

TRANSCRIPTS



**IMMUNE
DEFENSE
SUMMIT**



HOSTED BY JONATHAN LANDSMAN



The contents of this book are for informational purposes only and are not intended to be a substitute for professional medical advice, diagnosis, or treatment. These presentations do not provide medical advice, diagnosis, or treatment. Always seek the advice of your physician or other qualified health provider with any questions you may have regarding a medical condition.

DAY 1

PRESENTATION LINEUP

- 01 **Richard Cheng, MD, PhD**
Successful COVID-19 Therapy
Surprising vitamin facts
Overcome viral infections
Urgent message for U.S. citizens
- 15 **Ty Bollinger**
Avoiding Cancer Cell Growth
The unpopular truth about cancer cells
Most potent anticancer foods and supplements
Common lifestyle habits to avoid
- 31 **Niki Gratrix, BA, Dip ION, NANP**
Link Between Emotions and Disease
How emotional trauma triggers disease
Best tips for fixing emotional issues
Fascinating look at relationships and health
- 48 **David Minkoff, MD**
Overcoming Lyme Disease and Co-Infections
What Lyme does to immune function
How Lyme negatively affects digestion
Rebuilding immunity in Lyme patients
- 62 **Thomas Lewis, PhD**
Testing Your Immune Strength
Deeper insights into immune health
Potential signs of poor immunity
Best ways to measure immune strength
- 80 **Izabella Wentz, PharmD, FASCP**
Thyroid Disorders and Immune Health
Signs and symptoms of thyroid disorders
Proper way to test your thyroid
Best strategies to protect thyroid health

DAY 2

PRESENTATION LINEUP

- 96 **Thomas E. Levy, MD, JD**
 Natural COVID-19 Protocols
 Most powerful vitamin to kill viruses
 Best anti-viral minerals
 Effective at-home therapy
- 109 **Judy A. Mikovits, PhD**
 Vaccines and Immunity: The Untold Story
 Horrorific truth about the HPV vaccine
 Revealing insights about the MMR vaccine
 Alarming flu, polio, Hep B and pneumonia news
- 123 **Dr. Thomas Janossy**
 Biofilm Warnings: Uncovering Toxic Threats
 Key contributors to autoimmune disorders
 How "toxic synergy" weakens immunity
 Why biofilm is so dangerous
- 140 **Edward F. Group III, DC, NP, DACBN, DCBCN, DABFM**
 Heal the Gut, Heal the Immune System
 What causes immune dysfunction
 How the gut influences immune health
 Surprising value of detox and fasting
- 156 **Phil Carson, DPh, RPh**
 Nature's Pharmacy: Safe Sickness Solutions
 Why natural immunity matters
 3 most important protective health tips
 Best nutrients for immune strength
- 170 **Donna Powers CCH, RSHom (NA)**
 The Hidden Value of Fevers
 True purpose of a fever
 Why reducing a fever could be a mistake
 Safe remedies to treat a fever

PRESENTATION LINEUP

- 185 **Vladimir Zelenko, MD**
Suppressed COVID-19 Treatment
How to avoid hospitalization
Importance of early treatment
\$20 support protocol
- 193 **Robyn Openshaw**
Winning Immune Health Strategies
Real problem with antibiotic usage
Natural immune-boosting strategies
Best antibacterial and antiviral supplements
- 207 **Thomas E. Levy, MD, JD**
Killing Viruses Naturally
Suppressed news about the immune system
Natural ways to neutralize toxins
Best protocol to kill any virus
- 224 **Michael Murray, ND**
Supplements for Immune Strength
Undeniable reality about nutrition
Best supplements for immune health
Cold and flu prevention strategies
- 238 **Heather Wolfson, DC**
Family Health: Where Immunity Begins
Forgotten truth about breastfeeding
Best foods to build immunity
Vital news about toxins and disease
- 252 **Christopher Shade, PhD**
How Chronic Infections Block Detox
Chronic infections rarely discussed
Special warning for healthcare providers
Which nutrients improve detox pathways

PRESENTATION LINEUP

- 269 **Michael J. González, NMD, PhD**
How to Avoid the Threat of COVID-19
Understanding risk factors
Why is COVID-19 so dangerous?
Lower your risk of infection
- 281 **Mike Adams**
Pandemic Preparedness: A Survival Guide
What you haven't been told about pandemics
Worst place to be during a pandemic
Protecting yourself and your family
- 298 **Marjory Wildcraft, BSE, MA**
Home Remedies for Infections
#1 remedy for infections
Surprising facts about herbal medicine
Safe alternatives to toxic drugs
- 312 **Stuart Nunnally, DDS, MS, FAGD, FIAOMT, IABDM**
Dental Dangers: The Roots of Disease
Shocking truth about poor oral health
Warning about root canal treated teeth
Reversing gum disease and bone infections
- 326 **Dietrich Klinghardt, MD, PhD**
Health Impact of Wireless Technology
Link between wireless devices and brain damage
How EMF pollution increases autism risk
Best ways to reduce the threat of EMF pollution
- 341 **David Jockers, DNM, DC, MS**
Cellular Stress: The Link to Disease
How cellular energy production works
Why oxidative stress MUST be minimized
Best foods and herbs to support cellular health
- 359 **Donna Gates, MEd, ABAHP**
Candida and Immunity Solutions
Candida misunderstandings revealed
Why candida is hard to eliminate
Safely remove the threat of candida

PRESENTATION LINEUP

- 375 **Dr. Thomas Janossy**
How to Stop the COVID-19 Cytokine Storm
What is a cytokine storm?
Controlling viral replication
Key nutrients that save lives
- 385 **Raphael Kellman, MD**
The Master Key to Immune Health
How the microbiome influences immunity
Overcoming autoimmune disorders
Important advice for all healthcare providers
- 400 **Eric Zielinski, DC, MPH(c)**
How to Naturally Boost Immunity
How to fix “leaky skin”
2 best ways to strengthen immunity
Most underappreciated enhancement to immune function
- 417 **Peter Osborne, DC, DACBN, PScD**
Vital Tools to Correct Immune Problems
#1 choice to boost immunity
Specific lab tests to measure immunity
Common health mistakes to avoid
- 436 **John Dempster, ND, FAARFM, ABAAHP**
Testing Immune Strength: A Functional Approach
Holistic view of immune health
How the gut, stress and diet affect immunity
Best functional medicine tests to perform
- 453 **Gerald H. Smith, DDS, DNM**
Energy Medicine: Miracle Cures Exposed
How energy medicine beats Western medicine
Special message for cancer patients
Miracle cures revealed

DAY 6

PRESENTATION LINEUP

- 469 **Wendy Myers, FDN-P**
Toxic Metals That Damage Immunity
Main cause of allergies, asthma and cancer
Metals that destroy immune function
Best ways to remove heavy metals from your body
- 484 **Ronnie Cummins**
Major Immunity Threats
How modern food production destroys our health
Hidden waste products in our food supply
Honesty about GMOs, organic food (and more!)
- 499 **Joseph Pizzorno, ND**
The Toxin Solution: Avoiding Disease
Which diseases are caused by toxins?
Toxins that MUST be avoided
Links to allergies and autoimmune issues
- 517 **Ellen Tart-Jensen, PhD, DSc, CCII**
Liver Health: Your Guide to Super Immunity
Why the colon matters for liver health
Best ways to improve liver function
Natural liver detoxification strategies
- 532 **David Christopher, MH**
Protecting Immunity: Effective Herbal Remedies
Favorite herbs for immune health
Best remedy when you don't have herbs
How to keep a child's immunity strong

PRESENTATION LINEUP

- 548 **Sayer Ji**
Science Behind Strong Immunity
Most common immune-suppressing foods
Best ways to relieve stress in your life
3 great ways to improve immunity
- 564 **Jim Pilcher**
Recovery Story: Saved from Death
How one man nearly died
A SHOCKING story of recovery
Revealing truth about Western medicine
- 578 **Tom O'Bryan, DC, CCN, DACBN**
Autoimmune Disease Solutions Revealed
Effective treatments for autoimmune diseases
Protocols to address gluten sensitivity
What foods to eat and avoid
- 595 **Susan Blum, MD, MPH**
Immune System Recovery Plan
Intelligent way to deal with disease
Understanding the "stress connection"
4-step immune system recovery plan
- 611 **Russell Jaffe, MD, PhD, CCN**
Repairing and Defending Immune Function
How the immune system repairs the body
Why a repair deficit should be avoided
Best test to detect future disease issues

Successful COVID-19 Therapy

Guest: Dr. Richard Cheng

Jonathan Landsman: Welcome to the Immune Defense Summit. I'm your host Jonathan Landsman, creator of NaturalHealth365.com. If you're worried about the Coronavirus or any other bacterial or viral infection, this exclusive interview will prove to be very valuable. Enjoy!

Today I am joined with Dr. Richard Cheng. Dr. Cheng, thank you so much for being with us.

Richard Cheng, MD, PhD: Thank you for having me Jonathan.

Jonathan Landsman: So, Dr. Cheng, a lot of people have probably noticed about your work through my website NaturalHealth365, we've done many articles on the Coronavirus, and thank you so much for all of your hard work. I know you're over there in Shanghai, China. Please talk about first your medical background so people get to know you a little bit more, you know.

Richard Cheng, MD, PhD: Okay. Well, I've trained as an Internal Medicine doctor, I also received training in laboratory pathology and lymphoma, hematology. And I received a PhD and MD, and the most recent employment was at the US Army, I was a commissioned officer, major departmental chief at the US Army Community Hospital in South Carolina. And over 10 years ago, I separated from the army and opened my own private practice focusing primarily on Integrative Medicine or Functional Medicine and taking a holistic view of health and disease. And so that is briefly my background. I'm licensed in both the United States in the state of South Carolina and in China. So, I work in both places.

Jonathan Landsman: I appreciate that Dr. Cheng; this is very important. That you do practice medicine in the United States. But here it is, you're in Shanghai, China. Talk a little bit for a moment about what brought you over there. Of course, now with the lockdown, you can't come back to the United States at this point. I hope you'll be able to soon, with your travels when everything calms down. But talk a little bit about what got you so heavily involved in helping the doctors in Wuhan with this whole Coronavirus pandemic that we're experiencing today.

Richard Cheng, MD, PhD: Yeah, sure. Actually, my parents are in their 80's, so I made a rule to spend my traditional Chinese New Year with my parents, and for the last maybe 6, 7, 8 years now. So I came to Shanghai around January the 9th, so the Chinese New Year is on the 25th of January. And, also, I was invited to a few conferences here in China. That's how I came to Shanghai. And not long after, about 10 days after, the Wuhan or the COVID-19 epidemic broke out. And so, it rapidly evolved, pretty rapidly and towards the late January, early February, I remember US Embassy was offering assistance, so evacuation of US citizens to the United States. And I really seriously considered that both of my parents are here and like people we're you know, like the rest of the world today, a little bit panicky. And here in China, I felt that too. And I could feel that my parents were concerned, I'm concerned too.

So, I decided to stay with my parents in case something happens, I can offer assistance. And the reason.... Well, I go back a little bit. Quite a few years ago, I knew about how the vitamin C could help ... when I was in medical residency in the U.S., the early 1990s. And so ever since then, I started taking my vitamin C, maybe 1 or 2, 3 grams a day. And a couple of years ago, I encountered a doctor, Thomas Levy, you mentioned about, very well-known.

I really respect his work; I consider him one of my great mentors. He taught me how to think also molecularly or integratively. But anyway, so I mean, I didn't realize that other medicine because I've spent now almost over 40 years in medicine, in research, and it's all the Orthodox training, and I never really thought out of the box much. But a Dr. Levy's thinking really got me to think.

And what I didn't realize was that it opened up great a big door. And the more I read about vitamin C, the more I felt I missed it. So I actually translated two of his books into Chinese, I felt that Chinese people should know a lot about these. So I became very familiar with vitamin C, and I knew vitamin C's antiviral, antioxidant you know, mostly my interest was in the chronic diseases. As you know, I told you I'm getting old, so I like to know how I can stay healthy, slow down aging. So when this broke out, and I knew immediately the antiviral capability of vitamin C. And also over the past couple of years, I made a few acquaintances in the academic and public hospital systems in China, and they invited

me to.... As this time, I've been talking to various national conferences for cancer, for nutrition, for cardiovascular disease, and now I'm also a founding member of the Low Carb Medicine China Alliance. So I got together with some of those doctors and we started calling for the early and high dose of vitamin C, because I knew a high dose of vitamin C is very safe, and is very effective, and it does have antiviral capabilities. And that's how I got involved.

Jonathan Landsman: So that's great. But now, this whole thing breaks out and people are going to really learn a lot about what's going on in China. So this whole thing is going crazy. Talk a little bit more specifically about what the doctors did when it comes to using vitamin C. Because I know you were very involved with talking to them, right?

Richard Cheng, MD, PhD: Yeah, okay. Well, that's.... Actually early on, I volunteered to go to the epicenter in Wuhan, and there was only one condition they would allow me to have a high dose vitamin C. And I went through all channels, I actually went to the top national expert team. You know what I'm talking about. And I also went to the local Shanghai government, and many of my older schoolmates are in high position now. And well, eventually I remained in Shanghai.

Well, one reason was my US citizenship. And I don't want to talk too much about it, but this epidemic is more than just a medical issue. It's also a political, diplomatic issue as I noticed. So anyway, but I couldn't go to Wuhan, but I stayed connected with all these doctors. So early on, I didn't hear anything too positive ... you know, the people are not as vocal as they ought to, but I do know that things were happening behind the scene. So I got in touch with the doctors in Wuhan and Shanghai and we are in the social media group with all the 3 clinical IVC trials in Wuhan, with the leaders, principal investigator over there and also with in the Shanghai Expert Team in the COVID-19 treatment here in Shanghai. And so, you want me to talk a little bit about the findings?

Jonathan Landsman: Yes! I would like you to go a little bit more into the details as to what they did in China because later on, we're going to talk about what they're doing here in the United States. And it is a big difference, so please go into what they're doing in China.

Richard Cheng, MD, PhD: Okay. And so actually after I and my team of friends making the all these public appeals, we didn't hear much you know. And then I said, I've done my job in calling for IVC and I didn't hear much response from them. But before I realized, then things started coming out. And the first one was that the first clinical trial was announced, which everybody pretty much knew now in Wuhan, and it was also registered in Clinicaltrials.gov in the US. And this group, Dr. Pan was leading this group. He is leading this group, and they are still analyzing the data, and the paper as we speak is being prepared. And so

basically this group was trying to study high dose of IV vitamin C, they were using to start at 24 grams a day, and trying to recruit moderate to severe COVID-19 patients. Initially it was in a double blind RCT, later on tended to....

Jonathan Landsman: So I just want to jump in for a moment because you said it very quickly; 24 grams for people here in the United States. That is 24,000 mg in a 24-hour period. Is that correct Dr. Cheng?

Richard Cheng, MD, PhD: Yes, that is correct. Yes. Actually we believe, those who are more familiar with Vitamin C, we believe 24 grams is on the lower range of what we recommend, but it's good, it's a great start for any public endorsement limit. So we're okay, although we were pushing them higher, but then they were You know, I understand that. So that was the first one.

And then two others followed suit, more or less similar. The third category, we were very intimately involved in the designing, preparing and data analysis. And we recommended a higher dose actually. And the key here is the total dosage is important. The other factor that's very important is how we can get the peak volume of Vitamin C. As you know, you can have a total of vitamin C load over 24 hours, but part of that is administered rapidly to achieve a higher peak volume that is a lot more efficacious. And so that's another factor in doing vitamin C as we know this.

And so those are the 3 clinical trials in Wuhan. And at the same time in Shanghai, although early on, the Shanghai team wasn't really designing, I mean, doing in a clinical trial environment, however, some of the doctors here were familiar with high dose vitamin C, particularly a Dr. Mao. And he is the Chief and Professor of Emergency Department of the Regional Hospital here, one of the biggest hospitals in Shanghai. He's also on the expert panel. The way the Chinese government is dealing with these COVID-19 patients is to have them centralized. So in Shanghai, all these patients who are confirmed are all located in a place called the Shanghai Public Health Center, and only COVID-19 patients are here. And they also gathered these experts, so the treatment team in this particular place. And so here in Shanghai, this team is a lot more vocal. And they treated about 50 patients of COVID-19. At that period of time, out of a total of 358 patients ...50 received the high dose vitamin C. And out of those 50, Dr. Mao told me they observed a more significant improvement, a shorter hospital stay.

These IVC patients, they stayed in the hospital for an average of about 23-25 days, whereas those non-IVC treated patients were staying in hospital for an average of about 30 days. So there was around 5-day shorter stay of the vitamin C group. Another thing you can point is that out of the 50 patients, nobody died, they all healed and were discharged.

Whereas out of the total about 358 patients as of by that time, 3 of them died. And none of those 3 received vitamin C. This is important I think.

What I want to mention is that there was one particular patient who was a senior, and this patient was showing rapid deterioration of clinical situation, primarily respiratory distress. And Dr. Mao's team gave this patient a 50,000 mg dose, which is 50 grams Vitamin C bolus. That was administered over a 4-hour course. So I'm pretty sure this reached the peak desirable pharmacy level. And Dr. Mao reports.... The team actually were seeing real time improvement in oxygenation level. The two features of COVID-19 infection; one is the rapid deterioration of respiratory distress, as we noticed, the ARDS, Acute Respiratory Distress Syndrome. And secondly is hypercoagulability. These people tend to clot more easily; those are the two features. And the ARDS percentage is probably in the range of 10% or a little bit less, and mostly in a little bit more immunocompromised or overall not as healthy or senior group. Those are more likely. And the hypercoagulability, for the milder cases, maybe it happens in 15-20% and maybe around 40% in a bit more severe groups.

Jonathan Landsman: So I see this as being an extremely important point that you're bringing up right now Dr. Cheng. So many people in the United States.... I can't speak to China, but I'm sure you can. There are so many people in this country that are on medications, they already have blood circulation issues, they already have suppressed immune systems, they already have sluggish blood because they're on so many medications. They already have metabolic syndrome. They already have high blood pressure, they already have diabetes and sugar imbalances. The list goes on and on and on. And then when they get the COVID-19, when they get infected with this virus, this is what I think from this day going forward.

We have certainly not seen the peak where these people get infected, and then they go on and on with this fluid building up in their lungs, the infection, the virus is growing in them, nothing is neutralizing it. And these people are going to be overcome by this, because of all the other you know, cofactors, the problems that they have with their health. You know what I'm saying, right?

Richard Cheng, MD, PhD: Yes.

Jonathan Landsman: So before we jump to the United States, how is it right now in China? Has Wuhan reached its peak and it's dropping? Talk to us a little bit about what the atmosphere is like there? Are they still very nervous like they are here in the US?

Richard Cheng, MD, PhD: Well, overall in China, I can tell you people are not as nervous as it used to be. And the domestic infection death

gradually is slowing down, and we can see from those public reports. And if you don't trust public reports, but I can feel the atmosphere at least in Shanghai.

You know, life beginning to go back to normal, the shops are opening up and people can move about. And I've been going to the gym to play badminton, and I've been to the restaurant to dine out. And so things are going back to normal. And according to my sources in Wuhan, things are also trying to go in back normal. Yes. And then now the problem actually is the international ones, because many Chinese students in particular, I think they were frightened but they're finally coming back through Shanghai.

So interestingly, what I wanted to continue was that Dr. Mao in Shanghai actually, once they learned from some experience, they were trying to do some other kind of studies but the patients were out, they ran out. They didn't have any more COVID-19 patients, which is good. But he couldn't continue the study. You know, but he got some experience. Now he told me actually, we are going to be involved in this clinical trial design right now, and it is that because of the continued inflow of these patients, the whole China now has only one place that accepts international flights, which is Shanghai. So that's how they triage.

So 100 percent of the tourists coming back, travelers coming back to China would have to go through Shanghai and those infected will be treated. And so he is treating these patients in a clinical trial setting, and hopefully he can get this thing done in a little bit more convincing way instead of just reporting treatment. Treatment is important you know, as Dr. Fauci, you may notice that he mentioned it you know, because we don't need always very well designed RCT, clinical experience is important.

Jonathan Landsman: So now we shift our attention to the United States Dr. Cheng. I know you know physicians here in the US, the craze of the Coronavirus and a pandemic and all the fear has just really gripped the United States. It is getting out of control. We hear it on the news all the time. Doctors are there reporting in the New York Post and in other papers around the country.

Federally, Donald Trump you know, the President and his team, they're not talking about Vitamin C publicly of course. But we are seeing reports of Vitamin C being used in some of the hospitals in the US. But what do you see as an issue here? And it's an important one to talk about, the difference between the way that the United States physicians are using vitamin C here, versus in China.

Richard Cheng, MD, PhD: Yeah. Well, before I go on that actually, let me also make mention that at least 2 city governments in China, those

are Shanghai and Guangzhou, the 2 of the 4 major cities in China, they officially recommended high dose vitamin C in the treatment of COVID-19. Those cities published an expert panel consensus. So that's a fact, because I know some of the US media outlets in US saying that was not true. Well, it is true. And anybody bothered should check it out, and they can come to me as well.

Now, talking about New York, yes, I'm aware of the New York Post story, the reporter actually contacted me and interviewed me as well. I mentioned to her actually that it is great that out of desperation, we are looking for anything that we can use to treat these COVID-19 patients, so Vitamin C is part of that. And yes, a New York Hospital chain is using Vitamin C. But also at least in one report, I noticed that the dosage was small, I think the dosage was 1.5 grams every 6 hours, right?

Jonathan Landsman: Yes.

Richard Cheng, MD, PhD: So there, I think that adds up to only about 6 grams a day. Now, I know some of the groups are also on vitamin C. And the good thing is that they're using vitamin C, but that dosage for many of the vitamin C experts, among the many vitamin C experts, we believe that's too low. And it is better than nothing and it can help some people, but we are pretty confident that we will not see optimal results with dosages like that.

Jonathan Landsman: Dr. Cheng, there's something very important to bring up that I want people to be aware of, because there's a lot of subtlety in this, and I just want to jump out and say something to you and then get your reaction. But here we have, like Dr. Fauci you know, he's talking about how he has no problem with the use of vitamin C when actually asked by a reporter on the national TV. But he says as long as you're not taking "ridiculous amounts," right?

And then you have coupling that with the New York Post article, characterizing the 1,500 mg 4 times a day as being an 'enormous amount' more of vitamin C than what's recommended as the recommended daily allowance here in the United States - which is really for most people who don't understand how vitamin C can help someone who is seriously infected with a bacterial, viral issue, really chronically sick, it's very deceptive. Because the perception in the United States for most people reading those stories and not understanding about vitamin C is to think that 1,500 mg 4 times a day is just this enormous amount of Vitamin C to take when you're sick. And when you just said that for people really in the know, that is ridiculously low, not ridiculously high. Correct?

Richard Cheng, MD, PhD: Correct. Yes. Actually, I have to say that Dr. Fauci recognizes the usefulness of vitamin C, which is great. And I read

that too, when he mentioned about ridiculous amounts of.... I don't know what he meant by ridiculous amounts. Let me just give you some facts you know.

So above vitamin C, what are we worried about of high dose vitamin C? First of all, right; the physicians first thing is "Do no harm." Let's look at the fact. A lot of reviewed papers out there are not "go-to" literature right now, but just point to.... Let's talk about official. A lot of people like the official, that is NIH, right, NIH is official. So NIH, the NCI where I spent my last fellowship training at the National Cancer Institute. National Cancer Institute regularly puts out a document called the PDQ; Physician Data Query. Where basically, it's an expert panel that will review on certain drugs or substances regularly.

And the most recent update on Vitamin C is of December 4 of 2019, which is barely 4 months ago. Correct? Yeah, less than 4 months ago. So in that PDQ document, we have a high dose Vitamin C; everybody can check it out. If you just search PDQ Vitamin C. And it says "High dose vitamin C as a to as high as 1.5 grams, that's 1500 mg per kilogram of body weight IV appears to not have significant side effects." Okay, let me translate a little bit. So basically for somebody of 60 to 70 kg, which 60 kg is only 132 pounds. Most people are heavier than that. Let's say a 150-pound person, which is very small in the US, okay? Yeah, you're not a toy? You're.... And so what I'm saying is that we are talking about.... Let's say, taking 70 kg person, times 1.5, that's more than 100 grams of vitamin C a day.

Jonathan Landsman: Let me jump in, because I know you were noticing me pointing to myself, I don't know if people noticed that. I weigh a little bit more you know, give or take today, a little bit more than 150, 153, 155 pounds. And when I feel a little buggy, just to tell a little story for people to understand. A little scratchy throat, a little I know something's happening.... I have extremely long days, I get up 4 or 5 in the morning and I go, I'm interviewing you in the evening now, I know it's the morning the next day for you. Very long days, lots of stress, lots of things going on. So I know my body well. When I feel like I need a little something extra, and I'm starting to get hit with something, whether it's a cold, a little bit of a flu, you might say some sort of viral thing, I'm going up to 25,000-30,000 mg of vitamin C.

You know, 3,000, 4,000, 5,000 mg right away like you were describing before, give myself a good hit every hour or so another 2,000-3,000 mg depending on how I feel, how much I want to take in a spoon, and just sort of dissolve it in water and drink it down. And all through the day like an IV drip, I'm constantly putting the C into me, and a 25,000 to 30,000 mg for me a relatively healthy person most of the time, I'm getting no bowel intolerance at all, which is telling me that I must be dealing with something that my body really can handle the C, needs the C, and is

metabolizing it. And you know what? In 2 or 3 days, I always feel like I've got a greater control over what's happening, I feel a little bit better.

And then I keep taking it another day or two afterwards, just so things have calmed down and I'm through it, smooth as can be, with nothing else. So sorry to interrupt, but I just wanted to share that story. It's nothing, but if you talk to people in the United States and in conventional medicine, my God, they would say I'm crazy to take 20,000, 30,000 mg of C.

Richard Cheng, MD, PhD: Yes. I know. So let's go back to talk about that. Yeah, you're right. Basically, the NIH official document recommends about you know.... Roughly calculating, okay? So we're talking about 100 grams, or 100,000 mg level of vitamin C for those cancer patients. And so obviously that expert panel didn't think 100,000 mg of vitamin C was not ridiculous amongst those people.

So, of course, cancer patients and average people.... I mean, normal people are a little bit different in terms of their health and disease, right? But one thing we know is that up to like 100 grams. Actually let me tell you, I use like 150 grams on patients, okay? Some people even recommend 2 grams per kilogram body weight, even higher than that.

But anyway. So it is that high doses have been officially recognized by NIH and many other reviewed articles I'm not going into. So we know it is fairly safe. I mean, since we're talking about safety, let me also mention that a lot of people always worry about kidney stones, because the one thing about vitamin C that anybody can talk about is kidney stones; really not much anything else. But let me tell you, there has never been any official or clinical study that proves the causation between vitamin C and kidney stones. There are anecdotal case reports of people receiving vitamin C and developing kidney stones. Well you know, if you eat breakfast, you drive out onto the road and you have a car accident, you don't put the two things together, right? You don't contribute that the cause of car accident is linked to breakfast. But anyway, yes, vitamin C.... One of the vitamin C metabolites is oxalate, oxalic acid. And oxalate stones are one of the most common ones, but away, no official research I mean, no credible research on this. And also, we believe that kidney stones happening in those patients are more likely due to the overload of calcium, and I also believe maybe these people were eating too much of this oxalate rich vegetables, and also maybe dehydration and all other factors. So anyway, long story short; vitamin C is very safe.

Jonathan Landsman: Dr. Cheng, let me just jump in and add though, in the Riordan Clinic, Dr. Ronald Hunninghake, who's probably at the "capital" in the United States of IV Vitamin C therapy at the Riordan Clinic, has literally given almost 100,000 people these IV Vitamin C treatments I mean, tens and tens of thousands of people, and it's never

had such a problem that conventional wisdom, let's put it that way, would suggest that there is. So you're 100% right; it is so much safer than most people are led to believe. There's a lot of disinformation out there about vitamin C to say the least.

Richard Cheng, MD, PhD: That's right. And talking about side effects; anything has side effects, right; water, food, vitamin C too. Like the bowel intolerance they talk about. When you take too much vitamin C, you have diarrhea. It is true. Yes. And if you don't want to have diarrhea, then that's a side effect. But I intentionally, a lot of people do intentionally use that side effect as a therapeutic effect to cleanse themselves.

So Vitamin C is a very safe. And like I said, why are we worried about high dose Vitamin C side effects? Because when we prescribe drugs, we're never really worried about side effects. There's no drug in the world that doesn't have a side effect. So all of a sudden, when we take vitamin C, we worry too much about side effects. So that's one part I don't get it. Okay. Again, the vitamin C side effects are very few, very rare. I've used it for many years, I've used them on my patients when they have had any major significant side effects if you know how to take it, right? So that's very safe.

And let's talk about the effectiveness. Okay. Now, what I want to point out is that we know the mechanisms of Vitamin C continue to be discovered. But we do know one thing for sure, that this is well-established in the literature that vitamin C helps to produce hydrogen peroxide in the body. And the hydrogen peroxide is a direct virus killing agent. It normally kills virus, it kills bacteria, it can kill cancer cells as well. It doesn't kill our normal healthy cells because of our normal healthy cells have a hydrogen peroxide destruction mechanism, something called catalase.

So when our normal cells have this hydrogen peroxide, it denatures the hydrogen peroxide, it's not a problem. But virus, bacteria and many of the cancer cells don't have this capability or they don't have as good a capability; in cancer cells, because cancer cells are not well developed as you know, many of its biological capabilities are disabled. So we know vitamin C has direct anti-viral effects.

Vitamin C also has indirect antiviral or immune boosting capabilities as we know. A lot of research out there is that vitamin C boosts immunity, it boosts lymphocytes and it also enhances collagen build up, and collagen offers resistance to these invading bugs. So vitamin C is effective in terms of antimicrobial.

Now, one thing I want to point out here is that vitamin C's antiviral, antimicrobial capability is universal, it is because it's through the

production of hydrogen peroxide. It is not COVID-19 specific or common influenza virus specific or TB specific, it is across the board. Now, this is important, and I think we're going to discuss later. This is important because in the future when another.... I guarantee you it will, another viral outbreak of unknown nature, then we know Vitamin C is out there. So this is the antiviral, antimicrobial capability of vitamin C.

Now, one other feature as we already know is that the COVID-19 is scary for two reasons; one is that COVID-19 infection spreads too rapidly as you know now. You know, over a couple of months, the whole world is in a panic mode. And secondly is the high mortality, a lot of people get it, so they will develop this white lung, and they will have a lot of water, fluid in their lungs and you can't breathe, and eventually the patients would choke to death.

And the mechanism of this lung problem we call ARDS; Acute Respiratory Distress Syndrome, basically the fluid buildup in the lungs is due to a so called cytokine storm. Basically, the virus infection causes a cascade of reactions in our body, and a lot of these free radicals or inflammatory factors are being released, and these free radicals start attacking our own cells, our own lung cells.

And if it happens in the kidney, it can attack our kidney. If it happens in our liver, it can attack our liver. This process is also nonspecific. It is our body's natural way of fighting an invading agent by releasing free radicals, but unfortunately, sometimes this reaction can be overwhelming that it starts hitting the bystanders and the friendly fire so to speak. Okay.

Now, Vitamin C as I already alluded to, is a prototypical antioxidant. It helps to neutralize the free radicals and reduce the, what we call, the oxidative stress, basically too many oxidizing agents in the blood. And that's very important right now, because this can save lives. And again, this is a universal mechanism. And without ARDS; actually we shouldn't be so worried about this COVID-19. You know, it's like catching cold; no more healthy people die of it, right, unless you're immune compromised. Can I tell you a brief story of this?

Jonathan Landsman: Sure. Go ahead.

Richard Cheng, MD, PhD: O.K. ... actually in Wuhan... a woman in her 70s with diabetes and heart disease with a stent placed in as she mentioned. She is an older lady, and also poor health, immune compromised. Anyway, she came down with the virus later on, she was confirmed to have COVID-19 infection. And so when this lady was hospitalized, the daughter who is familiar with vitamin C requested a high dose vitamin C treatment. Luckily, the ICU chief allowed high dose Vitamin C. Again they are living on the conservative side, giving 10 grams IV.

This lady actually recovered pretty rapidly in 7-10 days, she's out of the ICU. Well, she developed an ARDS, she was put on ECMO, the Extracorporeal Membrane Oxygenation basically a lung breathing outside of the body. She was put on that machine, and she lost her consciousness at a point, and she was receiving heavy dose IVC, and she spent only about 10 days in the ICU, she stabilized and was discharged to the regular Ward to recover. And well, so we cannot draw conclusions in 1 case, but this is a case report you know, the patient recovered rapidly, and coincidentally or maybe causally that she was receiving high dose vitamin C. You have to understand that the mortality rate among this group of patients is high.

Jonathan Landsman: Well, there's another very important takeaway Dr. Cheng, which is a side note but very practical. How important is this? And this is what I stress all the time to the people who listen to my programs and go to my website. How important it is to have friends like you in my family, right? God forbid, something happens to me and my relatives, my people close to me have no idea about vitamin C. They don't know what to do, they just hand it over to "medical professionals" to do whatever they will with me. All due respect to what they may be trying to do. They don't know, the family doesn't know. And then these people become real victims.

So it's very important that we educate ourselves on all of these tools if you will. vitamin C isn't the only thing; yes, wash your hands. Yes, stay away from someone who's coughing and sneezing all the time. You don't want to hang around with someone who's very sick anyway. But take lots of antioxidants, eat healthy food as much as you can, stay well hydrated, have good people around you who understand things, get a good physician close to you, who appreciates all of these things. Because God forbid, if something does happen, you want to have that team around. You know, just like that daughter was there for her mother, you know?

Richard Cheng, MD, PhD: That's right. That's great. You brought up a very good thing. The second part of this very interesting story was that this lady, her daughter, as soon as this broke out, she recommended her family to take high dose vitamin C. She herself was taking 20,000 mg of vitamin C daily. That's 20 grams.

Jonathan Landsman: That's 20,000 mg; twice as much as the mother.

Richard Cheng, MD, PhD: Yes, twice. By mouth. The mother was getting the vitamin C from IV. Now, the interesting part is that the whole family, the remainder of the family of 5, none of them came down with this COVID-19 infection. Keep in mind that early on, for the first 10 days, they were staying together without any protection. They were in close contact. And also this lady and her brother and brother's wife, 3 of them were taking care of their sick mother in the hospital before she was

admitted to the ICU, and they had a very little protection. None of them caught any infection of that COVID-19. Now that's another important part.

Jonathan Landsman: So Dr. Cheng, I'm sure there'll be some people watching us that would like us to just talk for like 2 hours, 3 hours on this, but I have to be respectful for people's times not go on too long. For me personally Dr. Cheng, I'm sure you shake your head at this all the time as well. In the United States, they are constantly telling people that the people at the greatest risk and threat and danger with any of these infections, especially these viral things like the Coronavirus, COVID-19, is the fact that if you're immune compromised.

This is the bottom line; whether you're 40, 50, 60, 80 years old, it doesn't matter. If you're immune compromised, watch out, you're in a lot of trouble. That really does account for a lot of people out there. And all we have to focus on is doing everything we can, all the strategies, the tips, the techniques to build up our immunity. And that's what I hope that a program like this can be shared, and people focus on this more so that they don't have to walk around in so much fear, feel like a victim and don't feel empowered at all. But as we close out Dr. Cheng, just talk a little bit about what you would like to add at the end about what kind of lessons we can learn from what we're going through right now together.

Richard Cheng, MD, PhD: Okay, well, let me just quote on two other studies, I think that's important. It's that one study just came out this year in the British Medical Journal, military medicine from South Korea. And in the middle of a training camp, there were 101,444 new military recruits, and they were divided into 2 groups and 1 group was taking 6000 mg Vitamin C and the other didn't. And at the end of the training, the Vitamin C group, the common cold infection rate was significantly reduced. So this study again, it's a controlled study and it shows that Vitamin C can prevent viral infection.

Of course, that's for common cold. However again, this is universal. And I believe I would recommend that vitamin C can prevent and help you to reduce symptoms of COVID-19 infection. There was another study 20 years ago, in 1999 out of Switzerland. Out of 460 college students in their 18 to 32, they were divided into two groups; one group, once they developed symptoms of cold, they take high dose vitamin C. This high dose is very similar to what we do today; 1,000 milligram every hour for 6 hours, followed by 1,000 mg 3 times a day. And the vitamin C group, the symptoms were reduced by 85% compared to the placebo group.

The placebo group was receiving painkillers and nasal decongestants. So we know vitamin C can help prevent viral infection and can reduce the symptoms when the viral infection happens. And I don't see any difference why it will not work for the COVID-19. Of course, the virus

strain may be different, you may need to take more, but the rate is the same. So I believe vitamin C can help you to prevent.... Again, I'm repeating but it's important. Can help prevent viral infection, and I believe COVID-19 included.

Jonathan Landsman: So I hope this conversation helped you to learn a lot more about how vitamin C can help you, but also all of the other things that you can possibly imagine or get busy doing to build up your immune system. That's what this is all about. Keep your immune system healthy and strong so that you can navigate your way through all of these challenging times. Again Dr. Cheng, I really appreciate your time. Thank you so much for being with us.

Richard Cheng, MD, PhD: Thank you very much Jonathan for having me.

Avoiding Cancer Cell Growth

Guest: Ty Bollinger

Jonathan: Welcome to the Immune Defense Summit. I'm your host, Jonathan Landsman, creator of naturalhealth365.com. Did you know that every year drug-resistant bacteria or super bugs kill 700,000 people worldwide and is projected to be more lethal than cancer by 2050? And infectious diseases still remain one of the leading causes of death. Cancer, cardiovascular problems, and diabetes are by far the leading cause of premature death in the world. But in reality, all of this is avoidable with a strong immune system. That's why I created this event. To help you understand the roots of disease and how to prevent and reverse life-threatening illnesses by re-empowering your immune system.

Our show today: How To Avoid Cancer Cell Growth. Our guest, Ty Bollinger, first brought his discoveries about cancer into the public in the best-selling book *Cancer: Step Outside the Box*. In addition, he has co-authored other books on alternative medicine and produced several ground-breaking documentaries including *The Truth About Cancer: A Global Quest*, which has been viewed by millions of people worldwide.

After losing several family members to cancer, Ty refused to accept the notion that chemotherapy, radiation, and surgery were the most effective treatments available for cancer patients. Instead, he sought what he could find about alternative cancer treatments and the hidden truth about the conventional cancer care business. What he uncovered is shocking.

Today, we'll discover the truth about cancer cells, what role the immune

system plays in ridding our body of these potentially life-threatening cells, which foods and supplements should we eat and avoid to reduce our risk, plus many other interesting realities about how our emotional and mental well-being affect our cancer risk.

Please join me in welcoming Ty Bollinger to our program. Ty, welcome.

Ty: Hey, Jonathan, thank you so much for having me on today. Looking forward to the conversation.

Jonathan: Oh, it's going to be great for sure. Ty, in reality, let's start off with this, don't we all have cancer cells?

Ty: Sure, Jonathan. We do. Actually, everybody that's listening to this program is producing cancer cells somewhere in our bodies. That is just a natural product of our body. Some cells are damaged in a way that we would call them "cancerous." The problem is that we have healthy immune systems and we have some people with unhealthy immune systems. And if you've got a healthy immune system, the immune system is able to recognize these "cancer cells" and eliminate them. So we're never diagnosed with what we would call maybe a life-threatening form of cancer, but we all have cancer but not life-threatening cancer.

But when we have an immune system, which we're going to talk about today, Jonathan, that's damaged, it's not able to control the growth of these cancer cells. That's when eventually these cells get together. They begin forming a tumor. And then that's when that diagnosis comes, saying, "You have cancer," when in reality we all have cancer every day of our lives. But this is not when it is noticeable, the tumor's forming. If it's a solid tumor-type cancer, that diagnosis comes. And then we go into the treatments for this cancer.

But the reality is that a functioning immune system is able to get rid of these cancer cells that we all produce on a daily basis. And if the immune system is functioning properly, you're not going to face the diagnosis of cancer.

Jonathan: Yeah. This is an important point, Ty. I know you've been working on this for years, awakening the public to this reality. And I know you and I share in this view; what a different world it would be if every physician were to say what you just said to all of their patients, "Hey, we've all got cancer cells. Let's take good care of our immune system. Here are some of the steps, talk to my nurse, talk to a nutritionist on staff." And all of these different things as an opportunity for all the physicians out there to relay this message to so many people instead of them thinking the complete opposite of being a truth, which it isn't, which is that we have to wait until billions of cells are created and we could pick up on it on a test, that would be crazy.

So why don't we talk a little bit more about this role of how our immune system helps us to defeat cancer cell growth.

Ty: Yeah, that's a great topic, Jonathan. And the reality is, just looking at the role of diet and the foods that we eat and the immune system function, we know, I mean we can measure this now. We know that eating refined sugar suppresses immune function. I mean, you can measure the activity of the immune system and the immune cells after eating sugar, and we know that it suppresses their function. They don't work as well afterwards.

In light of that fact, let me ask you a question, Jonathan, what kind of sense does it make for oncologists to have candy dishes in their office so after somebody goes through a round of chemotherapy, they can go grab some candy on the way out of the office to further devastate their immune system? I mean, to me, that's just insanity for medical doctors to offer nothing more than refined sugar to patients who have cancer that we know not only is the sugar going to go in there and suppress the immune function but we also know that sugar feeds cancer cell growth. And is that bizarre to you, Jonathan? Because it is to me.

Jonathan: I know exactly what you're saying. And for me, when I listen to you even describe that to this day after being in the industry for over 30 years, it just proves to me, Ty, that there is such a huge disconnect between conventional medicine and so many of the wonderful messages that you're putting out that are so scientifically grounded.

Ty: Well, thank you. And the reality is, Jonathan, and the reason that you're doing this summit is we're trying to get this word out to the people and to the doctors too, because some people have different opinions of doctors. I just think that I think most doctors are good people. They've just been misled and they've been mis-educated. And they don't understand these things that we're talking about.

They don't understand about the importance of the immune system because the medical school curriculum is not what it should be. And so the goal is not only to reach the people but it's to reach the doctors and help them to wake up. Because they're good people that have just been taught incorrect things about how to keep the immune system healthy, the role that the immune system plays in cancer, and really overall in how to treat cancer. And so that's why what you're doing right now is so important.

Jonathan: And Ty, just for the record, it'll probably take us about 30 seconds to do this, before we get into what's reducing our cancer risk in terms of the foods we should eat and avoid, which is extremely important for anyone listening to this message. But just for the record, our immune system is beautifully designed to actually detect cancer cells

when it's working well and get rid of them so that we don't get harmed. Is that fair to say?

Ty: Oh, absolutely, it is. The immune system is like our surveillance system for our body. It's our army. I mean, some people call it an army. It is our body's protection. And when it's functioning properly, when the immune cells are fed properly, when our army is eating a good, nutritious diet, I guess—good analogy there—it's able to do its work. It's able to defend us.

Just like if we look at the United States Army, let's say the United States Army is trying to defend our borders and they're starving. They're not getting any nutrition. They're not getting any valuable food intake. How long will the army work to defend our borders? Not too long, right, Jonathan? Because why? Because they're going to be dying of starvation, right? They're not able to do their job. The immune system is very much the same way. It is our army and if we feed our body proper nutrition to fuel that immune system then it's able to do what it's supposed to do. The fuel is the most important thing.

Jonathan: Without a doubt, Ty. Let's get into it. Because I know a lot of people are concerned about cancer and not even so much, Ty, for themselves, perhaps. But they're certainly concerned about it for someone else that they love in their family or their friends. So let's get into it. What foods we should really be focusing on eating? And, of course, please blend in there the kind of foods that we should absolutely avoid.

Ty: Right. So it's a great question and it's something that sticks out to me. It's just three words that Dr. Mercola said last year when I interviewed him for the documentary on cancer. He said eat real food. So that's what we need to do. We need to eat real food. And I found this simple, overly simplistic, to eat real food. But I mean, let's look at the typical diet that an American eats today. I was reading a survey that was done with grade school children in the United States.

And I can't remember the percentage but it was upwards of 70% to 80% of the kids don't get any fresh fruits or vegetables on a daily basis. I mean, they eat, it's all processed. It's all canned. It's all bagged. It's all processed food. It's not real food. So I think to reduce our cancer risk, we should try to eat real food. And what does that mean? It means eat fresh fruits, fresh vegetables, things in their natural state.

And of course, going along with that would be to avoid things that are processed or packaged but also to avoid things that are fresh but they're not in their natural state, such as genetically modified foods, right? So GMOs are very dangerous. And the problem is with GMOs is that many foods that are being genetically modified that we're not aware of. That's

another whole topic in and of itself, Jonathan, that we could go into if you wanted to.

But GMOs are a big problem. But I think if we keep it simple, right, the old KISS, keep it simple, stupid, that's what my dad used to always tell me that we keep it simple. Remember to eat real food. And when we focus on eating organic, fresh food on a not daily basis but on a meal-by-meal basis, try to get mostly fresh fruits, fresh vegetables, fresh real food, non-genetically modified on a meal-by-meal basis, we're going to be really well-off when it comes to defending ourselves from cancer. Why? Because I can't think of a natural food, a real food, that doesn't have some sort of anti-cancer property and that's just reality.

Jonathan: Yeah, Ty, I mean, the message is clear. Since World War II, it looks like corporations have taken over. They've changed the way our food supply is delivered to the public. There's no doubt about it. It's such a simple message and I think that's probably what makes it so difficult for you and I to bring this message to a larger public. It's so simple. Come on, Ty, there's got to be something fancier.

But when we look at workplace, large workplaces, cafeterias; when we look at the schools, as you mentioned also; if we look at hospitals where people get sick and go to these institutions to get well; when we're looking at literally the cancer fundraising events—and I've gone to them, Ty, I'm sure you have too—where you see the tables set up and they're giving out the donuts and the cookies and the farm-raised milk that's pumped with hormones and antibiotics. I mean, it goes on and on, it's like we're drowning in this heavily-processed, corporate food.

And like I said before, I'm with you, I think anyone would raise their hand and say, "You know, I would love to help people," especially if they're in the profession, like the healthcare profession. I want to help people. No doubt, I want them to stop suffering. But yet there's this huge disconnect that you're literally delivering poison into these people's bodies when they want to avoid being sick.

Ty: Yeah, there is this huge disconnect. And I think, Jonathan, that one of the reasons is because with conventional treatments for cancer, we're treating the symptoms instead of getting to the root cause. And so what I mean by that is this, so, if you're diagnosed with cancer, let's say a solid tumor type cancer, you're going to go through—you're going to probably have some of it surgically removed maybe or maybe not. But you're going to definitely get chemotherapy to poison it, right, to chemically poison the tumor. And you may get radiation therapy to shrink it and/or to burn it, right? So the tumor's shrinking.

Meanwhile, what have we done to correct the underlying imbalance in the immune system that gave rise to the solid tumor? Nothing, right?

Not only nothing but most oncologists say, “Hey, while you’re going to go on chemo, you’re not going to feel too good, so. And you’re going to probably start losing some weight. So why don’t you go out and make sure you eat anything you feel like, donuts, ice cream, cake, you name it, sloppy joes, French fries, you name it. Eat whatever you want, so you don’t lose weight.” So not only are we not correcting the underlying imbalance while that tumor is shrinking but we’re exacerbating the problem and creating more problems, more cancers, more tumors because we’re eating foods that are further compromising the immune system. So it’s like this endless spiral.

And that’s why when—I’m not a fan of conventional treatments, but people that do use conventional treatments like chemo and radiation but if they improve their nutrition along the way and they start eating clean foods to help their immune system, they inevitably have a much better outcome than people that eat the typical hamburger and fries and pizza diet while you’re on the treatments.

And so what we eat does matter. Nutrition does matter. And so I think the reason that we’re having such a low success rate with conventional treatments for cancer is that we’re treating the wrong thing. We’re taking the shrinkage of a tumor and equating that with curing cancer. When the reality is all we’ve done is we’ve shrunk a symptom of the cancer but we’ve never fixed the underlying condition, which is a compromised immune system.

I was speaking in Toronto, Canada last weekend and one of the speakers said something that was just so appropriate to me. He said, “When we treat cancer, we focus on shrinking the tumor, but that’s not the problem.” He said it’s like if you’ve got a baby that’s crying and you duct tape its mouth shut, have you fixed the problem? The baby is crying for a reason. But when you duct tape its mouth shut, you don’t hear the crying anymore, but you still got an underlying condition. Unless you fix that condition, you’re not going to be able to have a long-term solution to the cancer. And I think that’s the problem, is we are treating the wrong thing.

Jonathan: Ty, that is an incredible analogy. It is so perfect. And I think another thing for people who are new to this information, I know this is really basic for you, Ty, but the idea that, okay, we want to avoid cancer cell growth—and with all due respect for anyone considering conventional treatments like let’s just say chemotherapy and radiation in general—talk for a moment about how none of that is addressing the stem cells, like you say, the underlying cause. This is a shocker to people who are new to this information. Here it is, they’re reducing the tumor. Oh wow, we’re having some success. But the ones that are producing the cancer cells, this stuff doesn’t even touch it. Is that true what I’m saying?

Ty: It's sort of true. It's actually worse than what you're saying. Not only does chemotherapy not help with controlling the cancer stem cells, there's recent research out that I think—I'm sure that you're familiar with that shows that the chemotherapy actually induces cancer stem cell growth. So not only it doesn't help, it actually makes it worse. Because of the fact that we're killing the tumor cells, the daughter cells is not what we're after. We want to get rid of the mother cells, the stem cells. And the research is now showing that chemotherapy actually causes the stem cells to produce more cancer.

Jonathan: By now I'm sure it's very clear if you're listening carefully to what Ty and myself what we're saying to you. Please be careful. When you're looking to avoid cancer cell growth, conventional treatments don't address it. Food is extremely important. I know you get it. We have a lot of presentations here at the Immune Defense Summit, which talk even more specifically about the dangers of genetically-altered food, genetically-modified organisms, the problem with the chemicals in our environment, and many of the things that we need to do to take care of our gut and all of those things.

Another very important point though, Ty, that we want to bring up is this idea of supplements that can actually reduce our risk of cancer. Let's make this very clear. What have you seen in all of your research?

Ty: Well, I'll talk about supplements. I'm not going to talk about any specific brand but let me talk about substances in supplements. So let's look at something like turmeric or curcumin. So we've got literally hundreds of studies on curcumin, the turmeric, that show that it helps to stop cancer growth. We've got studies to show how anti-inflammatory it is. We've got studies to show how it balances the immune system and makes the immune system work better. We've got studies on vitamin D3, just exposure to natural sunlight. There was a study, I think it was Creighton University, this is 10 years ago, that showed that adequate exposure to sunlight, getting the appropriate amounts of vitamin D could decrease your cancer risk by about 75%.

We've got medicinal mushrooms that I'm a big believer in medicinal mushrooms whether it be reishi or maitake or shiitake or cordyceps. The list is endless of medicinal mushrooms that are used over in Asia to treat cancer. One of the reasons they work is that they help to modulate the immune system, to help it work better. We've got substances like ashwagandha, ginger, *Coriolus versicolor*, which is a substance from—that I believe that *Coriolus* is found in—I believe it's found in a flower but I may be mistaken.

We've got things like—substance like resveratrol, right, that we know of from red grapes and dark grapes. It's found in the skin that has tremendous effects on the immune system and stopping cancer cell

growth. We have some natural substances like vitamin B17. It's found in the pits of apples and apricots that is also known as laetrile that's been shown to have a natural effect of being selectively toxic to cancer cells without harming normal cells.

I mean the list, Jonathan, is endless. I could go on and on and on with natural substances, whether it be from herbs or roots or whether they're polyphenols that have an anti-cancer effect. The bottom line is this, as I mentioned earlier, I really cannot think of a natural food, whether it's just—how about broccoli, how exciting is broccoli? People are like, "Oh, I hate broccoli." Well, there are substances in broccoli that have been shown to stop cancer cell growth. I can't think of a natural food that doesn't have some sort of anti-cancer effect. So again, we go back to what should be our mantra after learning this stuff? I think we should just be a mimicker of Dr. Mercola in a good way: eat real food.

Jonathan: Ty, it's so great what you're bringing up because these are the essential points that someone has to really take to heart. Here it is, we're talking about conventional medicine being completely disconnected. And it really is just by the design. When you're a young medical doctor in medical school, you're not learning about this. Less than 1% of your class time—and this is a fact. Don't go by what I'm saying. Please look it up yourself. Less than 1% of your classroom time is in nutrition and none of it, for the most part, has to do with food and that's according to the *American Medical Association Wire* report, an online magazine that is admitting this to the medical professionals out there, saying, "We've got to make a change."

So here it is. You've been talking about foods that are causing all these problems and they're telling cancer patients, "Oh, eat whatever you want," which is pro-inflammatory and it's pro-cancer cell growth. They're telling people watch out for the sun, it causes cancer. Yet, you've just said that science says that exposure to sunlight, not burning ourselves so that we're hurt, but just good natural sunlight exposure daily is actually anti-cancer, so it's the opposite. And don't take supplements at all. My God, Ty, how many times have you heard a medical professional actually tell one of your clients, your people, and your audience who've sent your customer service an email saying, "My doctor says don't even touch any supplements at all."

I mean, the fear of anti-cancer work is so out there because people are being told by people who are misguided. And I love your point. Pro-inflammatory, is that the lifestyle you want? Or do you want to live an anti-inflammatory lifestyle? I think that's what I'm getting from you.

Ty: Yeah, I mean, that's absolutely accurate. And anyhow, again, the doctors, they don't tell their patients that could—that's what they're being told. Stay away from antioxidants when you're on chemo. It'll

lessen the effectiveness of the chemo. I mean, they're just regurgitating what they're told. The problem is that the entire medical system, specifically, when it comes to treating cancer, it's just been a victim of a bunch of disinformation. And earlier, Jonathan, I was talking about *Coriolus versicolor*, that's actually a medicinal mushroom. I was thinking of chrysin. It's a substance that's from flower. It's from passion flower. And that actually has several anti-cancer effects as well.

So broccoli, Brussels sprouts, and cabbage, those are three foods that I'm a big believer and they contain diindolylmethane. And so the list is just endless, Jonathan. Green tea, I mean, it's just coming to me as I'm talking, green tea extract, right. The EGCG in green tea is an antioxidant and it's got several studies that have shown that it has anti-cancer effects. Selenium, right? Selenium, appropriate amounts of food-grade, food-based selenium, not the synthetic selenium but food-based selenium, has tremendous anti-cancer effects.

There have been several epidemiological studies that have compared societies that have, really, no difference in the way they live or what they eat except one of the groups have a large intake of selenium and the other didn't. And the effects on the cancer were unbelievable. It was like there was an inverse correlation with the amount of selenium that, that population took and the amount of cancer. In other words, the more selenium, the less cancer and vice versa.

But anyway, we could go on and on about nutrition. But needless to say, I'm very passionate about it and it is a very, very potent remedy to treat and prevent cancer. It's just getting the proper nutrition into your cells. I mean, look, would any mechanic tell you that it doesn't matter what you put in the engine of your car? I mean, let me tell you, that once you fire the mechanic, that guy's an idiot. He has no clue about the way a car works because he told me to put Kool-Aid in my gas tank.

So you fire the mechanic because they have no idea what they're talking about because they're ignorant of the way a car works. But we have doctors that tell us, it doesn't matter what you put in your body's engine, it'll still run the same. And we believe that? Come on. We've got to start applying logic to this situation. And it makes no sense for us to believe a doctor when they say that what you put in your body has no effect on its performance.

Jonathan: Ty, I want to talk about some of the lifestyle habits that increase our risk of cancer cell growth, water. It's so important, right? Generally speaking, we could probably guess that there is an element of dehydration and the wrong kind of water, is that fair to say?

Ty: Yeah, I mean, I would venture to say that most people that are sick are chronically dehydrated. As a matter of fact, there was a medical

doctor named Batmanghelidj. They call him Dr. Batman. He was in Iran. And I think he died about 10 years ago. He was imprisoned in Iran. And he treated several hundred prisoners while he was in prison with them of different ailments that he cured pretty much everything across the board with just hydrating them.

And he learned over the years—and he was actually treating prisoners with dirty water. They didn't have clean, good water like we have. It was dirty water, but that's all they had in prison. But he made sure that they were hydrated. And he found out that a lot of the symptoms went away whether it was cancer or diabetes or high blood pressure or whatever the symptom might have been. Just hydrating their body properly a lot of times will make that symptom go away and they felt a lot better. And so Dr. Batman, his mantra that he preached until the day he died was, "You're not really sick. You're just thirsty."

So hydrating the body, which is upwards of 75% water, and the blood, which is upwards of 90% water, if you're not drinking enough water, you're going to be living in a chronic state of illness. And I have people say, "Well, I don't drink water. I don't like the way that water tastes. But I drink plenty of sodas throughout the day. And I drink plenty of coffee and plenty of tea." And that's not water. You go out with an animal—like we have horses here in Tennessee where we live. If I went out into the horse's water tank and I poured soda, they wouldn't drink it. If I poured tea, they wouldn't drink it. If I poured coffee, they wouldn't drink it. All they'll drink is water. That's because they know the difference. We need to learn the difference. Just because it's liquid, doesn't mean you're getting water that you need.

Jonathan: So great, Ty. That is such a valuable message you just put out there. Why don't we just get into it now, some of these common lifestyle habits, this is really important, that you would say increase our risk our cancer cell growth.

Ty: Yeah. And I'm going to exclude diet because we talked about diet. So other than diet, I think the most common lifestyle habit is being sedentary today. I think we don't move enough. I think that's one of the things that's happened over the last 100 years. My granddad lived until he was in his late 80s. Now, he did die from cancer. But he was elderly when he died. And his whole life, he was out working. He played baseball in the Boston Red Sox organization in the minor leagues. He worked the farm. Until the day that he died, he had a garden. He was out every day working and moving. And we just don't do that anymore. I mean, we sit and you go to a restaurant and everybody is sitting and looking at their handheld devices. People don't even talk anymore, much less move. But that's another subject all together. I could get on my soapbox here.

But the main thing that we need to do is just to get outside and start moving, moving up and down, jumping. When I was a kid, we had a trampoline. We'd jump all the time. When we jump up and down, it moves the lymphatic system, which is a big piece of our immune function. And the people that sit in an office all day and all they do is they click on a little mouse and they type on a computer, the only exercise they get throughout the day is when they walk to their car to drive home. That's not enough movement for our body.

So our—stagnant water, I just said our body is mostly water. Well, if you have a nice, fresh, crisp, running spring up in Montana, that's some clean water. We used to live in Montana, and you can just drink straight from the springs. But if you have a body of water that hasn't moved in several weeks, it's going to be stagnant, it's going to be scummy, it's going to have all kinds of fungal overgrowth. And just think of our body that way. If you're not moving, that water in there becomes stagnant. And so we need to move.

And that's one of the thing—I think that's the main thing that's missing today is having a lifestyle where we're always active. And so if you want to decrease your risk of cancer, get active. And it doesn't have—you don't have to go be a body builder and lift heavy weights. The best exercise, I think, for any cancer is just to get a little mini trampoline, a rebounder, maybe three feet wide and you can put it in your living room.

And when you're watching the evening news for 30 minutes, jump on the trampoline for 30 minutes. Get that lymphatic system up and down movement, stimulate your lymphatic system, which carries nutrients to the cells, but it also carries toxins away from the cells. And so that's probably the most important thing you can do is become active on a daily basis. And it's really easy nowadays with these little rebounders that you can carry with you even when you travel and you can slide them underneath the bed or underneath the couch.

Jonathan: Ty, it's a great message. Again, really simple but very important. And as a trained exercise physiologist, I just want to underscore something that's really important, especially for those who are concerned about their health. And I mean the ones in particular who are really dealing with health issues right now. When Ty talks about not having to be a body builder and lifting heavyweights, that is so true. All of the benefits that exercise offers, just moving around comfortably, a nice, easy walk, 30 minutes, 40 minutes, it doesn't cause you pain afterwards. And I am leading to a point.

For many people who have a pro-inflammatory lifestyle who are dealing with health problems, if they go to the gym or they try to do some exercise or maybe even if they sense that if they started moving the way Ty is suggesting, that their body is going to hurt more, I would strongly

suggest you listen to the Immune Defense Summit, the presentations that deal with detoxification. Because if your inflammatory markers are not brought down, that's the kind of thing that could get in the way of you really enjoying the benefits of exercise. Don't get me wrong, you should get out and move. But if you find that you're getting sore and you're having a hard time recovering, that is a clear sign that your body is toxic.

So, Ty, of course you can make a comment if you like but I think we ought to move on for sure to a very important aspect of starving cancer cells or actually ending up feeding them and that is the mental, emotional part. So take it away, please.

Ty: Yeah, Jonathan. That's a great topic because most people that are listening have probably heard of the placebo effect. So the placebo effect is when you have two groups of people that have the same ailment and you give one of them a drug or some other substance for it, and you give the other a placebo, which may be a sugar pill that really has nothing, no therapeutic effect. But we find that they have to account for the placebo effect in these studies, they have to do double-blind placebo control trials.

Why do they have to account for a placebo effect? Because it's a real effect. Some people can actually heal themselves by just thinking they're going to get healed. There are people that will take a placebo and actually heal something because their mental, their emotional state is so strong that they believe they're going to be healed, that we have to account for the placebo effect because it's a real effect.

Now, we're also finding today that there's what they're calling a nocebo effect. In other words, not only do we have the placebo effect that could heal you when you're really taking nothing but a sugar pill, but we have the nocebo effect, which is what happens when you believe that you're not going to be healed. And in that case, they're finding that no matter what you treat somebody with, what regimen they're on, what kind of a protocol they're on to treat their disease, you can do everything right, you can give them all the right foods and all the right medicines and all the right exercise and they still never heal.

And the reason is because the nocebo effect, which is the belief that no matter what they do, they cannot be healed is such a strong effect that it overrides all the other substances that you're putting into their body. This just indicates how powerful the mind is when it comes to healing. We must believe that we're going to be healed. The mental, emotional aspect, especially when it comes to cancer, is huge. And so we've got to believe.

And here's a story I want to share with the listeners real quick because

it kind of illustrates this fact. So I've got a good friend that's a doctor in North Carolina and he treats cancer. He told me a story of having a cancer patient come to him and this is after the patient had gone through traditional treatments. There's chemo, radiation, and surgery. And their oncologist had told them you'll be dead in three months.

Well, he said, he didn't have anything else that he could do with them. They didn't offer any help. So he goes to my friend that's a doctor and he treated him for three months and he completely healed him of cancer. But he still died within three months. And so upon the autopsy, he sent the body to the pathologist. And the pathologist called back my doctor friend, and he said that he sent the wrong person to the autopsy, this man has no cancer and he couldn't figure out why he died.

So this just illustrates how powerful the mind is, that man believed the oncologist and he believed the death sentence. He believed that he had three months to live and even though the doctor reversed his cancer and shrunk the tumors to where there was no visible sign of cancer. At autopsy, the pathologist could not figure out why he died because he believed that he was going to die, that overrode everything else that they were doing. The mental, emotional state is, I think, probably the most important when it comes to cancer.

Jonathan: Wow, that is an incredible story, Ty. And I mean there's no doubt that we can appreciate, anyone listening to this message, that our minds, the way we think and the way we feel, actually do set off real physical things in our body. So it's actually not just this invisible thing, if you will, of just the mental, emotional part. But it actually goes into, certainly with emotions, our electricity that runs through our body, and mentally, all the chemicals, our hormones, the cascade of chemical reactions that happen, whether we feel very depressed, guilt-ridden, angry, versus someone who just has such a gratitude, appreciation, thankfulness, this kind of thing flowing through their body. There really are different chemical states that come from those two different types of people too, right?

Ty: Oh yeah. There's no doubt. And the reality is, Jonathan, that I think that's probably the most overlooked aspect when it comes to cancer diagnosis and treatment. I don't know of any traditional or conventional oncological centers that even try to deal with emotions. I mean, if you're trying to deal with some of the emotions and you're trying to give them hope, how can you give somebody hope if you have a doctor looks at you—the doctor that you trust looks at you and says, “You have three months to live. There's nothing we can do to help you.”

How is that going to help somebody's mental attitude if mental attitude has this big of a role to play in cancer treatment and prevention? How can the oncologist look at somebody and sentence them to death?

Because that's essentially what they've done. I know they're trying to be honest. I know they're going through the protocol that they have to be honest with the patients and say there's nothing else they can do. But the reality is how can they do that to someone because what we're seeing is that those words when that oncologist pronounces that death sentence on some people, they believe it and it's a self-fulfilling prophecy.

Jonathan: So, Ty, as we close out the program, God forbid someone were to be diagnosed with cancer, what would be your best advice on the first step to take?

Ty: Analyze what are you eating. Are you eating real food? Because there's something in your diet that's obviously causing your body to be toxic. I'm not a doctor so I can't recommend any treatments. But yeah, I would personally look at detoxification. Do I need to detoxify my body, my liver, my kidneys? And there's a lot of different protocols that you can use to detoxify.

I would immediately—well, I say I would immediately, I already use essential oils on daily basis. I diffuse them. I rub them on my body. Essential oils are amazing with different effects that they have on cancer and the immune system. So those are three things that almost anybody can do. I look at my exercise regimen and see if I'm getting enough exercise. But those are all basic things. But if you're actually diagnosed with cancer, those are things you can do on your own.

I would then seek out a medical professional that is willing to help guide you through this journey. And there are many medical professionals that are out there. There are clinics all over the United States, all over Mexico and Europe that are good clinics that I've visited personally that I would try to find somebody that would be the medical professional to lead you through this. Because there are some people that say you should be your own doctor. And you don't need doctors. You should just become your own doctor and treat yourself. I'm not of that persuasion.

I understand where people are coming from but I don't believe that. I don't believe that most of us know enough about the way our bodies work and about different medical interventions to actually be your own doctor. I believe that doctors do serve a very important purpose but you need a doctor that's open to natural treatments, to integrative treatments, and a doctor that's willing to listen to your desires and help you to treat your cancer the way that you want to.

If it were like a melanoma cancer, I would look at a—there is a virotherapy clinic in Riga, Latvia, that's been very successful at treating melanomas. If it were pancreatic cancer, I know Dr. Linda Isaacs' office up in New York City has been very successful at treating pancreatic

cancer. So it would also depend upon the kind of cancer that I've been diagnosed with as well.

Jonathan: Oh, that's a great point. The healthcare providers out there, it's so important to find one that you're comfortable with. But you've got to stay on the ground about this. It depends on what kind of cancer you do have. Find a doctor that has a great history with helping you.

And I love what you're saying, Ty, about the individual doesn't necessarily have to make all the decisions themselves except what course of action feels the best for them. Maybe for that person it is surgery and natural therapies, maybe it's surgery and chemotherapy, and integrating natural therapies along with that. But the main point for sure, I'm sure you've heard this many times from the healthcare providers you've interviewed, Ty, that it all does come down to how comfortable is that person.

I mean, the late Dr. Nicholas Gonzalez, I know you knew him really well. He was a dear friend of mine. I mean he would be the first one to say that when someone went into his office and he felt like that individual was sitting there because the person right next to that person dragged them in, the very first thing his antenna was up, he sensed that, he would say, "Look, do you want me to pay for a cab and I can just have you sent over to one of the hospitals over here and they can take care of you?" Because he never wanted to convince somebody of anything. You know what I'm saying, right?

Ty: Yeah. And that is one of the most important things, Jonathan, and I'm glad you brought that up to end the conversation with is that it's got to be your choice. We're all about the freedom to choose. I mean, you should have the option to choose whatever method that you want to treat your disease. Whatever protocols that you feel are best, you should have that option and not be coerced and not be persuaded. It's your choice, your body.

And we just believe that you should have an educated decision, make an educated decision. And in order to make an educated decision we have to be educated. And that's why we share what we do and we leave the rest up to the patient. Still to this point in the United States, we've got freedom of speech, freedom of choice, freedom to make our own medical decision. And that's what we are really in favor of, it's just educating people and let them make up their own mind.

Jonathan: Please share this information with your family and friends because I agree with Ty 100%. It is so much better to be into this kind of information wherever you're working, you're walking, you're driving in a car, listen to these programs as much as you like, as many of them as you can, before it's the 11th hour. That's the worst time to try to figure things out. I know it's not sexy. Prevention is not the most exciting

thing in the world. But that's exactly why I create events like this so that you can have all of this information now when it counts the most. Get started with things that feel great and do them as often as you can because living that kind of lifestyle can really mean the difference between life and death.

Ty, I want to thank you so much for your time and I want to thank our listeners for joining us today. If you would like a copy of this program plus all the other presentations inside the Immune Defense Summit, simply click the banner you see on this page.

Thanks again for attending the Immune Defense Summit. Talk to you soon. Take care.

Link Between Emotions and Disease

Guest: Niki Gratrix

Jonathan: Welcome to the Immune Defense Summit. I'm your host, Jonathan Landsman, creator of naturalhealth365.com. Did you know that every year drug-resistant bacteria or superbugs kill seven hundred thousand people worldwide, and is projected to be more lethal than cancer by 2050 and infectious diseases still remain one of the leading causes of death? Cancer, cardiovascular problems, and diabetes are by far the leading cause of premature death in the world. But in reality, all of this is avoidable with a strong immune system.

That's why I created this event, to help you understand the roots of disease and how to prevent and reverse life-threatening illnesses by re-empowering your immune system.

Our show today: The Link Between Emotions and Disease. Our guest, Niki Gratrix, is an award-winning internationally renowned registered nutritionist and health writer specializing in stress and mind-body medicine.

In 2005, she cofounded one of the largest mind-body clinics in integrative medicine in the UK with patients in thirty-five countries where she worked as a director of nutrition until 2010. In 2015, Niki hosted the Abundant Energy Summit, the largest ever free online health summit on overcoming fatigue, interviewing twenty-nine of the world's leading experts on optimizing energy, with over thirty-thousand participants.

Today, we'll explore how emotions directly influence our health. How

do emotions affect our immune system? And more importantly, what can we do now about the negative impact of past emotional traumas in order to avoid future disease symptoms, pain, and premature death?

To be perfectly clear, we know based on tremendous amount of scientific data and clinical evidence that unresolved emotional traumas threaten our immune health and overall wellbeing. Fortunately, we also know how to identify these issues, which in many cases go largely unnoticed without the right information and tools. After listening to this conversation, you'll have a much deeper appreciation about emotional health and how to overcome past traumas to achieve stronger immunity and optimal health.

Please join me in welcoming Niki Gratrix to our program. Niki, welcome.

Niki: Thank you so much for having me, Jonathan. It's great to be here.

Jonathan: Oh, it's just great to have to you, Niki. This is such a special conversation we're about to have because no one else is diving deep into just the emotional aspects of our health than you are, Niki. So let's talk about how important is the role of emotions in the onset of disease and specifically immune system dysfunction.

Niki: So, Jonathan, I truly think that emotional stress is probably the most underexposed risk factor or factor that would be suppressing immunity. So there is a whole body of research, mind-body research, in the area of psychoneuroimmunology, the study of the mind and the body, whose most robust finding is that emotional stress suppresses the immune function.

So this is a huge area to look at. And one of the ways in often stress to people about how important, how prevalent it is, in terms of being a factor in everybody's health and their immune function is, I talk about the Adverse Childhood Events study. I'll give you a brief overview of that study just so that people are up to date and they kind of know what the results of some of the most important medical research that's ever been done.

So the Adverse Childhood Events Study was a huge study of 17,000 adults, started in the mid-1990s. It was done by the CDC and Kaiser Permanente. And they were specifically looking at emotional stress in childhood and then they correlated that with adult onset of diseases, chronic disease state.

So when they talk about adversity in childhood, they're looking at things like, this is what counted: parents separating or divorced, physical, sexual or emotional abuse, physical or emotional neglect, domestic violence, mental illness in the family, substance abuse, and incarceration

of a related family member.

Now, first of all, 67% of all adults said they'd experienced at least 1 ACE, so that's already... We're at epidemic levels already. And of that group, 80% actually said they'd had more than 1 ACE. So the implication, if you have a high level of these ACEs, you have a dramatic increased risk of 7 out of the top 10 causes of death. If you had 6 ACEs, you had a reduced lifespan of 20 years. If you had 8 or more ACEs, you had triple the risk of lung cancer and then three and a half times the risk of heart disease.

And the statistics went on. A few others, that if you have 4 or more ACEs, you have a 400% increased risk of things like depression and Alzheimer's. You are 12 times more likely to be suicidal, cancer is two and a half times higher, diabetes is 1.6 times higher. And with just 2 ACEs, you are 100% more likely to have autoimmune diseases. Chronic fatigue and fibromyalgia are like the poster children for trauma in childhood.

So these statistics really are epidemic. They're colossal, and more people should know about them. And it's probably also an underestimate. The 67% of adults who said they'd experienced an ACE, this the last point I'll make, it's bound to be a huge underestimate, because even the original researchers said they missed off things. They just weren't expecting to get the results they got. And they didn't include things like asking about if somebody had experienced bullying or being a victim of racism or physical trauma in childhood such as pregnancy and birth, the birth process, perhaps witnessing violence or death of a caregiver.

Also, emotional trauma is intergenerationally inherited. So if you had no ACEs in childhood, what about your parents or grandparents? So third generation survivors of the Holocaust victims have the same physiological and psychological expression as their grandparents.

And there's also something called silent ACEs, which they go greatly underreported, and we'll talk about that a little bit more when we cover talking about attachment trauma. The upshot is everybody is affected by emotional trauma. And nobody that we see in clinic or if you have some kind of ailment or chronic complex illness, the chances are there's an emotional component to the illness.

Jonathan: Niki, I'm going to very honest with you and anyone listening to this message. This is one of the biggest motivations as to why I did the Immune Defense Summit. I'm just so sick and tired of the mainstream media and even, with all due respect, conventional medicine, and all the doctors that are probably just falling into the trap or the habit of really getting into this whole fear-based mentality.

We're talking about emotional wellbeing here. Yet, all the time I hear

this, that doctors are using fear to rush people into treatments. They're not educating people like what you just shared with us, Niki. You really heighten our awareness about things that are really important to pay attention to.

The mainstream media we know, you turn on the TV, all you see is violence and divorce and fear, over and over again, with very little of anything speaking to solutions to any of the problems that they have. In social media, Niki, all we see. It is rampant. They will heavily suppress, Facebook, Google, Twitter, all of these social media outlets are heavily suppressing, censoring great, healthy information like this to get out to the public. And yet, they'll allow things like, God forbid, we see the beheadings and the fire and all the horrible stress.

You must shake your head with such sadness in your heart all the time looking at all of this, what I'm describing, because I know this is what's going on. So I know we're going to talk about what is attachment trauma and why it's so important to know about this. But I was just wondering if you could just make a comment or two about what I'm saying.

Niki: I couldn't agree more. If people really understood where their health comes from and how to create health and how much it's so involved with the impact of social relations, other people, and what people are sending our way at the emotional level. Exactly what you said—what's being shown on TV, how people are treating each other, and also the mainstream media and how they're sort of demonstrating how humans should relate to each other. You would almost think they had an agenda of actually population reduction or something along those lines. It wouldn't be completely irrational to think, *Wow, this is...* It's why the work we're doing, the work you're doing, Jonathan, is so important.

Jonathan: So let's talk about this, Niki, because I know this is going to be very important for those that are open-minded to this, right? That's what this is all about. It's not feeling threatened. We're here to help. What is attachment trauma? And why is it so important to know about this?

Niki: So this is a huge update on my work that I've been talking about on ACEs and adverse childhood events. So attachment trauma is also known as developmental trauma and it falls into what we call the silent ACEs. So it's very much underreported and most experts would agree.

And if you do an ACEs questionnaire and you answer those ten questions that I just listed about whether you'd had substance abuse in the family and so on, that questionnaire is very superficial. And people self-reporting things like emotional neglect and emotional abuse are likely to miss attachment trauma because it occurs in the first thousand days of life.

So it's conception to about 2 years old. It's the time before the cognitive or thinking brain comes online. So obviously, you don't have explicit memories of it. So trauma at this time occurs either when mommy's traumatized during pregnancy, those things that are going on in her life. Or essentially, she or the primary caregiver doesn't bond securely with the baby.

Now, here's the blockbusting research data. Over 6000 mother-baby interactions as part of what are called the Strange Situation Studies done from 1970 up to 1999 by Dr. Mary Ainsworth show that a shocking 45% of babies insecurely attach with their mother. These statistics were confirmed by over 10,000 adult attachment interviews done by Mary Main, who was the graduate of Dr. Mary Ainsworth. And that was over 25 years up to 2009.

So we have about approximately 50% of adults who are actually not capable of creating secure, happy, long-term, loving adult relationships. And they tend to fall into 2 categories, either avoidance or anxious type. So the babies that insecurely attached, the anxious ambivalent types, essentially, the baby is in a room with a mother and a stranger. This is what the strange situation study was. Mom would leave the room, and then the researchers would observe the baby's reactions and what happened when mom comes back into the room.

Now, with anxious types, mom comes back into the room. The baby is very anxious when she leaves, very anxious when she comes back and is very hard to calm down. In other words, the baby is in a chronic stress response. They generally found that moms like that who had a baby who is anxiously attached would be somewhat there and attached, and sometimes she would meet her baby's needs and sometimes she wouldn't.

The other type, the avoidant types, this is where mom leaves the room. Baby doesn't respond. Mom comes back into the room. Baby still doesn't really respond. Mom could be a stranger. This is more heartbreaking because it's essentially where mom is not expressing emotional love to the baby. And basically, the baby learns it doesn't really matter whether mom's there or not, which is very sad and heartbreaking.

Secure babies, when mom leaves, the baby cries. When mom comes back in, the baby cries for a bit, clings to the mother, and then she calms down or he calms down. She carries on playing.

So this type of trauma actually leads on to something called developmental disorder. It doesn't qualify as PTSD, post-traumatic stress disorder. So essentially, it's a type of emotional trauma, which is not recognized by psychiatrists. You won't get diagnosed for this and it's not covered by insurance. PTSD occurs in response to a specific indiscrete

event, such as being beaten or perhaps being raped or something specific.

Attachment trauma is relational. It's not one event. It's ambient. So with PTSD, you might get anxiety, flashbacks and nightmares. But with attachment trauma, it leads on to problem with things like regulating emotions, concentration and learning problems, chronic anxiety, chronic depression, inability to create good healthy social relations.

Now, Bessel van der Kolk, the world-leading expert in trauma, he's the professor of psychiatry at the Boston University School of Medicine, studied over 40,000 children nationally being treated for multiple traumas and found that most, I quote, "do not meet the criteria of PTSD as majority of issues are not specific traumas but issues in their attachment relationships."

So this is huge. 50% of everybody probably has this. If you are somebody who kind of wonders like, "What's wrong with me? I seem to have chronic depression. I seem to have chronic anxiety. I seem to have hyper reactions to things. But I was physically looked after. I wasn't in foster care. I haven't been raped, I haven't been beaten, but I still have all these symptoms." You might want to look at attachment trauma.

So this is hugely underreported. And to assess attachment trauma in adults, it takes quite an intense interview. It's called the Adult Attachment Trauma Interview. And it's an assessment done by experts. So the ACE study is going to miss that, but this adult attachment adult interview, they have an 85% accuracy of predicting whether the adult attached securely or not in their own childhood and, therefore, whether also 85% accuracy on whether they've attached to their own children.

So this is a huge area. It's why it's underreported. It's relational trauma. That's where most trauma's coming from. It's not your PTSD stuff. And that's the next thing I wanted to flag for people to be aware of, like don't just think about ACEs superficially. You'll want to go a lot deeper. We'll look at this ambient type trauma.

Jonathan: Oh, Niki, this is just incredible because so often, of course, during this event, the Immune Defense Summit, we're going to be talking about those things that attack our body literally: heavy metals and poor nutrition, nutritional deficiencies, you go on and on and on.

But when life is reasonably okay and you've been feeding yourself pretty well and you're taking some good quality supplements and just being well hydrated and all these things, you put them all away. And you say you know you've taken care of these things, but there's still something that's bothering you physically.

And that's what we're about to get to: how these emotional traumas literally change our biology. It's just mind-blowing what I just heard you say already, as you were speaking, Niki. I just felt like this recording already should be given to every young male and every young female that's thinking about having a child. You know what I mean?

Niki: I couldn't agree more. It's so important, isn't it? You know for health, humans need love. We're social beings. And if we don't get love from our mother in the first days of our lives, this will set up a permanent stress response in our body. Literally, how does this type of attachment trauma or other types of trauma change our biology? It literally changes the epigenetic expression.

So they've done all kinds of experiments, creating early life stress through maternal separation, which is essentially creating attachment trauma in animal models. And we know, the research is there. It's done. It's in mainstream peer reviewed studies showing that the body will get reset into a fight/flight response.

It changes the glucocorticoid expression, which impacts the entire stress mechanism, which is the hypothalamic-pituitary-adrenal axis, this very important HPA axis, which directly speaks to immunity and controls immunity. And if we're in fight and flight, we know that suppresses immunity.

So from a young age, the system gets reset. Those little babies that are either ambivalent or are actually avoidant types of the moms of both types being shown that their systems will be set into chronic stress. And chronic stress kills. When we have this cascade of the HPA axis changing, the immune system changes. We're not in the parasympathetic rest, digest, detoxify mode.

So we have this enormous continuous stressor started from childhood. It's going to define how we respond to events in adulthood as well. It's very important. So if you want to be a resilient adult to stressors that are inevitable that happen in adulthood—death, divorce, job loss—why do some people get knocked out by that and why are others quite resilient? Often, you can look back to their childhood experience, because the body's already been under like an internal reset. And that's where our stress levels actually come from.

And truly, how somebody is going to ultimately express that physically, whether that goes into somebody expressing a cancer or it's heart disease or it's chronic fatigue, which is just the weak link in the chain in your gene. So some people have slightly weaker genes to do with heart health or cancer or whichever illness or autoimmunity. So how it expresses is personal. It's going to be different for every person, but the core root issue that's the same is this change in the HPA axis.

So this is mainstream peer reviewed science that people aren't talking enough about. And it should be. Every doctor should understand and be ACE aware. Should be aware about trauma, how that changes biology. Everybody should be looking at their own timeline, looking backwards to look at, is there a potential trauma related influence on something that's happening now in my physical body?

Jonathan: I hope people can appreciate this message already. I know most of my interviews are a certain amount of time. This one will probably be a little longer. But I promise you, every word, every minute will be well worth your time. So hang in there.

And for those who are interested in more about family health issues, make sure in the Immune Defense Summit you're listening to Dr. Heather Wolfson. She goes into many things that are so related to what Niki has already just started to talk about. She dives deeper into it from a physician's perspective and also from a mother's perspective, just really amazing information.

So, Niki, let's get into this a little bit more now. How do emotional traumas literally change our biology?

Niki: So as I mentioned, early life stress will literally... The research has shown that things like maternal separation and models in both rats and monkeys and replicated in humans, when we have trauma in childhood at a very young age, it changes the epigenetic expression of the stress mechanism in the body.

So the expression of the glucocorticoid genes change so that they have a lower threshold response. So you need less of an external stress to cause that stress response. And what's happening with the stress response? We're pumping out cortisol. We're pumping out...essentially, we're increasing inflammatory cytokines in the body by being in a chronic state of stress.

And all of that puts the wear and tear on the body. It's being reset from a young age. Unless there's an intervention, the body will be reset since the time of the trauma. And this will be happening, even if you can't remember, your body remembers. Your body keeps the score even if you can't remember it.

So unfortunately, with trauma, with emotional trauma, time doesn't heal, it conceals. And so the biology has actually shifted and it will only become evident when there'll be a trigger, a stressor trigger in adulthood and then the disease will express, whether it's autoimmunity disease or whatever. But in truth, you'll have actually started 20, 30, 40 years before when the trauma happened and the biology changed. I hope that makes sense.

Jonathan: It makes a lot of sense. And again, I just cannot help but think how critically important this is for those who are young, for the children out there. And I say it like children who really aren't aware of these things, and then of course, they're old enough to have children on their own, they really need to listen very carefully to this message. And I'll tell you. Even if it's past that point of something already happening that you can't change in a sense going backward, it's important to be aware of these things and really take a different perspective. If you are a parent looking at a child who's older now having so much stress in their life, really appreciate what might have happened earlier. And then maybe make some changes now to help them heal. Does that make sense, Niki?

Niki: Yes, totally. And it's good for parents to remember, let's not get into faultfinding or blame game here. Usually, a parent's parenting style comes from their parents and it just gets passed on. So the awareness is everything.

A child's brain doesn't develop in a vacuum. It actually is, the social impact is what impacts the growth of the brain and how it develops. So the brains of children are actually impacted and changed by connection with others and the role of others and the interaction of others. It literally builds neuropathways in certain directions.

So a positive, loving, interaction between parent and child will create neuropathways of calm, security, not in the fight/flight response and in that kind of rest, digest, detoxify mode, in a mode where there's good concentration. But if it's not, if it's stressful or it's not loving, or all those kinds of things, then literally, the brain develops differently and the epigenetics is different.

So it starts from a young age and it's a very important time. But it is reversible. And that's the key thing, and we can talk about that. In adulthood, we're not doomed to this. We can change our epigenetic expression even if we did have a rough childhood.

Jonathan: Yeah, that was beautiful what you just said, Niki. Because I can imagine in the twenty odd minutes now, people are absolutely freaking out about, how on earth do we get out of this?

So please let's go through this, the best tips to identifying if emotions are playing a significant role in our illness, or just generally in our life. And of course, please give us some ideas how we can fix this. Where do we begin?

Niki: Okay. So like step one I would say, explore. So this is the journey of kind of getting to know yourself. And you can start very simply, by going and getting your own ACE score. So that's a simple place to start. Go and find out. Look at the list. I've got a completely free and no opt-in

required place on my website, nikigratrix.com/acesscore/ just go to that page. It's an extended ACEs score. So you can toss up, look exactly what the research has originally questioned. I've got the additional questions in there covering things they missed.

So start to look at this. Maybe you've never explored it before. So just start to take an inventory. And now also, going into attachment, there is a way of actually finding out if there may be some attachment issues going on. One of the things you can do is an Adult Close Relationship questionnaire, which is also, it leads on from that page on my website. It's also free, no opt-in required. And the Adult Close Relationship questionnaire is very much how we relate to the most important... Our romantic partner. Our key partner is often influenced by attachment very early on in childhood.

So if we tend to be a little bit more on the avoidant type, where we tend to downplay emotions. We tend to be the commitment-phobe, or if in some areas they are starting to term this as a form of narcissism. There are different degrees of that. If you are that type, it might suggest that you are on the avoidance side.

There's also the anxious type. And we can relate the same in our romantic relationship when we're on the anxious side. So we tend to worry a lot if the person still loves us and if that person is going to be there. We have a lot of emotional requirements, and so on.

So there's actually a whole questionnaire, whether you are securely attached in adulthood or not, that'll actually help you find out if you had attachment issues in childhood but also just exploring the whole area of your childhood.

And there is a questionnaire I have that you can do that's an Adjusted Adult Interview questionnaire that is by Dr. Dan Siegel, who's an expert neurologist in attachment trauma and developmental psychology. He's a neurologist. And it's a kind of exploration questionnaire that will get you thinking and just start to think maybe there is something here that I didn't previously think of. So that's another thing to do. So it's exploring.

We use in clinical practice something called the Enneagram, which is a very useful personality typing system. The Enneagram stands for, *ennéa* means 9 and there's 9 different personality types. And it's very useful because it gets to attachment trauma again. It's categorizing people by, not what their behavior is but why they do what they do.

So there's what we call achiever types, giver types, anxiety types and perfectionist. That's 4 types. That's just picking out 4 of the 9. And you can actually look at that and go, if there is attachment trauma, often the achiever types actually learn that the way to earn love, because they

didn't get it from the mom or they didn't get it from their caregiver, it wasn't something they found with their birthright. It was something they learned to earn.

So they had to earn that by doing. Because the attachment trauma, it wasn't just freely available, it seemed to be missing. So they learned to become a human doing rather than a human being. Now that leads into all kinds of other destructive health patterns, overwork, inability to relax. Kind of the workaholic types. They are very prone to things like chronic fatigue. We see that constantly in the clinic that I cofounded.

Giver types are very interesting. They didn't get unconditional love as a child. They learned the only way they could get love was by giving it to others and then they would get love back. And giver types, there are loads of therapists, the giver types. A lot of mothers are the giver types. It tends to be something where there are a lot of people in the helping professions.

And you'd think they were the ones that are sorted on this, and, actually, they are some of the most imbalanced and who are actually not giving to themselves enough. Tons of people with chronic fatigue and other illnesses, they put everybody else before themselves. And then we have to learn to sort of...

So each type has their kind of certain destructive patterns that will come from being that particular type. And this is just part of the exploration. Looking back in childhood, there were the certain events and issues that happened. Did you change in response to those events? Or have you always been a giver, achiever type? Perfectionists think they can only get love by getting things right and doing things well and "being good."

So it's a real exploration of finding out who you are. And you'll start to see certain patterns that are maybe destructive or are actually not putting your health first. Or, will show you why you don't need to be compliant with a health protocol.

I'll just mention something very briefly here. The ACEs study started in an obesity clinic. And they were trying to find out why they had a high dropout rate. 55% of people would drop out after doing really well losing weight. So they interviewed people to find out why. And somebody summed it up, it was a woman, when she said, "The reason I'm overweight is because it's a form of protection against unwanted attention from others." So she was sexually abused in childhood, and she was overweight because it was protection.

So here is a trauma that is directly sabotaging somebody's ability to stay on a health plan. Essentially, it was a threat to her identity to have a thin body. So it shows you how much more we need to consider

when it comes to health. It's not just about diet. It's not just about the information, the education about what to eat. It's who is this person you are dealing with? What's their subjective state? And what's been their history? What's their subjective history?

So step one is start to do some exploration. And I have given you quite a few different tools there to start to find out. And by the way, awareness alone can help to start to shift these patterns. So you'll get lots of light bulbs going off and energy will move. Emotions will move. Things start changing just in the exploration.

And do journaling. Start writing about it. You could talk to a trusted friend as well. A trusted counselor, someone that you know is a safe space and you can talk about these things to. Perhaps the things you've never talked about to anyone before, it might be a good idea to start talking now. And you'll find it will start to change and move.

Jonathan: Niki, this is just absolutely fantastic information. I'm not trying to make light of this. I was just laughing at myself inside. I think I had the achiever, giver, perfectionist. I was completely messed up when I was in my 20s and my 30s.

Emotional imbalances, emotional issues that absolutely, Niki, when I started to let a really good friend of mine close to me, I allowed him to talk to me. Or I should say, I allowed myself to talk to him. He had a medical degree, a lot of experience in health and natural health. And again, my longest friend even to this day. But the point is, I started talking with him. I got into homeopathic remedies.

The awareness issue, what you were talking about just at the end, just becoming more aware of it. And just, "My God, I am really messed up here." Just noticing that, how messed up it was. How it messed up my relationship with my wife. How I had to fix these things. You know what? It was about being disgusted with being that way anymore.

That was a big deal for me, Niki. And when I got to that place where I said, "I have had enough." And then brought in some tools, talking to this friend of mine I told you, doing the homeopathic remedies. And of course, working with a spiritual mentor as well that did tremendous amount of work I did over a course of few years. Now, it wasn't like a few days or a few months, but a few years. Boy, did it have a tremendous positive effect on my relationship with my wife. My work got better. Everything got better. I'm sure you can appreciate what I'm saying.

Niki: Totally. And you'll be amazed about how much this type of thing is impacting the physical body. And some people are staying ill in an illness because if they got better, somebody they are living with, actually, they are not going to deal with that very well. And they've got attachment

issues going on with their adult relationships.

So it's one of the most fundamental things to look at. Like, who are you now? How are your current relationships? And what happened as a child? How did you evolve through that? And how are you being destructive to others in your life and in relationships?

You see, we just need to get away from this reductionistic approach to illness just being something that's suppressed by a drug. It's who are you in the world? How are you going about your life? And if you've got an illness, if you think that something is going wrong in the bigger picture, something's out of alignment in this larger context that you're a human being with a social context. You don't exist in a vacuum.

And your immune system doesn't exist in a vacuum either. It's being impacted by people around you as well as environmental toxins in diet and all of these factors. So we're just expanding our view on what's actually affecting us and what's blocking our recovery.

Jonathan: You know, Niki, I often say, and I really mean this from the bottom of my heart, my wife truly saved my life. And so I want you to talk a little bit about how relationships affect our immune system because man, if it wasn't for her... She was the key human being in my life that turned things around, that I almost want to use the word "forced" me to look at all the issues I mentioned before. And I just see relationships as being a huge influence on our immune system. So please talk to us about it.

Niki: Yeah, so it's so interesting because that is exactly what we've been discussing when we talk about attachment trauma and how trauma from childhood, the vast majority of it is coming from attachment relationships. How interesting that there are these blistering studies in adulthood that confirm that this is so important.

So there was a meta study. It was a landmark study done in 2004 of over 300,000 people. Social support was a stronger predictor of survival than physical activity, body mass index, hypertension, air pollution, alcohol consumption or even smoking fifteen cigarettes a day.

So it's fascinating that other people, OP—I call them OP—these are going to be great for you and it's going to help you recover. But a negative situation going on socially is bad for your health and it's shortening your lifespan. And as I mentioned before, one of the most robust findings in the science, just like in your immunology, is that things like social isolation, lack of social integration, interpersonal conflict, suppresses immunity and increases inflammatory markers.

So if people can't attach properly in adulthood because of what

happened in childhood, they either end up... Often they can be involved with pathological narcissists who basically are abusive. They're selfish. They're withholding of love, and you end up having your needs put last. So that's one type.

The other type is a very needy type, codependent, the type of people that you have to stay small around. They can't celebrate your success. They get intimidated by your independence. So there's two sides to that scale. Or if you can't attach, you might just do the relationship anorexia thing and not have any relationship at all. And that might not be from a healthy point of view, because you either know you are going to attach to a narcissist or you're just not able to do that.

So the state of your relationships is huge. It often comes from what happened in childhood. And having healthy, supportive, secure relationships is truly one of the most important things. And it will be directly impacting your immune system. There's an entire area of research called social genomics now, which is looking at how social interactions and social context affects genetic expression, so yeah, very important. And it's a huge exploring area for people to actually start to consider who they are in relation to others and how others are impacting them.

I talk about energy vampires a lot. You really want to stay away from the energy vampires. They are real. They will be draining you of your life force energy, and they will be reducing your life span. So it's as black and white as that.

And in terms of just staying compassionate towards others, we want others to connect into their own source of health, independence, their inner beauty, their own source of love. So we don't want to be rescuing people and we don't want to be hanging around with people who are toxic to us. You don't have to come from a judgmental place. But when we allow ourselves to let go of destructive people, we enable other people to do the same. So everybody benefits. And the rising tide raises all boats in the harbor.

So yeah, relationships, can't emphasize that enough. And it links exactly to the whole relational trauma, really emotional trauma, most of it comes from this. So it's very important.

Jonathan: You're making some really beautiful points, Niki. So again, as we're closing out the program, this is some of the most important stuff, of course. Day to day, what can we do to keep our immune system charged up? What do you tell people?

Niki: I actually talk about doing daily reset rituals. So really everybody must, must relax, totally relax, for at least 20 minutes twice a day. So

what we're trying to do to is reprogram the neuropathway that is stuck in a state of stress often since childhood. So we need to trigger the going to the safe space mode where we're triggering the parasympathetic, which is the rest, digest, detoxify. It's the recharge state.

Now the big four, where there's the most research that you can change the neuropathway—it's an anti-inflammatory thing to do—are things like meditation, yoga, tai chi, qigong. I call them the big four. But it's whatever works for you. It might not be those four things. It might be a time in nature or it could be dancing. It might be some form of art, painting, sculpting. It could be sun bathing. It could be forest bathing, deep breathing, whatever works for you.

It could be actually healthy social relationships, having a good social time with some positive friends. As long as it's not competitive, you're not competing with others, there's no judgment, you can't fail at whatever it is, you're not striving at it, there is no right or wrong, you're just in the safe space, 20 minutes twice a day, that will reset so much of the stress messages that we're getting that we've had internalized in the past or that we're getting in the present.

So I can't emphasize that enough, everybody. Even if you had a great childhood, there's stresses happening in adulthood today. So if you want to stay strong immune system-wise, that daily ritual of total relaxation for 20 minutes, at least 20 minutes twice a day if you could do it, you won't believe how much of a difference that it makes. But also, it's so simple. But how many times you'll come up with excuses not to do it. So you've got to schedule it in. Very powerful technique though.

Jonathan: There is no doubt. Niki, my history is with high performance athletes. And they have done physically so much. And people could be in awe of their accomplishments on sports, on the playing field. But they also know mixed in, all along the way with all of their training and even in the heat of battle at high-performance levels, how breathing alone, resetting, like what you say, themselves even for just moments but multiple, multiple moments throughout their competitive time, that they know that that breathing break is so important, because the intensity level is so high. Without it, there would be no endurance. They wouldn't be able to last long enough to win.

So breathing is so huge. Anyone can do that. Even if you're not feeling well, just trying to enhance your level of breathing is so valuable. And I talk about chewing your food. Just spending much more time chewing each mouth of food. It will shift you from the sympathetic to the parasympathetic nervous system. And overall, your whole body is going to feel a difference.

And one of my favorite things, Niki, for sure, is taking that walk in nature

with my wife. That is such a relaxing time where I just go there... And they do talk about that. Forest bathing, just walking, literally being surrounded by trees, or getting close to the ocean if you can, or water. It's an amazing feeling. And then you go back to your regular life and you really see that you are performing at a higher level. So I couldn't agree with you more, Niki.

So to finish up the program, Niki, on a little bit of a serious note, when do you think that professional help is really needed?

Niki: Yes, so this is important to comment on, especially when it comes to, we're talking about emotional trauma. So first of all, if you've had a lot of trauma and it was intense and it was early, that is a time when I would consider getting professional help. Because as you do this work and if you start to explore on your own, it is possible that repressed memories and things like this could come out. And you really want to be within a proper safe professional environment to go through that, especially if it was bad trauma and there was a lot of it or just a particular incident that's really negative, then having that additional support with a professional who knows how to help you through it.

Most trauma therapists and specialists know that in order to release trauma, you do have to connect into it again. Connect to the feelings again in order to release them. So that can be re-traumatizing if it's not done in a proper professional environment. So if it was bad, if it was intense and if it was early, there is some recommendation, I would probably seek out professional help for that.

The other types of recommendations I would say to consider start getting professional help is when you're doing a lot of meditation, say, you're trying to do your 20 minutes twice a day. You've done a lot of work so you've become very aware of your own patterns, but they are just not shifting. So you're still having chronic anxiety. You still have sleep problems. You're still getting symptoms, health symptoms as well. Then you might also want to start exploring with a professional.

And there is a range of different things that you can do to help resolve trauma. Plenty of interventions that absolutely work, whether that'd be the Emotional Freedom Technique, that's EFT, working with an EFT practitioner, neuro-linguistic programming, NLP practitioners. Some people do great with hypnosis. Somatic experiences, Dr. Peter Levine, he is a world-leading expert on trauma. That's type of slightly more body-focused work.

Even massage, by the way, can help release because often we store emotions in the muscles and so on. I think neuro feedback is also been profoundly helpful as well. Sometimes it might just be psychotherapy, or it could be cognitive behavioral therapy. What works for some people

doesn't necessarily work for another. And it' is an exploration. And the most important thing is you'll want to get your free fifteen-minute chat with a practitioner. Make sure that you feel comfortable with them, that you feel that you could trust them, that they are the right person.

And if someone is not right or makes you feel uncomfortable, you don't agree with them, you don't have to work with them. Let them go and find a new one. That's your prerogative. There are good practitioners out there. There are bad ones out there as well. So be picky. Have high standards and don't get stuck with one.

And try some different things. Try a few different types of therapies. It will never be wasted because once you start down one route, you'll often learn something and gain something from that and then realize, "Uh-oh, actually, I've got to this level now where I need a slightly different approach." So it's never wasted. You'll build on that and you'll learn. So, lots of help out there for people who are committed to looking.

Jonathan: Niki, I know this is going to sound a little strange probably to say right away out of nowhere, but I feel so blessed to have conversations like this, every single one of these conversations I've had with all the experts. I feel like you listen to these conversations two, three times, you will get so much more out of it by just listening more carefully a second or third time.

But I got to tell you, Niki, I am not kidding. You have taken it to another level. And you and I know each other for a while. But I just feel like people need to hear this again and again. And they will absorb, get more out of this conversation, and it will take them to another level.

So all I can say is thank you so much for your time. And I want to thank our listeners for joining us today. If you would like a copy of this program plus all of the other presentations inside the Immune Defense Summit, simply click the banner you see on this page. Thanks again for attending the Immune Defense Summit. Talk to you soon. Take care.

Overcoming Lyme Disease and Co-Infections

Guest: Dr. David Minkoff

Jonathan: Welcome to the Immune Defense Summit. I'm your host, Jonathan Landsman, creator of naturalhealth365.com. Did you know that every year drug resistant bacteria, or super bugs, kill seven hundred thousand people worldwide, and is projected to be more lethal than cancer by 2050? And infectious diseases still remain one of the leading causes of death. Cancer, cardiovascular problems, and diabetes are by far the leading cause of premature death in the world. But in reality, all of this is avoidable with a strong immune system. That's why I created this event. To help you understand the roots of disease and how to prevent and reverse life threatening illnesses by re-empowering your immune system.

Our show today: overcoming Lyme disease and co-infections. Our guest, Dr. David Minkoff, graduated from the University of Wisconsin, Medical School in 1974, and worked for more than twenty years in conventional medical world. In 1997, he and his wife, Sue, founded Life Works Wellness center, now one of this country's foremost alternative health clinics. In 2000, he founded Body Health, a nutrition company which offers a unique range of dietary supplements to the public and practitioners.

Today we'll talk about Lyme disease and related co-infections in a way never talked about within conventional medical circles. In fact, I would venture to say that if you've been unsuccessfully treated for Lyme disease with just antibiotics, then after listening to this program, you will most certainly be looking for a better health care provider.

Sadly, in many cases an antibiotic treatment protocol is simply not enough for Lyme disease patients. And conventionally trained physicians, for the most part, are ill equipped to handle the situation due to their synthetic drug based medical training for the treatment of disease.

Get ready because this conversation will offer you a sensible, intelligent, and scientifically grounded way to naturally overcome the symptoms of Lyme disease from one of the best doctors in the United States in terms of educating and empowering patients towards better health. Please join me in welcoming Dr. David Minkoff to our program.

Dr. Minkoff, welcome.

Dr. Minkoff: Thank you very much. It's great to be here.

Jonathan: Dr. Minkoff, I think probably the most important way we should start off our conversation is to really go over this. Why is Lyme such an epidemic right now? What's going on?

Dr. Minkoff: I think if you look at the history of infectious diseases, there are sickly patterns in every one of them. There were times in the thirties and forties where strep would kill people. And the flu in 1918 killed I think twenty or thirty million people. So these bugs tend to get worse and then they go down and then not so bad. The Lyme bacteria itself, *Borrelia burgdorferi* is an ancient bug. It's not a new bug. It's been around for a long time. And I think what we're getting now is sort of a confluence of, this bug is on the up rise along with a bunch of its partners. And we have people very immune stressed.

And so now we are in the middle of what looks like, to me, an epidemic of what's called Lyme disease, but really it's a big waste basket for a bunch of infections and a bunch of other things which kind of take off the immune system so that the person can't fight them adequately. And then often with conventional treatment, further immune system devastation takes place with regular pharmaceutical antibiotics. And people rarely get cures or literally get where they are really better and they are back to where they were before.

Jonathan: This is interesting because I know last year you joined me for Alzheimer's and Dementia Summit. And this is so important what you already have just said, that literally people with Lyme disease actually appear to have something of like dementia. But really, if they clear up their Lyme, then they don't have those symptoms of dementia. Is that fair to say?

Dr. Minkoff: It is fair to say because what happens with Lyme is that you get not only a toxin load from the bugs, which drift into the central

nervous system and cause inflammation, but you also get an auto-immune type reaction from the immune system where it starts attacking its own tissue. And in many people who have memory loss or sleep disturbance or dementia or anxiety or depression, often it's because their immune system is attacking their brain tissue and the brain just can't regulate itself or behave in the right way.

Jonathan: Now, I think a lot of people are going to appreciate this, especially the more they hear all the presentations inside the Immune Defense Summit. But there is a very powerful, strong message for everyone single conversation. And that is, we have to take great care, much more appreciation, much more respect of our immune system.

So, Dr. Minkoff, obviously, what you've already said, we're being challenged in so many ways in our immune system, so many toxins, so many stresses. I think in my opinion, talking to so many doctors like you, it's all these attacks to the immune system that give the opportunity of Lyme to take over and cause so many problems.

So I'd like to ask you, what does Lyme exactly have to do with the immune system? What's the connection here?

Dr. Minkoff: I think there are several. One is, it's a foreign bacteria that gets into the body and then the immune system does react to it. Now, as a foreign bacteria, it has its own waste. It has its own toxins. And these can infiltrate the tissues and cause an inflammatory response by the immune system. The problem with these bacteria is that they are able to take many different forms. In bacteriology, we call it pleomorphic, which means more than one form. It can exist as kind of like a little cyst, where it's not really alive. It's kind of dormant. And the immune system doesn't really identify it or can't do anything with it.

It can also exist as a bacteria, like a spiral key, where it's actually a bacteria and it's moving around either in the tissues or in the blood. And these various forms make it a challenge for the immune system.

The other thing about Lyme is that it's very sophisticated. It has a lot of weapons so that the immune system can't get to it. And these weapons are called plasmids. They're pieces of extra chromosomal information that is acquired from other organisms so that it can become resistant to many, many things, especially antibiotics when they are used. Now your average bacteria has only 2 or 3 of these things so that it can change itself, so that it becomes resistant to antibiotics.

So you've heard of resistant staph or resistant strep, where you've got to give another antibiotic or 2 antibiotics at the same time. The borrelia organism has been seen to have up to 23 of these different things. So it's very difficult for not only the immune system, but if you're trying to treat

it with pharmaceutical antibiotics to kill this thing because it can hide and it can make the antibiotics so that they are not effective, it can form sort of a shield around itself. We can this biofilm. It's kind of a mucus protein coat. And the antibiotics don't get through that, so they can live happily in your connective tissue, in your brain, in your blood. And the antibiotics can't penetrate them. So that's what the real challenge is with this thing because it's just very adaptable.

The other thing that it can do is it can make toxins that actually can kill some of our own immune cells. And one of the cells that our body uses to make kind of attack particles are lymphocytes. These are white blood cells and they make antibodies. These are proteins that are supposed to attach the bacteria and either break their shells or tag them, so that then the other immune cells can come and eat the bacteria up. And the Lyme bacteria has toxins that actually poison our own lymphocytes. They are called CD57. That's a particular one that our laboratory can identify.

And then the people who are sickest with Lyme disease, we see that the percentage of their CD57 lymphocytes is really reduced. Normally they should be somewhere between sixty and three sixty. And in many Lyme patients, we'll find that they are ten, twelve, eighteen. They don't have the cells that they even have to have to kill these bugs because the Lyme has taken them out. So that makes it a big challenge.

Jonathan: Obviously, one of the more important things we are going to talk about, Dr. Minkoff, is how we measure the effect of Lyme on the immune system. But just as a side note first before we get there, this isn't all happening because people are getting bit by deer ticks. Is that what's going on or is it more than that? Obviously, right?

Dr. Minkoff: Yeah. It's way more than that. Probably 90% of the people that we diagnose with Lyme never had a tick bite. They had other bites. They've had mosquito bites. I think it's proven now that the bugs that have been found in mosquitoes, they are probably available in bedbugs and other sort of arthropods, these kinds of insects that bite humans and bite animals. So I know it's not just deer ticks.

One time they said, "Well, Florida doesn't have these kinds of deer and so you can't have these kinds of ticks. And so the disease doesn't exist here." But we see tons of patients with it. And I think it's really a worldwide situation because our clinics...we see people from Sweden and Germany and Russia and Australia and the Far East. They come for treatment and they are picking up the disease there. They haven't been in New York or in Massachusetts or in Connecticut where the epidemic was first discovered.

Jonathan: Yeah, I live in deer country around here, but I knew it was more than that, Dr. Minkoff. And also another thing that I've really

focused on since 2015 is poor oral health. So again, just as a quick little mention, the toxicity in the mouth and how that feeds into Lyme disease. There is a strong connection there, right?

Dr. Minkoff: It's usually strong. And I think the way you get someone better with Lyme disease is that you have to handle all of the other things that the immune system is trying to handle. And it can't take on all of the stuff because it's got too many things to fight. So the oral thing is usually important. If people have gum disease, or root canal teeth, or cavitations where they have places in their jawbone where they have existing infections, these are huge stressors for the immune system. And when that's going on, the immune system can't say, "I don't have any spare soldiers to fight the Lyme," and so the disease continues.

Jonathan: Okay, I hope you can appreciate the reason why I brought this up for anyone listening to this message. Please listen to Dr. Stuart Nunnally. He is the past president of the International Academy of Oral Medicine and Toxicology. Brilliant dentist who knows a lot about the dangers in the mouth. Please make sure you listen to that as part of the Immune Defense Summit so that you can clear away that load to your body no matter what kind of issues you have. So, Dr. Minkoff, real quick now, we've got to get into this. Measuring the effect of Lyme on the immune system. How do you go about doing this as a physician?

Dr. Minkoff: Well, we do the routine things like what is their white blood cell count and what is the distribution of white blood cell counts? Some people with a lot of infection will have low blood cell counts. Some people will have normal ones. We measure this particular marker called CD57 lymphocytes. And in most of the cases, I'd say, who have symptomatic Lyme, this marker is low. It'll be below sixty and it might even be in the teens.

So that's kind of helpful because then I can look at them and I can say, "Hey, this is thing is not only in your body, but it's eating away at your immune defense." And so it maybe that your progress with this is going to be a little bit slower because we have to get your immune system built back up, so that it can fight back. So those are the big problems.

And I think this kind of leads into the next thing, which is a lot of people do traditional blood tests to try to get diagnosed with Lyme. And they'll do a western blot or they'll do IGG or IGM antibodies for the other bacteria and parasites that are part of this sort of picture, this community that you get. And if the lymphocyte count is low, if the CD57 lymphocyte count is low, you may not be making enough antibodies for the test to show that you've even had the infection.

And so a lot of people, I said, "Well, you only have 1 band or you have

2 bands. You don't really have it because you're supposed to have 5 bands," that the whole way that you diagnose it is very, very suspect. And that a lot of people have the disease but, if a traditional infectious disease guy, if he's not really Lyme literate or Lyme trained, he's going to say, "Well, you don't have it and you've got something else." So that's very important.

We encourage people to do more detailed testing. And the laboratory that I like the best is called Fry Labs. They are in Phoenix and they actually are able to look at the biofilms in the blood and use very targeted DNA type probes. And virtually when people have the right symptoms, that they look to me like Lyme, it's almost a 100% that with their diagnosis they find, yes, you have biofilm and you have organisms in the biofilm which are part of the Lyme complex. And they may even find organisms that are attached to the red blood cells and they can find those too.

So when I see that, then either with or without antibody, I'm sure that I'm dealing with this wastebasket that we call Lyme because it might be a half dozen or more organisms at the same time, but at least we have an approach where we can treat them and help them to get better.

Jonathan: We're going to have several presentations inside the Immune Defense Summit that are going to deal very deeply with gut health issues. But Dr. Minkoff is part of this discussion. It cannot be ignored. From what you're telling me, often nearly all the patients with Lyme have some kind of gut problem. So please talk to us about what this has to do with immune problems and Lyme, this whole connection with gut problems.

Dr. Minkoff: Sure. In the evolution of the body, the place where the body is most susceptible to invasion by organisms is the gut. We put things in our mouth and the food isn't sterile. The water is not sterile. There are organisms in there. You've got something on your hand and you reach in to pull a piece of something out of your teeth. And so a lot of things can get into your body through your mouth. The skin is pretty good if it's not broken. Your respiratory system has all these filters so the air coming in is pretty well filtered. But your gut isn't that well filtered.

And so I would say a 100% of the patients that we see with Lyme have a disturbed gut. They have a leaky gut. They have parasites and fungi and bad bacteria. And if they've been on antibiotics, they especially have those things and a lack of good bacteria. A lot of people are eating foods that are disruptive to their intestinal wall. So they have either small ulcerations or the glue that's supposed to hold the cells together doesn't hold together. And so the body is being invaded by massive amounts of foreign proteins. And, of course, the main part of the immune system is

around the intestines.

So when the body was built, the intestine is the way things are going to get in. Then you put most of your soldiers around that area to protect the body from these things getting in. So probably 70% of the immune system is actually around the intestine. It's called Peyer's patches or gut-associated lymphoid tissue. And these guys are kind of the guys who stand guard to make sure that nothing foreign gets through.

And if you have a gut that's leaky. You know, you think about it, the surface area of the small intestine is like 2 tennis courts. So leaky doesn't mean that there is one little hole. There are probably billions of holes where things are coming through that shouldn't come through. And it makes the immune system crazy. And it upregulates and it's trying to handle this stuff.

And then you get bit by a tick on your arm or on your back. It doesn't have any attention for that sort of thing. That bug can come in. It can get in your blood. And it's basically ignored because there is just too much stress either from the teeth and gums, which is the beginning of the GI tract, or down in the small intestine or large intestines. And so if you're the Alamo and you've got fifty guys and Santa Anna has three thousand, you're going to get overwhelmed. You're not going to make it.

So our first thing to rehabilitate the immune system is we have to get the gut healthy. We have to get people eating the right food and the right bacteria and things that will get rid of the bad bacteria. And if there are parasites, identify them and get rid of those and funguses, and get rid of those so that we can get the gut no more leaking, intact, and then the immune stress coming from there is reduced. And then we've got more soldiers that can go fight in the blood and in other tissue to kill the Lyme bugs.

Jonathan: I'm sure you're shaking your head every day when you see these television commercials that advertise these people with such gut problems. They are obviously looking like, when they are on TV in these commercials, like they have stomachaches, and pains after eating something that's so horrible. And I know most people listening to this summit, you just laugh at those commercials or just look at them as ridiculous because conventional medicine, the pharmaceutical industry is simply telling the public that the way out of this mess is to swallow a pill to fix the problem.

I know, again, all due respect to all the health care providers listening to this program. But, Dr. Minkoff, you came from conventional training as well. Isn't it embarrassing, almost in a sense, that this is message? This is level of intelligence that they want to put out there as a how to solve gut problems? Don't look at what you put in your mouth, how you've been firing off your immune system by everything you're pouring into your

body and that that needs to change? No, don't look at any of that. Just take a pill and everything will be okay. It's crazy.

Dr. Minkoff: It's crazy. It's dangerous. And it's why that there are hundreds and thousands of people every year that die from medical interventions because it's really damaging. And then if you take a "do no harm" or you take anything reasonable, you take your life in your hands if you agree to do these things. People make a choice every day. Like, "I'm going to eat that pizza even though I know it's going to give me a heart burn, an upset stomach, and bloating. And to protect myself, I'm going to take a Nexium tablet so that it doesn't bother me." But believe me, it's sort of akin to, "I'm going to put a local anesthetic ointment on my hand and then I'm going to stick my hand on the hot burner on the stove. I won't feel it at first, but it's a crazy thing to do." And it's the same thing.

There is something like 25 million, I think, prescriptions for drugs that block stomach acid every month. And now most of these drugs are over the counter. So you have tens of millions of people taking these drugs. And your first barrier to your gut is the acid in your stomach. So that if you eat a carrot or you eat some lettuce, and there are bacteria on that lettuce, when it gets to your gut or to your stomach, the acid there will kill it and it won't get in you. But if you are on a PPI or an acid blocker of some kind, the pH of the stomach, instead of being 1 or 2 is going to be 7. And that bacteria are just going to slide right through there. And then it's going to get into the small intestine and it's going to live just fine and set up shop in you.

And these bad bacteria have 2 characteristics. One is they cause inflammation in the wall of the intestine. So there is redness, soreness, and then that membrane will leak. And the 2nd thing that happens is these guys have toxins things that they dump in, which then get absorbed into our own bodies.

And we have a test where we have actually measured this. It's a urine test and it shows that if you have bad bacteria or yeast in your intestine and those things are putting in these toxic chemicals, they go into your blood. And then they go to your kidney and then your kidney filters them out. And they go into your urine. And we can say, "You had all these things that are coming from your intestines because you've got bad guys living in there and they are causing inflammation."

So the importance of correct diet, organic food, don't take medications unless it's life threatening, and then only as little as possible. If somebody came to me and they had a temperature of a 106 and they had pneumonia, I would give them an antibiotic. But for every little ear infection, for every little stomach ache, for every little heart burn, almost always a lifestyle modification with correct food or using nature's natural

remedies. Herbs and spices and essential oils, and things like this, that there is a solution and these things. The body knows what they are. They are not foreign chemical drugs, that it's like...the body is a couple of million years old. And now you've got, I don't know how many, 80 thousand, 90 thousand new chemicals in the environment that we're exposed to everyday among all the drugs. And the body has no idea what to do with these things and it just causes malfunction.

Jonathan: Dr. Minkoff, I am really hoping that this conversation is a big 'aha' moment for a lot of people because I've felt those 'aha' moments going through educational programs that I've created myself in the last couple of years. It was a dentist who actually enlightened me; really got through to me, I should say, about how like you described, the whole tube from our mouth all the way to our anus. It's actually the outside of our body. And all those sensors, all those soldiers that you described before that are just trying to identify, "This is allowed into my body and this ought to stay out." That's a great system, beautiful design.

But then that's incredible what you just said already about the antacids. And then you're mixing those kind of things and medications and sugar, and anything that is literally suppressing bodily functions and causing us on a mitochondrial level, our cell function, our energy to go down, down, down. Now there is no way that our body can handle all of these things.

Then we're getting the tears, the leaky gut, and then everything is getting in. And that's what's making, like you say, a tick bite or Lyme that gets embedded into the body, makes it next to impossible to fix. It's just got to be a lot of work for you. I can only imagine when you're seeing the serious cases, what this takes to try to unwind from problems like this. It's really much better to respect everything we're saying and do everything we can now to calm things down to allow our immune system to do the best job that it can on a second-by-second basis.

So now let's shift gears, Dr. Minkoff. We're talking about those really horrible cases that I can only again imagine that you're seeing on a day-to-day basis. How do we go about rebuilding the immune system or Lyme disease patients? This is a really important thing.

Dr. Minkoff: Well, we have an approach, which it's really very effective. And probably 85% of the people that we see actually get better. They get restored health and they're fine. And they don't have to keep taking antibiotics. And they can go back to work. And they get their energy back. And as long as they keep their lifestyle in, they can do really well.

The common thing that we look for and if we find it, we correct it, the dental thing is huge. 2 or 3 weeks ago, I spoke at the International Academy of Oral Medicine and Toxicology. And the topic of my speech was on dental problems that the patient and the dentist don't notice

because it doesn't hurt, and it doesn't look bad, that cause the person to have a systemic illness.

They have chronic back pain, or they have chronic headaches, or they have high blood pressure, or they have chronic Lyme disease because the immune system is so tied up with the problem of mouth that it can't fight other things. So we look very carefully at that because people just don't get better unless you fix their mouth. So that's like the highest point on the totem pole.

The 2nd thing is the intestine. We have to restore a normal intestine. And that encompasses, what are we going to feed this person so that they are eating foods that are nurturing for them and that they are not going to cause allergy or leaky gut from the foods?

Mostly we orient people toward a paleo diet. However, I found that if they have a lot of neurological problems, a lot of memory and anxiety and can't sleep and depression, that we put them on a diet that's even a bit more restrictive. It's called a ketogenic diet. So their carbohydrate intake is very low. And that tends to calm the nervous system down.

The other thing that we notice about this is that the little molecules that the brain and nervous system use to communicate with each other, these are called neurotransmitters. And I always had this idea. Well, the neurotransmitters are made in the brain and because the brain is sending these back and forth between these neurons to turn them on or turn them off or go slower or go faster. But about 90% of these things are made in the intestine.

And when you have the intestine that's off, it's inflamed. It can't absorb food very well, then the neurotransmitters are off. So there is no healthy mental attitude or ability without a health gut. So we do the teeth. We do the gut. And a lot of times in the gut there is infection. If they've been on antibiotics, for sure there is infection with bad guys. These are like bad bacteria that can kill you and they are in there. So we have to clean those out using natural remedies. And parasites are a big problem. Probably 75% of the people we test, they have parasites so we got to get rid of those and often fungus.

The other part of it is because you have immune overload, there is often other organisms that the body has in it that they start just sort of a pile on. Organisms like Epstein-Barr, or cytomegalovirus, or herpes type 6, or herpes 1 or 2, or mycoplasma, coxsackie. They are atypical micro bacteria. These are all bacteria that the immune system should be able to handle, no problem. But when it's overrun, then they come out.

And so you've got all these things going on at the same time in the middle of this poor guy's body and the immune system just doesn't

know what to do. And so the symptoms that we see are the immune system's attempt to fight back, but it can't really do it because it's too much.

Now, any doctor then that sees this patient like that and thinks that giving that person Rocephin or Biaxin or Amoxicillin or Tetracycline for the next year is going to fix the bad teeth, the bad gut, the co-infections, is dreaming. And that's why it doesn't work.

And I had somebody say this to me this week, because I did a laboratory profile on them and they had had 9 months of antibiotics without improvement. And as we went through the test and I showed him, it was like fifteen things. Like you don't have any zinc. And you don't have any vitamin A. And your CoQ10 level is too low. And your amino acid levels are too low. And you don't have any omega...your Omega 3's, which are important in all your cell membranes, you can't even find them. No wonder your cells don't work right. And the doctor that gave you antibiotics as a solution to this just wasn't thinking right, because you'll never get better like that.

So a comprehensive approach; and for those of you that are sick, you need to find somebody who does a comprehensive approach on this and is looking at the whole body as a unit and what are the things that are actually wrong with it so that as we fix these things, the patient gets better. And then we fix the next thing and they get better. And they get better. And they get better. And then pretty soon they say, "Hey, I'm sleeping now. And yeah, I went for a little run today. My pain is not there anymore." And people start to get better.

Jonathan: Dr. Minkoff, it's got to be a really tricky thing at the beginning because as we've already kind of talked about throughout this whole presentation, I'm just shaking my head thinking about the psychiatrists out there, how they need to get on board. And like you say, all the general practitioners out there. These people of presenting emotional and mental issues alone, just feeling depressed, anxious. They are not sure why even. They can't really put their finger on it. I'm talking about that real chronic depression, anxiety, brain fog, the general fatigue even when they've been in bed for hours overnight, all of this, like you say, being treated with antidepressants, anti-inflammatories, mood stabilizing medications. Wake up, right?

If you're a health care provider, wake up and really help these people because the emotional, the mental part, you must see such a strong connection all the time to how they are physically doing. These people with gut issues, they're infected, and then they feel this way mentally or emotionally. And if they fix those things, how all of that gets better, right?

Dr. Minkoff: It's totally true. I think the psychiatrists are the most clueless on this thing of any set of doctors because they don't talk to people anymore. In the old days, they used to talk to people. Give them some comfort. Give them some understanding. But now, they don't even talk to people. They just, "Here is a prescription pad. Here is the drug."

And I would say that 99% of people who have what are so-called behavioral issues, they have a bad gut. They have low neurotransmitters. They have these other chronic low-grade situations going on. Sometimes it's food allergies. Sometimes it's intolerances. And all of the children, all of this ADD, ADHD. You put a 5-year old on an amphetamine, which in the brain, if you do a SPECT scan looks identical to cocaine, the way the brain...The places where it goes. This is just criminal.

And so we need parents to wake up, because there are a lot of practitioners out there that are health-oriented. They are not disease-oriented. They are thinking about lifestyle and nutrition and safe things that you can introduce to the body to help it repair. The body has a built-in intelligence, which is to survive and get better. And if you give it the right tools, the right nutrition, the right vitamins, the right minerals, supplements, amino acids, it will take those things. And if you can get the suppressor things off, the co-infections, and the bad foods, and the bad environment off, then the body will heal. And almost to the last breath, this works. You can get the thing to, uh, uh, uh. It starts to sputter, and it starts to sputter a little more. And it comes back and it comes back.

We had a guy last year. He came down from Canada with the end stage of ALS, like he's in a wheel chair. He couldn't swallow. He had a stomach tube. He couldn't hold his head up. He couldn't even talk. He was so weak. And he shows up on my doorstep, "Can you help me because they don't have anything for me to do?" "I'll try."

And when I first examined him and I sent him to the dentist, he had a bunch of infected teeth. We got those pulled out. And we started him on our IV nutrition programs and Ozone, and all this stuff. And by golly, by the grace of God, in 6 weeks he's walking with a walker. He's now able to swallow and eat his food. And he had enough strength in his chest where he could talk until about noon and then he got tired. But he was steadily, steadily, steadily getting better, basically coming back from the dead. And this is supposedly an incurable disease. But really, he had Lyme too.

So people can get better. You just have to find somebody who is interested enough to sit down with you, talk to you for an hour, examine you carefully, do the proper testing so that you can figure out, what are these things that are causing these? And then do something that isn't harmful to get you better. And most people can get better.

Jonathan: Dr. Minkoff, I think we've covered so much. I don't know if there are any other co-infections that you'd like to talk about that overtax the immune system. I'll give you a few minutes to get into that. But boy, already, I just see how it's so important to just simply put together a plan, right? Somebody is feeling really bad. They are, of course, mentally and emotionally overwhelmed. And I'm saying this in every single conversation I'm having with all the health care providers as part of this summit. Don't be overwhelmed. Just listen to as many of these presentations as possible. What resonates with you.

And I would just venture to say that if you put together a common sense plan. Walking a little bit more. Chewing your food a little bit more. Getting rid of certain sugars. Any of these things. Cleaning up the mouth as your first project. Just really organizing on a piece of paper things that you may not necessarily know for sure or believe are going to help. You don't really have the energy even to do it, but you make yourself do it. One step at a time, like you say. You start feeling that positive result. Boy, is that motivational.

Dr. Minkoff, is there anything else that you'd like to cover as we're closing out this conversation? Co-infections, anything else that might be taxing the immune system that people really need to understand.

Dr. Minkoff: Well, I think I just want to reinforce what you just said, is a lot the times, if the person goes on a clean diet and they take digestive enzymes if they need them, or hydrochloric acid if they need it, and the probiotics and give them some natural things for fungus and parasites if the doctor discovers them. And gets them out in the sunshine a little bit, and have them fire all the negative people in their environment, that within 5 or 6 weeks, people start to feel better. They actually start to feel better. And then I think the doctor is half sort of director of a program and half cheerleader, encouraging people that you actually can get better. And that you can fight this thing and that you can recover your health.

And we literally see it all the time, within a few months. Some people need more intensive therapy. So they are getting IV's with Vitamin C and Ozone, and silver, and these other things because a lot of those people are really sick for a long time and they need more intensive stuff. And I think there is a whole band of people who aren't quite as bad and they are walking wounded. But if they clean up their diet, and they make sure they get enough sleep, and they get some sunshine, and they take Vitamin D, and they do these sort of basic things: exercise, walk, play, and get the dental things sorted out. Virtually, every long-term serious case I see, it's not 100%, but it's a lot, has a dental situation.

I have a guy now. I'm his fourteenth doctor. He's actually a physician. And he lives in the Atlanta area. I'm his fourteenth physician. And

he came down, he said, "You're my last hope. I've done 5 years of antibiotics. I'm exhausted. I can't work. I used to be a dynamo." In working with him, I found he didn't have any dental complaints. And his dentist had assured him that everything was okay. And I had him go to the dentist. There are a couple of dentists that I work with here, and we did what's called a CBCT. It's Cone Beam CT scan of the teeth. And it's a very detailed X-ray where if there is abscess, you can see it. If there is a dead tooth, you can find it. And he had this thing sitting there, was completely asymptomatic. And the dentist had to handle the tooth. He had to pull the tooth because it was dead and there was an abscess there.

And within about 3 days, I saw him walk into the clinic. He was brighter. His eyes were shining. His face was brighter. How are you doing? He says, "I feel it. It's better. I didn't know what was holding this thing down. But that was what was holding it down. And I feel better." So these are really important things and I think a lot of times the patient has to be their own doctor until they find a doctor who knows what to do to help them get through this stuff.

Jonathan: I couldn't agree with you more, Dr. Minkoff. I've invested in my health over and over again, cleaning up my mouth, getting the mercury base silver fillings out, all of these things that I do now in my fifties, really investing in my future self. Again, I don't have symptoms now, thank God. But that doesn't mean just throw out my brain and don't think about this. And you have certainly made that a very clear point today.

Dr. Minkoff, I want to thank you so much for your time. And I want to thank our listeners for joining us today. If you would like a copy of this program plus all the other presentation inside the Immune Defense Summit, simply click the banner you see on this page. Thanks again for attending the Immune Defense Summit. Talk to you soon. Take care.

Testing Your Immune Strength

Guest: Dr. Thomas Lewis

Jonathan: Welcome to the Immune Defense Summit. I'm your host, Jonathan Landsman, creator of naturalhealth365.com. I hope you're enjoying this event. And of course, I'm going to also say I hope you're enjoying as many of these presentations as possible.

If you really find that something sounds great to you, I would encourage you to listen to it two or three times. And even if you don't want to watch the video, maybe you can get it on a mobile device, stick it in a car, and just listen to it as you're going to and from wherever you are, because the more you listen to this, I know the more you're going to get out of it.

The Immune Defense Summit is absolutely the best work I've done. I know many of you are familiar with the work I've done with the Holistic Oral Health Summit and the Alzheimer's and Dementia Summit. And today is no exception in terms of the great people we have.

We're going to be talking today about testing your immune strength. And we have a special guest, Dr. Thomas Lewis, who happens to also be a very good friend of mine. Dr. Lewis, welcome.

Dr. Lewis: Jonathan, it's great to be part of the Immune Defense Summit.

Jonathan: So why don't we talk first, Dr. Lewis, about maybe for those who aren't familiar with you, a little bit of your background, where you are coming from in terms of knowing so much about immunity in general; but then also, of course, maybe the way you look at it with all of

you research. What do you see exactly is the immune system? Let's talk about that.

Dr. Lewis: Well just to give you a little of my background. I'm an MIT scientist. And I have more through working with two very fine clinicians at Harvard Medical School and medical scientists. I'm sort of like Abe Lincoln. I've really self taught myself.

My dad passed from Alzheimer's about sixteen years ago. And I met these colleagues now at Harvard about fifteen years ago and learned so, so much from them, because they're real practicing clinicians, seeing what's going on in the clinic. And what I've done is work very closely with them to see the correlation between these really sick people, these really sick populations that these two docs have worked with, and the connection between their life risks and blood markers.

And one of the most significant markers, Jonathan, is the eye. One of my colleagues, Dr. Clement Trempe, was an ophthalmologist at Harvard for forty-one years. And what few people know is that eye diseases are actually very deadly diseases. So for example, cataract is just a cataract, right? And it happens to be the number one surgery in the world.

But if you follow these people prospectively and look and see what happened to these people after cataract surgery six years later, a slew of them die. And they die of cardiovascular disease. And they die at a much higher rate than people who were diagnosed with prostate cancer or breast cancer.

So the eye actually is a really good marker of your immune system health, because we're not looking at a risk or a blood marker. We're actually looking at tissue changes, pathological changes. So it's really a profound thing.

So that leads me into immune health. And our immune system is everything. You know, we give supplements to try to improve immune health. The allopaths give drugs to try to circumvent what's happening with the immune reaction in our body and try to usurp that.

But really at the end of the day, if we want a good health span, a good life span, longevity, and good health, good robust health the whole time, if you don't have a good, healthy immune system, then it's moot. Genetics are important. But your pure immune system, which you have complete control over, is the number one thing that you should be working on to have a healthy life.

Jonathan: Yea, and you know, Dr. Lewis, I find that a lot of the things we do on Natural Health 365, obviously we talk about one thing or another that stresses the immune system, right? And we talk about a lot of

different conditions, heart disease, cancer, all of these things. It goes on and on.

But I think what you're saying, the most important thing that I get in what you just said is that we should be focused on the immune system from the get go. In other words, if somebody were to come in with kidneys, or lungs, or whatever it is, whatever their condition is, it would be great if a health care provider would just say, look, let's take a look at the whole big picture. Let's take care of your immune system. Let's enhance it, the function of it. And as we do that, you will see your symptom A, B, or C fade away, right?

So maybe we should talk a little bit about how the immune system really works. I mean this is what I'm hoping people really get out of this event, that they appreciate the real value of the immune system, hone in on it, and then really watch those unwanted symptoms just fade away. So talk about the immune system and how it's working.

Dr. Lewis: Well actually, it's historic as well. So modern medicine is modern, but the immune system has been helping us against disease, mainly infectious diseases for eons. The two giants in that space were from France in the nineteenth century, Claude Bernard and Louis Pasteur. And Pasteur was one of the authors of the germ theory, whereas Claude Bernard, less well known, but really a better scientist in my opinion, said it's all about our internal terrain, everything that goes in our body to keep ourselves healthy. And it was reported that Pasteur on his death bed said, Bernard was right. The soil is everything, the seed is nothing.

So it's really about our internal terrain, so how we make that healthy. But one of the key things, Jonathan, is that we're not doing a very good job of measuring the immune system, its health and its strength. And so, for example, if you go and see your doctor and you get a lipid test, you see a cholesterol number. You might get a white blood cell count. We're really not evaluating immune health. We're looking to see if you're sick, you're really acutely ill, and you need a medication. You have a so-called indication, which is a diagnosis.

So what we've developed, Jonathan, is a more targeted, more sensitive scale for immune health. We call it the chronic disease temperature. And what it is, it's really just an amalgamation of a bunch of markers that are critical at measuring inflammation, immune activity, immune strength. Vitamin D is in there. White blood cell counts are in there, and C-reactive protein, which is a remarkable marker of inflammation.

But we cannot look at these values from an acute perspective. We have to look at them from a chronic perspective. So the whole thing about measuring immunity is appreciating the difference between a blazing fire and a little smoldering fire, just a couple of little sticks that are

smoldering. You know, think about two sticks and they're starting to smolder. Will they catch fire? That's the kind of thing we need to look at in laboratory values for people to understand where they are in what I call a chronic health disease continuum.

You don't catch heart disease, right? People who die of a heart attack weren't perfectly healthy the day before, the week before, the month, the year, or even the decade. There are clear signs and indications. There's cataract that I mentioned earlier, white blood cell count. We need to know where our white blood cell count really indicates that someone is sort of aging prematurely, or their immune system is weakened or compromised.

So that's really the essence of what has to be done in the future if people are going to avoid chronic diseases, or even reverse chronic diseases. We have to know this data as well.

Jonathan: I know there's a lot of information that comes your way. And it's easy to get overwhelmed. But I'm just urging you to please look at that handout. It really outlines so much for you in terms of understanding the immune system more.

Dr. Lewis, what you already said is very interesting. I just want to jump in and maybe get your feedback on the idea that like when you were talking about white blood cells. Maybe there's something that we should look at that conventional medicine is not really sounding the alarm about until it's too late, or until it's really an advanced situation.

And what I'm thinking about when you were talking is these infections, these low-level infections that are in the body. And then if they're neglected for whatever it is, decades really going along, that then we can have these things like memory issues. And then it's easy to label somebody with dementia. But really if we reverse engineer this, and we dealt with this person years earlier with infectious issues and try to calm down inflammation that's smoldering in the body for years, they would be so much better off.

Dr. Lewis: Jonathan, you know, I've dedicated an awful lot of time over the last decade with Dr. McCauley and Dr. Trempe at Harvard to really understand mechanisms of disease. And we wrote a book, *Quarterback Your Own Health: How to Take and Lower Your Chronic Disease Temperature*. And we discussed mechanisms.

And to your point, there is the 80/20 rule. But I really believe this is the 98/2 rule, mechanisms of disease. And the primary mechanism is inflammation. That plays so much a part of it. And insulin plays such a huge part in that, insulin resistance.

If you're insulin resistant, on a cellular basis, even if you're not type 2 diabetic or even pre-diabetic, even if you're just a little insulin resistant, on a cellular basis, your cells are malnourished. You have plenty of calories, but your cells are malnourished. What I would say to my participants, if you're driving down the highway and your alternator light comes on, do you go to the gas station and fill up with gas, and does that solve your alternator problem? No. We need nutrients. We need nutrition, not just calories.

So inflammation is the number one driver. And so signs of inflammation are signs of malnutrition, it's a sign of immune dysfunction, and it's a sign of disease susceptibility. So that's number one.

Number two is sensitivities. You know, if we don't come out into the world right or we do things that we don't comport ourselves well, we may develop sensitivities to things. And so even though our immune system is really strong and our inflammation is really low systemically, we can get very targeted inflammation tied to sensitivities to food, to toxins, to a whole host of things.

And as a chemist back in the chemical industry, I worked with people trying to keep their exposure down. And then with certain chemicals, one day this person could no longer do their job. They were just sensitized to the chemical for the rest of their life. That's sensitivity.

And the third thing is infection, Jonathan, to your point. But see all of us are exposed to infection throughout our entire lives. And you know, when we die, we're no longer interacting with the environment. Yet we have to be pickled in formaldehyde. We decompose from within.

So we're always engaging in a war against infection. It's just a question of when that smoldering fire, when will that kindling wood catch hold and erupt into a big fire. We always have a little kindling infection in our periodontal disease throughout our body. And so it's a question of how good are our immune system and our terrain to hold this at bay? And we think that infection is very much under-appreciated in many, many conditions--brain, Alzheimer's.

I just got back from a summit in Switzerland. It was all about Chlamydia pneumoniae, Borrelia burgdorferi from Lyme, viruses, fungal infections that drive toxoplasmosis, a parasite highly tied to schizophrenia. The CDC says that sixty million people are infected with toxoplasmosis, but most don't have symptoms. And they say right in their fine print, CDC, because they have a healthy immune system, so toxo doesn't express. Now the complex thing about infection, though, Jonathan, is if someone has infection expressed, and it's joint pain, it's brain fog, it's memory issues, it's things like that; now sometimes that infection can become focal, targeted or residing in a specific tissue. And you can do all kinds

of things to bring your terrain up to here. But that focal infection is still there. So that infection has to be ferreted out and treated.

And now let's go back to the physiological labs we do, our chronic disease temperature. Even slightly elevated white blood cells will give us a clue of systemic, but also focal infection. And it was Dr. Ken Stoller out in California who said sometimes I have to treat people clinically. He's a very good doctor.

What he is saying is that sometimes it's extraordinarily difficult, even with autoimmune diseases, with very focal infection, that your train looks perfect, but you still have symptoms. So there's something going on, low grade infection.

So there are the usual suspects, the Lyme co-infections, Chlamydia pneumoniae. Eighty percent of people are exposed and have it. It's a respiratory pathogen. So you have it. Now how good is your immune system at controlling it?

The number one thing that Chlamydia pneumonia affects is your micro-vessels, your capillaries. Guess what? You have a slew of capillaries in the brain. You have a slew of capillaries in the kidneys, high blood pressure, and inflamed micro-vessels. It's all connected.

Jonathan: And what we talked about in the past with other work that I've done, and you've been a guest as well, a guest speaker on those events, is talking about oral infections, and how that's connected to the digestive system, and to the heart muscle, the tissue around the heart as well.

So again, like what you said about locating where infections are, very important, I know it would be good, if people really viewed the idea that when they go test themselves, because that's what we're talking about here, testing your immune system, this would be part of it. Hey, I have gum disease. I have bleeding gums. Wait a minute. This is going to be a major stress on my immune system.

Now maybe not at twenty-five years old; everything else, like you said, is fine. But as you get older, and it's wearing out your body and you start seeing these thresholds being reached in all different areas, including the mouth, it might be the one thing that really pushes you over the edge.

So why don't we talk a little bit more. You mentioned white blood cells. But I know there's C-reactive protein. There are so many different things. Can we talk a little bit about, with all your research, some of the things that tell us whether we have a strong, good immune system, working for us, hunting down evil things if you will, keeping them at bay. Or if

we have a weak immune system, and we really better start addressing certain things, or else we could run into some serious problems later on down the road.

Dr. Lewis: Jonathan, great question. And I'm going to answer it maybe a little differently than you expected. But I want to talk about some key markers in a minute, because I really enjoy how your blood tells. If we go with things from a reductionist perspective, just looking at one marker, like cholesterol, it doesn't say much. It's one point in space. But when we take a bunch of markers together and really understand how they interact in our body, then we can paint a story.

But I want to present this. I'm not a well built guy. But I'll pull up my bicep right now. So the question is, the bicep muscle, like your brain, like your immune system, it's just an indicator of how strong you are. If your immune system is strong, you have a strong immune system bicep, for example. So how do we tell if someone has a big bicep immune system, or a skinny little weak bicep immune system?

And the conundrum is, let's just you are under assault. Your body is under assault from something very strong. And you have a strong immune system, you know, your labs will go up. Now let's say you have a wimpy little weak immune system, and you're under assault from something fairly weak. Your immune system might go up to the exact same extent. So labs sometimes aren't the best way to tell how strong your immune system. It's more about how hard your immune system is reacting to the insult.

So what we've done is we've taken intake forms from Harvard Medical School, from the Institute of Functional Medicine, and really looked at what good doctors are asking about life risks. And what we've done is we've taken these questions and broke it into an online survey, where we create a relationship, a risk score, if you will, for every question/ answer couplet. And then we've correlated that total score that we get from an individual to their blood labs.

And I believe the score we're creating, because we've got a very strong correlation between the labs and the risk score. So we're seeing a very nice relationship. So what I believe we're doing now is our risk score is actually telling you the strength of your immunity. And it's things that you understand implicitly. We've just sort of put a number to it.

If you're eating fast food, your immune system is not as strong as it could be. If you're eating inflammatory oils, if you're not exercising, if you have bleeding gums, if you're smoking, these are the kinds of things.

But what we've done is sort of institutionalize the concept of measurement so we can stratify. So what we're doing now with our

survey is we can stratify in a group, if you will. If we have a group taking the survey, we now know who has the lowest risk and who has the highest risk. And the beautiful thing about these risks is they are all reversible. People are empowered to reverse these risks.

So now let's look at how we can tell, rather than just saying oh I feel better, how we can tell if in the process of reducing these risks you're actually getting better. So one of my favorite markers is fibrinogen. It's a clotting factor. Fibrinogen is a protein. It circulates. Everybody has fibrinogen circulating in their bloodstream right now. And when you get a cut or a tear, fibrinogen recruits fiber to come in and stitch up that leak. So like if your gums bleed and you don't bleed out, it patches up. And that's fibrin and fibrinogen.

But what few people are talking about is you don't have to have a gaping leak to have fibrinogen go up. If your vessels, if your endothelium and your blood vessels are damaged or a little bit inflamed, fibrinogen will be peaked. It will be up a little bit compared to normal. That means fibrinogen is always up and working. You've got a little bit more of a repair crew patching those potholes in you vasculature.

And we see a very strong correlation. I'll tell you what we see a strong correlation between--fasting insulin, fasting glucose, A1c, red blood cell distribution width, which I'll explain in a second, C-reaction protein, and fibrinogen. All those tend to go up from the normal values just a little tiny bit. And when they go up a lot, they all tend to go up a lot. And it's telling you exactly what's going on inside your vessels. And I think that's what everybody wants to know.

So red blood cell distribution width, doctors talk about that as being anemia. But it's much, much more than that. Your red blood cell is actually a little three-dimensional disk. I'm not really showing it well, but it's three-dimensional. It's not a sphere; it's a disk. Now the interesting thing is the diameter of the disk is actually bigger than the diameter of capillaries. You know, it's about an eight or ten micron diameter for a capillary, and the blood cells are actually bigger.

So when a red blood cell is going through capillaries, it actually deforms like a worm elongating as it goes through the ground. So now imagine that blood vessel is inflamed or there's some occlusion. Now this blood cell has to squeeze down even more. And I tell my participants, if you have inflamed vessels, your red blood cells twenty-four/seven are going through a fraternity hazing program, where they are getting slapped and roughened up. And what we see is a much broader red blood cell distribution width, believe me.

Red blood cell distribution is a measure of vascular inflammation and early mortality. So when red blood cell distribution is up, C-reactive is

up, and fibrinogen is up. You are repairing. And you know what? If your fibrinogen is not going up, or if it's really low, God help you, because you probably are clotting all over your body. So low is bad as well. High is obviously bad.

So we set a very narrow range for acceptable fibrinogen. I just want to give you one way we do this. Scientifically, from a forensics perspective, we looked at fibrinogen at this level and this level--on the high end and the low end. And we set our limits based on where do we see studies that show prospectively looking forward a statistical increase in mortality in a population that has fibrinogen at this level.

So the standard of care says fibrinogen at 500 is fine. We say fibrinogen at 286 is unacceptable. You want to be in the 200 range, for example. So that means your immune system is strong, you have healing under control, and the important thing is you don't have so much inflammation going on that your fibrinogen can't stay ahead of it.

Does that make sense, Jonathan? I mean these are simple, simple things. And fibrinogen is not an expensive test. It's just under-appreciated and under-done.

Jonathan: No, you're making great sense. And I think it's absolutely critical, obviously for those people watching who are very concerned about their health or someone that they love. The key is to not just get the test, but to find an integrative health care provider they can really work with and build a whole team for that matter. Get the family on board, friends, coaches, whatever they can, so that they understand that all of this matters.

I mean, I'm thinking of other things that if people don't get blood tests, or urine tests or whatever. But just the fact that they feel dry mouthed all the time, they have trouble concentrating even on this conversation, right?

Dr. Lewis: Right.

Jonathan: Or if they feel sluggish after six, seven, eight hours of sleep all night, and then they wake up the next day. Or even the fact that they're having trouble after eight hours in bed getting up because they feel groggy, maybe there's something else going on. Their blood is sluggish, right? They're having trouble getting oxygen to their body.

And then sure, a lot of people in their twenties, thirties, and forties, you know, or even beyond that, they blow it off. Right, Dr. Lewis? They just say, well, you know, I just have had a rough week. Let me get some coffee. These are all signs that you're immune system is getting stressed out.

One thing in particular I feel is really worth mentioning. We've done it a few times in the past. But Dr. Lewis, you're really good with this about cholesterol. I think sometimes when people do testing, which is what we're talking about here, what has cholesterol got to do with the immune system?

I'm bringing it up, Dr. Lewis, because I feel a lot of people quite easily think that high cholesterol, which of course, excessive cholesterol we don't want to have flowing through our body all the time. That's a sign of something that's not good. We get tested and we see that. I'm talking about the massive amount of people that have cholesterol that are not that big a deal.

But of course, a lot of conventional medicine, the Western medically trained doctors, they look at cholesterol of 180, 190, 200. And you know, you bring in a couple of things that people talk about, like oh, I'm concerned about heart disease that runs in my family. And boom, right away they want to give statins, cholesterol-lowering medication.

And what I'm getting at is, and I'd like you to speak this, the lower cholesterol number, dropping that without looking at anything else, the toxins that people are exposed to and the damage that could cause, please speak to that, right? Because this is a big concern, I feel.

Dr. Lewis: Jonathan, I just wrote in a book that's going to be available to folks at the Immune Defense Summit, a book we titled *Uncovering Chronic Inflammation and Hidden Infections*. And it's really about measuring your immune health and helping you figure out how to assess that on your own or with some help and then how to improve it.

But what people don't realize is we have an innate, an adaptive, and then what no one is talking about is what I call the tertiary immune system, okay. And these are things that go and support your primary immune system, your innate and adaptive immune system. And one of the most important things is cholesterol.

And another extraordinarily important thing is amyloid formations. It's now being recognized after four-hundred failures of Alzheimer's that the amyloid plaque collecting in the brains of Alzheimer's sufferers is actually there for a reason. It was shown at Harvard Medical School that the amyloid is an anti-microbial peptide; translated, tertiary part of the immune system fighting infection. Guess what also shows up in the tissue of those people? It's cholesterol. Cholesterol is extraordinarily important for a number of reasons. The number one thing is the cholesterol, the LDL is simply a transport mechanism to bring fats, and cholesterol is a fat, around to the body.

And if anybody has ever done a coconut oil swish and in two weeks had

bleeding gums stop. We know that fats are antibiotic. So if you don't have the transport mechanism for fats through your body, your body is more vulnerable to infection. And that's a major driver of so many diseases.

Let me tell you a couple of things, Jonathan. UCLA looked at 138,000 people coming in with a heart attack over a decade. And seventy-five percent of them had normal cholesterol. And, of course, they concluded that we've got to drive cholesterol down even lower. You know, that's completely wrong.

But now when you look at the foreign studies, the Asian studies, the European studies, anything below 180 on medication actually causes more cancer. It causes more diabetes because of the same mechanism for the infection. If you cannot transport fats around to your cells as an energy source, then all you can do is rely on glucose, and you'll never overcome your diabetes.

But the number one and two things that are happening with low cholesterol, particularly medicated, are pain of all types, and brain fog and brain effects. Suicides, you would be shocked at the number, if you look at the details. Just Google statins, low cholesterol, and violent deaths, and you're going to see, it's not me. It's in the literature.

So we believe, look, we're breathing twenty-one percent oxygen. If I go to Pike's Peak, on top of Pike's Peak, it's seventeen percent and I'm suffering. And if I put the oxygen mask on for too long, I'm going to burn up. We've adapted to a range of oxygen like this. We've adapted to a range of glucose like this. And if we go too high, we inflame our tissue.

We've adapted to a level of cholesterol like this. And if we go too low, it puts major stressors on our immunity; so, therefore, the more cancer, the more infection, the more brain fog, the more of that. I've yet to have someone tell me what other molecule the liver naturally produces to be deliberately toxic to our bodies. I just can't get anybody to answer that question. And cholesterol certainly isn't one. It's not toxic. We produce it naturally in our liver, and we need it.

So let me just give you a case study from yesterday with one of the participants in our program. He's had severe osteoarthritis for a decade. His cholesterol was 117. And you don't have to go very far into Scholar Google, PubMed, to see that he's on Crestor at 40 mg, that these lipophilic statins, these lipophilic cholesterol-lowering drugs can have symptoms of joint pain and psoriasis and autoimmune diseases.

But clinicians just aren't aware of that. So they're giving you a biologic, and they're giving you the statin. I will promise you, because we've had many other participants, that in nine months as I cajole him through his primary care doctor with some sensitivity off these statin drugs, and

improve his nutrient density and other things associated with his health (he's a road warrior, so he's stuck eating American fast food), that his joint pain is going to go away.

The statin drugs are a boat anchor. They're a boat anchor on anything he tries to do to overcome this pain. And he's in misery every day. It's just not right.

Jonathan: Yea, this is exactly what I was talking about before. And now look at that scenario. He's eating horrible food. He certainly is absorbing a lot of toxins, environmental toxins, food toxins. Cholesterol is there in a sense. And still to this day it sounds radical, but it has a protective value to it. Now he goes in to the doctor's office. He gets tested. Alarms go off, high cholesterol. Take a statin, lower your cholesterol.

Lots of conventionally trained cardiologists just can't think anything more than you can't get too low with your cholesterol, you can't be too thin, and you can't be too rich. It's these three things they think all the time. So the idea is that now he takes all that toxicity, never addressing it, drops the cholesterol, and now the opportunity for those toxins to do even more damage to the body is so much higher, right?

Dr. Lewis: Jonathan, the range is 100 to 199, standard of care. Nobody has done a study on a major large cohort prospectively at 100, nobody. But what's interesting is, see, we get away with a lot because it's the tertiary immune system. So if you have a good innate and adaptive immune system, you can get away with things.

But AIDS patients, how I learned all of this is Kaiser Permanente. AIDS patients with low cholesterol died like flies back in the 1980s. And those with high cholesterol actually survived. So we're talking about vulnerable populations, so people with AIDS, immune deficiency, but older people. I challenge the audience to go find studies on older people and cholesterol lowering. And there's no question the data is there.

We will experience it, we can't avoid it, immunosenescence, loss of our immune activity. That's the innate and adaptive immune system. But thank God we have the tertiary immune system to hold us so we can hopefully fall off the cliff rather than slide down the slippery slope. You will see that the higher your cholesterol is as you age, the longer you live and the longer you live healthy. It's a very clear correlation.

People who live to a hundred have nine years of declining health. This was a major longevity study. People who lived to eighty have nineteen years of declining health. So there's this misnomer about living long. The longer you live, the longer your health span. If you live to a hundred, you have a thirty year longer health span than someone who lives to eighty. And guess what's holding you up? It's your tertiary immune system that's

holding you up. Sure you had a better innate and adaptive immune system during that period. But at the end of life, your tertiary immune system is holding you up and keeping you able to pick up your grandkids or even great grandkids and all that good stuff.

Jonathan: I'm sorry. You know, in case somebody is getting lost with these definitions, can you go over that again exactly? Tertiary, when people want to look that up; t-e-r-t-i-a-r-y, right, Dr. Lewis?

Dr. Lewis: Tertiary, all it means is the third. Your first immune system is the white blood cells. That's your innate immune system that slaps anything it sees coming in as an invader.

The adaptive immune system, that's the antibodies. It sees a specific virus and it creates an antibody against that specific virus. And, you know, sure, the virus is morphed. That's why you get a cold. But sometimes you become the people who say, I'm not susceptible. They have a very robust adaptive immune system. I call that the second tier of your immune system, or secondary immune system.

And the tertiary is your third tier. They all work together. They're all helping each other. It's like the army, the navy, and the air force. You know, we all have it. And the tertiary immune system, maybe my definition is wrong. Maybe it should be your primary immune system. But you know, we already have these definitions in place. But tertiary would be cholesterol, TNF alpha, the cytokines, the amyloid formations.

Jonathan, let me just digress for a second, getting back to the ophthalmology. You know, we talked about measuring your immune strength. And that's by measuring life risks. It's just a survey. Then the next thing we do is measure your blood. Do you have smoldering inflammation going on in your blood? And then the last step normally is you have a disease.

But along the way, what we've added is the eye pathologies tell us a lot. If you have a cataract, you have dry eye. That's inflammation. You have glaucoma. That's Alzheimer's disease of the eye. Alzheimer's of the eye is glaucoma, and glaucoma is Alzheimer's of the brain. It's the exact same pathology.

So macular degeneration, I don't care if it's just a dry form of macular degeneration. There's something in the back of your eye, in the retina, called drusen. And this is Don Anderson out of UC Santa Barbara. He dedicated thirty years of his life to that. That drusen contains amyloid. And that amyloid is part of the immune system's response to some inflammatory process, maybe even infection going on in the back of the eye.

So the eye is really the canary. A lot of people think it's the brain, because the eye is an outcropping of the brain. But right below the nervous tissue in the eye is an extremely vast vasculature of micro-vascular capillaries. So it's highly correlated with immune health. And so when you're seeing pathologic changes, buddy, you better take some action, because your blood has probably been bad for quite some time.

Jonathan: Okay, so Dr. Lewis, as we're getting close to the end here, let's get down to the nuts and bolts in terms of measuring the immune system. Someone wants to get more focused with an integrative health care provider. What are some of the things that you would pull out and say look, this is what you ought to take a look at?

Dr. Lewis: So, you know, we obviously would like people to take our survey. But if you're going in and you're doing an intake at any good doctor's office, anything they're asking, they're asking for a reason, because there are risks associated with these behaviors, environmental factors, whatever. And so you don't have to focus on A1c. Let's focus on this litany of little risks that have been articulated in this intake. So these are straightforward things. Then when we do it, we very much look at behaviors, lifestyle, your oral cavity, the foods you're eating, the water you're drinking, the air you're breathing.

You know, we had some folks that seemed to have everything together. They live in a little three-quarter acre block, around which is huge farm, throwing pesticides--these are the kinds of things, these are the little risks we have to pay attention to--throwing glyphosate, throwing fertilizers, throwing chemicals. And of these people, one of them is a nurse and a health coach, full of autoimmune diseases.

So what we have to recognize, Jonathan, is that there are big risks. But we really need to focus on the many, many little risks that we have that we can embrace, that we can change for life. Look at the foods we're eating. Do we get GERD, acid reflux, after we eat a certain food? That is not a good thing. It's not just creating GERD. It's affecting the whole absorption in your gut.

And these are critical things. Why it's so critical, Jonathan, one thing we didn't go into. We're talking, we're thinking, we're moving. We're all electrical. We need minerals.

And that's why we have to be fetish about processed foods. We have to be really tough with folks on processed foods, because there are no minerals. There are hardly any nutrients in those to support our electrical system. No wonder you have brain food. This beautiful electrical system, it's not plugged in if you're eating processed food. It's that simple.

We have a little metaphor. Let's just say we're going to have a

transaction in thirty days. And I could cut you a check for a million dollars, or I could start collecting pennies. When I give you that first penny, Jonathan, you're very underwhelmed compared to a million dollar check. But in thirty days, if I keep doubling, you'll have 10.7 million dollars. That's how our body works. It's a symphony. The little pennies start adding up and having a dramatic effect.

So if someone is sort of down in the dumps, and they're a defeatist, and it's like I can't do it, can you find a penny? Can you remove a penny worth of risk? If you're flossing and you bring a little pink up on your floss, can you do something just to eliminate that little bit of bleeding? That's a penny.

And it will eventually add up and create strong effects and miraculously healing effects in your body. So nothing can be overlooked. But the beautiful thing about that is most of these things are simple to embrace, understand, and take out of your life.

Jonathan: And in closing, Dr. Lewis, let's talk about some of the tests, because I think it will be important in that way that people can start looking out. You know, are there certain things they can ask their physician to check out, as well as the intake form?

But before we get there, Dr. Lewis, for sure, to talk about what you just said about simply understanding the mental/emotional side of things and how that affects the immune system. I always like bringing that up, because if someone is doing things on a habitual level that make them feel down mentally and emotionally, the habits of always reacting to people in a depressed way or looking at the negative dark side of life.

I really like to bring this up and to test people on this. So people can actually test themselves when they're thinking incorrectly about things. Perhaps their perception has to change so that they keep a more uplifted mood.

Why am I bothering to spend so much time on this? Because here it is we have a healthcare provider that might say, hey, you got to lose some weight. Or eating so much ice cream filled with sugar at night before you go to sleep is not a good idea. You're going to get inflammation. You're going to have digestive problems. You're going to have trouble losing weight.

But here it is we go reverse engineer again. What is causing the person to do that could be something entirely different that's not being handled in the doctor's. It's not being addressed, and that's that person's guilt, their anger, their lack of forgiveness about something. That absolutely is directly connected to the immune system.

I mean I would love to see the day where people are getting tested more

as a standard if you will for those kinds of things and somehow give a person a real great feedback. Look, you came in and you're seeing me. You feel really down and depressed. Look at this marker. Look at how it's going. Come back a month or two or three months later, you feel better. Look at this marker. It's going up, right?

And then people would really get the connection between the think and the way they feel. And they know they're doing better. And look at those markers going up. I just think that's a very exciting thing. But I'm sure people get it already.

Dr. Lewis: They get it. But they're not doing it as well as they could. You know, the evil of the pill, the pharmaceutical drug, is so multi-factorial. Yea, there are side effects, toxicity. But it's a crutch, and it provides no empowerment to the individual. They're stuck on this pill. The message is you cannot be healthy without that.

And it's not the doctor's fault in most instances. It's the payer. They don't have enough time. So you know, our program, and I think the only way we solve chronic disease and reverse chronic disease and get people out of this state is through building personal relationships, and showing the relationship between their insulin and their food.

But more importantly than food, they're not interested in that either. What is holding their life back? You know, they can't play with their kids. They're exhausted at night time. They can't sleep. They can't put the effort into family life or whatever.

Those are the touch points that have to be related up to the life risks and the labs. And then the labs are the triumph when they come down. But the life risks then get connected to the behaviors and outcomes that the people want.

But you can't do that in allopathic medicine. No one is allocating the right time. If someone comes and takes our assessment and we give them a bad score, we do a letter grade, they're going to get two hours a month. I mean, there's a certain amount of time that people can't spend because they're busy. But two hours a month, that's about four sessions. That's a weekly half hour session to just help them through it.

And it's not just about, oh, do this and do that. It's about this is what this means, and this is how you have control over it. And our coaches are much better than me at this. It's all about mind, body, spirit. I'm just the science guy trying to empower the coaches to create the relationship between the problem or concern about the person's life and the labs. And the coach connects everything in between. And that's the only way we're going to win.

Look at the biggest losers. They all lost weight. Nobody ran insulin. They're all insulin resistant. That wasn't solved. The camera stopped rolling and the lights went off. They all gained the weight back. That's a big risk, reducing calories to a ridiculous level for these folks. It's not sustainable. We have to work in small swap outs--small, manageable, little, bit-sized things.

And you have to meet people where they're at. You know, a lot of wellness programs, institutional wellness programs with allopaths, that A1c has to come down. The weight has to come off. You have to stop smoking. They've given up on that. That hasn't worked for several decades. So we work on little things that they're ready to do.

I had a gentleman yesterday. I wanted him to get more nutrition when he's on the road. I said have you ever heard of Pho soup? It's Vietnamese. It's broth. Rather than going to some Wendy's, go to a Vietnamese restaurant and get a little Pho soup. It's little teeny things. You might even like it. You might even like the taste better. Have you ever heard of it? No I haven't. How do you spell it? I pronounced it wrong. It's "fa", but it's p-h-o. It's the little things in life, Jonathan. The devil is in the details.

Jonathan: And people know. I really say this all the time, Dr. Lewis. I think a lot of times our society, at least certainly in the United States, and I think throughout the Western world, that conventional medicine has got this sort of spell on people, that you're not being reasonable. You're not being intelligent. You're not doing the right thing if you don't just listen to the "expert," the doctor who's gone to medical training.

And I think again, people know intuitively what they really need to address. Is it a mental/emotional issue? Is it a food issue? Am I too close to a garbage dump, and the smells that are just killing me? So you take some supplements, right? But you get a blood test or a urine test or whatever test you might get for your immune system and your issues.

But you just know that you've got to get away from this toxicity or relationship that has to heal, or forgiveness for that matter. Obviously there are those kinds of things, and appreciation and gratitude, and how that can dramatically change your life, the quality of your life. So it does go on and on, right?

Dr. Lewis: It certainly goes on and on. And the only way to conquer those kinds of issues with individuals is what we call investigational conversations. So open ended questions, and leave no stone unturned. Ask the participant about their daughter that was brought up on the previous thing. And let that open up a flow of information.

The people we achieve the best results with are the ones that we build

personal relationships with between the coach and the individual. And you know, these people are suffering miserably. They're costing the healthcare system gobs. And coaching just isn't that expensive on a relative basis. I mean usually we can offset medication costs and pay for our program. But you can't do that unless you're successful at getting people off medications.

And it's sort of a vicious cycle. You can't get people off medications unless you can spend the time with them to build personal relationships and deal with all those touch points, be able to find all those touch points, Jonathan, like you've talked about, and then deal with them. And the only way you do that is having a personal relationship.

Jonathan: Great information! I hope this inspired you to look, please, at more of the presentations here at the Immune Defense Summit. Some things may really spark motivation in you, inspiration, whatever it might be, to take action. And other things may not be as important to you. And that's okay. Listen to as many of the presentations as you can.

Dr. Lewis, I want to thank you so much for your time. And I want to thank our listeners for joining us today. If you would like a copy of this program, plus all the other presentations inside the Immune Defense Summit, simply click the banner you see on this page. Thanks again for attending the Immune Defense Summit. We'll talk to you again soon. Take care.

Thyroid Disorders and Immune Health

Guest: Dr. Izabella Wentz

Jonathan: Welcome to the Immune Defense Summit. I'm your host Jonathan Landsman, creator of naturalhealth365.com. Did you know that every year drug-resistant bacteria or super bugs kill seven hundred thousand people worldwide? Chronic diseases like cancer, cardiovascular problems, and diabetes are by far the leading cause of premature death in the world. But in reality, all of this is avoidable with a strong immune system.

That's why I created this event: to help you understand the roots of disease and how to prevent and reverse life-threatening illnesses by re-empowering your immune system. Our show today, Thyroid Disorders and Immune Health. Our guest, Dr. Izabella Wentz, received her doctor of pharmacy degree from the Midwestern University Chicago College of Pharmacy.

After graduation, she excelled in many roles including working as a community pharmacist and medication safety pharmacist. She is a Fellow of the American Society of Consultant Pharmacists. And holds certifications in medication therapy management, as well as advanced diabetes care. But what makes Dr. Wentz such an expert in thyroid disease may surprise you, and will definitely inspire you to take better care of your health.

The statistics on thyroid disease are staggering. About twenty million people have some form of thyroid disease, and that's just in the United States. Unfortunately, there are too many people walking around with thyroid problems and they don't even know it. Women are 2 to 10 times

more likely than men to develop hyperthyroidism or hypothyroidism. Hyperthyroidism affects 1 in 500 pregnancies, and hypothyroidism occurs in 3-5 of every one thousand pregnancies.

If you suffer from chronic fatigue, hair loss, brain fog, unexplained weight gain, depression, or muscle aches, this program will prove to be an invaluable resource for you.

Please join me in welcoming Dr. Izabella Wentz to our program. Dr. Wentz, welcome.

Dr. Wentz: Jonathan, thank you so much for having me. I'm so excited to be here with you.

Jonathan: It's my pleasure. Dr. Wentz, why don't we start off first by talking about something that not everybody understands about you but I think it's so important. How did thyroid disorders become such a focus in your life?

Dr. Wentz: So, Jonathan, in full disclosure, I was never interested in the thyroid gland during pharmacy school. And I wasn't really interested in it after I graduated. I was more interested in medication safety, in getting people off of antipsychotic medications and all these other types of conditions that were more, I thought, complicated and required more extensive treatment.

It wasn't until I was diagnosed myself with a thyroid condition in 2009, after almost a decade of some pretty strange symptoms that I sort of had just learned to live with. So I had started having symptoms in my undergraduate years, where I started being really tired. And every single year after that, I started to have more and more symptoms where I ended up with irritable bowel syndrome, I ended up with panic attacks, anxiety, carpal tunnel in both arms, acid reflux, hair loss.

And slowly my life was kind of escaping me. And my world just kept getting smaller and smaller, year after year. I went from being a bright-eyed and bushy-tailed college student to being an ambitious young healthcare professional, to ending up really just spending a lot of time on my couch after work and watching TV and eating dinner and then falling asleep. And that was pretty much my life for quite a few years, until I was finally diagnosed with hypothyroidism and Hashimoto's disease.

Jonathan: You know, Dr. Wentz, already what you've said has already touched me and I'm sure a lot of people listening. And I'm going to very specific. Of course, we are going to get into how thyroid problems directly affect the immune system. But just for another moment or so, I think we ought to talk about this because I think it's that important.

You are a young woman. You're feeling fine. You've got so much in your heart and in your mind that you want to accomplish in your life. And then you say things like, "These things started to happen to me." You don't really get a full medical check-up. You write them off as stress or whatever it is. You downplay it a little bit.

I don't want to put words in your mouth, but what a huge warning in some of the words that you've already spoken about just taking our own health more seriously, right? Like really not being so quick to blow things off. I mean isn't that fair to say?

Dr. Wentz: Oh my goodness, it's so fair to say...and I'll tell you for the years that I was struggling with my health. I used to sleep for twelve to thirteen hours each night to feel rested. And even when I woke up, I still had this horrific brain fog and memory problems. And this was from a straight-A student. I went to somebody that could barely remember things.

And I would go to different doctors and I would be a good girl and get my annual checkup. And I was told a variety of things. One of the things I was told was that I was just depressed and that I needed antidepressants. And of course, I was like, "Why? I'm not really unhappy. I don't really think I'm depressed. I know I'm sleeping a lot, but that doesn't quite fit."

And another thing I heard was that I was just stressed out and that it was probably all just in my head. And the silliest thing that I think I heard, and at the time I believed it. It sounds ridiculous now. But I was told that I was just getting older, and that as we got older we put on more weight. We tended to be more tired. And our hair started to fall out. And all these things happened.

And of course, I was twenty-five at the time. I'm in my thirties now and I think that's laughable when people say that, "Oh, you're just getting older." And they say that to a lot of women and a lot of men who are struggling with thyroid symptoms. Or that it's just in their head, or they are lazy or crazy. And I certainly got a lot of that until I finally got the right diagnosis.

And it's very challenging for a person with a thyroid condition, because they'll oftentimes go for ten years, on average, to get diagnosed. For me it only took about nine years. So apparently, I'm pretty lucky, but for the average person it's about ten years.

Jonathan: Yeah, very disturbing things you just mentioned. And they are so true, Dr. Wentz, that when someone is dealing with some sort of health problems, it's another scary thing to be surrounded by the wrong people. And that's exactly what you're describing in terms of healthcare

providers. That's why I feel like an event like this is so important to tie so many things together. Thyroid issues, we are going to be talking about wireless devices, EMF pollution, nutrition, and the supplements and how all of this can influence our immune system, which is just so important to take good care of all the days of our life. That's really the main point of why I'm doing this.

So why don't we jump right back into it, Dr. Wentz, and just talk to us please about how thyroid problems actually affect the immune system. Help us understand this, okay?

Dr. Wentz: Sure, Jonathan. And so when I was first diagnosed with thyroid disease, I was given a lot of doom and gloom, or the alternate was, "Oh, it's nothing to worry about." And the nothing to worry about was basically you are just going to have to take a pill a day. And then your thyroid disease is going to keep getting worse, so we are going to have to give you more pills. And then after that, we are going to monitor you for other types of autoimmune conditions.

The other thing that I got too from a lot of patients was that just things never got better. That I was never going to be the same. I was always going to struggle with my weight, fatigue, fertility, my hair was never going to come back. And of course, all these things have come back. And I'm feeling better than I did when I was eighteen now.

And the main reason for that is because I ended up taking things into my own hands. And I started becoming a Hashimoto's researcher/expert/human guinea pig. And what I came to learn is that actually, most thyroid conditions, and not many people are aware of this, are actually because of an autoimmune disturbance in the body.

So whether you have an overactive thyroid, an underactive thyroid, postpartum thyroid issues, or thyroid issues during pregnancy, these issues are actually caused by the immune system recognizing the thyroid gland as a foreign invader. So automatically, for anybody that has a thyroid issue, they have an immune system issue. Their body is, for some reason, starting to fight against their thyroid gland. And that's just the first step.

Thyroid disease is the most common type of autoimmune disease in the US and worldwide. And thyroid autoimmune disease opens up the door for other types of autoimmune conditions. And so, we will see people who start off with one autoimmune condition like Hashimoto's, Graves' disease, hypothyroidism, postpartum thyroiditis. And they end up, a few years down the line, they get diagnosed with rheumatoid arthritis, Sjogren's, sometimes even multiple sclerosis. So that's kind of one part of it.

The other part of it is once the immune system starts to attack the thyroid gland, this results in a breakdown of thyroid tissue. And eventually, the body can no longer make enough thyroid hormone. And when we don't have enough thyroid hormone, this also has implications on the immune system.

So many times, we'll see people who struggle with an underactive thyroid when this autoimmunity has been going on for some time and they end up getting a lot of chronic infections. So they are not going to be able to generate a fever as well as a person that has healthy thyroid function because their body temperature is down.

So this opens up an opportunity for all these potential pathogens to thrive within the body. And we'll see people getting higher cases of pneumonia. They'll have higher cases of stomach issues, like small intestinal bacterial overgrowth as well as other types of gut infections. Potentially Epstein-Barr virus and other infections can thrive in a hypothyroid body.

The kind of thing that brought me out of conventional medicine as a conventionally trained pharmacist into more of natural medicine is that no organ lives by itself in a vacuum, right? So every part of the body is in constant communication with another part of the body. So, the thyroid and the immune system have a very complicated feedback loop where the immune system attacks the thyroid. And then once the thyroid is low, this ends up making the immune system weak as well.

Jonathan: Wow, Dr. Wentz, you've said so many important things. As we move into the next part of this program, talking about the specific symptoms that are related to thyroid disorders, I just want to share one quick story with you. As you were speaking, I was thinking about someone who I used to work with a lot, who was actually a private client of mine many years ago.

And she would complain about cold feet and cold hands. And she knew she had thyroid imbalances. And she took these synthetic medications. She said she was working on that. She ended up years later getting cancer all through her gut. They did a hysterectomy. It's just horrific. I won't go into the details so much more. And eventually, she dies of stage 4 cancer.

I'm just thinking, my God you are such a blessing, Dr. Wentz, to this entire world, warning people about what's going on with thyroid disorders way before it's too late. And I'm just thinking, my goodness, you literally, I feel, saved your own life. I don't know if you want to say anything to that. But please, speak to people about the symptoms related to thyroid disorders, because none of this should be ignored.

Dr. Wentz: Yeah, absolutely. And a lot of these symptoms mean that there is something going on in your body that can be a potential progressive thing. And we need to figure out why your immune system is attacking the thyroid gland.

But some of the symptoms that people may experience are going to be, basically when you have an underactive thyroid, we are thinking about slowing down a bit. So the person may feel sluggish. They may feel more tired. They may be more depressed. Their memory might be slow. They might have trouble finding words. They are going to have a lot of fatigue. So they are going to be people who are tired. They are going to have, perhaps, trouble waking up in the morning. They are going to not feel ever rested.

And the other big thing is weight. So people can have a lot of challenges with losing weight or gaining weight. So, a lot of times we'll see women will be eating the same exact type of foods that they have been eating, doing exactly the same amount of exercise, stress, so on and so forth, but as soon as they have a thyroid disorder, all of a sudden, the weight keeps coming on. And they could be eating like birds and then they still end up putting on weight. And this happens month after month, and it's very frustrating.

Some of the other symptoms that may occur, some of the ones I mentioned, could be hair loss, could be anxiety, panic attacks, fertility issues, palpitations, pain in the body. Carpal tunnel is a very common symptom of thyroid disease.

And with an overactive thyroid, we are going to see kind of a speeding up of the body where we'll see a person having more palpitations, more irritability. They may lose weight even though they don't want to lose weight. They might have some eyeball protrusion. Overall, they just feel on edge at all times.

And really, the crazy thing, Jonathan, is not a lot of physicians will recognize this, and I certainly didn't really learn about it in pharmacy school. But not everybody will have every symptom. And people might present from both sides of the spectrum. So a person who has autoimmune hypothyroidism, they might have some of the symptoms from the overactive spectrum and vice versa. And the biggest challenge is that most doctors are not doing the right kind of testing to identify thyroid conditions.

Jonathan: Yeah, no doubt, Dr. Wentz. We are going to also get into testing. What are the best ways to test for thyroid problems? But wow, I couldn't agree with you more, thinking about this person that I just mentioned. When you through that list of things, it's so true: the cold hands, the cold feet, the tiredness, the very quick to anger.

All of this physical disorder stuff that you're talking about, this stuff can be tested. You can see what biochemically is going on in the body. I'm sure you are going to talk about this a little bit more in the next few minutes.

But so easy again, going back to what I said before, Dr. Wentz, about doctors and neighbors and family and friends, just blowing this off and saying, "Oh, you need to sleep more. Or, why don't you just calm down? Or maybe you've got to see a psychiatrist or something. You seem to be having some sort of mental problem." And they don't connect it to a real physical disorder, you know what I mean?

Dr. Wentz: It's so frustrating. And I've actually had clients who were misdiagnosed with depression, panic attacks, bipolar disorder. I've even had some clients who were hospitalized for psychotic disorders, when in fact, it was their thyroid.

And in the early stages of thyroid disease, most people get misdiagnosed with a thyroid condition, because the doctors are not doing the right labs. And as the immune system is attacking the thyroid gland, that sends thyroid hormone to the bloodstream. And that thyroid hormone is cleared out and the body can't make enough. And so this ends up putting a person on an emotional rollercoaster.

So thyroid hormones attack everything in our body, including our emotions. And a person whose thyroid is under attack may mimic bipolar disorder. They may mimic depression or anxiety. And it's very unfortunate, because some of these people end up lifelong psychiatric patients when they actually are thyroid patients. And if we just address their root causes, they would be perfectly healthy.

Jonathan: Yeah, Dr. Wentz, most people who listen to programs that I've done, I've created well over 400 programs in the last 5 years, they know I'm super organized. I bring that up because I want people to stay tuned. We are finishing up this program with what I consider to be the best part between myself and Dr. Wentz where we are going to talk about her best advice about how to overcome thyroid problems.

And I mean that: physically, mentally, emotionally, and even spiritually. Because everything we are talking about here, when the body is off like this, it's touching you on so many different levels. But first, to keep myself real organized here, Dr. Wentz, let's talk about this. What are the best ways to get tested for thyroid problems? Because there is no sense in doing things operating in the dark, right? We've got to know what's going on here, right?

Dr. Wentz: Exactly. So we do the test to figure out what we are dealing with. And then we do follow-up testing to make sure that our changes

are improvements. So we can track the interventions are functional medicine, natural interventions, lifestyle interventions. And we can see, not just improvement in how we feel, but also improvement on labs, which is exciting.

The thing with thyroid testing, and this is like a big pet peeve of mine, because so many women will say, "My doctor tested my thyroid and they told me my thyroid was normal." And few different things come up for me. One, which test was done? Did they do a complete thyroid panel? And two, normal for who?

So the only test that's done by conventional medicine for thyroid disease, in most cases, unless you have an uber comprehensive doctor, is the TSH test. This is the Thyroid Stimulating Hormone test. Now this is basically a hormone that gets released by the pituitary gland. When it senses that there is not enough thyroid hormone going on.

The thing with this test is that it's going to be "within the normal range" for up to ten years when somebody has a thyroid condition. And the more comprehensive tests are usually not ordered by conventional physicians until that TSH is altered.

And really, the reverse should happen. We should start off with the most comprehensive that can pick up thyroid disease in the early stages when people have symptoms and when there is already a destruction happening against their thyroid gland.

With most autoimmune conditions, the standard of care tests don't pick up the conditions until 90% of the gland has been destroyed. And there are so many different things we can do to help prevent the destruction of the gland. There are things you could do to regenerate thyroid tissue as well, but it's much easier to of course prevent damage than it is to try to regenerate an organ.

And so the more comprehensive tests are going to be thyroid antibody tests. These are antibodies that can be measured with a very simple blood test that tell us whether or not the immune system has recognized the thyroid gland as a foreign invader.

The antibodies to ask for, and I'm going to say this out loud if you guys want to get a pen ready, but thyroid peroxidase antibodies and that's TPO antibodies. And then thyroglobulin antibodies, so you could just write down TG antibodies. And then also TSI and then TSH receptor antibodies. So TPO, TG, TSI, TSHR, and that's what you need to ask for. Because these tests will reveal if your immune system is attacking your thyroid gland. And this could be an explanation for your symptoms before the conventional tests catch it.

The other tests I like to see for people are going to be T3 and T4 levels. This tells us exactly how much thyroid hormone we have in the blood, not just if the pituitary is catching a deficiency. Reverse T3 is another helpful test. This tells us what our body is doing with the thyroid hormones and if it's properly activating it. And then doing a thyroid ultrasound, in some cases. If all those tests were "within the normal limits" then I would do an ultrasound, because sometimes that could reveal additional thyroid changes.

The other key here is with the TSH tests. Most people should have that number between 0.5 and 2.0. And I can't tell you how many women I've met that are wearing winter coats in the middle of the summer. And I'm like, "Listen here, you've got a thyroid problem. Let's talk about your thyroid." "No, no. My doctor tested it. They said it's normal."

And sure enough, I'll get a copy of their lab results, and their TSH will be at a 5.0 or a 6.0 or a 7.0. Now that is not normal. A TSH needs to be somewhere between 0.5 and 0.2 for most people to feel good. When my TSH was at a 4, I was a sloth. Yet conventional doctors, oftentimes, they will not recognize a TSH until it's above 10.0. And when it's anywhere above a 2.0, we're at risk for miscarriage, fertility issues, and there's depression, anxiety, being cold, being fatigued, being brainless, basically.

So these are some things to consider, is make sure you get comprehensive testing and you get a copy of your own test results. Don't just take your doctor's word for it. Make sure you see the test yourself. And make sure that you look at functional ranges for what your test results should be, which TSH should be between 0.5 and 2.0.

And then the antibodies should be under 10.0 if you don't have thyroid disease, I would say even under 5.0. And so, doing those tests will help you identify what you're dealing with. And really, we're looking at 27% of the population in the United States with thyroid disease when we do the more advanced tests. So that's 1 in 4 people.

Jonathan: So wow, Dr. Wentz, this is the problem, right? As again, going back to my point about being with the wrong healthcare provider. I'm about to ask you, conventionally speaking, how does Western medicine tend to treat these conditions?

I have a feeling you're going to answer that it's a complete train wreck. Because like what you said, if they do the normal TSH test and they are getting like a 5.0 to a 7.0, what are they doing? They are just looking to that woman or man and saying, "Eh, you are normal. Have a nice day. There is nothing else you can do" How do they treat these conditions?

Dr. Wentz: Right. So in the early stages, even if they do catch the thyroid condition, if they have a TSH under 10.0, or if they have the

thyroid antibodies. Basically, when their thyroid gland hasn't been fully destroyed, most doctors will say, "Oh, well, why don't you just come back when the thyroid is fully damaged, when it's fully destroyed. And then I'll put you on thyroid hormones. Until then, I think you're overweight because you're eating too much and not exercising enough. And your mood is probably off and you're probably tired because you need an antidepressant."

And sadly, this is the message that most people get when they have a thyroid condition until their TSH is above 10.0. And they can struggle for 5, 10 years with these symptoms. It's very frustrating.

When they do get on thyroid treatment, they are prescribed one medication, synthetic thyroid hormone, T4, and that's pretty much it. And then they are told to come back and get monitored for other types of autoimmune conditions. So it's sort of like, "Well, your immune system is attacking your thyroid and you can't make any more hormones. So we're just going to give you more hormone and let the immune system just keep attacking you. And we'll just watch what happens."

With an overactive thyroid gland, the treatment approach is even scarier. In that case, a lot of times, the first kind of recommendation might be from more conservative doctors, "Let's put you on thyroid suppressing medications." And the thyroid suppressing medications have a lot of different potential side effects. They are not hormones, so they are not what our body normally makes. They are dirty drugs that interact with a variety of receptors and people can have a whole host of toxicity symptoms, liver toxicity, so on and so forth.

Other times they might recommend radioactive iodine, or surgery that completely removes the thyroid gland, in the cases of an overactive thyroid. So basically, they say, "Your immune system is attacking your thyroid. We're just going to take out the thyroid." And unfortunately, what happens in those cases is people have to be on replacement thyroid hormone for life, which is challenging to regulate. And two, this still keeps the door open for other types of immune conditions.

I've seen countless women and men, they'll have radioactive iodine or thyroidectomy. And they'll have rheumatoid arthritis a few years down the line, or another type of autoimmune condition. And they are struggling with their thyroid hormones, because the door of autoimmunity was left open and never addressed.

Jonathan: You know, Dr. Wentz, I know a lot of people listening to this program just want to get to the real heart of the matter here. And of course, at the end we're going to focus on all the things that you suggest to overcome thyroid problems.

But I want to make it perfectly clear that so many of the threats to our immune function, to our thyroid, to many other organs and glands in our body, our lymph system, our bloodstream, all of this will be talked about in so many of the presentations in this event.

And also, more importantly, what are some of the things that we need to do to nourish our body, to keep our immune system strong and healthy so that we don't have to deal with these things? I know that you really appreciate this kind of work, because it's what you've been really focusing on so much over the last many years. Helping people with thyroid disorders is really just to get them healthier.

But before we get there, Dr. Wentz, let's talk about this because I know you're an expert with just being a pharmacist in your conventional training. Can the prescription medications, which you did allude to just a moment ago, can it actually cause more harm than good? If it does cause more harm, talk to us about how this can do some damage.

Dr. Wentz: Right. And just in full disclosure the treatment options for underactive and overactive thyroid are going to be different. So the treatment options for an underactive thyroid are going to be hormone treatment based therapies. And these are going to be given to replace the hormones that our body is not normally making. And this is actually helpful, so this is something that I advocate for.

The biggest challenge with treating an underactive thyroid, and I imagine that's what most listeners will be dealing with, is that they are oftentimes not placed on the right type of thyroid hormone. So they are given T4, which is a synthetic version of our own thyroid hormone. It's the same as our body would normally make.

But the deal is T4 doesn't always turn into T3, which is the more active thyroid hormone. I call it like the energy hormone, the beautiful hair, and helping us lose weight hormone. That happens on paper where T4 it's considered a pro drug in pharmacology, where it's supposed to get converted into T3, the more active version.

But it doesn't always happen in the body. So there are a variety of different reasons why a person may not properly convert T4 to T3. We'll get into some of those as well. Some of those are root causes and triggers. But the most important thing for people to know with that is that there are options that they can take on. For taking natural desiccated thyroid hormones or T4/T3 combinations, like give them a combination of bioidentical combinations of what their bodies would normally produce.

And in many cases, people feel significantly better when they get on natural desiccated thyroid option that contains the active hormone as

well as the T4.

That's one of the big things to remember about that. It's unnecessary that the treatment is a problem. If you're overdosed, it can be a problem. And if you're under dosed or not properly dosed it can be a problem with hormones.

Now with Graves' disease, it's a whole other story. So we've got medications that can have potential problems with causing issues with liver and bone marrow. And this is going to be potentially life-threatening issues. And there are some alternatives for people that they can discuss with natural healthcare professionals instead of doing the [inaudible] or PTU, which are some of the medications that have potentially toxic profiles. One of the medications is also problematic during pregnancy.

There is an alternative medication that maybe helpful for people with both Graves' disease and thyroid disease, any kind of autoimmune condition, known as low-dose naltrexone. And this is a medication that's a compounded medication from a FDA-approved medication used for opiate addiction. When given a dose of 1.5-4.5 milligrams per day, this has the potential of balancing and boosting the immune system and helping a person thrive.

So I've seen people with both Hashimoto's and Graves' disease going to remission, where they take this medication. And so this is an alternate medication that one can take, instead of potentially some of the problematic medications used to suppress thyroid function. And it helps to balance out the immune system naturally, by supporting our own endorphins.

Jonathan: Dr. Wentz, now that we're going to get into probably the most significant part of this program about your best advice to overcoming thyroid problems. And I meant that before, on a physical, mental, emotional and even on a spiritual level, some of your best tips.

I'm really excited about that part. But before we get there, just for moment, people are going to be wondering, "Where the heck do I go?" You're not going to go to a conventionally trained internist and say, "Hey, I've known you for a few years can you help me out with this?" What do you suggest in terms of recruiting the right kind of doctor? Can we throw that in for a minute or two?

Dr. Wentz: Absolutely. That's one of the most common questions I get because most conventional doctors are not trained in looking at lifestyle changes and natural medicine and what are the root causes that are actually causing us to have a condition. And so they're trained in trying to stabilize us and medicate us.

And so the type of practitioner to look for is going to be somebody who's either trained in functional medicine, naturopathic medicine, or integrative medicine. And one of my tricks for finding a person like this is going to be finding your local compounding pharmacy and talking to the pharmacist, or one of the staff there, and asking them, "Who are the recommended thyroid doctors in the area? What are the doctors that know how to utilize, not just one thyroid hormone, but the other thyroid hormones? Who are the doctors that know how to use low-dose naltrexone? Who are the doctors that are doing innovative things and actually healing their patients and helping their patients recover their health?"

So that's one option. And then also on my website, *Thyroid Pharmacist*, I have a database for people, because this is such a common question, to help people find practitioners that can help them address their thyroid hormones and the root causes.

Jonathan: I know we're throwing a lot of things out there. We're going to try to make each and every presentation here part of the Immune Defense Summit easy to digest because the last thing I want to do on any of these programs is to overwhelm somebody. But that's why I asked Dr. Wentz just now. And I would encourage all of you to go to the *Thyroid Pharmacist*. That's Dr. Wentz's website.

And also I know she just finished up a life's passion for her right now. And I know it takes a lot of work to put these things together. And that was *The Thyroid Secret*. Go check it out. She didn't ask me to mention this, but check it out. See if you can get a copy of it yourself. Have it in your home, have family and friends around, watch it. It's just that important.

If you're concerned that thyroid disorders are affecting your life, really compromising your immune functions so that your immune system could then not pay attention to other things that really matter, then I strongly suggest you check those things out.

Okay so, Dr. Wentz, let's not wait any longer. I can't wait to hear what you have to say about overcoming thyroid problems. I know you can't treat everybody individually in an audio program. But just talk to us about what you think are some of the best things that people should keep in mind and look into.

Dr. Wentz: One of the key things to do is make sure that your thyroid function is optimized and that your hormone levels are optimal. So if you have an underactive thyroid, the best way to do that is with thyroid hormones. Natural desiccated thyroid hormones, combination of T4/T3 seems to work best in most people.

If you're taking a synthetic thyroid hormone like Synthroid or levothyroxine, if your TSH is above a 2, if you're still feeling tired or having brain fog or having weight gain. There's a chance that your thyroid function is not optimized. So make sure you do that. That's very important.

The second big thing is food pharmacology. So using food as medicine and figuring out which foods are serving you and which foods are not. So one of the biggest problematic foods in thyroid disease is going to be gluten. 88% of my clients and readers report feeling significantly better off of gluten. A couple of years ago I did a study of over two thousand people and those were the stats I got. Furthermore, 80% feel better off of dairy and another 76% feel better off of soy.

And the interesting thing with gluten here is I asked how many people felt better with medication versus how many people felt better with gluten-free. And more people felt better, in terms of having more energy, being able to lose weight, and their depression lifting, going gluten-free than they did with taking thyroid medications, even the best thyroid medications. So that's how important getting off of gluten is.

The other important thing here is also balancing the blood sugar. So we'll see that a lot of times people with thyroid issues have blood sugar swings. And this can contribute to anxiety. This can contribute to immune system dysregulation. And so I encourage everybody to eat. When they are starting off this may change as time goes on, they can do fasting and all these other things that are very healthy, but in the beginning stages they should eat every 2 to 3 hours and eat a little bit of protein with a little bit of fat, and limit their carbohydrate intake.

So over time this will help them balance out their blood sugar. And people start feeling better right away, within 2 to 3 days when they do that. The same thing with going gluten-free and dairy-free. I personally, my acid reflux went away after 3 days of going gluten-free and dairy-free. Some people can completely get rid of their thyroid condition by getting off of those two foods.

Furthermore, we're looking at figuring out what type of nutrition serves you best. Many people, unfortunately I found, while the vegetarian diets and the vegan diets can be very healthy for a lot of different people, for people with thyroid disease, it's actually more beneficial to be on a diet containing meat as you're healing.

A lot of times people with thyroid issues are going to be deficient in B12. And they are going to be deficient in ferritin, which is an iron storage protein. And so once they get good amounts of healthy animal protein, organic pastured meats within our diet, we start seeing some of these things improve.

The next thing to do is nutrient deficiencies. So all of these things that I'm talking about are potential triggers. And when you address these triggers you start lifting symptoms and you start removing those antibodies that are attacking you.

And so for the nutrients that are very commonly depleted, we're going to be looking at selenium. I recommend about 200 micrograms a day. Vitamin D, this helps to balance the immune system. Thiamine, which is a type of B vitamin at 600 milligrams per day, it can reverse thyroid fatigue. And those are very three important nutrients that you could take throughout the day.

And then at bedtime, oftentimes, I'll recommend doing a magnesium supplement. Magnesium citrate for those that are constipated and magnesium glycinate for those that tend toward more diarrhea. Now, this combination together of just those 4 nutrients, can have a tremendous impact on the body. So selenium helps to stabilize any anxiety. It helps people grow back more hair. It helps to reduce their thyroid antibodies. And they start converting their thyroid hormones better. And so they are losing more weight and having more energy.

Magnesium helps to normalize the thyroid gland appearance. So whenever people might have damage to their thyroid gland, magnesium starts to help heal that up. Thiamine addresses energy levels. And then vitamin D helps to balance out their immune system.

I like to see my thyroid clients, somewhere in the 60s, 80 range of vitamin D. Beyond that, we're looking at addressing the adrenals in our stress response. We can't get fully into it today, but things that are causing us stress in our day-to-day life. Sleep deprivation is a big one. If you have sleep apnea, if you're drinking too much caffeine, these can all be things that are very stressful and taxing on your body and can cause you to develop a thyroid condition.

And any history of past trauma. And so if you were abused in childhood, these are the things that you need to process out, otherwise you're always going to be stressed out no matter what's going on in your life and your body keeps the score. And there is a significant correlation between childhood trauma and thyroid disease. And there's different therapies like EMDR that people can take on to help with that.

And these are some things that people can implement on their own. Maybe they might have to find an EMDR coach, but just going to food pharmacology, nutrients, and getting their stress response in balance. These are the core fundamental things that we want to do.

Beyond that, we're looking at eliminating toxins. Getting rid of fluoride within our water supply. That's going to be huge. Doing a reverse

osmosis filter can be very helpful. Getting rid of triclosan within our antibacterial soaps. This is a potential thyroid-disrupting chemical. And then another root cause is going to be infections, inside or outside the gut such as H. pylori, which can eventually turn into cancer, Epstein-Barr virus. All these infections can trigger thyroid disease.

And when we address these infections, when we address these toxins, address the stress response nutrients in our food balance, we start seeing that with everything we address, the person starts feeling better and better and better. And eventually, many people do go into remission, where they are no longer considered to have thyroid illness once they start implementing all of these changes.

Jonathan: Dr. Wentz, what great information. A fantastic outline for people to dive into. I encourage any of you listening to this to just pick out something that resonates with you. Throughout this event, we're going to be looking much deeper into a lot of the things that Dr. Wentz mentioned in terms of the best diet, how to clean that up, some of the best foods, what foods to avoid. The supplements, we're going to be talking about as well. We're definitely going to get into the emotional aspects. Check out those presentations.

We're also going to be speaking quite a bit about the infections that could be in our body, from oral health problems and oral infections, to other infections like Lyme disease. All of these things are a very big deal for people looking to improve their immune function. And of course, we're going to be talking about detoxification and other things that threaten and also nourish our immune system. Really important information.

Dr. Wentz, I want to thank you so much for your time. And I want to thank our listeners for joining us today. If you would like a copy of this program plus all the other presentations inside the Immune Defense Summit, simply click the banner you see on this page. Thanks again for attending the Immune Defense Summit. Talk to you soon. Take care.

Natural COVID-19 Protocols

Guest: Dr. Thomas Levy

Jonathan Landsman: Welcome to the Immune Defense Summit. I'm your host Jonathan Landsman, creator of NaturalHealth365.com. If you're worried about the Coronavirus or any other bacterial or viral infection, this exclusive interview will prove to be very valuable. Enjoy!

Dr. Levy, thank you so much for being with us.

Thomas E. Levy, MD, JD: My pleasure Jonathan.

Jonathan Landsman: All right. I want to just jump right into it Dr. Levy and talk about the difference between the coronavirus which everybody's hearing about, and other viruses. What do you have to say about this?

Thomas E. Levy, MD, JD: Well, my personal take on the coronavirus.... And I'm not an epidemiologist, and I'm not a virologist; I am an internal medicine and cardiology physician. And of course, we never really know exactly what type of information we're getting from the press. However, with all of that in mind, what I've been most impressed about the corona virus is, I have never seen anything in my medical life as remotely as contagious as this particular virus. I mean, that's probably the most mind numbing, and if you will, scary thing about it, is really how easy it is to transmit.

However, that can also end up being its Achilles heel. Because as these people get infected, and as we do know, most of them get over it, some of them completely asymptotically. Then in a period of time, the

testing won't even reflect this because they're not able to test a small percentage of all the people coming into contact and contracting this virus. But at some point in time, I can't say exactly when, but I don't think it'll be too long from now.

Maybe weeks, maybe a month roughly, the number of people that are going to have had this minimally or asymptotically are going to have their antibodies to this virus, we're going to have a very large what's called herd immunity, where a large number of people have encountered it, had their antibody response. And then very quickly, the virus will lose its ability to go from host to host because it will no longer have very many uninfected people in the population to continue the rapid rate of transmission.

Jonathan Landsman: I think it's interesting Dr. Levy, because you and I spoke before actually doing this recording. Dr. Zelenko over in New York has had a lot of success in treating people, tremendous success. In fact, nobody has died and nobody has had to go to the hospital. They're doing quite well.

But one of the points he made, which I thought is very important is, it's not about not doing anything, but he bottom line said, if you're under 60 years of age, if you're young, yes, you're going to feel like crap, yes, you could get this like you say it's highly contagious, but you're going to be okay. What's your take on what he said about that? You know, really just trying to calm the tremendous panic and fear that's out there, right?

Thomas E. Levy, MD, JD: Well, for the most part, I do agree with him however. And I know what to be a panic spreader. But I've also seen for completely unknown reasons, yes, it mostly attacks older people with chronic diseases.

But it does attack a significant number of young to middle aged people. Most of them do well, but paradoxically almost, for some reason, there's a subset of these individuals, and I have a good friend who just went through this; 52 years old, extremely healthy, does everything right, supplement right, disinfect everything. And he went from feeling well to becoming short of breath in the afternoon and struggling to catch his breath at midnight, such that by the description he gave me, it was an acute respiratory distress syndrome, basically acute pulmonary edema that evolved in 10 hours.

And I don't think he would have lived another 2 or 3 hours except being a compulsive person. God bless him, he went out of his way to have some chloroquine with him in the event of an emergency, and he took one 500 mg chloroquine, and then rapidly over the next hour or two, came out of his shortness of breath and started to resolve that pulmonary edema. Part of the problem too is we have this semi hysteria

in the United States about respirators, respirators, respirators. Well, my take on that is, we have chloroquine, we have some other things we'll talk about. They're actually able to cure the virus, not make it better. Use that nasty four letter word "cure" the virus.

And all we're doing is concentrating on sticking tubes down people's throat and permitting them to live a couple weeks longer until they finally die. Because if you get a tube down your throat with ARDS and acute pulmonary edema secondary to this virus, and you do not start a proven effective antiviral therapy at the time, there's virtually no way that respirators are going to save your life, it's just going to prolong it, rack up the hospital bill and fill the hospital needlessly.

Jonathan Landsman: 100% Dr. Levy. I have people in the healthcare profession right now in the New York area that are saying exactly what you just said. These people, with all kinds of other conditions as well, but the bottom line is they're infected with COVID-19. They've got the tube down in them to help them breathe.

They're sitting there in the bed, they're laying down there, they're fully infected and none of it is helping them. These people are dying. So I think it is important, certainly I'm not making light of this as well Dr. Levy, I don't want to initiate any kind of panic at all, that's not what I'm about. But if you are feeling shortness of breath, even Dr. Zelenko said, that is a serious thing no matter what age you are.

Thomas E. Levy, MD, JD: Very serious.

Jonathan Landsman: So let's get into it a little bit more now. Help people out there who want to know more specifics. What about the agents to, as you say "cure" a viral issue? Obviously we're not necessarily stopping a virus from getting into our cell and making the attempt to replicate into many many other cells, like millions, trillions of cells. But what agents do we have? Talk to us about that.

Thomas E. Levy, MD, JD: Well, from a scientific and medical point of view, the two things that most effectively kill, some people say the virus "is dead" so you shouldn't use the word "kill", but inactivate or break down or stop the infectious nature of a virus are ozone and vitamin C.

Ozone has been used for hundreds of years in Germany, there's no substance that I know of on the planet that has been longer and properly documented to be the most powerful antiviral intervention on the planet, if you're able to get the ozone in contact with the virus. Okay, it absolutely breaks it down, stops it dead in his tracks.

Obviously, or maybe not obviously. The problem with ozone is it's not readily available because it's still not widely accepted in the United

States, so the people that.... They do however permit it, so that's good because a lot of countries don't permit these things at all. So you do have private doctors in their clinics that are able to initiate ozone treatments on the blood, which is a phenomenal if you will, viral sterilization type procedure that just knocks a virus is out on the spot. But as far as I know, I can't think of a single hospital that I know of that applies ozone therapy. So it's there, it does the job, but it's not available.

Vitamin C is sort of in an intermediate category. Vitamin C has been in an 80 to 90-year track record, of when you give large enough doses intravenously, I'm talking multigram; 25, 50, 75, 100 grams or 100,000 milligrams intravenously, completely knocks out these viruses as well. Less so than ozone, there is more Vitamin C available than there is ozone.

And this is sort of a growing type of movement. We have a number of studies that have evolved in China where.... I happened to go to China with Dr. Richard Cheng a couple years ago to talk to the Chinese about Vitamin C therapies, but let me tell you, it was a tough thing to acquire, because China has been doing a large amount of clinical research on Vitamin C, giving the multi gram doses that I just mentioned for viral pneumonia, ARDS, burns, post-operative recovery.

And they've published the results that we expect to see which is Vitamin C is a phenomenal intervention, a phenomenal accelerator of quality healing, and a phenomenal anti-toxin and anti-infective agent.

Jonathan Landsman: Let me just jump in for a moment. Because I know Dr. Levy, you know Dr. Chang, I've interviewed him as part of this program as well. So I really respect his work as much as I respect yours. But it's very interesting, and I'd like you to make this distinction to people in case they're only listening to your interview and nobody else.

But in China, I see that already when it comes to COVID-19, Coronavirus, whatever you want to call it, 10,000-20,000 mg of Vitamin C are being given out quite routinely is the impression that I'm getting. I know we're still waiting for reports to come out, official studies or numbers to come out about what they've done and their outcomes, but you're looking at 10,000-20,000. In fact, in one case, I think they're saying when the situation is much more serious and life threatening, they're doing up to about 50,000 within 4 hours.

And here it is, in the United States, the New York Post published how "effective" vitamin C was in one New York hospital. Some of the doctors here in New York are using Vitamin C at around 1,500 mg 4 times a day, we're looking at about 6,000 mg is all it seems to be happening here in the US, way less than in China. What's your take on all this?

Thomas E. Levy, MD, JD: You know, it wasn't really until Dr. Marik came out with his study on treating sepsis with Vitamin C, in which case on a very large number of patients in advanced sepsis, organ failure, he was able to save the patients from sepsis. Maybe they died of their disease later on, but he saved the patients from sepsis virtually 100% of the time with 1.5g of Vitamin C every 6 hours; 6 g day. And it got me to thinking, and we've done some analysis and research and applied it to some other patients.

Probably an equally important factor in Vitamin C administration is frequency and the rate at which you give an infusion. When you give 50g bulk book just like that, it is in and out, it's great. But I don't believe 50g, 1 quick dose over an hour gives you the same amount of protection and curative value as a lesser amount, say 20g given as 5 g every 6 hours, and each 5g is slowly infused, okay?

So those two factors should be combined; there's no question that the more Vitamin C you can give, the better, but it should not be forgotten the extreme importance of frequency and when at all possible, to it infuse it over a much longer period of time.

The study in China interestingly enough, where they decided to give a group of patients, COVID-19 patients over a 2-week period, 24,000 mg of Vitamin C a day. But that 24,000 mg was given over a 7-hour period. So I think it'll be.... Well, not only do I think the final result will be overwhelmingly positive, we're already getting feedback it is doing a great deal of good.

When you get any amount of Vitamin C into a patient who's reasonably removed from death's doorstep, you're going to make them better. You're going to slow the progress of the disease, you're going to turn it around. And just about any dose of Vitamin C until you really get infinitesimal is usually good to save the patient. Whereas the larger doses can get you out of the syndrome in a day or two, the smaller doses are going to get you out of the syndrome in a week.

Jonathan Landsman: Also, I think it's important just to illustrate for people, because what's behind what you're saying Dr. Levy, correct me if I'm wrong, is we need to pay respect to bacterial infections, we need to pay a lot more respect to viral infections.

That when we get hit with something and we experienced all these terrible symptoms, and then we hit ourselves with Vitamin C and some of the other things that we're going to talk about, and we feel somewhat better, and then we back off and we don't keep up with that frequency, now what can rear its ugly head again, is the very thing that made us feel lousy at the beginning. Fair enough to say?

Thomas E. Levy, MD, JD: Sure. And that's something that was established 80 years ago by Dr. Klenner when he first started working with Vitamin C and many different viruses. And he even had a situation where his little girls had the measles and he gives them Vitamin C and they'd get better and he stopped and then they get worse again.

And that was exactly the case with the patients. Whenever you're treating a viral syndrome with Vitamin C, and you get in your clinical opinion a complete resolution of the infection, don't stop. Continue the same high doses of Vitamin C for at least 24 and preferably 48 hours more to ensure a complete eradication and a complete cure.

Jonathan Landsman: Okay. So let's shift gears now talking about plasma. And specifically, the plasma that might possibly be used to administer to others, from people who have already been infected by COVID-19. Is that an insane idea? Or do you think there's something to that that would be a benefit?

Thomas E. Levy, MD, JD: No. Actually, that idea has been around for a long time with a lot of different infections. And so everybody that's listening understands completely, we're not talking about taking plasma out of a person who has the infection. We're talking about taking the plasma out of a person who has had the infection and has completely recovered and has the immune response, the antibodies made to the COVID-19 virus.

This is the theoretical purpose of a vaccine, is to give you something in which you are make your own antibodies and then you keep those antibodies indefinitely, so that the infection can't hit you.

And as far as I know, in a few patients, they've done this and I think in 10 out of 10 patients, that's pretty close to 100%, last time I checked. In 10 out of 10 patients given the plasma from previously recovered COVID-19 patients, allowed a complete resolution of significant COVID-19 viruses in these 10 patients.

But you've got to come back to expense and applicability and everything else. I mean, you can't even compare the cost effectiveness of a few pills of chloroquine, which we'll talk about, IV Vitamin C and other things, versus getting one recovered patient and harvesting their plasma to give to 1 patient, that just doesn't work. It doesn't work economically; it doesn't work effectively in the numbers that are being dealt with now. But it is a scientifically sound therapy.

Jonathan Landsman: That's absolutely a great point. And that's the point of all of these things that I'm putting out as far as educational pieces. We can talk about all the different issues, but the bottom line is, can we scale this up to literally tens of thousands, tens of millions,

a billion, 2 billion people? And I like to lean towards what you've been saying Dr. Levy, the kind of things that we can practically do that are affordable and accessible to a lot of people. So before we get to some of the other, how should we say, less expensive things, talk about the effectiveness of these prescription antivirals. Let's break this down a little bit for people.

Thomas E. Levy, MD, JD: I'm not going to go through a laundry list of what's out there, mainly because their names are so bizarre, I can't even keep up with at the tip of my tongue. But they pretty much all share significant toxicity and minimal effectiveness.

So these are definitely not the first line agents you would use to deal with a virus. I mean, if your doctor was to use it and is willing to allow you to take other things along to support their antiviral viral impact, that's fine. But for the most part, I'm not aware of a potent reliable anti-viral agent by prescription that clearly reliably kills the virus and cures you.

Jonathan Landsman: Moving on to some of the things ... Dr. Levy ... talk about some of these preventative measures that each one of us should do. Of course, the first one is not so much about taking into our body ... hygiene. But let's talk about vitamin C, Magnesium, Zinc and Vitamin D. Go ahead Dr. Levy.

Thomas E. Levy, MD, JD: Sure. Well, let me briefly talk about hygiene. Obviously, it's extremely important, the hand washing and all the other measures; mask when you have them, social distancing.

But I also want to say, my goodness, there was a piece on Fox News yesterday on Watters World of some doc in there. And I couldn't believe it. He was basically saying as long as you wash your hands and don't touch your face, you're fine.

I mean really, that was the extent of what he was saying, and I couldn't believe it ... now, that may make a lot of people feel calm and take away their panic, but it's not protecting them in the slightest. Obviously, you want those hygiene measures.

And he was also minimizing the fact that you could have an inhaled exposure. He was basically saying you had to touch something contaminated and touch your mouth or nose, and that is patently asinine, patently horrible advice.

Something that might make people feel better like, oh, that's all I have to do. No, that's not all you have to do. So yes, do quality hygiene, it is important, but it's only a piece of the puzzle. We talked about Vitamin C; there's preventative doses and curative doses. Now, understand

when we're talking about preventative; preventative is not an absolute prevention. It decreases statistically your chance of contracting the virus and catching it. Everything with a virus is dose related. If somebody with a heavy infection sneezes in your face, you're probably going to get that infection no matter what you're doing. So this is to allow you to stay well when you have lower dose exposures.

Jonathan Landsman: I think it's important ... this distinction you're trying to draw Dr. Levy, between getting a virus and mitigating the collateral damage. That's what you're really speaking to. We might get infected, right? But some people 35, 42 years old, strong immune system, taking Vitamin C, taking the other things that you're about to talk about. You know, a bit more better with hygiene and social distancing.

Obviously, if you know someone close to you is very infected, you're going to take extra measures to stay a little further away because the coughing could transmit that to you. All of these things, you basically come out on the other end feeling a whole lot better than someone obviously 50, 80 pounds overweight, taking diabetic medication, blood pressure medication, they have Lyme disease, they have heavy metal toxicity.

I mean, they have all kinds of other issues, and then they get exposed to COVID-19. That person not taking any of these other things that we're about to talk about, they're at a far greater risk of suffering a whole lot more or premature death than someone obviously that you're talking about is young and healthy, robust, all of those good things.

Thomas E. Levy, MD, JD: Yes, no doubt about it. But the proper supplements.... And this isn't just "feel good" talk. This is in the scientific literature, the right supplements in the right amounts literally arm your immune system.

Okay, your immune system brings Vitamin C laden cells; monocytes, macrophages, that have 8,000% more Vitamin C than in the plasma. These are the first cells that show up at areas of infection, at the areas of inflammation. And the whole idea is whatever else the immune system does, the immune system is a primary way to deliver Vitamin C internally to the places where it needs to go.

So that can never be minimized in my opinion. So you want to take Vitamin C somewhere.... This is very rough, but probably, if you're really strapped, you don't have a lot of money, then 2,000 mg a day. Otherwise it's best to take 6,000; 2000 mg three times a day. Take Vitamin D3; probably during this pandemic, take 15,000 to 20,000 to 25,000 International Units a day.

Later on as the pandemic passes, you can bring yourself back down to

the 5,000 to 10,000-unit range. Zinc; probably somewhere, even though the recommended dose most of the time is 30 mg more or less. Again during the time of epidemic, it's fine to take 2 or 3 times that amount at least, maybe more.

And then you can back off on it. Because Zinc and Vitamin D at very high doses do have some toxicity. Vitamin C has none. Also Vitamin K too; these all work to together. Vitamin K too, if you can find a preparation that has roughly 1,000 micro grams, in other words 1 mg, that's an excellent preparation as well.

So all of these things together, there are many many many good supplements that support your health, but you don't have the money or the stomach or the time to take all of them. But these are critical ones; also magnesium.

Jonathan Landsman: Right. I wanted to make sure that the public knows that you've actually written an entire book on this topic, but I know you can't say enough about magnesium. Right?

Thomas E. Levy, MD, JD: Yes. And I almost feel guilty that I might have minimized its importance by throwing it at the end. But it's absolutely of overwhelming importance because along with Vitamin C and Vitamin D3, it's one of the best ways to arm your immune system. Just as Vitamin C many years ago was cure; yes, cure by Dr. Klenner when he was treating young polio patients with injectable forms of Vitamin C, a French doctor in the 1940s showed that magnesium chloride solution taken orally was as profoundly effective as the Vitamin C in curing polio.

So regardless of whether or not we ever understand these mechanisms, these are simple extraordinarily inexpensive interventions. Magnesium chloride, probably next to hydrogen peroxide, which we'll talk to in a moment, are the two least expensive things on the planet, and probably two of the most potent.

Jonathan Landsman: You know, I'm going to share your guilt for a second Dr. Levy, because probably we should have said this right away at the beginning. Anyway, I applaud all those who are listening to us right now and hung in all this time for us to make the most important point of all of these programs, but certainly in talking to Dr. Levy today.

Dr. Levy, your main point, your main takeaway from all of this should be what? I'd love you to make that clear. And then to finish up, let's talk about how a nebulizer can actually help those people concerned about COVID-19. But I want you to make it loud and clear why you are doing this with me today. What's the main goal for everybody out there?

Thomas E. Levy, MD, JD: Well, for me, the main goal is.... And I can't

emphasize this too much: No patient should ever die from this viral infection.

Now, this says maybe a lot of people can get it, maybe a lot of people are getting sick. But if you do what we're talking about with the right frequency or the right dosage, it should only be the person that is 10 minutes away from dying that shouldn't be saved by these interventions. The virus is exquisitely sensitive to the measures that we're talking to.

And unlike what you've heard, probably all your life about there's no effective treatment for a virus, there's no antibiotic for a virus, that is pure BS. The virus is easily rendered killed if you like, inactivated, broken down. And once it does, the body mops it up and you're cured of the infection.

So nobody should ever die from this virus if they do the right things in my opinion.

Jonathan Landsman: Great point. Now, let's talk about a nebulizer ... but, before we get there ... this is such an important point Dr. Levy, when you're talking about "nobody should die."

The idea that if we get a virus that gets injected into one of our cells, and it wants so much in its sinister manner and function to replicate itself to so many other cells, that if we're taking the right amount of Zinc, if we're taking all the other things to sort of mitigate and calm down all this collateral damage, that we can ride ourselves through this and our immune system is strong enough to get us through this.

Like you say, I share in your message so strongly, nobody should die. The big thing, the big takeaway for me in learning from you and so many other professionals that really know what they're talking about, is as soon as you don't feel well; the throat....

I mean, God forbid the shortness of breath, but the throat, the nasal passages, where we're going to talk about the nebulizer very soon and the importance of that. But as soon as you just know you're not doing well, jump on it and be frequent with these very powerful natural things.

Do not let conventional medicine, with all the respect that I have for Western medicine, and do not let the mainstream media convince you that these natural things are some hokey pokey things that are ineffective.

Everything you've mentioned Dr. Levy today is very powerful if you take enough, and if you take it for a long enough period of time for it to take effect. This is what I've learned that I respect so much about your work. And really, this is a long way of me saying, thank you very much Dr. Levy.

Thomas E. Levy, MD, JD: Well, let me add this. I think this one slipped through the cracks, but it's very important for the people to understand.

And the physicians that are open minded enough to listen to a program like this should understand as well, is Zinc has long been known to be a very effective anti-infection mineral supplement. And it appears that Zinc is extremely powerful as an antiviral agent, especially for the coronavirus, as long as it gets inside the cell.

Outside of the cell in the extracellular space, it really does next to nothing to stop the virus from replicating inside the cell. But when you can get the Zinc inside the cell, it immediately blocks the RNA polymerase that allows the virus to propagate, and then the whole system rapidly breaks down, and you no longer have that cell contributing to viral replication.

But it turns out that hydroxychloroquine and chloroquine both facilitate significantly the uptake of Zinc into the cell, and that appears to be the magic if you will, that these particular drug agents have their effect. So it's actually a prescription drug combined with a natural agent that are doing the good task.

And it's important because these drugs.... And I've got to say this. It maddens me so much to hear, oh we've got to do trials, we've got to do this, we've got to do that. Chloroquine has been around for 80 years. We know its toxicity, we know its safety profile, we know that below a certain dose given very infrequently is almost as safe an agent as you can get.

Yet you have in my opinion, the pseudo-intellectual doctors of questionable intellectual capacity, insisting that we have documentation documentation documentation while people die. Okay. This is very much analogous to President Trump's Right to Try bill. People should have the absolute right to try chloroquine at any stage of their infection.

Jonathan Landsman: That's very well put Dr. Levy. People, I would encourage them to look at Dr. Zelenko's work, because he does outline a protocol that is definitely not being highlighted in the mainstream media. They're only talking about the prescription drugs. They're leaving out the Zinc.

In my opinion, they're doing it deliberately, there's a lot of disinformation that's out there, but that's for a whole other program. So as we finish up Dr. Levy, hit us with what you think is so precious, valuable about a nebulizer.

Thomas E. Levy, MD, JD: Well, this intervention is as cheap as or even cheaper than magnesium chloride, which is pretty doggone cheap.

Point being is, not only am I going to tell you, I think this is of incredible effectiveness, it's faraway the most economical way to deal with any viral threat.

And when I say viral threat for the most part, I'm talking about viruses that enter through the respiratory tract, which is pretty much all of these epidemic type viruses we're talking about, we really all get them through the nose, to a limited degree through the eyes, but then through the nose and through the mouth.

Now, hydrogen peroxide is actually the body's natural antibiotic. At the cellular level, when you have an infected cell, literally it's through the utilization of the hydrogen peroxide that naturally occurs inside the cell that allows pathogens and their products to be oxidized, broken down and eventually eliminated.

And what does it break down to? It breaks down to water. Okay. So you have something that goes in, kills the pathogen, and it leaves you with the horrible byproduct of water. Okay, that's a little sarcastic. But, anyway...

Let me just say when you have a virus and especially when you have an influenza or something like the coronavirus, which is an influenza of a respiratory virus, you do have virus throughout your body, but you have your highest concentration of virus in your sinuses, in your nose and oropharynx, nasopharynx, throat, upper respiratory and sometimes even deep respiratory mucosa.

And it is propagating at an incredible rate, continuing to supply to the rest of your body, new virus, as it frantically tries to cope with the virus that's already there. As it turns out, doing nebulization which is a device, either a regular machine or a small hand held machine, that puts a solution into a fine mist that you're able to inhale.

You get it into your sinuses, into your nose, back to your throat and into the lungs. And when you nebulize hydrogen peroxide, nature's natural antibiotic that only has the toxicity of metabolizing down to water, you're able to almost immediately with 5-10 minutes or nebulization a couple times a day if you're infected, once a day if you're doing it as a preventative measure, you completely take out all the virus there.

You also incidentally take out the chronic pathogens that are growing in your throat which most people have as well, but they're protected by chronic biofilms. Hydrogen Peroxide completely destroys the biofilm. Once the biofilm is gone, it destroys the pathogens. In the case of coronavirus or in the case of influenza, I liken it to chopping the head off the snake.

Okay. You stop the huge influx, and unless you're 10 minutes away from death, your body once it stops getting new virus fed into it, mops up the virus very quickly, especially if you're using good agents like Vitamin C as well to deal with a virus that's already inside your body. Point being, so people want details, we've written some articles about this, they can probably get that later.

But you can use as much as 3%. The regular hydrogen peroxide that you buy at Walmart, 80 cents for a pint, 3% is too potent for most people, it will burn and it'll sting; you can dilute it down as much as you want until you reach a tolerable level. Having said that, in my own personal experience, when I have an active infection, the 3% is fine, because it's working on biofilm, pathogens, mucus. Is not really hitting your mucosal cells.

As you resolve the infection, those higher concentration levels will start to irritate and inflame the normal cells, and that's your sign to back off to a lower concentration or do it less frequently. But also be aware that any burning any stinging, any temporary soreness in your throat is very very self-limited. It's not a cold you're getting, it's just a temporary irritation of the mucosal surface once the peroxide goes all the way through the path of the pathogens, and then starts reaching your cells.

Jonathan Landsman: Dr. Levy, you gave us a lot to think about and a lot to actually do. I really appreciate your time today. Thank you very much for being with us.

Thomas E. Levy, MD, JD: My pleasure Jonathan. Thanks for letting me get all this information out there.

Vaccines and Immunity: The Untold Story

Guest: Dr. Judy Mikovits

Jonathan: Welcome to the Immune Defense Summit. I'm your host, Jonathan Landsman, creator of naturalhealth365.com. Did you know that, every year, drug-resistant bacteria or super bugs kill 700,000 people worldwide and is projected to be more lethal than cancer by 2050 and infectious diseases still remain one of the leading causes of death? Cancer, cardiovascular problems, and diabetes are, by far, the leading cause of premature death in the world. But, in reality, all of this is avoidable with a strong immune system. That's why I created this event: to help you understand the roots of disease and how to prevent and reverse life-threatening illnesses by re-empowering your immune system. Our show today, Vaccines and Immunity: The Untold Story.

Our guest, Dr. Judy Mikovits, earned a BA in chemistry from the University of Virginia in 1980 and a Ph.D. in biochemistry and molecular biology from George Washington University in 1992. In her 35-year career, she has done pioneering work in immunology, epigenetics, virology, and natural products drug development including discovery of the modulation of DNA methylation machinery by human retroviral infection and the concept of inflammatory cytokines and chemokine signatures of infections. I know that sounds like a mouthful. Probably, for another day, we would explain what that is all about. Dr. Mikovits has co-authored more than 50 peer-reviewed publications and book chapters about matters related to our health that rarely get discussed in the mainstream media.

Today, we'll talk about vaccines in a way that all of us need to really hear it. You'll learn what is most alarming about today's vaccine schedule; the

ever-growing threat of aluminum, which is being added to more and more vaccines without the public being fully informed about its dangers; plus, a rare inside look at how this valuable health information is being systematically suppressed by the powers that be. No doubt, every healthcare provider or health-conscious individual should listen to this program very carefully.

Please join me in welcoming Dr. Judy Mikovits to our program. Dr. Mikovits, welcome.

Dr. Mikovits: Thank you, Jonathan. It's good to be talking to you again.

Jonathan: It's great to have you as part of the Immune Defense Summit. Dr. Mikovits, the Centers for Disease Control and Prevention, a lot of people call it the CDC, now recommends that 11- to 12-year-olds get the HPV vaccine. Has this really been proven to protect us from cancer? What does your research reveal?

Dr. Mikovits: Well, Jonathan, not only has it not been proven to protect against any cancer, the FDA and Merck who developed these vaccines, Merck and Gardasil is the one we'll primarily talk about because it's the only one left on the market. They had an agreement that it was not even tested to protect against cancer. And it was actually developed to prevent something called pre-cancerous lesion or similar to a polyp in the colon, it's called CIN3+.

So the cancer is rare and takes a long time to develop. There are hundreds of strains of HPV virus. It does not prevent the infection of the virus and it was not even tested to prevent the development of cancer. Cancer takes a long time. So when you look at the tissue and you do a Pap smear, which is the preventative screening process, number one is healthy tissue and then number five is cancer.

So they're only testing that it protects against a 3+ lesion, a 3 lesion, which is abnormal-looking tissue, usually inflammation, and only one in a hundred ever go on to become a cancer. So the FDA and Merck agreed simply that the surrogate endpoint would be that dysplasia—it's called, technically—that abnormal-looking tissue that very rarely goes on to cancer.

So here at the beginning, it's all about marketing. What was tested—there was only 18 months of trial to see that it even protected against that abnormal tissue CIN3. So they got approval from the FDA in 18 months. And the FDA asked for a follow-up, which they never got. Merck stopped the trial. So it's totally unethical between both at the level of the FDA and at the level of Merck, the manufacturer, in that they never showed any protection even that lasts five years. And yet, they were recommending three shots, when in fact the trial done in Costa Rica

said you'd get the same level of efficacy if you get only one dose. So that shot has all kinds of other components including a very toxic form of aluminum, which over the three-dose course, you get 700 mcg of injected aluminum.

I mean, it's actually criminal that some states are mandating this vaccination in order to go to 7th grade. It was never tested in a child. These are children. The protection doesn't even last four years. So if they're recommending them to 11- and 12-year-olds, most won't even be sexually active by the time they're 16 or 17. And the crime there is they'll think they're protected. They will think they're protected from that and they won't get the screening, the Pap smear.

Jonathan: So, Dr. Mikovits, I know already this is extraordinary information that most people are hearing probably for the first time. And the natural thought is, my goodness, how could something like this be going on? How could they allow it? And where on earth do you get this information? I want people to just, in a nutshell, if you don't mind, tell them what your background is so people really appreciate where you're coming from. I mean, you really understand this information.

Dr. Mikovits: Well, Jonathan, I spent more than 22 years at the National Cancer Institute. My mentor, Dr. Frank Ruscetti, discovered the first human cancer-causing retroviruses. We worked there on immune therapy. He discovered the adaptive immune response with the discovery of something that used to be called T-cell growth factor. So, we were at the National Cancer Institute.

Now, the director of the National Cancer Institute is Doug Lowy, who actually developed this vaccine. What we did was we were at the bench developing these things, actually, and torturing mice with them. And the information that I just provided you came from Dr. Diane Harper, and she was a developer of Gardasil. Her role in Merck was to design the clinical trials in humans, that's how you test an endpoint. You can't wait for a cancer to develop over 20 or 30 years. So these cancers develop in a step-wise fashion. So what I told you, they prevent up to the third step, where you might have a polyp, an abnormal-looking tissue that is not, in any way, a cancer.

So the National Cancer Institute and the FDA along with the manufacturer actually agreed to stop the trial and do a surrogate endpoint. The developer alone, Dr. Diane Harper, I think she called it criminal. So they didn't even do any testing in anyone under 21. They said, for the obvious logistical reason, because it would be unethical. So Diane Harper gave a very long description of what's wrong with the Gardasil vaccine.

And I encourage everyone to listen to a series called Vaccines Revealed,

Episode 10, because that is—she spent almost 45 minutes talking about this. And since I was a drug developer at the National Cancer Institute and in industry for now almost 35 years, that's what I've done is develop drugs and look at the response of the immune system. And vaccines are drugs. And they're not tested as drugs. They're not even tested as safe as the supplement you find in the grocery store, and yet we hear about those on TV every day.

Jonathan: I understand that people listening to this entire Immune Defense Summit, they've already heard this message from me quite a bit, but it's worth repeating again. I've often told you, you are not hearing this information anywhere else in the mainstream media. Simply put, the pharmaceutical industry is controlling all the messages that are being put out in all the medical journals to medical professionals, all the television ads, all the magazines, the newspaper print.

That's why it is so critically important, please share the Immune Defense Summit with someone that you love that needs to hear this information. And if you think that's something, wait until you hear the information you're about to hear in terms of the MMR vaccine, the flu vaccine. We're going to talk about the polio vaccine, pneumonia vaccine, I mean it goes on and on. And at the end of this program, we're going to finish up with the hep B vaccine, which is given to every single child, at least here in the United States, just hours after they're born. This is like standard operating procedure.

So hang in there, be ready to take notes. But this is a really important show as I'm sure you could tell from the tone of my voice. Dr. Mikovits, once again, the CDC says that the MMR vaccine protects us from measles, mumps, and rubella. Yet, their own scientist, Dr. William Thompson, says that they have committed scientific fraud when it comes to its real effectiveness and that it actually causes an increase of autism in African-American children. I mean, what is going on here?

Dr. Mikovits: Again, this is all about the message. It's all about fraud at the highest levels of our government. So I just talked about the FDA and, now, here we are—the Food and Drug Administration. And, now, here we are with the CDC, who did these studies back in early 2000 before we had sequenced the entire genome, before scientists knew what certain genes were that contributed to immunity or not.

And so what they had found was there's four to five times increase in risk for black boys, African-American boys, if they get the MMR before they're three years old. So I'm just going to say it again, if they get it before they're three years old. And that risk goes away or at least is backed down to Caucasian-Americans where the risk is two to threefold if they get it before they're three years old. So what we know is our immune system and our detox pathways in the liver, kidney, and

lymphatics are not fully mature until a child is three years old.

So think about it: they covered up this data when they could not make the association go away with fancy statistics, which are really criminal. When they could not make the association go away, they simply destroyed all of the raw data and put out a paper that was fraud. Took the African-Americans out of the study in order to remove the association. This is detailed in a chilling movie called *Vaxxed*, V-A-X-X-E-D. And I encourage the listeners again to inform themselves because just to think about it, when I learned this, I didn't learn it until 2014 when of course Dr. William Thompson confessed to Dr. Brian Hooker whose own child was severely injured. And Dr. Hooker, also a biochemist like myself, spent 10, 11 years trying to do Freedom of Information Act, FOIAs, to get the raw data. And finally, Thompson broke down and confessed.

Can you imagine, all you had to do was wait until a child was 3 years old and somebody sat on that for 11 years? I can't even imagine the suffering. And again, so here we are, two federal agencies, pure fraud, criminal actions which should put them in prison, and Dr. Thompson has never even been subpoenaed by Congress or anything else. He's protected under the so-called whistleblower act, but he's a coward and a criminal. And for someone like me who spent my whole life in scientific research, those are ethical violations that are beyond comprehension.

Jonathan: I want people to understand that there are experts out there like Dr. Paul Offit that'll get on TV all the time and they will give usually this idea that it's just so unfortunate, they'll say. They'll characterize it as sad that people are being misled by the powerful lobby of the natural health world. He's very vague about it. And he will say that because of that and the supplement industry, people are being misled into believing that vaccines might be dangerous and that something like nutritional supplements might be more helpful. It's very interesting when you hear that kind of criticism coming from a so-called expert who's earning millions and millions of dollars from the pharmaceutical industry. Dr. Paul Offit is somebody who always talks about how vaccines are safe and effective. And I want everybody to really pause and question, what is the agenda of the person that's speaking to you?

Clearly, you know what my agenda is here at the Immune Defense Summit. I'm looking to get this kind of information out to the public because none of this is being spoken about in the mainstream media. And it is truly the scientifically grounded "other side" to so many of these issues about what can make our immune system strong and what truly threatens our immune system. All of these chemicals that are out there especially those put into the vaccines that are being injected into millions and millions of people. So please pause and ask yourself, what is the agenda of the person that's speaking to you?

And in a lot of cases in the mainstream media, when you hear these experts getting up and saying that vaccines are perfectly safe and effective, it's too long to get into here, but many of these people with MDs or PhDs after their name are all part of these organizations that are heavily funded by major corporations and many of them are vaccine manufacturers.

Do you really think that these experts are going to get up their paid for by these corporations and say, "You know, I think I have some reservations, we should study it more. I notice something where it might injure some people." They'll never do that. And that's exactly the case where the senior scientists at the Centers for Disease Control, Dr. William Thompson, who really, like you say, Dr. Mikovits, broke down. And he said, "I got to make things right," because for, so long, he kept quiet over something that truly is criminal.

We're going to shift gears now, Dr. Mikovits, and get into the flu vaccine. And this is another thing that just—it gets me so riled up. The CDC says that, "Vaccines are the best way to prevent the flu." I mean, it's incredible. Are they kidding? What should we know about the dangers of the flu vaccine?

Dr. Mikovits: Well, the dangers of the flu vaccine are many, many, many more because who they're promoting get the flu vaccine; that is pregnant women, the elderly, and young infants, again, who don't have an immune system. The flu vaccine is one of many that actually has mercury. So thimerosal is mercury. So if I read the list of ingredients in the flu vaccine—I'll just read one off the CDC's own list. It's got Madin-Darby canine kidney cell protein. It's got protein other than the antigen. It's got DNA from dogs. These are dog kidney cells. It's got polysorbate 80, a detergent. It's got thimerosal. It's got vitamins, amino acids, and mineral salts.

What we're seeing with these flu vaccines—and when I say we, Dr. Ruscetti and I, serve as experts for vaccine court. This is people who are injured by vaccines and they go to a special court, that's really just a kangaroo court, because the only person it protects is pharmaceutical industry because nobody is liable for any injury—not the doctor, not the clerk.

And when we talk about these things, with MMR, with HPV, with the flu vaccine, they all have these animal cell lines. They all have DNA from other animals, which people are developing allergies, which viruses and toxins and pathogens are literally being carried by this material. So these people are being injected with toxins. Mercury is a known neurotoxin. When we opined in vaccine court in the last six months, we have done three deaths of elderly from the flu vaccine, three deaths.

So the very people, when you see the TV and they even give a high dose vaccine to the most elderly—so these are people with cardiovascular issues, type 2 diabetes, the thing you would expect in an elderly, their immune systems are weakened as they say on the TV, “Oh, your immune system is weakening so let’s get this one done. Let’s inject our elderly.”

So they’re usually not even injecting with the flu vaccine alone. And we’ll talk later about the pneumonia vaccine. But these vaccines are killing the susceptible population in a large part because of the toxins in there and the level of immune response that the high dose in this flu is injected. And of course, if you’ve ever had the flu, you’ve ever had a vaccine, you only get 50% protection ever at a vaccine.

So to keep compounding the addition of mercury, the toxic mercury, year after year after year, it’s a compounding effect. So they’re not producing immunity, only 18% of what is called the flu, “Oh, I’ve got the flu.” If you test it, it is not influenza. So they don’t protect against the disease. They don’t protect against most of the infections that have symptoms of influenza. They don’t protect against most of the strain. And the CDC admitted last week that the nasal, the FluMist, they took off the market a year ago because it didn’t work. So the CDC came back out last week and said, “Well, let’s put it on the market because I think in a year or so, we can convince folks that, in fact, it’s valuable,” when the flu mist, that nasal spray was actually causing the flu.

These outbreaks of the flu, these outbreaks of these diseases are literally from shedding the very virus that you’re supposed to be protecting. And many, many people will tell you, “I was so sick after that injection.” And every one of these cases that we do in the courts, in the vaccine courts, is just that: people who are severely injured, again, much, much, much more damaged. All you have to do is use the Tamiflu and wash your hands and you might have the flu for a few days not six months or a year and, certainly, not death.

Jonathan: I want people to not even believe anything they hear in this conversation. Go investigate it yourself. But things like the flu vaccine, it’s incredible, if you just read the package insert, I have no doubt most people are very uninformed. They just simply trust their healthcare provider when they get injected with the flu shot.

But when it comes to pregnant women, they’re not even testing it in pregnant women. It’s horrific, the ingredients that are in there. When they talk about all vaccines being safe and effective, and then you’ve got brain inflammation, you’ve got seizures, you’ve got sudden death in some cases. You’ve got these vaccine court cases that you just talked about, Dr. Mikovits, where literally billions of dollars have been paid out to people who they actually had to admit got injured by vaccines. Whereas the vast majority of them, they looked to throw them out for

one reason or another to protect the pharmaceutical industry.

But some of the cases are so horrific and so obvious that they actually had to dole out billions of dollars. And yet they still have the gall to say that vaccines are perfectly safe and effective. Don't worry about a thing. Take as many as you want. None of this is a problem. To me, it really is absurd. It is criminal. There's absolutely no concern for public safety whatsoever.

Dr. Mikovits, we've got so much more to cover. Let's talk about the polio vaccine. Is it true that a cancer virus was found inside the polio vaccine?

Dr. Mikovits: Absolutely. So let me tell you a little bit more about the science of the polio vaccine. So the polio virus is grown in a cell line, a continuous line of cells called Vero, V-E-R-O, monkey kidney cells. So they're kidney cells from monkeys. Not only do they contain viruses related to HIV. But in order to get these monkey cells to grow in the laboratory so that you can grow in fermenters, much like you'd make a home-brew of beer, so that you can grow that of vaccine-producing virus, they transform those cells. They make them continuous by transforming them with a virus called SV40 virus, Simian virus 40. So they transform them with SV40 virus that is associated with all kinds of cancers, primarily lung cancers and things like that. So here you are again in this vaccine, you're growing it—and the polio vaccine is not the only one. And the polio vaccine is one that's given to infants as part of things like Pediarix and things like that.

So the Vero monkey kidney cells known to carry not only retroviruses but calf serum, antibiotics, formaldehyde. The polysorbate 80, that detergent breaks down the blood brain barrier. So here you are, you're taking a known cancer-causing virus and known virus-containing cell line and you're growing and manufacturing many, many, many of these vaccines.

So people don't know when they get a DTaP vaccine, they're getting a DTaP that contains the polio containing those vaccines and it's called Kinrix, the one called Pediarix. So even your doctor does not know what's in these shots. It's a clear liquid containing things that, for the rest of your life, could give you acquired immune deficiency, could give you cancer, and are known to—and the investigators who've done the most work on this, a colleague, a former colleague, Dr. Adi Gazdar, who's now in Texas, was literally, like many of us when we discovered these things...

As drug developers and as clinical scientist, unless you're the person in the lab making the drug, knowing how they're manufactured—as we mentioned earlier, that's why I have a particular vision in this, because my first job was fermentation chemistry. I made cancer drugs. I purified immune therapies and interferons. We used these cell lines. We

developed these cell lines. We know they're contaminated with not only monkey viruses or human cancer-causing viruses, but now the whole mouse, the gamma viruses related to mice. We do everything in our laboratories in mice.

And in 2009, we discovered these mouse viruses contaminating not only the vaccines but the blood supply. And people developing not only cancers but Parkinson's disease, ALS, Lou-Gehrig's disease, autism, myalgic encephalomyelitis, it's absolutely criminal. And when Dr. Gazdar talked about SV40 back in the '80s, we're exiled from our jobs and we're exiled from the scientific community. The papers are retracted like Dr. Hooker's paper was in 2014. Ours was retracted in 2011, forced. And that implies some kind of fraud on our part. And what it is, is a big cover-up.

And you don't hear the government talking about this. They talk about things like Zika and Ebola that nobody will ever come in contact with. And here you are, this polio vaccine where everyone everywhere says, "Oh, vaccines are wonderful. We eradicated polio." That was before cell culture. We didn't have those things in that polio vaccine that was in a sugar cube. We didn't grow them in cells. We didn't list toxins. They are listed in the CDC website. There were different formulations, different times. And in fact, that polio vaccination back in the '50s and '60s was toxic, but the risk of the disease outweighed the loss and the development of post-polio syndrome and even cancer, if you ended up dead or in an iron lung or wheelchair.

So when the benefit outweighs the risks, but there isn't anything on the current schedule where the benefit outweighs the risk. Measles is a childhood disease that we now know, if you've had measles, you're not only immune for life, immune for life. Think of all of these boosters our 2-month-old gets because they simply don't get any immunity. A 2-month-old doesn't have a functioning immune system, and yet we're injecting them with toxins expecting them to develop an immune response and they can't.

A pregnant woman's immune system is suppressed so she doesn't reject the fetus. You don't give a pregnant woman a glass of wine. Why do you inject thimerosal? I mean, for people to actually look... And when my friends and colleagues, since we were in a different field, we didn't make vaccines, we made cancer drugs. So when I say to my friends and colleagues, "Do you know there is Vero monkey kidney cells in these vaccines?" They're like, "No. They'd clean that out of there, wouldn't they?" And I'm like, "No, they just write it down and keep injecting it because they can."

So I'll correct you on one thing and that is, in 2011, so here you are, before Thompson was caught, while he was running for 10 years and Dr.

Wakefield and myself and others said, "Wait a minute, these things are contaminated," our paper in 2009. In 2011, the Supreme Court, came out with a ruling saying vaccines are unavoidably unsafe. And I'll tell you as a drug developer of 35 or 40 years, they are not unavoidably unsafe. We can have vaccination strategies and vaccines that will protect us from deadly diseases, not from childhood chicken pox or measles. These help us develop a sound immune system. We can protect our population. But not by giving someone 83 shots of 20 or more different things before they're 18 years old, all of them containing compounded amounts of toxic aluminum, toxic mercury, detergent, formaldehyde, and everything else.

And the important thing to think about is we're injecting this directly into the bloodstream, directly into the lymphatics, which go directly to the brain. We're bypassing the immunity. HPV, we have cleared—90% of them are cleared by the skin keratinocytes within two months of the acute infection. But we're injecting HPV directly into the body, into the bloodstream, into the lymphatics. We have no idea what the virus does when you bypass the natural immune response. And nobody is asking.

And it's the message. It's always the message. So as we've discussed, look at your TV, look at where it says get this one done. Why? You're not at risk of anything from the flu vaccine. You'll recover in a couple of weeks if you have clean water and good nutrition from the flu. Go home and then you'll be as immune as you're ever going to be. So you don't need to get injected with these toxins and mercury every year while you watch your health get worse and worse because you're crippling your immune system.

Jonathan: Dr. Mikovits, another thing too that people just simply have to ask themselves, this is common sense—the Centers for Disease Control and Prevention, they're the ones that not just here in the United States, but throughout the world, countries are looking to this organization for advice and leadership about what's safe and what's proper to do. Here it is, the CDC is pushing, and I mean they are aggressively pushing, the idea that every person should be thinking about getting a flu shot. Go talk to your doctor about getting the best in vaccines to protect your health.

And then on the other side, most people don't realize they're spending billions of dollars, this is US government money, invested in vaccine solutions. So they got tons and tons of doses. They're looking to put them out into the public. They're promoting that everyone should take it. Who in their right mind would think that the same organization should be impartial and say, "Well, maybe there's a mistake here with the MMR vaccine or maybe there are these toxins we ought to take a look at"? There's absolutely no vested interest in them doing that. It'll only make them look bad. And I know it sounds oversimplified. But I feel, in my

opinion, that is simply the truth. They are really on shaky grounds for being exposed for how corrupt this whole operation is.

Dr. Mikovits, we've got two more really important vaccines to cover here. We're seeing the pneumonia vaccine gain in popularity. Everywhere I go, at the local pharmacies, it's "get your pneumonia vaccine." It's incredible. Do you think public is fully informed about this vaccination? And if not, what should we know?

Dr. Mikovits: Not at all. You're not informed just like you're not informed about any other vaccine. That's the media message. Get this one done. Why? We're not, most people aren't at risk of—so there are 13 and 23 different subunits or pieces of parts of different kinds of pneumonia-causing bacteria agents, subunits. There's no testing. There is no evidence it prevents any kind of pneumonia as we've been talking about. And again, the components, the detergents, the aluminum, are crippling the very people and their lungs and making them susceptible to everything else.

So this, again, it's just messaging. And if you look at the pneumonia vaccine and you look at the CDC and the FDA, both corrupt and both make billions of dollars. They have foundations. The taxpayers pay for vaccine court. The taxpayers pay a dollar on every shot. And they have huge incentives for doctors' offices to get these done. I went to a Leukemia and Lymphoma Society meeting a few months ago and the doctors are standing there, everyone in the room has a mask on, because they're susceptible. They have a B-cell lymphoma, meaning they can't possibly make the antibodies. They can't possibly respond to this pneumonia vaccine. And she's saying, "Make sure you get it." And I walked out and another person in a mask walked out and it happened to be a doctor with the cancer. And he's saying, "Are you kidding me?" They can't make an immune response. This is criminal. I just had a friend die because his cancer came back with a vengeance right after that pneumonia vaccine. It's horrific.

It's money. It's marketing. They do it because they can. And there's no oversight. They can just keep adding to this list. They don't develop them. I've spent 10 years or more making a cancer prevention drug, 10 years or more, and it still hasn't hit the market. And it's safe, it's efficacious, it's everything we've discussed. And yet these things could roll out in a few months because they can, because they've got that law backing them up. And all they have to do is call it a vaccine and they can do anything they want.

And it's not just volunteer. It's mandated. It's law in California. Children don't go to school. And now they're targeting—these are the terms the CDC and the FDA use. Okay, we got the kids, they're used to going in for their checkups. They're just used to you injecting them with a hundred

needles and losing 10% of them is not a big deal to us. And so here we are and they're saying, "Let's target the adults." So the commercials on the TV, "Get this one done, look if I had known there was a vaccine before I got the pneumonia..." These are horrible. Same with the cancer drugs, the immune therapies. We are only one of two countries in the world that does direct-to-consumer advertising of drugs.

So again, the message is the same. There's nothing about the pneumonia vaccine that is safe or efficacious. Simply don't get that one done.

Jonathan: Thank you, Dr. Mikovits. And the untold story of all of this related to vaccines, all the information in the Immune Defense Summit, I mean, I know I'm joking around here, but it's not funny. Could you imagine if the CDC had a link to the Immune Defense Summit so that people should actually learn about immune-enhancing strategies, which we talk about throughout this entire event, aside from this conversation, Dr. Mikovits, where we're really focusing on all these vaccines.

But in a nutshell, nutrition, organic food that is chemical-free, right. But that would be speaking against the chemical industry that is chemicalizing our food supply or nutritional supplements, which would take money away from people like Dr. Paul Offit and all the vaccine manufacturers if more people had optimal levels of vitamin D and were taking vitamin C on a regular basis, which would help them to get over things like measles and pneumonia or any of these inflammatory-related conditions.

I mean, it just goes on and on. Essential fatty acids to improve your sleep and what your bedroom is like and the electromagnetic frequencies and trying to get wireless technology minimized in your life so that you can sleep better, which is so important for your immune system. And clean water, we should filter everybody's water. The government should be giving out filters to everybody so that the water that they're drinking is clean. This would be great for their immune system.

Again, I go on and on like this because this is not just hype. This is the real thing. This is why we call this an untold story. All millions of people ever get—they're exposed to one message, "Get your vaccine, that's the reasonable thing to do." And when you bring up all these other things that I mentioned, you're a nut job. You're labeled as a health nut or you have some sort of mental disease. I mean, they demonize any other kind of conversation about this, about how to enhance the immune systems. It's crazy.

So finally, Dr. Mikovits, this is the one that's got me most worked up. Because, to me, it's one of the most dangerous and it's the most illogical, unscientific vaccine. And it's actually hitting all of our babies within hours

of birth. The hep B vaccine is supposed to be given right when a child is born. Is this really necessary?

Dr. Mikovits: Not only is it not necessary but, again, it's criminal. Hepatitis B is transmitted through blood and IV needles. It's for homosexuals and drug abusers and people like me who work with blood products in the health industry for 35 years. So this is the one that gets my colleagues. This is their big mistake. Not only is it not necessary, but it's criminal.

So when I tell my colleagues that they're mandating it, mandating it for newborns. There are hospitals here in California that send the nurses two-by-two and even if the parents say no, even if the parents say no and sign a waiver of it, one of the nurses give it to them anyway because these are horrible parents subjecting these kids. There is no risk of hepatitis B. There was minimal risk. I was 30-some years old when the vaccine was developed and I had a choice. I was an adult and had a choice and was walking and talking. This is a pararetrovirus. It's an AIDS-like virus.

So watch the TV tonight when they say, "Oh, millions of Baby Boomers have AIDS-like virus lurking, go get tested." And all of my colleagues say, "This is criminal that they tell them to go get tested," they go get money, and then they take this \$90,000 course of treatment for something that they didn't have and wasn't bothering them anyway. But here we're mandating in California, that a newborn—and they'll get a shot.

They'll get this Hep-B shot three times before they're six months old, not just on that first day of life. So on that first day of life, when they're struggling to take their first breath and get their feet on the ground, they don't have an immune system at all, that's why they're relying on mom. They're given their first sexually-transmitted disease. Really? It's beyond comprehension.

The great news about it is it's the big mistake. So people, other doctors, scientists, anybody said, "No, they're not doing that; no, they're not doing it." And I said, "Look for yourself. Look for yourself. Look at what changed since 1986." And in fact my colleagues, Drs. Ruscetti, they both went upstairs and got their son's vaccine record. He was blessed to be born in 1986. This is when the National Vaccine Injury Protection Act went into law, was signed into law by Ronald Reagan.

You can read a great book called *Inoculated* by Kent Heckenlively and it tells this story, where Ronald Reagan called it unconstitutional. But they went upstairs and looked at the records and it's like, "Nope, he didn't get that." And by far, the kids with the most injuries are kids that were forced. And again, it's going to be the impoverished. It's going to be the minorities. It's going to be parents who don't know or are bullied or in a hospital.

There is no risk of hepatitis B, none for essentially anyone in this country. And to mandate that shot and give it to millions of children sets them up for a life of health issues, asthma. We have the sickest kids in the world, and that shot, more than anything else, if we can stop—one of the reasons I come on shows like this and just keep talking.

If we can stop any child from being inoculated with anything before they're three years old like we were when we were children, they let these children develop a healthy immune system, let them develop healthy detox liver and kidney and lymphatics, none of which are completed. We educate our immune system. We educate it according to our environment. Our environment is not injecting our children with needles full of toxins over and over again so they can't develop well.

Jonathan: Dr. Mikovits, this is so well said. I can't tell you how much I really appreciate everything that you were saying. And please, big message to anyone listening to this program, please don't be paralyzed by any of this. Take action right now. Take a copy of this. Get the link. Put it in your email. Share it with someone who you feel needs to hear this information because it's only that way, one person at a time, that we're actually going to get this word out. Everybody's got to do this. We've got to share it. I could say, for years, I've already put out all this information, what's the point? I created the whole Immune Defense Summit because there is a point. Millions of people need to hear this news.

Dr. Mikovits, I want to thank you, again, so much for your time. I want to thank our listeners for joining us today. If you would like a copy of this program plus all the other presentations inside the Immune Defense Summit, simply click the banner you see on this page. Thanks again for attending the Immune Defense Summit. Talk to you soon. Take care.

Biofilm Warnings: Uncovering Toxic Threats

Guest: Dr. Thomas Janossy

Jonathan: Welcome to the Immune Defense Summit. I'm your host, Jonathan Landsman, creator of naturalhealth365.com. Did you know that every year drug-resistant bacteria, or super bugs, kill 700,000 people worldwide and is projected to be more lethal than cancer by 2050? And infectious diseases still remain one of the leading causes of death? Cancer, cardiovascular problems, and diabetes are, by far, the leading causes of premature death in the world. But in reality, all of this is avoidable with a strong immune system. That's why I created this event. To help you understand the roots of disease and how to prevent and reverse life-threatening illnesses by re-empowering your immune system.

Our show today, Biofilm Warnings: Uncovering Toxic Threats. Our guest, Dr. Thomas Janossy, is a pioneer in the area of natural detoxification, anti-biofilm strategies, and anti-aging with a special interest in neurodegenerative disorders like Alzheimer's and other forms of dementia. After researching ketones at Sunnybrook Health Science Centre, University of Toronto, Dr. Janossy worked as a neuroscientist researching the brain at the Hungarian Academy of Sciences, Institute of Experimental Medicine.

In 1986, Dr. Janossy also obtained his veterinarian medicine degree from St. Stephens University in Budapest, and pursued this line of education. Since he was interested in learning more about nutrition from a broader perspective across many species, in addition to his understanding about the foundations of health, sickness, and healing. Today, we'll focus our attention on biofilms. How do they form and affect our ability to avoid

disease and its unwanted consequences? If you're concerned about protecting your health especially as it relates to chronic or infectious diseases, this program will be truly enlightening.

Please join me in welcoming Dr. Thomas Janossy to our program. Dr. Janossy, welcome.

Dr. Janossy: Thank you, Jonathan. It's always a pleasure talking with you.

Jonathan: Dr. Janossy, biofilm science is certainly emerging as the key to understanding chronic, infectious conditions. What should we know about this?

Dr. Janossy: The interesting part is that some 30 years ago, when I listened to my professors at the university, they never talked about biofilms. Basically, the old school was fixated with the images and concepts of free-floating bacteria infecting organs. Thus infections hiding in biofilm communities were never mentioned. Now, obviously, it was easier to research these bacteria. But in reality, by now, we know that most or probably all of the chronic conditions when an infective agent is part of the chronic disease, then the biofilms are involved.

Now, these biofilms are basically the infectious agents building up a wall, we call it extracellular polymeric substance. It is also called slime. And that covers and also challenge the biofilm colonies to surfaces inside our bodies. And these colonies are protected from the antibiotics, or even the bacteriocins that are produced by probiotics, or the antibodies that are produced by our immune system and other medicines and drugs, which might kill these infectious agents hiding inside the biofilm wall.

Now, biofilms can vary in thickness from mono cell layers to much thicker ones. And in reality, in nature, biofilm is often beneficial. For example, the flow boundary skin layer of rapid swimmers like barracuda can effectively subdue the turbulence, and thus prevent energy loss. Also, huge surfaces of slime, basically biofilm colonies, are used in certain sewage treatment plants to clean up water. So while we recognize that, in nature, there are benefits; but in reality, in our body, biofilms are a serious problem, and also linked to the ineffectiveness of antibiotics currently used.

I would talk a bit about the Lyme disease and Lyme condition. But before I do that, I would mention that, by now, we know that biofilm communities are involved in stomach ulcers, atherosclerosis, basically the arterial plaque that is a biofilm community. By the way, the most classic biofilm infection is the periodontitis. Everybody, when they go to the dentist, they try to remove the plaque. And basically they remove the biofilm colonies, including the bacteria.

Cardio and cerebrovascular disorders are also biofilm-linked autoimmune diseases. One explanation is that pathogens enter these biofilm communities, but also smaller pathogens can enter cells. And if we talk about the autoimmune diseases, then the immune system recognizes that something is not normal in the cells. Actually, the cells are hiding the pathogens, and then the immune system attacks these cells.

Now, I would also include type 2 diabetes, that it's also a biofilm-related condition. Arthritis, a very typical one. Sinusitis; prostatitis, Candida. Candida is huge. We will talk about this later. Otitis media, that's what's, early on, recognized that when our kids get ear infection, middle ear infection, it is not something that comes from the outside but actually the biofilm—we see in the biofilm community the bacterial flare up. And some forms of cancers, plus ulcerative colitis, are also added to this list.

Now, in a very interesting breakthrough study published in *Nature Medicine* in 2009, it was documented that even viruses alone are able to form biofilms. This was kind of shocking for most scientists because they assumed, up until this point, that viruses have no bodies of their own. They are not able to form biofilms.

Now, typically, when we talk about the biofilms, we have to step back a bit and think about its how and why does it develop in our body. Usually, the imbalance starts with the accumulation of some toxins. Now, these toxins can come from bacteria or from the gut or can come from the environment like the toxic heavy metals, for example. And as the toxins accumulate, then it also weakens the immune system. Once the immune system is weakened then the bacteria has an upper hand and can multiply and spread around in the body and form these biofilm communities.

The biofilm communities are forming quite faster than antibiotics are given. This is a problem that antibiotics, in a way, are very necessary, for example, in the cases of Lyme. But at the same time, the fact that we give the antibiotic, it triggers the development of the biofilms. So it's a delicate situation. As the immune system is weakened, then it can reach a level, actually a weak point, when it's extremely difficult on its own to fight against these invading organisms—they could call it as infection—that are all over in the body. Depending on the location that is affected more, we call the disease—it can be Alzheimer or it can be Lyme conditions or Lyme co-infections. But clearly what interplays is the variety of the toxins, the specificity of the toxins, and the variety of the pathogenic microbes and the specificities. So it's an interplayer, very interesting in terms of how this develops. But of course, for the patients, it's very difficult. And for the doctors, it's very difficult to treat chronic conditions.

Jonathan: So, Dr. Janossy, when you're talking about in your protocol this idea of what you were just describing, this toxic synergy, all of these different toxins that a person might be exposed to, or say pathogenic synergy as well, can you talk about this so people have a better understanding about it?

Dr. Janossy: Increasingly, this is recognized that the toxic load that it carries underlies most chronic diseases. As we try to function with 80,000 man-made chemicals in the environment. The average adult has 700 contaminants, and the babies are born with about over 200 industrial chemicals and pollutants that are measured in the umbilical cord. So basically, the difference, we talk about 500 extra toxins, we pick them up over a lifetime.

Unfortunately, most of the toxins, it's very difficult to get rid of them. And if you think about, let's say, somebody plays with mercury in childhood because it's shiny, exciting—I did it. At the time, nobody told us that we shouldn't play with the little, shiny mercury droplet—or others were exposed, mainly, by renovating their old house. In the old times, it was lead-based paint and the all available paints were lead-based until it was banned. Others may be—like cars who are over 50 today, and they were exposed to the leaded gasoline around cars. It was an obvious exposure.

So the problem is that the toxins are accumulating. And I call the toxic heavy metals the bottleneck, in a sense, of all of the toxins. They can show in the liver. And the liver becomes very sluggish. And obviously the liver has the toxins as well. So everything slows down, and the bioaccumulation—it's almost like on a highway when a few cars slow down and everybody is piling up behind it. So this is what happens with the toxins, that a few of these key toxins can actually severely compromise the normal function of the liver detoxifying effect, the phase 1, phase 2.

Now, most of the toxins are neurotoxins, and should be eliminated from the body and from the brain. Again, the problem is that the body is not able to eliminate all of these toxins, especially the toxic heavy metals. The body needs outside help. Now, as I reviewed the scientific literature and talked to many doctors and, traditionally, intravenous chelation was used but there are a few issues with that.

First of all, it's given in the daytime. And we have to know that our body works differently in the daytime and in the nighttime. There's a Circadian rhythm. And over the nighttime, that is the key most important time for detoxification rebuilding. This is why when we don't sleep, we feel sluggish. We feel awful, actually, next day. Maybe when you are 15 or 20, we can get away with it for a night or two. But also the toxic load is lower, typically, at that age.

So, the detoxification is really fundamental and it's much more logical. And in fact, it is necessary to support a normal, natural process. In other words, we have to detoxify overnight and we have to support the detoxification overnight. So this is one of my concerns about the intravenous chelation that, unfortunately, it cannot be given overnight.

When I heard about this some 14 years ago, about the rectal suppository delivery route that—first, it sounded a bit unusual. But what happens is that the rectum is anatomically part of the skin. So, the last 10 inches of the rectum is vascularized differently. If you take something orally, then from the gut, everything goes first to the liver. And the liver breaks down the food. Let's say, the proteins are broken down to the amino acids. And then the body benefits from the amino acids flooding, basically, from the liver all the food reaches the cells. But they can circumvent this since, for example, the EDTA, the calcium disodium EDTA, that is in the chelation, the main ingredient, that is broken down and we know if it's taken orally, only about 5% reaches the whole body circulation.

Since we know that the absorption for the rectum reaches the whole body circulation, as an aside or basically in brackets, I should mention that the prostate sits right on the rectum. And we know from a pilot study that was done in California, that ingredients that are in the rectum are disproportionately reaching the prostate—basically, four times more ingredients are reaching the prostate from the rectum than any other part of the body. It's difficult to understand why not even the pharmaceutical companies are coming out with a prostate-targeting drug that would be delivered through the rectum.

Anyhow, in Europe, people understand that rectal delivery route, because most kids when they have a high temperature, they get the rectal suppositories. Like I did when I grew up in Europe when I was young. I talk about it because the rectal delivery, first of all, we target the most important time, nighttime. Second, we target the whole body circulation. And third, the absorption is slow. In other words, the intravenous chelation, or even if you take something orally, there's a spike in the blood. In other words, it goes up. The ingredients show up in the blood. We could almost draw a graph. And then continuously comes down. With the rectal delivery, there's a continuous low level, much lower than with intravenous chelation. But over many hours, the absorption is continuous.

So, these are the three reasons why, from a physiological point of view, I became very interested in the rectal delivery route. And then what was not available at that time, at the beginning, only an EDTA-based rectal suppositories. So I came out with EDTA and glutathione that are in synergy in the suppository. And it's very interesting because it mobilizes 3.8 times more toxins than EDTA alone or glutathione alone. And obviously, it mobilizes mercury, lead, aluminum, pesticide, fungicide.

And in fact, all of the toxins are excreted because of the glutathione, because glutathione mobilizes all of the toxins. Now, by supporting this natural detoxification overnight, we can reduce the toxic load, and immediately the immune system becomes stronger.

The other aspect that I just have to mention here is the calcification. Somehow, it is not mentioned enough, yet, for example patient who have Alzheimer, their brain is examined after they died. The calcification of the brain, and in fact the blood vessels, is very obvious. And they have more calcified brain to a higher degree than normal people, or people who have no Alzheimer's or no dementia. So decalcification is a very important step.

Typically, by the way, in Alzheimer patients, the pineal gland is calcified. And the pineal gland is basically hanging outside of the brain, so it is not protected by the blood brain barrier. It also means that bacteria and toxins and everything can attack or affect that gland much sooner than the rest of the brain.

How this calcification happens is also sometimes clouded in mystery. But actually, calcium phosphate crystals build up in various parts of the body and mainly by Chlamydia and nanobacteria. They don't have a strong wall, like a cell wall, that protects them. And by calcifying the outer, basically, just the outside of the cells, calcifying the environment, it means that they can protect themselves from the immune system. Very intelligent these bacteria, really, these pathogenic microbes.

Since we talk about the EDTA, I would also mention why EDTA is an immune booster besides lowering the toxic heavy metal load. The white blood cells, specifically I'm talking about neutrophils, that are the most abundant type of granulocytes, and actually the most abundant, probably about 50%, 60%, type of white blood cells. They form a key part of the immune system. There is an enzyme, a catalyst, that is called myeloperoxidase, and that is needed for the production of hypochlorous acid. And this acid is generated and activated in the neutrophils. So this myeloperoxidase-mediated peroxidation of chloride ions, and that contributes to the destruction of bacteria and Candida.

Basically, what happens; the hypochlorous acid is produced, and then they should imagine these as tiny goblets that are actually injected into the body of the pathogens. It can be a bacteria or Candida. If the level of mercury or lead is high, this pathogen-killing function of the immune system is crippled. It's a very important step to understand because this is actually a key link to why the toxic heavy metals play such an important role.

I reviewed many cases of Candida over the last 16 years. And obviously, some people try to take herbs, and the usual methods that most widely

people and doctors talk about. But somehow, nobody talks about the link between the toxic heavy metals and the Candida, for example. Yet that link is very strong. So no matter how much other anti-Candida products or steps are taken, the availability of the hypochlorous acid seems to be the most fundamental requirement for a strong immune system and for the success of controlling Candida and other bacteria. This chelation can turn around the situation really like nothing does.

But the removal of amalgam fillings comes up repeatedly as a big question mark. Can we do the chelation with the amalgam? You have to remember that it's not the mercury that is, by the way, 50% in the amalgam silver filling. It's not the mercury that is right inside the amalgam filling that causes the problem, but the mercury that is already outside spreading around in the cells and the whole body. So yes, we can reduce the mercury load. In this case, if you talk about amalgam in the whole body, and the immune system would strengthen tremendously. And at the same time, we should replace the amalgam filling, if you can, by composite fillings most likely that's the case with a dentist that understands the whole procedure. And that way we basically cut down on the extra source of amalgam for the future.

Now, actually, before we go to the dentist, it's strongly advised to lower the overall toxic heavy metal load because typically there is some spillage. And what we want to avoid is for these patients to reach a tipping point where clinical signs and symptoms become prevalent due to the too-high level of mercury.

Now, we talked about the toxic synergy and the calcification. I would also like to mention the pathogenic synergy. This is really very exciting to me because the microbes in the biofilm community, they also communicate with each other. They can share genes and they can support each other. It's quite fascinating. It's like opening the door into an unknown territory. Over the last 10 years increasingly, there's more and more research. They also communicate, it's called quorum sensing or they send signals, few microbes can send signals. And then even other microbes from totally different species, they pick it up and they act as a united force. They can enhance each other. Basically, they can help the survival of each other microbes. They also support each other with nutrients, help each other with waste removal.

If we talk about nutrients, I have to mention that fasting is also a good way to enhance and support our immune system. First of all, about 35% of our body energy is spent on digesting and absorbing food, so that extra energy is available for the whole body to fight some infectious agents. Occasionally, we see it with our pets. When they become sick, sometimes they sit in a corner for a day or two. They just drink water and they go back. And then after two days or after sometime, it seems that they are healthy and they're purposefully fast. They super charge

their immune system. They really know what they are doing, and we have to learn from them.

So jumping back to the pathogenic synergy. All of us, without exception, have circulating microbes, viruses, and fungi in our blood. Some people believe that, no, I don't have it. I don't have microbes. I don't have parasites. I can assure you, 100%, everybody has parasites. The old school tried to find a parasite, looking for parasitic eggs, for example. But of course, there are certain parasites that shed their eggs when there is a full moon, and the lab was not open, or the collection of the feces was not happening exactly right after the full moon, and they missed the parasitic infestation. Now it's easier to measure because we can do some measurements for parasites, for example, with bioresonance machine so the test facilities are quite different today than, for example, 20 years ago.

So since all of us have these circulating microbes, it's really the question of balance. How strong is our immune system? How prevalent are the pathogens? And usually the microbes remain dormant over many years. However, reactivation can occur after stress, when the immune system is suppressed, or during aging. This reactivation is similar to the appearance of herpes virus under stress.

And by the way, I have to mention here that all of us, without exception, have cancer cells circulating in our body. There is no exception. When a doctor tells you that you have cancer, it means that the number of cancer cells is overwhelmingly high compared to the thousands or tens of thousands of cancer cells that circulates in our body every day. Certainly, the immune system is able to control these cancer cells. The question is, again, the balance. Once they are not under the control of the immune system, then they can multiply, and then the test can show that we have cancer.

Since we talked about chelation and cancer, I just have to mention here that there was a very exciting study done in Switzerland. A group of people went through, with more than 60 people, at that time with IV chelation and then there was a control in the same valley in Switzerland. And they did a follow-up test 18 years later. Very unusual, very long test, pharmaceutical companies don't do this type of long test because the patent expires in 20, 25 years. So there's no point coming with some great results 18 years later because they lose most of the profit over time.

The most striking difference between the groups that went through with the intravenous chelation compared to the one that they don't have this treatment, was that the chelation group achieved 90% reduction in cancer mortality. This is huge. I mean, this is the type of research that should be on the front page of the New York Times and all the major

papers but it's never going to happen, of course. We all know that.

But if we think about it, how many people are dying of cancer. And here we're talking about cancer deaths. We are not talking about prevention, but in a way it was preventative, of course, over 18 years. But if a new drug comes out and improves the chances of cancer patients by 5%, 10%, then everybody becomes ecstatic. And yet we talk about 90% and everybody's quiet about it. Obviously, now, alternative medical fields, nobody really likes to talk about it. There's a fear factor. If too many people talk about it, then maybe that whole idea of chelation might affect more. So that's also part of the reason, I guess.

Now, jumping back to the pathogenic synergy. The reason why so many people and even so many clinics fail, that typically it's treated in a piecemeal fashion; targeting one condition. Almost like replacing an antibiotic with a herb, like an anti-bacterial herb. And then watching and waiting what happens. And instead, when we talk about pathogenic synergy, we have to come in with all of the guns. Because we know that when we, for example, use antibiotics, then sooner or later the patient has problems with *Candida* because the balance is shifting. And obviously the antibiotics are not affecting the *Candida* but they cure good bacteria, large amount in the gut, so *Candida* can flourish.

So when we talk about the pathogenic synergy or, in fact, about most chronic conditions that has an infectious component—and I would say that 100% of them has, by now. It's just a question of research or question of findings. How long did it take until it was realized that ulcer is caused by an infectious agent? A very long time.

So we have to target all of them simultaneously at the same time and all of the pathogenic microbes so we have to come in with antimicrobials, antiviral components have to be there in the protocol, antifungal, anti-parasitic at the same time.

If we talk about fungus, I would mention that a very interesting study came out from Turkey, from Istanbul. They compared the antifungal drugs to EDTA. And it turned out that calcium disodium EDTA was stronger than the official antifungal drugs. It was also kind of shocking. In North America, nobody talks about it somehow. This is a concern to me that excellent studies are available from Turkey, from Istanbul, from India, even from Africa, some of them now. For example, from Cairo. And somehow, it's almost like there's an invisible wall.

If it's published in English, if it's available on PubMed, then maybe people talk about it. But if it's in a different language like in Russian—Russians are very smart. There are excellent researches coming from Russia, even in the East European countries. But somehow it's further away, so it is simply neglected. Yet, there are smart people there, and it would

be much better to have this broader view and willingness to look into it, what's happening in other parts of the world. I try to do that and, actually, this is why I believe the protocols that I try to put together are quite unique.

Now, since we talked about the synergy and the plaques, I have to mention something that is so intriguing. Harvard researchers described the amyloid plaque, that is obviously a hallmark of Alzheimer disease, as natural antibiotic. What happens, in the middle of the plaque, in each and every plaque, there's a single bacterium in its center. And there was another study done by Harvard Medical School and Massachusetts General Hospital, the mice that didn't produce beta-amyloids were at greater risk of dying from the infection, and they don't have any plaques in the brain.

So in other words, the infectious agents could spread across the brain much faster. So there are quite a few drugs when we talk about Alzheimer's, and these pharmaceutical companies rake in millions and hundreds of millions in profit, targeting the amyloid remover. And I just wonder, why would we remove a natural antibiotic? While not many drugs, in fact, none are really effective in turning around Alzheimer? So probably that's the reason why the amyloid-removing drug.

Jonathan: Dr. Janossy, all of this is very interesting. People obviously are very concerned about infectious diseases. And we know that the age of antibiotics is definitely close to being dead. So what strategies do you have?

Dr. Janossy: There were a couple of early studies, well, relatively early, 1997, when they measured of the effects of the combination of EDTA and antibiotics against antibiotic-resistant gram-positive and antibiotic-resistance gram-negative bacteria. And it was really interesting, because animals exposed to EDTA plus the antibiotics recovered completely within 10 days, and were controlled clinically and bacteriologically for 180 days. It means that there were no flare-ups and they were considered to be cured.

This was the first study that showed that the addition of EDTA to the antibiotics potentiates—actually, there's another study that showed that 1,000 times stronger than EDTA was present. 1,000 times; not 10 times or 100. And we talk about the huge potentiation.

Another study tested the EDTA-antibiotic combination to control *Pseudomonas aeruginosa*, and it was done actually in Egypt, in Cairo. I just love this study. And in this study, six multidrug resistant strain patients from Tanta University Hospital, who are tested against the antibiotics with or without giving also EDTA. It was found out that 70% of the strains turns from resistant to sensitive.

And this is very—if you think about it, that EDTA can extend—should call the lifeline of the current available antibiotic. So, they are not even talking about the discovery of new antibiotics. But because, of course, drug companies are no longer interested in developing antibiotics, mainly because they are not as profitable as other more expensive drugs that can be given to people indefinitely, like in a case of, for example diabetes. So because we talked about a few weeks, typically, there's not much money in it, so drug companies are not motivated. So we have to manage somehow, we have to handle the currently available antibiotics.

And it's mind boggling to me if you think about it, that in every hospital, there's an intravenous chelation setting at the emergency. So if a child is brought in who chewed on the leaded toy or picked up too much lead or mercury, because he played with an old thermometer, then immediately they hook-up the IV chelation. And at the same time, in the same hospital, feared and everybody is frightened, there are these patients who have typically Staph infections, and none of the antibiotics are effective. And they die, because the two are not put together. I mean, nobody runs off with an IV chelation set and hooks up those patients. It's mind boggling for me.

Jonathan: So since you already just talked about Staph infections, Dr. Janossy, as being pretty much their common place, the emergency, these multi-resistant bacteria, especially MRSA, is quite alarming. So what should we do in those situations?

Dr. Janossy: Well, first of all you have to know that the CDC estimates that there are at least 23,000 Americans who die each and every year as a direct result of antibiotic-resistant bacteria. Obviously, many people are not dying and they are also maimed or extremities are amputated because they are not able to stop the infection, typically Staph infection. So in a nutshell, what we do is, mainly the methicillin-resistant *Staphylococcus aureus*, and this is the MRSA that is resistant.

In other words, a group of Staph bacteria, or it's called Staph infection, that is resistant to several common antibiotics. And the big question is whether these infections could be turned around and the bacteria could be affected again? And what emerges is mainly the EDTA as the number one agent that can turn around Staphylococcus bacterium, but also enzymes like systemic enzymes like Streptococcus, they also play a role.

What surprises me that Dr. Mercola and all the leading voices in North America don't talk about this. I think it would be much better for all these patients who are dying. Imagine if I just mentioned that 70% based on the study, the hospital study, 70% of the strains turn from resistant to sensitive. So imagine that, every year, more than 16,000 patients lives could be saved simply by hooking up the intravenous chelation. Or in

fact, now, what I've heard of and obviously I cannot prove it but, some people are taking rectal suppositories and then magically the antibiotics become effective again.

It's difficult to understand why there's a blockage. If I can have access to this information—actually, I did study at the time talking about potentiating effects of EDTA on antibiotic-resistant *Staphylococcus aureus*. This is the title of the article. Of course because it was published in India in 2014 in the Journal of Nursing and Health Science. Somehow nobody talks about it or nobody cites it. This is what I'm talking about that I really believe that from now on, in North America, we really have to be more engaging with other researchers around the world.

Jonathan: Dr. Janossy, so often, as you were mentioning before, we're running around scared about so many different things without getting a good education. And that would certainly be the case when it comes to swine flu. Ebola, certainly makes people scared when they hear that in the news; and other exotic viral infections. But in all of your research, everything that you know, how can we best protect ourselves from these things?

Dr. Janossy: There's an interesting correlation between glutathione and selenium and viral load or the viral infections. I have to talk about glutathione here because glutathione plays a crucial role in the immune response, and DNA repair, and the detoxification process that neutralizes drugs, chemicals, radiation, metabolic phases, and it's based on viruses. And this is the key here. But also bacteria and reduces toxins and carcinogens that are increasingly present in our environment.

But the immune system cannot function properly without plentiful glutathione. What's very interesting that the glutathione besides it boosting the white blood cell production to fight infection, particularly the T-cells, these are called the lymphocytes. What I want to point out that the Ebola virus takes its name from the river near, well, I looked it up in Kikwit in Congo. The very first outbreak of this hemorrhagic fever was noted in 1995. And I would like to focus on something that the soil of this area is extremely poor in selenium. Now, the selenium is an essential trace element in human health and disease. And the research is going on about the selenium but what is so striking is that whenever the selenium is low, then the immune system is weak, but especially the viral diseases have a prevalence.

So several papers have shown that serum selenium concentration is decreasing in patients with malaria, for example. Senegal in West Africa had the lowest numbers of AIDS prevalence. I looked it up in a study, it was below 2% in the general population. And at the same time, the highest level of selenium in soils. I talked about Africa because there are groups of people there who are growing their own food. They are not

relying on shipping fruits into big cities. So the correlation between the selenium level in the soil really shows up in the individuals and recently they realized the tremendous importance of all the selenium levels.

Now, the selenium is key for the production of glutathione. So this is the link. So without selenium, a high level of glutathione cannot be maintained. Now, the supplemental glutathione had been studied extensively and seemed to inhibit viral production, and that indicates that glutathione is a treatment of viral infections. If you look it up in PubMed, there are close to 100,000 scientific studies and articles of glutathione, and it's very well established that their role is crucial. Glutathione is a basic first line of defense, and should be used for all life-threatening infections, including the treatment of Ebola.

The glutathione boosts the white blood cell production and it really protects us from viruses including the herpes virus, flu viruses, and the other more exotic viruses. The abundant supply of glutathione is also linked to higher magnesium level. Now, I was look for a good glutathione on the market and, obviously, people talk about liposomal glutathione. And that is a good way to get—and yes, others talk about the precursor of glutathione. But I was looking for a stronger one and couldn't find it, so I came out with a product that had 1,500 mg glutathione in the rectal suppositories. And this is the strongest ever.

Again, it raises the glutathione levels overnight, and that is the most important. In fact, there's a daily cycle, glutathione cycle in everybody, in all of us. And overnight, the levels are much higher, and the need for glutathione is also much higher. So when an individual die, for example, in Ebola, actually, it's not the virus that killed the people, but the cytokine storm. And the higher level of glutathione lowers this cytokine storm.

Jonathan: So for those I know who are listening to this, I promise you if you listen to it two or three times, this presentation, you're going to get at least 50% more. I've mentioned that on several of the presentations here at the Immune Defense Summit. But just to be open with everybody, I know Dr. Janossy's accent might be difficult for many in the United States to hear, don't be overwhelmed. A lot of what he's talking about is the rectal suppository, which is the delivery system. He's mentioned EDTA as a chelating agent, magnesium. He's been talking about glutathione, selenium.

Again, if you just listen to this conversation a second time, you will get so much more out of it. And I can assure you, Dr. Janossy, I would like you to talk about your website. We've got a history together, you and I. You're a great supporter of Natural Health 365. And why I bring that up is, if people want to dive a little deeper into this and read up on all of the research you've done, you've done a beautiful job presenting all of this information in many different ways in your website. So can you talk

about that before we get to activated charcoal, which would be the last thing we talk about.

Dr. Janossy: Yes. Our website is oradix.com O-R-A-D-I-X dotcom. Radix means a root of a plant in Latin. And people would find protocols and more information about Candida to detoxification to biofilms and dementia and Alzheimer and many other things.

Jonathan: Yes. So again, for people who want to write this down, it's O-R-A-D-I-X dotcom. And I promise you, you won't be disappointed. You should go check out their website. It really goes in very deeply in detail, written detail, everything we're talking about here. Of course, those who purchase the Immune Defense Summit, will also get a transcript of this presentation, and you'll be able to listen to this as many times as you like.

Dr. Janossy, let's finish up the program just talking about how you incorporate the use of activated charcoal in your biofilm, chelation, and Alzheimer protocols. How does charcoal help our immune system?

Dr. Janossy: I became fascinated with charcoal. There was a Russian study. They did give charcoal to rats, a group of rats, and there was a control group. And actually what they did, they put the charcoal into the drinking water of rats. So these poor guys, they were drinking black water their whole life. And the lifespan and the health difference was striking. The charcoal rats lived 40% longer, I repeat 4-0, 40% and healthier.

And I've never heard, I review the medical literature. I'm very excited and interested in learning about new things, whatever is related to longevity, anti-aging. I was involved in stem cell research for many years. But I have never seen—and then, of course, telomeres and stem cells. And in fact, I'm the one who came out for the first time with the stem cell—that was a big thing a couple of years ago and everybody came out with a stem cell boosting product.

And then I was thinking about it, well, we can do two things. Either we push the bone marrow to produce more stem cells, or we detoxify the bone marrow and then, naturally, more stem cells will come out and healthier stem cells. Because the ultimate goal is to have healthy stem cells with long telomeres, so then one stem cell becomes two thousand liver cells, for example, then all the two thousand liver cells will have long telomeres.

Anyhow, so I was looking at the charcoal study, and I couldn't believe at first that how come? Because charcoal has this bad reputation that it interferes with the absorption of good nutrients. But it cannot happen if the end result is 40% longer life span. Then I looked into it, why people

ignore charcoal and maybe they take it as a digestive aid. And it really boils down to money. I really believe that charcoal is so cheap that everybody ignores it. It's not something that the people want to touch. Yet we know that, for example, zeolite, in a way a competitor. If we look at it, zeolite has aluminum in it, so I'm hesitant to use zeolite. Clay, the various clays. There's the green clay, yellow clay, red clay. But obviously, it all showed impurities. Red clay has elevated iron in it. So why would we bring more impurities into our body when we really want to get rid of all of the toxins and all of the impurities. So charcoal is kind of standing alone as an extremely pure wonderful molecule.

Now, the explanation for that longevity of the rat's; charcoal is perhaps healing the leaky gut. It controls the pathogenic bacteria in the gut. And because it heals the gut, or helps healing the gut, therefore the absorption is enhanced. And because it helps removing the waste material from the whole body, it lowers the toxic load. So, basically, one product that targets so many things and so many processes.

And then a study came out in 2010; again, you see the study was done in Africa. The title is *Oral Activated Charcoal Prevents Cerebral Malaria*. And in men, it did not interfere with pharmacokinetics of parenteral Artesunate. So in a nutshell, what happened, they tested the charcoal in mice, when they basically induced malaria, and the symptoms were not coming up.

So okay, here is what happened in the village. And today and every year, every year, just in Africa, there are more than 500 million people who get malaria. And one million of those, mainly children, die every year in Africa. And I'm talking only about Africa. Now, it's true that 90% of the cases of malaria is in Africa. Actually I became so sad about the situation that I formulated the first and only kind of anti-malarial herbal product. I researched what has happened in China, the best herb in India, the best herb in Africa, the best in Brazil and I put them together and the synergistic effect is very strong, of course. Now, I know that using this anti-malaria product, I call it MalariNO, with the charcoal is a wonderful, wonderful tool in our hands. Even when we travel, just to have in our pocket MalariNO and charcoal, that can save us actually. Save our life or protect our life.

Now, jumping back to the study. It was very exciting because really when they studied charcoal and malaria, they realized that simply taking charcoal orally, just through the mouth, it dampened the inflammation in the whole body and enhanced the parasite clearance and also had a broad systemic, in other words, whole body effect on the immune system and the inflammatory processes. So significantly reduced, the charcoal treatment, the number of plenic CD-4 and CD-8, these are the T-cells, basically lymphocytes.

I don't want to go too deeply into the science, but the charcoal, the orally taken charcoal, also directly or indirectly affected gene regulation in the whole blood. So we don't have an explanation yet but, to me, it's fascinating if you think about it because the charcoal is not being absorbed. It stays in the gut. So we take it orally and then it goes out. Obviously, the bowel movement will be black, but it doesn't matter. It changes so many parameters in our body.

And really, why I incorporate into this protocol is because, for example, in an IV chelation clinic, let's talk about that. The patients excrete the toxins mainly through the kidneys and the liver. Some toxins are, probably the majority of the toxins, including toxic heavy metals, are released by the kidneys. But some of them, actually mercury is one of them, are expelled by the liver. It comes down through the bile duct and enters the small intestine very early on, and they have to travel the whole length of the small intestine and the whole length of the large intestine, the colon. And unfortunately, in the colon, there's a very large amount of reabsorption of water happening. And together with the food there, a large amount of toxins are reabsorbed.

Now, we have to cut down on this reabsorption. So in our protocol when somebody takes the rectal suppository in the evening, two hours before, the individual would take about one gram of charcoal. And so by the time that the toxins come out or pumped out by the liver, in a way, the charcoal is ready to pick it up for elimination.

So unfortunately, chelation clinics, they don't talk about the gut. They don't talk about the excretion of the toxins that are expelled by the liver. Somehow, I don't know, they cross their fingers that magically it leaves the body. But it's a serious concern and especially in toxic individuals, we just have to do everything to lower the toxic load and not allow the body to reabsorb toxins.

So that was the first motivation. And then later I learned about the very wide-ranging effects of the charcoal. And it's really mind boggling to me from longevity to changing the inflammation, healing the leaky gut, changing the blood parameters. It's an amazing product. I take it always with me, When I get bitten by a mosquito then I open a capsule. Always take a capsule-based charcoal, not the tablets because 30% is glue. So I open it, I create a bit of paste, I put it on a mosquito bite or when we are bitten by any of these insects. And you can actually see that the red elevated skin is going down and the pain is dissipating. So charcoal is wonderful and we just have to use it more often.

Jonathan: Dr. Janossy, obviously, a tremendous amount of information. I can't urge people enough that if they were to get mercury taken out of their mouth from those dental silver fillings, that one of the things that I was asked to do by my dentist was to rinse with the charcoal so that the

solution was making my entire mouth very black. A funny picture, to say the least. And then to swallow that charcoal liquid before he extracted the silver fillings, which are filled with mercury, out of my mouth. And I have to tell you every single time, in four visits that I went there, I feel like that was one of the most important things that protected me from having any of that mercury that possibly got through my mouth and into my digestive tract. That that really absorbed it and helped it from getting absorbed into my body, which is the last thing that anybody wants. So definitely look into activated charcoal, I encourage everybody.

Dr. Janossy, I want to thank you so much for your time and I want to thank our listeners for joining us today. If you would like a copy of this program plus all the other presentations inside the Immune Defense Summit, simply click the banner you see on this page. Thanks again for attending the Immune Defense Summit. Talk to you soon. Take care.

Heal the Gut, Heal the Immune System

Guest: Dr. Edward Group

Jonathan: Welcome to the Immune Defense Summit. I'm your host, Jonathan Landsman, creator of naturahealth365.com. Did you know that every year drug-resistant bacteria or superbugs kill 700,000 people worldwide and is projected to be more lethal than cancer by 2050? And infectious diseases still remain one of the leading causes of death. Cancer, cardiovascular problems, and diabetes are by far the leading cause of premature death in the world.

But in reality, all of this is avoidable with a strong immune system. That's why I created this event: to help you understand the roots of disease and how to prevent and reverse life-threatening illnesses by re-empowering your immune system. Our show today: Heal the Gut, Heal the Immune System. Our guest, Dr. Edward Group, founded Global Healing Center in 1998. He assumes a hands-on approach to producing new and advanced life-changing products and information.

At the forefront of the research and development team, Dr. Group leads the efforts to develop and formulate all Global Healing Center brand products. He has studied natural healing methods for well over 20 years and now focuses on spreading the word about health and wellness to a global community. By now, I'm sure you can appreciate that our digestive system and its health has everything to do with immunity. Simply put, if we don't take good care of our gut health, we run the serious risk of getting very sick and suffering for many years.

I've taken almost a year of my life to bring together many of the top experts in immune health, and today is an exceptional example of how

promising the future of medicine can be when you have the right doctor looking at health from an integrative perspective. Honestly, I think every health care provider should be talking to their patients or clients about digestive health. And today, we'll reveal just how important your digestive system is in protecting you from getting sick. Please join me in welcoming Dr. Edward Group to our program. Dr. Group, welcome.

Dr. Group: Thanks for having me on, Jonathan. It's a very important subject we'll be talking about today.

Jonathan: Yeah, it's great to have you. I've talked about this quite a bit, Dr.

Group, with many of the other presenters. In all my conversations here at the Immune Defense Summit, I told them to tune into programs like this. When people are concerned about their gut, and they should be, I told them to tune in to this particular conversation. So I agree with you, this is really, really important. Why don't we start off with talking about what really causes immune dysfunction. Let's clarify that.

Dr. Group: Well, from all the research that we've done—and we started our research 20 years ago, looking at the root cause of all disease. But then you have to look at what is the immune system? And what does the immune system do? And really the definition of the immune system is just a network of cells and tissues and organs in the body that communicate effectively with each other. And they work together to defend the body against any attacks by foreign matter which can mean bacteria, viruses, or even chemicals that might cause damage to the system.

So, looking at the root causes which we need to start doing these days and doctors need to start doing is looking at what the root cause of the problem is instead of addressing the symptoms of the problem. What we found is there's a lot of invaders, foreign invaders that are affecting and causing detrimental effects to the immune system.

And I like to call the immune system the body's self-healing mechanism because we're all born with the ability to detoxify these substances or attack these viruses or attack these bacteria and get them out of the body. And that's what our self-healing mechanism is designed to do. But if you look at what causes a suppression of the immune system or what causes a suppression of the self-healing mechanism, there's multiple factors involved.

But it really starts with one of the most important things which we were made to do is to eat. And when you look at the contamination of the food supply. And you look at the amount of chemicals and toxins. And we're talking about basically the gut system or the digestive system which starts in the mouth. It starts in the mouth, goes to the stomach,

goes to the small intestine, goes to the large intestine.

Then you have to think what is it that's going to cause the dysfunction? Or what's going to cause the detrimental effect or the reduction of the self-healing mechanism or immune system dysfunction? And with the food that we're eating these days, you look at something that's not even being talked about that much is the effects of Fukushima and the radiation on the food. Or for example, people who microwave their food and they radiate it.

Just the radiation and the microwaving of food cause an immune reaction in the body. And whenever you're talking about immune dysfunction, you're looking at the amount of energy the body takes to fight off foreign invaders. So radiation. You microwave your food. And that's going to cause an immune reaction or an immune response, because the body is going to look at it as is this a something that's natural or organic or something that I can utilize that's going to be good for me, something that's alive?

Like in nature when we eat live foods versus dead foods or cooked or processed foods which can actually cause toxemia in the system and a decreased self-healing mechanism or a decreased immune response. So some of the things that we identified—there's thousands of things out there. But the main things that we identify is going to be radiating food which is going to depress the immune system, genetically modified foods which are going to suppress the immune system.

And remember now that it's been proven 70% to 75% of your immune system located in your gut. So that's the reason I say, "Heal the gut, heal the body. Heal the gut, heal the self-healing mechanism," which is the immune system, keeping your immune strong. Then you have the negative effect of the pesticides and the herbicides that we have in the food supply. You have people not chewing their food enough. The meat, the hormones in the meat, most of the meat still is not grass-fed and organic. And these cattle are injected with bovine growth hormones and fed genetically modified feed and heavily vaccinated and given high, high doses of antibiotics.

So all of those things can actually transfer into your body. And those are the thousands, and thousands of these tiny molecules that your body has to fight and eliminate and attack every single day to try to prevent the damage, the secondary damage to your system, which is the root cause of disease. And then you have the dairy products. You have soy products, now with the phytoestrogens. You have gluten that's causing disruption in the bowel. You have table salt. You have all of these different artificial colors, these artificial sweeteners especially the aspartame, the sucralose, the saccharine. And people that are getting plasticizers in their system as well. So it's an accumulative effect just

from the food alone.

And the second big area that we identified was, still, what are people putting in their mouth which is the amount of beverages out there. The water supply. Because you look at the earth and you look at what is contaminated on the earth. Well, you look at the air supply, the food supply, and the water supply. And it's the same pretty much with what people are exposed to in their daily environment and what they're eating and what they're drinking. And you still have water that's contaminated or juices or some sort of liquids that are heated in the microwave which we know that that can radiate the water or the liquid.

We have a massive amount of bromine, chlorine, fluoride in the water systems which are very toxic. Halogens, which disrupt the immune system tremendously and they also cause damage to the stomach, cause damage to the bowel, cause damage to the endocrine organs. So all of these things are going to affect the immune system in one way or another, including arsenic as well.

Right now we're even identifying high levels of prescription medications in water supplies, in rivers, in streams, in municipal water systems. Heavy metals, phthalates, which are plastic, makes plastic more flexible. And most the time you see fragrances that are high in phthalates which are endocrine disrupting chemicals which can actually alter your hormone levels and cause damage to the immune system that way.

High-fructose corn syrup which is in all different kinds of things. Refined sugar. These are just in all of these beverages. These man-made beverages out there. And these drinks that people are drinking, whether it's energy drinks or fake juices. Or alcohol consumption as well is going to reduce the self-healing mechanism. All of these things that are found in the food, and in the beverages, and in the air.

And another big cause root cause actually of immune system dysfunction these days is the amount of stress people are under. We've identified stress as reducing the immune system almost 50% instantaneously when you're under a state of stress or when you're under a sympathetic state which means a fight-or-flight state. And that's something that most people actually are in when we talk about the gut being able to digest food and get the proper nutrients and everything to support the immune system. Well, if you're eating while you're driving or if you're eating while you're watching TV or if you're eating when you're in a bad mood or if you're eating and doing anything else that's requiring your attention, most of the time your gut is going to be in a sympathetic state.

When your gut is in a sympathetic state, digestion comes to a halt. And when that happens, your immune system will actually attack your food.

So most people think that, oh, the immune system is only going to work on viruses and stuff. But your immune system is going to attack anything that it doesn't recognize or it recognizes as foreign to the body or a toxin to the body. And unfortunately, when you're in a sympathetic state and what we've identified is majority of people these days, are eating their food in a sympathetic state.

And the immune system will actually go into work and start attacking the body. And that's why so many people are suffering from autoimmune diseases as well where the body actually attacks itself. So negative relationships, even fluorescent lighting, work scenarios, political scenarios, religious scenarios that are going on right now that are causing massive, large-scale, epidemic levels of stress, fear, anger, depression, anxiety are having a big effect right now on people's immune systems. Let alone the lack of exercise, the lack of sleep, the hormone disruption and everything else that they're suffering from.

So the root cause—addressing the root cause is the number one thing and that the immune dysfunction that people are dealing with today can really be linked to the amount of chemicals and toxins that are coming into the body on a daily basis and the amount of chemicals and toxins that the body and the immune system has to attack and has to try to eliminate from the system on a daily basis.

Jonathan: Dr. Group, that is just a great overview of exactly what this summit is all about. The Immune Defense Summit is all about shining a bright light on the immune system, to appreciate it, the threats to the immune system, and of course those things that will nourish the immune system. We're going to be talking about that at the end. So much to cover with you. But that's just a great overview, and I couldn't agree with you more.

In fact, so many of the things that you mentioned actually tie right into, on an individual level, somebody's mental and emotional stress. So, obviously, why wouldn't they feel mentally or emotionally stressed, if physically there are so many problems going on in a body, from the chemical toxicity, the hormone imbalances?

Then they get expressed, not only in physical symptoms of being stuffed up, having body pain, feeling sluggish, but in the mind and in our emotions. We literally express those in very sick ways as well. And we see that all around us. So, really great way to start, Dr. Group. Why don't we hone in now, since that's what this is all about, our conversation? How does the gut health affect the immune system? Because a lot of people have heard that the second brain is in the gut. The gut has 70%, 80% of our immune system. So talk to us about it, please.

Dr. Group: Well, 2500 years ago, Hippocrates said, "All disease begins

in the gut.” And you know back then it was really more or less about the immune system. If you had a healthy gut, you had a healthy immune system. So now years, and years, and years later—2500 years later—we’re just now beginning to understand how right these guys were thousands of years ago. We think that we have the best technology in the world now. But, it’s actually the technology and all these Frankenfoods and all this stuff we man-made and we’re creating is actually destroying the gut.

So as I mentioned before, we now know that 75% of the immune system is located in the gut and that’s your frontline defense. It’s like if you have a military lined up and you’re going to fight a battle or fight a war, the gut is the immune system. And it’s referred to as GALT, in medical terms. Really, it’s just gut associated lymphoid tissue. And that’s the gut portion of the immune system. And that tissue inside the gut stores your immune cells. Such as your T and your B lymphocytes.

And that’s what carries out the attacks and produces all the antibodies against all the antigens or the bad things that actually come inside your gut. So the gut is its own real ecosystem if you think about it. If you look at the soil of the earth and your gut is more or less your skin turned inside out, because it’s made of the epithelial tissue, the same tissue that your skin is made of, and your skin is actually one of your lines of defense against invading organisms too. It keeps them out, when you have healthy oils and everything else.

So the gut is really designed, because your body knows that most everything that you’re going to be exposed to that can be toxic is going to enter your gut first. Whether you breathe it in—that’s why you have all those little hairs and mucus membranes because the viruses or any type of toxins or chemicals you’re going to breathe through the air, most of it is going to get caught inside that mucus layer. And it’s going to drain down into the gut. Everything you eat, everything you drink is going to go in the gut. So that’s why the immune system really is located and the majority of it is controlled from your gut. There’s actually more bacteria in your gut, than there are cells in your body. The bacteria outnumber your cells by ten to one margin. And that’s getting into why we need... If you look at the soil, like I mentioned earlier, they have natural microbes in the soil that live off the soil and supply the soil with the nutrients.

And when we started getting away from that and using man-made fertilizers and everything else, it actually created more damage. And so basically the same thing that’s happening in our gut. When we put all of those toxic chemicals and everything else in the gut, it kills off our microbiome, our ecosystem or alters our ecosystem. And it kills off the probiotics that we need to keep and prevent pathogens or toxins, from either taking hold and over growing and leaking into the bloodstream or toxins burning holes in the intestinal lining and then going into the body

and causing more damage that way.

So even researchers at the Society for Neuroscience found probiotics improved the communication between the immune system and the brain. So it's amazing that we have this ecosystem, supercomputer system, inside of our gut that regulates and controls the lymphoid tissue and also regulates the immune system.

One of the things we looked into extensively was the appendix because our medical system still says there's no need for the appendix, still doesn't even know what the appendix is and takes it out whenever there's something wrong. But we know now that looking at Russian research and German research, that the appendix is actually the microcomputer system in the body. And it does actually secrete probiotics that work to boost the immune system.

And why wouldn't your control center, or the brain of your body, be located in your gut anyway? Because it's there to make the decisions and to see what you're eating and to regulate the pH and to make all those decisions and communicate with all the different organs in the body. So when we're not healthy and our immune system is down, then we have the very acidic compounds that the immune system is just overworked. And when the gut health is depleted and we're depleted of all those good probiotics, then all of the things that we talked about earlier—the GMO foods, the microwaved foods, the chemicals—all those kill off the probiotics or alter the probiotics. Or you might have an overgrowth, let's say, of *Candida* with a high-fructose corn syrup, or any type of high sugar diet.

Then what happens is you get a very acidic environment and it can burn holes into the intestinal barrier. And the intestinal lining becomes very permeable. And that's where we get the leaky gut syndrome. And when that happens, we can have large protein molecules, we can have toxic molecules, we can have harmful organisms escape into the bloodstream.

I mean this is how important the bowel is and the gut is when we talk about immune system, because that directly relates to the amount of work that the immune system is going to have to do to eat up the toxic molecules. Or attack those harmful organisms. And once those leak through the gut into the bloodstream, those are toxins in our blood of life that we have cruising around in our system that can be deposited in the brain, in the heart, and the liver, anywhere else. And the liver has to actually work even harder.

Just to give you an example of a study that was done, an experiment, where a volunteer ate only McDonald's food for ten days. And the choices that he had were he could either eat a Big Mac or chicken

nuggets, as well as fries and then he could have a Coke. And he did that two or three times a day or however many times he wanted to. And for the first three days, he felt okay.

But then he started to lose his energy levels. And he started turning like a slightly gray color. The last few days... This was only ten days. The last few days, he started feeling really bad and experienced like withdrawal symptoms. So they took stool samples and they were sent to different labs throughout his trial. And the final results came from Cornell University, by the way. And it was also universities in England that we're doing this. It was the British Gut Project. And the results revealed that his gut microbes were devastated. He lost 40% of his gut bacteria in 10 days.

And it can take months to get your gut bacteria up to a good level. So in ten days of eating just McDonald's, he lost 40% of his bacteria species. So if you attack that and get rid of all that, you can only imagine with the standard American diet and what's going on today what's happening with the gut and what's happening with the damage that people are sustaining by putting all this stuff in and the damage to the immune system. Right now, we have digestive ailments that affect one out of five people in America.

And these probiotics actually have been found to stimulate the production of white blood cells. White blood cells are the main attacking blood cell of your immune system. And they've identified thousands of different probiotic strains in your body. But each person, depending on where they live, what they eat might have a different makeup. And so all of these things, it basically starts in the gut. Your immune strength is directly related to the gut. And one of the things I didn't mention, was the epidemic that we have right now with antibiotics.

I talked about the food and the water but the medications too, and there's so many other things. Antibiotics completely kill the majority of the probiotics that you have in your gut. So taking antibiotics is actually going to suppress and reduce and almost kill your gut-derived immune system. And it can take up to six months of feeding your body good food and taking probiotic supplements to repair your gut fully after just one round of antibiotics.

Jonathan: And in certain respects, Dr. Group, even worse than antibiotics are all those medications that stop the acid production in the stomach. So many things like you say in terms of medications, this is a major warning for anyone on an intuitive level that feels like their gut health needs to improve. So important, everything you've already said. We're going to talk about how fasting and detoxification improve immunity. I know we're going to get into some of your top strategies—three of them, I believe—to keep the immune system strong. And we'll

also talk about which supplements you like to boost immune health.

But first I just want to talk for a few minutes about these daily toxic exposures again and how that's linked to immune system problems. Talk to us about that.

Dr. Group: If you look at the immune system or your self-healing mechanism. Then you're really asking the question, what suppresses the immune system? And when you look at the root cause of suppression of the immune system. You're looking at the destruction of the gut. And when you ask yourself, well what destroys the gut?

Then you're going back to the genetically modified foods, the pesticides, the herbicides, all the chemicals, the prescription medications, the soy, the table salt. Basically, anything that's man-made, cooked, processed, canned foods. The people are not chewing their food enough, either. So you're getting these large particles. And people are not going to the bathroom enough as well, because a lot of these foods cause constipation or a lot of these toxins can cause constipation.

And then what happens is the proteins end up turning putrefactive. So you take something that might be good when you put it in your mouth, and then you have it turn putrefactive where it turns into poisons. The carbohydrates are fermenting in the body into alcohols and toxic substances. And the fats are turning rancid in the body because people are not having the two to four bowel movements a day.

So all of these things really are attacking and causing immune system dysfunction because the immune system, like I said, is nothing more than the whole network. It should be a network of healthy cells, healthy tissues, and healthy organs that are working together as a team. Basically, it's like a military team. All they're designed to do is to get rid of and attack anything that's foreign in the body. So it's very simple when you think about it because they're there to keep the body safe. They're there to keep the body clean. They're there to keep any harmful organisms from attacking the body.

But if you're not feeding your immune system the right things. Let's say a healthy immune system can handle 100,000 foreign invaders a day. 100,000 foreign invaders a day. And the immune system is healthy at that level. But you're putting in a million foreign invaders into your body every single day. And the immune system can only handle 100,000. That is exactly what's happening today, and that's why most people's immune systems are suppressed chronically.

And the immune system—our main battle army that's designed to eliminate and attack any of these foreign substances—we only have a hundred thousand troops and there's a million invaders coming in.

So we're trying to do our best to try to keep that at a level that we can manage or the immune system can manage on a daily basis. Over a period of time, it just can't handle that. When the immune system starts to become suppressed, that's when we start having symptoms.

And that's when people start suffering from symptoms and start getting diseases because the body will start dumping these chemicals and dumping these toxins and dumping these harmful organisms or whatever in different areas of the body because the immune system, or our army, just cannot keep up.

Jonathan: Dr. Group, you said a real biggie right there. In terms of just looking what's wrong with gut health, if somebody is constipated... And here's the problem. It's such a huge disconnect for so many doctors out there. Talking to them about it. If the subject even does come up, they'll tell you, two, three bowel movements a week is okay. And you're saying two to four bowel movements a day is a healthy gut working and that elimination process is happening. I mean very few people are getting to that level.

So it's very important that if you're constipated, that you look really carefully at your gut health. Forget about everything else. You've got to get your house in order, without a doubt. So now we're going to focus in on all solutions here, Dr. Group. Talk about first how fasting and detoxification improve immunity.

Dr. Group: Well, one of the simplest and most effective ways to reset your immune system, to reset your body, is through fasting and detoxification. And it's very simple, right? Because we talked about all these millions of chemicals and toxins and all this stuff coming in. So the first thing you want to do is detoxify which is pushing or cleansing all of those harmful organisms or harmful toxins out of your body.

Instead of addressing the symptoms... You know if your oil light comes on in your car, you're going to change the oil. You're not going to put a band-aid over it or a piece of tape over it, so you don't see it anymore. And that's the problem that we're dealing with it in today's society or the situation we're dealing with, with the medical profession is they address the symptoms and not the root cause. So fasting is a real good way—one of the best ways actually and the fastest way—to boost the body's self-healing mechanism and to boost the immune system.

As a matter of fact, a couple years ago, scientists at the USC, University of Southern California, completed a study that fasting for as little as three days can regenerate the entire immune system and they even did it in the elderly. So think about that. So you could fast for three days and regenerate the entire immune system. What they found was that fasting flips a regenerative switch that prompts the stem cells to create brand-

new white blood cells. Basically, it regenerates the immune system and the way that the body works.

They also did some tests with cancer patients and found that fasting for 72 hours protected the cancer patients against the toxic impacts of chemotherapy. So I've been doing a lot of research on detoxification and fasting methods over the years because I'm always looking for what is the easiest way, the simplest way. The way that that we're created, we are created with a powerful self-healing mechanism. So the answers to disease and the answers to these things should be in simplicity and they shouldn't cost any money.

For example, you could do a purified water fast. Going back at you know thousands of years, that's what people did. They went to the local protected waterfall or the spring and that water contained high levels of oxygen in it, contained high levels of minerals. It was a powerful, healing water. And they would just fast on water alone. And it would regenerate everything within the system.

And the same way with animals. When you see animals get sick, they stop eating. And instead, they focus on resting or they just drink water. And that's a primal instinct that we also have, but we're not using. But the instinct to reduce the stress on the internal system, so their bodies can fight off the infection or fight off the toxicity or the poisoning or whatever it is that they're doing. It's just a natural mechanism that allows the body to concentrate all the internal energy systems towards their immune system or immunity.

And we're the only ones, the humans, because over time we've been misled about a lot of things. We're the only ones that actually look for more food during times of their illness which it should be exactly the opposite. We should not eat food because when we eat food, the immune system gets activated to increase all the inflammatory conditions, to attack all those things that we talked about earlier. And when the immune system activates in order to attack newly ingested pathogens, it's more or less the energy reserves that get used up.

And the fasting frees up all these white blood cells to destroy any type of dormant infections or anything like that. So it's very important to me. I've had extreme success using—and I've been practicing different types of fasting methods myself. And now we're starting to see even fasting of 14 days, 21 days, where people are using that for anti-aging. And we're seeing that the body actually starts attacking all of the dead and the diseased cells, anything that's toxic in the body, the blood, or the liver, or the organs and the tissues and everything like that by just doing water fasting.

It's one of the fastest ways to regenerate and reboot to only your

immune system, but everything. Think of all the dead cells that the body has every day right. So we have like pounds of dead cells every single day that can be accumulating in the system. And it's hard for us to get rid of those a lot of times. But when people go through a fast, the body actually eats off of those dead cells and it breaks those cells down and takes the proteins out.

And some of the newest research that's coming out right now is how the body can actually regenerate itself. So it's wild to think about all the cells that die. Then the body eats those dead cells and gets the proteins, the vitamins, the minerals and then forms what it needs in new stem cells to regenerate itself. I mean there was a guy that fasted for 362 days. This is medically documented. And lost only 0.2 of a pound of muscle mass. And he fasted on water and I think he had some minerals as well in his water. It was a medically supervised fast.

So fasting is one of the cheapest... People always say, "Well, I don't have thousands of dollars to take all these supplements and everything." Well, all you need is sleep, good sleep, fasting. All you need is good water, good sleep, and a little bit of time. And that's all you need. It doesn't have to cost a lot of money to get better. It really doesn't.

So that's why I think that even seeing patients and working with all kinds of different diseases and evaluating all these different diseases for over 20 years, one of the most important things and one of the fastest ways to get your immune system strong is to detoxify your body. You almost have to take two steps back before you take two steps forward. If you're sick or if you're dealing with symptoms of anything, it's because your immune system is down. It's because you have a toxic overload and you need to take two steps back. And what your body really wants is it wants to be clean. It wants to be clean and healthy.

Just like the earth cleanses itself, just like animals clean themselves on a regular basis, just like every single religious text that has been written since the beginning of time talks about forty-day fasting or talks about fasting and meditation and cleansing. So that's why the detoxification and fasting is one of the best ways to repair and to boost and to fix the immune system.

Jonathan: Yeah, Dr. Group, there is so much good science behind what you're talking about, just calorie reduction alone for longevity. And when we're talking about nutrition, people are worried about that. You can even get it in liquid form, but never forget just the mere act of eating food, like you were kind of saying already before, that takes a lot of energy. So when someone as a body very tired, just completely exhausted and sick, you're removing all that food to digest, and now your body does have that energy to go to work, to repair itself, just like you've been saying throughout this whole conversation. So, Dr. Group,

as we're closing out, your top three strategies for keeping the immune system strong. Something to add on to what you already just said.

Dr. Group: Well, one of the best strategies is just pure, clean water and trying to avoid all of the different beverages. The body only really wants water after it finishes with the breast milk. And water is amazing. So I recommend people drinking more water, a lot more water. It flushes your system. It helps keep the immune system strong. I mix raw apple cider vinegar in with my water just to give it some energy, because I usually get distilled water because I know that that's pretty much free from all the chemicals and toxins.

And then I add a little bit of organic apple cider vinegar into it to bring it back to life, to bring those minerals back in. So water is very important. I don't think too many people talk about water as much as we should. It does have a direct effect. Every living organism in the world is composed of at least 85% water, including the earth and the air. So it's the number one thing that's needed for everything to happen inside the body and to keep the immune system strong. And I think most people are dehydrated and don't even know it.

So my top three strategies. One of them is drink more clean purified water. Eat more clean organic food. And look into doing some fasting. There's intermittent fasting is big right now where people are fasting for 16 hours a day, 18 hours a day. Some people are doing one day a week water fasting. Do some more research on fasting. You're going to see more and more information come out on that.

Two other recommendations: reduce your stress levels. I mean I know that that's not easy for most people to do. But, emotional, mental, physical stress, it can age you. And it's going to chronically keep your immune system down. You know find productive ways to deal with it. Meditation is one of my favorite things. I try to meditate every day. Identifying the stressors in your life and trying to figure out what you can do about those. Exercising, also relieves stress. Yoga, Pilates, Tai Chi. All of those different things.

But find ways that you can eliminate, or reduce your stress levels. And sleep. The importance of sleep cannot be overstated. I mean sleep resets your entire system, provides an avenue for where you can relieve stress. It is great. There's been a lot of studies on how sleep improves your immune system and your overall health. And there's been a lot of studies also that show how a lack of sleep suppresses your immune system. So those would be my tips.

Sleep. Reduce your stress levels. Eat clean food. Eat clean water. Just drink a lot of extra water. And look into intermittent fasting or doing some fasting on a monthly basis or how you can reset your system and

reset your immune system.

Jonathan: Just to throw it out there for people to know. It sounds like it's so extreme what you said, Dr. Group, about the intermittent fasting. Twelve or sixteen hours. I try to eat my dinner relatively early. So then I'm done, let's say, for the night. Maybe some water of course at night, as we go through a few more hours. I go to sleep. Now we're looking at getting up at 5:00, 6:00 in the morning which is what I normally do. We're looking at about 12-13 hours right there. And then I get up and I usually have a green liquid drink. That's all it is, just green powder in there. Drink that whole thing down, 16 ounces or so.

So am I eating solid food? No, not probably till about nine, 10 o'clock in the morning I might have something. So there it is, you're looking at 14-15 hours. No problem at all for me. It's not something I even think about. And it really does give the body a lot of energy. I've got energy all throughout the day. I'm sure you can appreciate what I'm saying?

Dr. Group: Yes, I mean I've been probably for about two months now. So my last meal is at 6 p.m. At night. And my next meal is noon the next day. So it's an 18 hour fast, every single day. And you know after about 2, 3, or 4 days, you get used to it. And it's been amazing as far as energy is concerned for me. Sleeping through the night really helps out a lot because I go to bed fairly early. And I get up early in the morning to meditate.

But the 18 hours a day fasting, my energy levels have been incredible. And just the fact that you're not putting a lot of toxins or chemicals or utilizing a lot of energy stores. Really, that's what it boils down to. And now, medical doctors are doing supervised fasting. A lot of people are doing intermittent fasting. And what I'd like to do next is do maybe a 14-day water fast.

Because, we've been doing a lot of research. On that as well. And that's really changing people's lives.

Jonathan: Dr. Group, to finish up the last few minutes. I know we talked about not spending a lot of money. But you know in some people's situations, or I should say a lot of people's situations, supplements are very helpful. I use them every single day, and I find them really a valuable part of my day. But which supplements do you like to boost the immune system?

Dr. Group: Yeah, supplements are very important. I mean we really just cannot get everything that we need these days. Even eating organic. But of course, the number one supplement for immune health in my mind would be good probiotics. I mean we know that the good probiotics and the good bacteria in your gut are responsible for supporting digestion,

keeping your bowel moving, regulating pH. There's a brain connection like you talked about. Serotonin production. They fight off harmful organisms.

It's basically like having your own army. Which is your own T cells, B cells, white blood cells, neutrophils, all the cells that we have in our immune system. But then the reason why we have so many probiotics or good microorganisms is because they also help us. And they actually combat the harmful organisms. And considering the fact that the majority of your immune system resides in your gut, for sure the number one supplement I would recommend is a good, good probiotic that you can take on a daily basis or every other day to build up that... Especially if you're eating all that stuff that's not good for you.

Probably my number two supplement would be iodine. Iodine is a fantastic supplement that most people are deficient in. The majority of people actually are deficient in. It's got links—every cell in the body, actually, has iodine receptors. And it's really, really big for your immune system. It will help fight off invading organisms. It will help heal the tissue. It is nutritional support. And helps regulate your endocrine system, your thyroid, your metabolism. And it also helps remove and attack the harmful halogens, fluoride, bromine, and chlorine that so many people have built up in their system. So it's very important to take that.

Also, some of the other things. Just a good vitamin mineral supplement to make sure you have the balance of all the vitamins and minerals that you need. Vitamin D, believe it or not most people are deficient. They're not getting enough sunlight. They're slathering toxic sunscreen all over their body. It just amazes me when I go somewhere and I see these people bring out those cans and just spray this toxic, cancer-causing stuff all over them. They're blocking out all the rays that they need to produce vitamin D. So vitamin D is very important for the immune system.

Of course, vitamin C, as well turmeric is really good at boosting the immune system. But those would be my main ones that I would say... Obviously, my main goal is to teach people how to address the root cause by not eating the genetically modified foods, by not putting those chemicals and toxins in their system, and opening up their elimination routes and being able to strengthen their own army. But those are some of the supplements that I would recommend.

Jonathan: That's perfect, Dr. Group. And your message at the end is so clear, exactly what I've been saying about the value of the Immune Defense Summit. We are recognizing for everyone, putting it all on the table, what are the threats to your immune system? That is number one on your list. Whatever is resonating with you, as you listen to all these

presentations, make sure you're getting away from the threats, which, Dr. Group, you did a great job of outlining that.

And then of course bring in these things that are easy to do, extremely inexpensive to no cost at all that nourish your immune system. You combine those two and move forward and what a difference you will feel in your life. Dr. Group, I want to thank you so much for your time. And I want to thank our listeners for joining us today. If you would like a copy of this program, plus all the other presentations inside the Immune Defense Summit, simply click the banner you see on this page. Thanks again for attending the Immune Defense Summit. Talk to you soon. Take care.

Nature's Pharmacy: Safe Sickness Solutions

Guest: Phil Carson, DPh, RPh

Jonathan: Welcome to the Immune Defense Summit! I'm your host, Jonathan Landsman, creator of NaturalHealth365.com. Did you know that every year drug-resistant bacteria, or superbugs, kill 700,000 people worldwide, and is projected to be more lethal than cancer by 2050? And infectious diseases still remain one of the leading causes of death.

Cancer, cardiovascular problems, and diabetes are by far the leading cause of premature death in the world. But in reality, all of this is avoidable with a strong immune system. That's why I created this event; to help you understand the roots of disease and how to prevent and reverse life-threatening illnesses by re-empowering your immune system. Our show today-Nature's Pharmacy: Safe Sickness Solutions.

Our guest, Phil Carson, is a registered pharmacist and a doctor of pharmacy with a license in Mississippi and Tennessee. Since graduating in 1985, from the University of Mississippi School of Pharmacy, Phil has been certified as a compounding pharmacist, a diabetes-care pharmacist, and most recently a consulting pharmacist. He has also earned certifications in lipid management, GERD, plus many other certifications in natural and alternative medicine therapies for weight loss, fibromyalgia, ADD, and ADHD, to name just a few.

For many people, a trip to the local pharmacy or drugstore usually means that you'll receive an over-the-counter or prescription medication designed to suppress symptoms in one way or another. But sadly, none of these drugs address the underlying cause of your discomfort or illness. But what if you could talk to a pharmacist that appreciates the

power of natural healing? In other words, a healthcare professional that understands how the immune system works. Looks to do no harm. And instead, looks to help you regain your health without toxic medications.

Today, I'll introduce you to a true leader in the field, a natural pharmacist making a significant contribution to our society. We'll talk about the three most important things you can do to protect your immune system. How to take a proactive approach to avoiding disease symptoms. And, of course, review the best supplements to support immune health, plus much more. Please join me in welcoming Phil Carson to our program. Phil, welcome!

Phil: Thank you so much, Jonathan. So happy to be on your program today.

Jonathan: Oh, it's great to have you, Phil. Why don't we talk about first, in your professional opinion, how important is immune health?

Phil: I put an extreme emphasis on the immune health of our bodies. It's vital to our survival. With all the bugs and superbugs that we're exposed to today, we've got to have a healthy immune system. And it's not only vital to our survival, but it's vital to a healthy, vibrant life that we all strive to live and want to enjoy.

Jonathan: It seems like such a basic thing, right, Phil. But yet, so many people don't even really think much about it day to day, I guess, because you don't see this on TV. You don't see it in magazines. When you go to most of the local pharmacies, you certainly don't hear them talking about how to make the immune system strong. My goodness, the first thing you see when you walk in is get these vaccines, because you can't live without vaccines. That's basically what that means if they're urging people to get these shots, right. Isn't that true?

Phil: Oh, yeah, that saddens me to see that happening. Even though, I'm a pharmacist, I'm not a big proponent of vaccines. And I'll tell people all the time, "If you keep your immune system strong and healthy, you don't need those vaccines." Personally, myself, I'm almost 57 years old, and I've never had a flu shot, and I don't intend to ever get one. Because I strive to keep my immune system as healthy as I possibly can to protect myself against the viruses, and all the bacteria, and bugs that are out there that we come in contact with, on a daily basis, a lot of times.

Yeah, I'm a strong believer in a healthy immune system and doing everything you can to keep it healthy and being conscious of it. A lot of people, like you said, they're just not conscious of it. They just don't think about it. They don't think about the importance of it. And how important it is that they do what's necessary to keep that immune system strong and healthy to protect themselves against all these invaders.

Jonathan: Well, I think there's a lot more to it that subtlety happens to people with all of these messages that I was just referring to about getting vaccines. Talk to your doctor. So many of these messages are disempowering. And it's a very subtle thing, right. It's not like it comes right out and beats somebody over the head, and says, "You know what? You're pretty stupid. You don't understand anything. Just talk to your pharmacist. Talk to your doctor. And just hand your life over to them because you don't know anything at all."

Of course, they don't say those kinds of things. But I guess you see this a lot with people you speak to. You really have to encourage them more. Be like a cheerleader. So why don't we talk a bit about what really makes up a healthy immune system because most pharmacists aren't really talking like this.

Phil: Oh, yeah, absolutely. Yeah, it's something that I've always strived to talk to people about, especially ones that have come in to see me over the years that are struggling with chronic illnesses and chronic infections. And they're always coming in for an antibiotic. Or they're coming in for an antibiotic for their children. I try to tell them, look, you know, you've got to do this. You've got to do that. There's certain things you need to do to have a healthy immune system. And, you know, to protect yourself from the invaders that I mentioned a minute ago.

But what constitutes a healthy immune system is one that is producing the amount of bacteria and viral-fighting cells that the body needs to fight off these invaders. The thymus gland is the master gland of the immune system. And it's got to be healthy. And it's got to produce these bacteria-fighting and viral-fighting cells.

And the other thing that I stress to them, as far as what constitutes a healthy immune system, is having a healthy gut. Having a gut that is supplied well with what I call normal gut flora, the probiotics, the good bacteria. Both the thymus gland and the gut are vital parts of our immune system. Research shows that approximately 60, up to 70% of our immune health is around the gut, and the health of the gut. So those are two things that I stress to people that they have to be aware of. And to have that healthy immune system that they need, and strengthen that immune system, the gut is so, so important.

And we mentioned antibiotics. That's one of the things that people have overused over the years and a lot of doctors have overprescribed. Thankfully, we're seeing some improvement in that. Things have gotten better there. But these antibiotics actually destroy the good bacteria in the gut. But the bad thing about it is there's too many health professionals don't talk to people about that. And they don't warn them about that, what these antibiotics are doing to their immune system. And how they're weakening their immune system. And one of the

primary ways they do that is by destroying those good bacteria.

So I've always stressed to my patients, "You've got to replace the good bacteria that you're destroying with these antibiotics. You've got to take a probiotic or you've got to eat the probiotic-rich foods to keep that gut healthy, and keep your immune system healthy, and give it ammunition that it needs to fight these bacteria and these viruses that are making you sick."

Jonathan: Phil, I was just thinking, as I was listening to you talk about how so many people don't even question—and this is for doctors, as well—they don't even question the health of the pharmacists that they're speaking to. So often, I get this picture in my mind of a pharmacist in a white coat. Just basically behind the counter all day, running things for themselves or for their staff, in terms, of how many pills have to go in to which bottle, and bagging everything and labeling everything correctly. Bottom line is, I just think of them—and I say this with a lot of respect—as pharmaceutical pill pushers.

But what do they do on a personal level? And I wonder how many people even think that way when they go in and they ask for help. Most of these pharmacists are probably taking pills themselves when they don't feel well. Just thinking that pharmaceuticals, over-the-counter prescription drugs, that's the way to go. So then, they go tell their patients the same thing. And I know that's not the way you live your life, right.

Phil: That's exactly right. And when I started learning about natural products and natural therapies, quite a few years ago, I started applying those things to my own life. And I saw the difference that it made in me and in my health. And that made me want to share it with my patients. But, as I've told many people many times before, when it comes to natural therapies, and natural products, supplements, all those kind of things; herbals.

I was taught the history of that in pharmaceutical school. When I went through, back in the late 70s, early 80s. We were taught, "You know, this is the modern-medicine age. We don't need those things anymore. And they're really not effective anyway. So we've got these great new medications and great new antibiotics. This is what you need to be learning, and dispensing, and talking to people about. And, you know, this herbal stuff is, you know, a thing of the past."

But I learned differently when I was seeking help myself to correct some major digestive issues I was having in my life, due to extreme amount of stress, primarily. But when I learned these things, it changed my life. And I began to share it with my patients and began to see their lives changed. And it has just kind of evolved over the years, that I have

shifted away from traditional medicine and more into natural medicine.

And I'm not anti-drug. I'm not totally against medications. I know they have their place. And there's certain things that they can do. And we need them for certain things. But it's not the first go-to for me, and not the first recommendation for me when I'm dealing with someone that's looking for an answer or for a solution.

I want to tell them about the natural things first, and how they work with their body, and how they can correct things, and improve things. In most cases, and especially with me and with a lot of people I've dealt with over the years, not just treat the symptoms, but correct the underlying cause, in most cases.

Jonathan: Phil, I know in a few minutes or so, we're going to be talking about the three most important things to teach people about protecting their immune health. This is going to be a very interesting part of our conversation, I'm sure. But first, let me just address something that a lot of people hear. And it's this whole thing about age, right? Which in my mind already, I think is very disempowering. Just this idea that, you know, the older you get, the tougher it's going to be for everything in your life. It's a very negative message. But I want to just let you answer. Does age have anything to do with the health of our immune system?

Phil: Yes, unfortunately, it does. The thymus gland that I mentioned a minute ago is the master gland of our immune system that produces the T cells and the B cells that help fight off invaders. And unfortunately, around puberty, that gland begins to shrink and begins to atrophy. And eventually, it turns into this fatty blob of tissue. They say that generally around the age of 75, the thymus gland is pretty much just fatty tissue. And as we age, the immune system or the thymus gland is going to get weaker and weaker.

So it makes it even more important, that as we age, we do what's necessary to protect our immune system and keep our bodies healthy in every way that we possibly can so that we can continue to have a strong immune system, even though that thymus gland is getting smaller and smaller and weaker and weaker. So the age is extremely important, as far as the immune health.

And I know with, even young kids a lot of times] that I've seen over the years, have had major, major problems with chronic infections and those kinds of things. And that's when our thymus gland is at its best, and its strongest, and most productive, and most vital. But yet, they're still having problems. And I think it goes back to what I was talking about a minute ago, the overuse of antibiotics, the overuse of medications is one of the things there. And other environmental factors, as well, that can come in to play. And those things, it doesn't matter about age. We've

got all these environmental factors that can directly affect the health of our immune system. So throughout our lifespan, it's important that we do what we can to maintain it.

Jonathan: So let's talk about this, Phil. Somebody's coming in to see you. Obviously, they're not coming in because they feel great. They don't feel well in one way or another. It's a great teaching opportunity for you. What would you say in just these few minutes here the three most important things that you teach people about how they can protect their immune system?

Phil: Well, the first thing I amplify is diet. We've got to have a healthy diet. A diet with as little sugar, as possible, because sugar is detrimental to our immune system. And I'm talking about processed sugar that so many people consume so much of every day. And that's one of the best things a person can do for their immune system is to eliminate that sugar and eat as much raw foods, as possible. Fresh fruits, fresh vegetables that are rich in vitamins and minerals that our immune system needs for support.

Another thing is exercise. Regular exercise. I'm a big proponent of exercise and exercising consistently and regularly every week, several days a week. That exercise is a vital part of keeping our immune system strong and healthy. And studies show that, that people who exercise consistently have better immunity, and less likely to catch colds, and other viruses that are out there.

And then, the third most imported thing, alluded to already, is that gut. Just keeping the gut healthy. Maintaining a healthy amount of gut flora. And that can be done by eating probiotic-rich foods on a regular basis, as part of the diet. Include those in your diet. The fermented foods, I'll just mention a couple of my favorites, are kombucha tea. I love kombucha tea, loaded with probiotics. Another is sauerkraut. It's fermented cabbage, that's good. But there's a whole lot of fermented foods. But that's just two of my favorites. But for people who can't eat those fermented foods, or they don't like them, won't eat them, or drink them, or whatever, then there are probiotic supplements that they can take. But those are three things that I teach people that are extremely important and that are vital. And they should be incorporating into their daily lives to protect their immune system.

Jonathan: Phil, I know you also talk, if I can just bring up for a moment, because I know you pretty well. You talk about how important it is to have faith and to have prayer in your life. And it's just not about becoming more and more religious, for anyone listening to this message. But the reasons why I bring this up—and, of course, I'll allow you a few minutes to talk about it—is that I find that if people's immune systems are down, because of a lot of the physical things that you

brought up, the diet is really not being thought about that much.

Exercise, let's face it, millions and millions of people are not exercising often enough in even just a comfortable way. My master study is in exercise physiology. I trained high-performance athletes. I'm not talking about deadlifting and extreme amounts of exercise. But just most people are not doing the most comfortable, easy, consistent exercise. And then, on top of that, they're not sweating enough. And then, you've got these poor gut health issues.

When you have all of this together, if you just look at someone and say, "You know, you got to have faith. You got to have more hope in life. And try some prayer." Or you mention anything, it's really tough to talk to those people because they're in such a depleted state. But how important is this to have a real faith in something more than yourself? Talk about that a little bit.

Phil: Oh, yeah. Yeah, absolutely, I put an extreme emphasis and importance on that, especially in my own life. And that's something that I practice and encourage other people to practice, as well, because it is important for our immune health that we keep ourselves healthy spiritually, emotionally, mentally, as well. And one of the things that affects us so much there, which is a detriment to the immune health for a lot of people today, is stress in our lives. And the stress that we have to deal with on a day to day basis. And that stress affects our immune health. It weakens our immunity. One of the ways is through the adrenal glands because the effect that it has on the adrenal glands and the hormones that are produced by the adrenals, that can directly affect the immune system.

But when we practice faith and we practice things like prayer and medication, that has a direct effect on calming our bodies and supporting the adrenal glands, therefore supporting the immune system and helping to heal with our immune health. So I think it's extremely important. And I'm glad you brought that up because it is something that I practice in my life. And I know it has made a difference in my life in a lot of ways, and especially in having a good, healthy, strong immune system, where I rarely ever get sick. But yeah, I'm a strong believer in what you're saying there.

Jonathan: Yes. And, Phil, I'm glad you brought it up that way because a couple of concepts came across my mind in terms of nature's pharmacy. Our pharmacy is inside of our body. And what I mean by that is two-fold. For me personally, I believe in myself, right. But when I said you got to have faith in something outside yourself, especially when times are really stressful for me, and I know that's going to impact my health, right, just like anybody else listening to this message, I often think, it's not just up to me.

In a certain way, mentally, and I know you can appreciate what I'm about to say, I don't put like, "Oh, my, God, I have to fix everything. It's all up to me. I have to decide to do everything. I have to try to figure out everything. If I make it or I don't, it's all because of me." And this me, me, me, focusing just on everything that I do, puts a tremendous amount of stress.

And when I shift my mindset to realizing, "You know, it's not all under my control. I am doing the best that I can." This kind of thought process, it really does relax me. It allows me to continue to work at a high level. And it doesn't overtax the immune system.

And I think a lot of people who don't feel well and are overwhelmed with all this information and they feel they've got to figure things out all on their own, and again really self-centered, can be a very dangerous thing. It certainly is a very stressful thing. You know what I mean, right?

Phil: Oh, yeah. Yeah, absolutely. It's funny that you say that because it's something that my wife and I were just talking about a couple of days ago is praying for wisdom. And we should be praying more for wisdom. Wisdom of how to do things, how to do things better. And not just rely up on our own selves and our own knowledge, but pray for that wisdom. That divine wisdom that we can receive to know how to do certain things and to do them in a certain way or in a better way than what we think that is the best way. Sometimes there, through that divine wisdom, we can find out that our way is not the best way. And that we don't know everything we should know. So yeah, that's something that we've practiced in our lives is seeking that divine wisdom that you're talking about.

Jonathan: Yeah. And, Phil, I've said this often, throughout the Immune Defense Summit, that I really feel in my heart of hearts, right, that we all know what we need to do, but that it doesn't necessarily always come from us. And that's what I love about what you just said. A divine intelligence, right, call it what you will, it just comes in. And it hits you.

I've often said things like, "Listen to this entire event. And just simply relax with it. And see what resonates with you." There's a message that comes in to you. And when that feels that strong that it literally could sometimes, even if you're, I guess, fortunate enough to get goosebumps over the whole thing, I think that if someone senses what I'm talking about, that's something that really hits you deep down. You know that's something you got to do.

Which I think is leading to the next thing we ought to spend a little time on, which is how can we be more proactive in protecting and supporting our immune system? What do you tell people?

Phil: We've been talking about that actually already, as far as being more proactive. The exercising regularly is one thing. Eating more raw foods and fermented foods, eliminating sugar from your diet, these are decisions. These are decisions that we make. To be more proactive, we need to think about what we're deciding to do every day with our bodies. What we're deciding to put in our bodies. And that's how we can be more proactive in protecting and supporting our immunity is to make the best decisions. To make those decisions that are going to support, and help, and protect, and not the ones that are going to break down, and destroy, and make us weaker.

So I encourage people, all the time, to make better choices. Make better decisions in what you're doing and what you're eating, what you're putting in your body. And that's something that we all need to be conscious of and do more. And I have no doubts that it's the choices that we make, as a whole in the United States today, with our healthcare issues that we have. Our health crisis issue that we're dealing with is all these lifestyle diseases that are robbing people of a vibrant life is the choices we make. So if we want to be proactive in protecting our immune system, make better choices.

Jonathan: And wouldn't you say it's a great idea to do new things, right. Make, like you say, a conscious choice to do something healthy. Like, you know, I'm going to start walking 15, 20 minutes, whatever it is. Ten minutes out, ten minutes back, that's it. Comfortable. I'm going to do it three, four, five days a week. Just get started with something. Do it for a week. And do it when you feel good. I think so many people wait until they get really sick. And then, you often hear that story of someone who says, "I got cancer. And it changed my life for the better." It's great that that happened. But God forbid that should happen to anyone. Wouldn't it be great if we just said, "You know, today's the day I'm going to do something different. Something new that's healthy for me. And you know what? I feel pretty good. But I'm going to do it anyway, you know."

Phil: Yeah, that's exactly right. And I agree with you 100%. And people need to do that. And that's something I encourage people to do. They sit in my office all the time. "Hey, you can do this. You can make better choices." And sometimes people just need that little push, that little encouraging word. A little bit of encouragement. A lot of people who have lost hope. And they think, well, there's nothing I can do. I've been given this diagnosis. Or this particular thing has been spoken over me that you're not going to get any better. Or you know, it's just a way of life or whatever.

They hear these discouraging words all the time. And sometimes, to get somebody moving, get somebody motivated, an encouraging word is all it takes. A little glimmer of hope. And that's something that I love. Part of what I do is being able to have a person sit across from me and look at

me and say, "Hey, you've given me hope."

Jonathan: Phil, I guess, maybe if you had a story, that might be interesting, too. But, boy, did you make me think about something that also is so dangerous for the person who doesn't really think much about it. And that is just taking that aimless trip to the doctor. Not feeling well for a while. Then spending those few minutes with a physician that, like you say, gives a label of, "You're diabetic." Or whatever else, whatever other kind of condition. "You have high blood pressure. Take this pill, at the pharmacy. Go get it now. And you've got to be on this medication for the rest of your life."

Saying those words over somebody and how if someone doesn't think about this, they just quickly accept this as a way of life. Talk about this. How you've been able to maybe, maybe there's a story of somebody who was that way. Really felt like there was no hope at all. And what you did to turn it around for them.

Phil: Oh, yeah, absolutely. I remember several years ago, a lady coming to me that was suffering from all kinds of problems. She was suffering from fibromyalgia. She had an extremely weak immune system, as well. Was fighting off colds and infections all the time. And she was in terrible, terrible shape. And she could not function. She actually was a school teacher, a mom of two young children. And she got to the point where she couldn't even work. She could barely get out of bed. Get off the couch during the day once she got out of the bed. And she was just living a miserable, miserable life.

And so we started working with her and encouraging her. And we did some testing to find out what stress was doing to her life. Her adrenals were all out of balance. And began to work with her, and encourage her, and restore that balance in her body. And we began to see her just come back to life. I'll never forget one day she called me. And she was just beside herself on the phone because for the first time in a long time, she had been able to get out of her house. Walk to the end of her driveway to the mailbox and back without being totally exhausted. And this lady kept improving, improving, and eventually ended up going back to work teaching and teaching school.

And so yeah, things like that. And I've seen others. I could tell you story after story of people that we've seen their life transformed and their life changed just by making a few good choices and not accepting and believing that, "This is it for me. I'm never going to get any better." Because that's basically what she was told. "We don't know what to do with you." And they had her on all kinds of medications that were really not helping her at all. So this lady's life was restored with some hope and some natural supplements that restored balance to her body. It was an amazing thing to see.

Jonathan: Phil, often I've spent over the years working with kids and their sports, and their athletics, and getting in shape, and all along the way, kids will get hurt. They'll lose. Parents will yell at them and make them feel bad. And all the odds are against them. And I've learned a lot through sports. And it's the same thing I've seen in trying to coach and help people to, like you say, come back to life to improve their health. So many obstacles are in the way. And there are so many reasons that are—I don't know how else to put it except—very obvious to the individual to see, "Oh, I can't make it." There's all of that.

But what you said, I feel is so important. Before we get to the exact supplements that you would recommend to patients to protect their health and to support strong immunity, I think this is a great supplement for all of this to have deep inside of us. And I'm saying supplement. But you know what I'm talking about. That belief, like you say, you see yourself being successful, no matter what. And you know what? The highest performing athletes, they've had that. They've had their low times. They've lost. And they still see that they are champions. And eventually, they come out on top because of that kind of mindset.

And it's the same thing with patients who are once sick, who once were patients. And now, they're not any more. They lose that diagnosis. They make changes in their lifestyle. And they just feel like a completely different person because that's what they wanted their whole life. Inside their mind, they did not change that, no matter what was happening in their life and no matter what other people said. Even if they had medical degrees, they believed that they would have a successful outcome. And I know you know what I'm talking about. You can certainly comment if you like. But let's also get into some of these supplements. Ones that you suggest. And why they're so helpful.

Phil: Oh, yeah, that belief you're talking about is extremely important. And the belief that I have in these supplements has been extremely important to me because I've seen some tremendous things happen with them. And people's problems, and dealing with chronic infections, and their association with why people are sick a lot of times is because they're deficient in some of these nutrients that we're talking about and supplements that we're talking about.

One of the ones that I use a lot, especially with children, is thymus extracts. There are quite a few thymus gland extract products on the market. And there have been some studies that show that help tremendously with chronic respiratory infections. There are kids or people that are suffering from chronic respiratory infections that these thymus extracts can help boost the thymus gland and give a person better immunity against the invaders that are causing these respiratory infections. And so I'm a big believer in using those.

Also, probiotics, as I've mentioned a minute ago, because like I said 60% of the immune system is around the gut. So these probiotics are extremely, extremely important that we get those either through our diet or through a supplement. And there are quite a few probiotic supplements out there on the market. And you see them being advertised a lot now.

I don't know, probably 15 years ago, a lot of people had no clue what a probiotic was. However, I was recommending them 15 years ago. I even had a doctor tell one of my patients, "Well, you don't need those things. They don't work anyway." And that was ridiculous. But anyway, that belief about probiotics and the use of probiotics has changed quite a bit over the past 10 years, especially. And I'm thankful to see that.

Another thing is vitamin D. Big believer in vitamin D and keeping our vitamin D levels at an optimal range. Vitamin D is extremely important for our immune system. And actually, there are quite a few autoimmune disorders that have been associated with low vitamin D levels. Multiple sclerosis being one of those. So I stress to people all the time, "Have your vitamin D levels checked to make sure you're keeping your vitamin D in that optimal range of between 50 and 80."

And then, another thing, as far as vitamins and minerals, of course, vitamin C, everybody's familiar with vitamin C and the use of vitamin C and helping to support the immune system. But another, a mineral that's not thought about a whole lot, that we need to make sure we maintain healthy levels of, as well, because this is vital for our immune health, and that's zinc. Zinc deficiency is a bigger problem than most people realize that it is. And so I recommend to people all the time, "Have your zinc levels checked. Make sure your zinc levels are normal where they should be."

And then, there are several herbs that I have used over the years and recommend when people are dealing with chronic immune system issues. Echinacea is one of those. Echinacea has been found to be very, very helpful in fighting off the common cold and other viruses, as well as elderberry. Elderberry is extremely efficient in helping reduce the time of a cold and other viruses, respiratory viruses, especially.

And then, another one I like is astragalus. Astragalus is something that I have recommended for quite a few years now for people who had had pneumonia or have pneumonia and trying to get over it. Or maybe they've got the lingering effects of pneumonia. And it's just slow recovery time. Astragalus seems to help with people who have been battling pneumonia. So those are some of my favorites. And things that I use and recommend on a regular basis.

Jonathan: And for those who are interested in going a little deeper

into the topic of herbal remedies, we have a master herbalist. David Christopher is part of the Immune Defense Summit. Check that out. And home remedies for infections, another interesting conversation, I'll tell you. And that was with Marjorie Wildcraft. Make sure you check that out, as well.

But, Phil, this is great, the information you're giving us. I know a lot of people will listen to this. And again, they'll tend to initially feel overwhelmed. But just to throw it out there, Phil. Every morning when I wake up, it's a whole blend. It's a green powder that I just take a big scoop. I throw it in water. I mix it all up. I'm having some liposomal turmeric, I'm putting in there. I'm putting some vitamin D. K2 drops, I put those in there, too. I stir it all up and drink it down.

And that green powder has medicinal mushrooms. It's got barley grass and wheat grass. And it's got sea vegetables all freeze dried. These sea vegetables are all in there. So it's rich in all the herbs and medicinal mushrooms, and minerals from the sea vegetables. It's just, it's an easy way for me to get so much nutrition, so much fortification for my immune system. And it's done within minutes. It's not that hard at all is what I'm really trying to say.

Phil: Yeah, that's exactly right. We just need to be, as we talked about a minute ago, more proactive and doing these things that are vital for our immune system. And if we want to live a more vibrant, healthy life, then that needs to be something that we make a priority that we protect our immune system. And we keep it as strong as we possibly can. Because the one thing that I, for sure, don't want to end up laying up in the bed for days or for weeks because I'm sick from some bug or virus that's knocked me on my tail. Because I love being active. I love doing things. I love what I do. And I don't want anything slowing me down. So I'm going to do what I need to do to stay strong and healthy.

Jonathan: Phil, just as a final word. As we close out this program, I was just thinking in my mind, what a fantastic blend of things we've talked about. It's so easy to think in a Western mindset, "Okay, just tell me the supplements I have to take that'll make me happy or healthy or fix my problems." And that's not what we can do in a program like this. But we can throw out the key supplements, the herbs like you just did.

But we also blend in there, those things that you just talked about at the end, about having, in my mind, a state of gratitude always. Not just thinking of ourselves. We're being grateful for the things from out there that have come to us in our life. And also love, you brought it up a few times at the end, loving something, right, someone and something, and having social connections.

Let's be real here, we're talking about a natural pharmacy. If I hate my

job and I'm taking vitamin C, that's not going to do it. Or if I walk and I exercise and I sweat a little bit, but I absolutely hate what I'm doing to work up a sweat, you could see how that's battling yourself, right.

Phil: Yeah, it's that combination of things that we do. It's not just one thing that we need to zero in on. But all of these things that we've been talking about and the things that you just mentioned, all the pieces of the puzzle need to be put together. And when we do that, we're going to have our best chance for a strong, healthy immune system. And that's what I encourage people to do. To take these things and put them all into practice in their lives on a regular base. And it will make a difference.

Jonathan: Phil, I want to thank you so much for your time. And I want to thank our listeners for joining us today. If you would like a copy of this program, plus all the other presentations inside the Immune Defense Summit, simply click the banner you see on this page.

Thanks again for attending the Immune Defense Summit. Talk to you soon. Take care.

The Hidden Value of Fevers

Guest: Donna Powers

Jonathan Landsman: Welcome to the Immune Defense Summit. I'm your host, Jonathan Landsman, creator of NaturalHealth365.com. Did you know that every year drug resistant bacteria or super bugs kill seven hundred thousand people worldwide and is projected to be more lethal than cancer by 2050, and infectious diseases still remain one of the leading causes of death?

Cancer, cardiovascular problems, and diabetes are by far the leading cause of premature death in the world. But in reality, all of this is avoidable with a strong immune system.

That's why I created this event, to help you understand the roots of disease and how to prevent and reverse life-threatening illnesses by re-empowering your immune system.

Our show today: The Hidden Value of Fevers. Our guest, Donna Powers, is a private homeopathic practitioner, a teacher to parents and students of homeopathy at Western College of Homeopathic Medicine, workshop consultant, speaker, and author.

Make no mistake about it. Donna is on a personal mission to make sure that as many people as possible know about the value of homeopathy.

After 4 years of homeopathic training, fourteen years of private practice and as many years attending seminars, Donna is stepping out into the world to share with you what she only wishes she knew as a young parent. Today, your entire perspective about fevers is about to change so get ready to take some notes and let's get started.

Please join me and welcoming Donna Powers to our program. Donna, welcome.

Donna Powers: Thank you so much, Jonathan. It's lovely to be here today.

Jonathan: It's great to have you, Donna. Talk about the purpose of a fever in an immune system response. What is this all about?

Donna: Well, the fever is such an important part of our immune system. It's the beginning of our healing process. And often, we don't even realize we're sick until it is the immune system that has been activated.

So we can have some process happening within us for as long as...well, even today, I was teaching about whooping cough. And that process of the bacteria growing and reproducing can take up to 3, 4 weeks, and you wouldn't even know you were sick or your child was sick. And then after that, the prevalence of these bacteria and the toxins that they are putting into the system then trigger an immune system response.

So the immune system is this wonderful collaboration. It's community, and it has this communication from the local and then it moves all the way through and into the brain where other things are put into place that create the fever. So it's a messaging system that goes all the way through.

And so that's when you start to have what we typically think of symptoms of a disease. It's not always the disease itself, but it's what's happening in that disease process that is triggering the immune system to respond.

And so in a fever, the idea is that it's creating a warmer environment that does a couple of things. One, it increases the immune system response by creating hormones, chemical reactions. And then the other thing is that warm environment is a little bit hostile to the bacteria that are already reproducing or the viruses. So it's this wonderful integration of things happening.

This morning even we talked about chicken pox. We got sidetracked in our group lesson. But in my research and learning, there are a couple of things that happen with fever, and one is that we produce our own natural antipyretic. So that is the substance that is careful about monitoring the height of our fever, and natural antibiotics. So it's just 2 of the things that are produced in a fever. So those are the purposes of the fever in an immune system.

And one of the things that I've learned as I've taught parents, because there can be this fear of fever, is to think of fever not so much as

because of an attack or using more metaphors and that the immune system is battling.

But Dr. Philip Incao has introduced a perspective that I think our families can really relate to, and it's about a housecleaning. So we are actually cleaning up in a fever all of these byproducts and these toxic kinds of things that are produced from the virus or bacteria, and the fever is actually assisting in the housecleaning.

So I like to explain to parents it's like there is a party going. So like with the whooping cough, there is a party going on and these bacteria and virus have been growing and reproducing because they've got something there to feed on. And they've left a mess, and so you have to call in the big cleaning company. And this is your fever, and your immune system that then comes in and helps to clean up. And then there is a whole other consequence once the fever's gone through. But this is the beginning of it. It's this response, and it's a super housecleaning that starts to happen.

Jonathan: Yeah, I love what you're saying, Donna. When our team found you, I got so excited because I knew in looking at your work that you were going to bring a new appreciation of fevers. You know, it's funny the way you're making it sound. It's like, I was just thinking it's time to celebrate when you have a fever. But I know that's hard to do when you feel so terrible. But it's really getting rid of this fear of fevers and appreciating what it's all about, which is what you've made so clear. We're going to talk in a moment or so about what happens after a fever.

But I just love what you said already about really understanding what a fever is all about. And throughout this event, we're going to be bringing up all kinds of natural antibiotics, natural remedies, things you can do at home to take care of these infections that western medicine tends to create this fear and promote it and raise people on this without really giving them a good education about anything that's happening to their body. So again, I just so appreciate your message, Donna.

So talk to us about what typically happens after a fever.

Donna: So what typically happens, it would be the same as if you were cleaning up after a party. You've got a lot of garbage to get out. There is a lot of detox going on. So you're quite right. A fever is actually something to celebrate. And when we are unable to produce fever, it means that something is happening with the immune system, that it's not strong enough.

So this is why you see in small children that their fevers will go quite high. They have robust immune system responses. But if you have a child who really it's a low-grade fever, then there is cause for concern

because you do want these high fevers.

So what typically happens after a fever, and any mom or parent can tell you this, even if it's not an infectious illness where a vaccine is offered. So it could be hand, foot, and mouth disease. It could be slapped face. There are a number of illnesses that we still get where no vaccines are offered.

And what will happen is the child will have the fever, and it will go on for a little while depending on the child. The fever may fluctuate in terms of temperature. And there is always a built in system, and it's not ever going to go any higher than that. So that's one of the big fears parents have. So it's built in. Unless it's poisoning or sunstroke, it's going to stay the same.

So once that fever breaks, typically, you will notice that you break out in a sweat. The immune system is so elegant in its design that actually in the perspiration, in the sweat, on the skin is something called...and is one of these immune systems does it on its own. It's endogenous, which just simply means from within. Antibiotic that's on the skin. And it actually lays it down.

And you know, science is so great because it is finding out these things and they are talking about it in research articles that I use to study from. And it's just that this fear of fever and fear of illness has taken over, and I think it's even affected our medical doctors. But if they are trained and if they do the same reading and the same research, they will find these same publications.

So there is a versatile antibiotic that gets laid down on the skin. Now, one of the main concerns with chicken pox and the reason for the push for the vaccine was that you could get a staph infection. So if your child scratched and broke it open, then they would be susceptible to staph infection.

Well, in fact, if after a fever has broken and your child has had a good sweat, by all means, wash the bedclothes. Wash the blankets. Wash the pajamas. But do not wash the skin because on that skin, your immune system has laid down an antibiotic that's quite powerful. And in fact, in this one study in the *British Medical Journal*, it actually killed *E. coli*, *Enterococcus faecalis*, which is a poop. It's poop germ. And staph aureus and candida albicans, which some people will recognize as yeast.

So these are actual studies that have gone on. And that's not the only one that gets laid down on the skin. But you can see how the immune system in its own elegant way has devised a system where secondary infections can be prevented if you just work with the immune system.

So after a fever, generally what you're looking for is a rash on the skin. Those are called your eruptive fevers. Sometimes there's diarrhea. And again, it's just a detoxing method. Sweating, again, perspiration is another way for the body to release toxins. You will get nasal. You'll want to be able to blow your nose a lot and you want to expectorate or cough up mucus. I think that pretty much covers all of them.

But any time you have a discharge...now sometimes it can happen. We consider tears and crying also a discharge. So these things can happen too, but it's more the physical responses after a fever that you're looking for and then you know you're well on your way to a healing response.

Jonathan: So incredible, Donna, and I couldn't agree with you more. The good science, and I underline the word good, is absolutely proving how as you say, how elegant our body is, our self-healing response.

But to eliminate that frustration out there just to make one simple point, a lot of times this good science that you're referring to is simply not going over to the conventionally trained physician. They are getting their information as everyone I'm sure can appreciate, from pharmaceutical-sponsored medical journals. Their medical training in school is not going into this.

It would really be up to that particular medical doctor to dive into this good science and make that real, personal connection so that they could put this into play in their medical practice.

So that's why there's this huge divide, and that's why I just feel so honored to be in a position like this where I can bring people together like you to get this kind of information out to so many people. Let's shift gears because I know a lot of people out there, parents in particular, of children who are going through autism, this is an extremely stressful situation for a lot of them especially that don't have a good healthcare provider. But there is something going on here in terms of a fever and its connection to helping children with autism. Is that a fair statement, what I just said?

Donna: Yes, it is. One of my personal heroes when I first started researching and studying this whole vaccines and infectious illness is Hilary Butler. And she still has a website, beyondconformity.co.nz. But Hilary has been writing. She's a mom and incredibly researched, not a "but", but an "and".

And in 2007, as early as that, or 2000, 2007, she was already hearing from parents who were writing to her and saying, "You know, when my autistic child had a fever, the symptoms disappeared."

So it took some time before good researchers and good science started

looking into it, see what was actually happening and to look at it. To really look closely and to see, what is actually happening?

So one of the names is Dr. Anthony Torres, and he has some work to do with that as well. But there is another MD, PhD, and he's done an abstract of study. He's with the Albert Einstein College of Medicine and they were using some experiments with hyperthermia. So "hyper" just means more and "thermia" is heat. So, more heat, which we would understand the natural equivalent of that is a fever and the amelioration of autism symptoms. And in fact, he did find that the researchers saw an improvement in socialization and in repetitive and restricted behaviors at the hyperthermia or fever conditions.

And they demonstrated that they could reliably and safely increase children's temperatures into the fever range. So that was up to 101.7. That's degrees Fahrenheit, which is getting close to 102. And so they actually saw that there was a correlation between increase in heat, hyperthermia, and some improvement in some of the behaviors that the children are actually...they record them and compare them.

So this is really important because again, these children are diagnosed on a spectrum, often have compromised immune systems. And so one of the things that, as a homeopath in particular, we really look forward to in their care as we go along is the return of a fever. This is really good news because what that means is that the energetic vital force that is in all of us that has this ability to self heal is finally strong enough so that they can mount a fever. And then you know that the healing is really going to really begin in earnest.

Jonathan: Interesting, Donna, because as you were speaking I was thinking about how they often say, even in Western medicine, that they are starting to recognize that mitochondrial dysfunction, this lack of cellular energy is so connected to so many issues, including autism.

So it just goes back to everything you were saying about, when a body system, whether it's a child or an adult, become so sluggish, so tired inside on a cellular level, fever can't even be activated. And then you couple that with so many toxins that people are exposed to and may not even be aware of them at that moment in time, that's like the perfect storm to be experiencing all these physical troubles, whether it's neurological, mental, emotional, or some of these other physical symptoms that we associate with so many diseases.

Bottom line is, it's a body suffocating in toxins and not processing them, not having a body alive enough to handle the load. Is that fair to say?

Donna: That's exactly what's happening. So often you approach it. There is a detoxification that has to happen. And it's a different kind

of detoxification than what you get with the fever. And then you have to work at assimilation, and then, you're getting so that there is some energy, some vitality, the organs have been supported a little bit. And then you can start to move forward and really look toward that child or even adult experiencing a fever, and then you know that there's going to be quite significant changes.

In fact, there is a whole philosophical understanding with the anthroposophic medicine, is that after a fever and after an infectious illness, you will see developmental gains, and you will actually see that for children who are recovering on the spectrum.

Jonathan: Okay, so obviously, in this program we're not promoting that people should just walk around with fevers all the time. But, Donna, in all seriousness, speaking especially to those parents out there who...I know what it was like with my wife so concerned about our child when she was younger and that fever just seemed to be going up and up. Talk about when a fever might be too high. What do we need to know here?

Donna: One of the best resources that I found when I was doing research so that I could teach parents what I was learning as well is from a nursing journal. Mark Broom did some research with that. And in anything that you read that is good research, you will see that in general, fevers only reach a certain set point. It's rare that it goes beyond that except in poisoning and in sunstroke.

And it's only a very small minority who actually have what are febrile seizures. So this is what parents begin to worry about when that fever starts to creep up, 102, 103. And the child is actually in pain in as much as they are also in a lot of heat. And it's the pain that can be very discomfoting.

In the research with Matthew Kruger, he talks about fever biology evolution and function as well. And he said if we could just design something that addressed the pain without suppressing the fever, we'd be a long way to helping go through infectious illnesses.

So just to reassure parents, fevers, as a rule don't go too high. And if you do have a child who has a febrile seizure, it is very upsetting to watch your child go through this. In most instances though, in healthy children without autoimmune disease or any kind of serious illnesses and are under treatment of doctors, generally, they will recover quite nicely without any long-term effects.

So the febrile convulsions are generally self-limiting. And they have found also in their research that there is no evidence that antipyretics, fever medications, actually reduces the incidence of febrile convulsions.

So sometimes in rare cases, there can be some cell damage. But again, we are moving up into those really higher realms: 43, 44, 45. And with all things, you really have to use your common sense as a parent. If you are dealing with something like that and your child has gone limp, you're on the way to a hospital, and you're under medical care. There's just no two ways about it. You get the help that you need.

So with fever, yes, there can be a concern. Yes, it can go high. Yes, the fever, there is fear of the febrile convulsions. But you have to weigh things at home. And if your instincts are telling you that you need to get help beyond what you can give at home, febrile is one of those instances where you can go and get some help.

Jonathan: Yeah, so definitely, Donna. In cases where the child is squirming and feels okay and it's just hot and all, that's a whole different thing than the extreme situation that you're talking about, right?

Donna: That's exactly right. And so what you're looking for as a parent also, especially in younger children who may not be as obvious, you are looking for wet diapers. And if their diapers are dry, then that's a concern. You're looking at the skin. Dehydration is a concern because kids might not feel thirsty and they definitely don't want to eat. They go in an anorexic state where they don't want to eat.

You can just gently pull up their skin and it should fall down. If it's standing up straight, then you know your child is dehydrated. With babies, if that little soft spot at the top is really sunken, then you know that there is some dehydration going on, and you want to look at the tone, the color of the skin.

If they're playing well and even if their temperature is high, you can still be at home and watch for these little signals that go on. So there are clues as to what you can do at home to know when you're really needing extra help beyond what you can do at home.

Jonathan: Okay, and then of course, what we're about to talk about, I would consider one of the most important things as well. You obviously want to have a good physician that you have trust in, you have great communication with that physician.

But let's be realistic, Donna, right? We're just talking about now conventionally speaking, a western medical trained doctor is going to say to a parent or an individual, "Hey, you've got to reduce that fever. That's just the most important thing. You've got to get it done now. I'm telling you this is the most important thing to do." Is there a problem with that approach? What do you say?

Donna: Yes, and there is good science for that as well. So one of the first

ones I find is acetaminophen use. So acetaminophen is just the brand name for our product. It's associated with autism spectrum disorder. That's in 2016 and that's published in a scholarly research journal. And so they've actually studied and looked at age 12 to 18 months, and what they showed was the use of acetaminophen as a fever reducer at that age group is associated with the increased likelihood for autism spectrum disorder.

So this is huge, this finding. They are understanding that reducing fever is causing long-term problems, and to switch from acetaminophen to ibuprofen also creates its own problems with that as well.

One other publication, food intolerances. So they've been watching and they've noticed that there is a relevance or...they never really say, causation. But food intolerances can be created by the use of acetaminophen and ibuprofen early on as an analgesic so pain reducer or antipyretic or fever reducer.

So again, lots of science and research—infections increase the prevalence for the use of the fever medications, increase the prevalence of symptoms of asthma, rhinitis, which is simply your common cold, and eczema in childhood. So there is research there. So reducing a fever with your ibuprofen and acetaminophen. And of course, aspirin has been long taken off because that has been connected with Reye's syndrome when using aspirin with fever.

So there is enough research to really help parents and conventional medical doctors understand that routinely using these medications to reduce fever is really counterproductive for the immune system, but also unintentionally or unintended consequences create other problems later on for children as they move into adulthood.

Jonathan: Yeah, the obvious things we can mention real quick are the stress to the liver if you happen to have fevers often. Also another idea besides just giving the medicine is conventional medicine is not simply doing this all the time, which is simply looking at what is causing all these fevers to come up? Isn't that the more important thing to be trying to figure out as a really good investigator?

Donna: Exactly, and how do we support the immune system in having the fever do what it's supposed to do? So rather than suppressing it, how do we support the immune system function of fever?

And it's a very good point. And right now, the other thing to remind parents of is when you're using over the counter medication, sometimes you think that by using the baby acetaminophen medicine or baby ibuprofen, and then you want to get something to suppress the snot that's coming out. Remember all those discharges I was talking about?

The immune system is getting rid of these things.

So on top of that, you start giving stuff to stop that happening. And inside of that is also acetaminophen medicine or ibuprofen. And what's happening now is the emergency departments are seeing an awful lot of, yes, liver damage and poisoning, overdosing, with these particular medications. And it's just simply because parents go buy over-the-counter. And they get this product and that product, and then there's this accumulation. And so there is a great deal of damage being done just thinking that you're making your child comfortable and removing symptoms and suppressing the fever.

Jonathan: You know, I know that you're dealing with this every day, Donna, in your educational process with people that you're meeting, but everything we're talking about here about the perspective of a fever, it's all about consciousness. It's about our awareness. It's the way we're looking at things.

And as we mentioned before with the dangers of medications that are just suppressing this and suppressing that, high blood pressure medication. Get that blood pressure down no matter what. High cholesterol, oh, let's just knock down the cholesterol.

Throughout this event, we're reminding people that it's more important to understand what is driving these things up and not suppress because the other general effect that all these medications have are they are slowing down our bodily functions. What a serious thing to slow down the heart muscle from beating and to lower blood pressure when the body is screaming out that it feels like it needs to raise blood pressure to survive.

We could go on and on, but there are some serious issues here that are not being addressed by just having the attitude "there is a pill for every ill". That's crazy.

Donna: Right, yeah. And I would sure agree with you. I think what is mostly I deal with when I teach and when I see people for product consulting is simply fear. And I don't say simply fear. Fear is huge. I get fearful thinking about having an interview with somebody as amazing as you. And fear is there. We live with it all the time, and I think that that's, as a parent, what gets triggered. But it's also what motivates us a parent to find out what's really going on.

And I think that education is power, that once you know then you can be confident in your choices and know when you need to see a conventional medical doctor. You know when you can do things at home. You know when you can go see a complimentary alternative, practitioner. And I think knowledge really is power.

Jonathan: Oh, I couldn't agree with you more. You just literally read my mind. It is not a cliché. It's very real. Knowledge is power. Experience is even more powerful to give you that confidence, to give you that real personal knowing.

That's what this is all about, and it isn't sexy. I've said it often. Being on an event like this, tuning in, sitting, walking around, listening to these interviews, maybe it's not the most exciting thing you're going to do. Tell your neighbors and friends and work associates. "Hey, I'm listening to the Immune Defense Summit."

But I'll tell you to take away one or two incredibly valuable things. To try them, to incorporate them in your own life and really get a personal experience, that's what I think is so valuable about learning. Always wanting to learn and always trying to get the best personal experience that you can get because that's what's going to serve us well moving forward in our life.

So enough with that, Donna. Let's talk about another segment of the population, which I have a profound respect for because I've watched my wife give birth to our child in our home and all the months before, boy, did I learn a lot as a man about what this is all about. My hat off to any woman that is pregnant and gives birth. It's really incredible. But all seriousness, talk about, should a pregnant woman suppress a fever? What do you tell them?

Donna: Well, pregnancy is such a tender time for a woman, and we naturally move into being very protective of that little life inside of us. So we understand right away that we need to eat well. We need to sleep. We need to have exercise, reduce stress. There are so many things we do for that little life inside of us that's incubating. So if and when we do get sick during pregnancy, it is a cause for concern.

So I did do some research with this, and later on in pregnancy, there has been association between using fever suppressors late in pregnancy that could possibly lead to childhood asthma. So again, this is the one time that I would really encourage parents to do as much as they could naturally. Again, you do have to be careful. And fever is an indication that something is going on. And if the mother's core temperature is going up, it's definitely going to affect that little one inside.

So I didn't get sick myself during pregnancy. But it does happen and sometimes women are put on fever suppressants and then they are also put on antibiotics.

And you know what? I couldn't find a whole lot of science research on that whole thing except for that one study. But this is where I would really recommend, even if you have a few homeopathic remedies or

a homeopath or a naturopath as part of your care routine, to find out what you can do to help support that fever and your immune system so that you recover.

And again, I just could not find any research that said if the mother has this particular kind of illness in pregnancy, does that mean then the antibodies will then transfer through the placenta? I couldn't find anything like that. So I will keep researching and look that up.

But I do know now being a person born in the 1950's, I naturally went through all these illnesses. I don't know how my mother did it, but she had 4 of us, and we all had these illnesses together.

And what I didn't know then that I know now was that I had maternal immunity to offer my little ones when they were inside. So they got passive immunity through the placenta and then also through my breast milk. And I wish I had known that then.

So one of the things that vaccination is doing, and unintended consequences we have young adults now in their thirties and sometimes up into their forties who were vaccinated. This is my own children's age group, and they no longer have the ability to confer natural immunity through placenta and breast milk because they have been vaccinated, and that's a concern.

Jonathan: Donna, that is so right on. Exactly. We are raising a generation with a lack of respect for what you just said in terms of appreciating, "Hey, we were exposed to these things. Our body adapted. Our immune system dealt with it successfully. No, we didn't go run around and do a marathon when we have a fever. We didn't do stupid things like that. We rested." And we're going to get into now some of the best things that you recommend for a fever.

But my point being, I couldn't agree with you more, we cannot lose respect for the value of being exposed to these things. Don't be living in fear. And this personal experience we have with bacteria, viruses, illnesses, and dealing with them not just in a natural way, just in a safer more intelligent way, I think is extremely valuable for all of us to be involved in.

So, Donna, I'm going to leave it up to you. This is an extremely important part of the program where I think a lot of people are going to want to take a bunch of notes, probably listen to this presentation two or three times for sure, but I leave it up to you. Talk about what you feel are some of the safe options that you recommend when we do experience a fever.

Donna: Being a homeopath, that's my first go to, and this is how I

empower parents when they are at home with their children with a fever. Nothing is more exciting for a parent than that first fever they go through and they use a homeopathic remedy. I had one mom write to me. They come and see me as patients. I see their children, and then I do education as I'm going along.

So this mom wrote about her success with a homeopathic remedy called belladonna. And she just watched and listened and waited. And then when her son started saying these kind of crazy things, then she remembered belladonna, gave it to her child. The child fell asleep right away, and in the morning woke up and had had a good sweat in the middle of the night.

So with fevers, with homeopathy, they are so safe. It's a homeopathic pharmacy, makes them non-toxic, and they are very gentle. So even if you get the remedy "wrong", it won't do anything because what we're doing is listening to the innate wisdom of the immune system, which is an energetic vital force. It operates everything in harmony. When we don't have a vital force, we're dead, and we're returning back, dust to dust. So it's this vital force that's going to be communicating to us with symptoms about which remedy we might need.

So for the listeners today, even if you have these 3 simple remedies, you will be able to handle quite a few fevers. And if you can get into a parents' support group, that's something that I offer with the courses as well, you become part of a very private parent Facebook forum where we help each other when our children are in acute illnesses.

So belladonna, things to look for. You can practically take this one to the bank. You turn on the light because your child's crying. They are sick in the middle of the night. You turn the light on, and you notice that the black part, the pupil of their eye, is still wide open. That pupil hasn't contracted because the light has come in.

So if you think about when you go to see an eye doctor, they put drops into your eyes, and the active ingredient is called atropine. And that's a material dose. And your pupils dilate, and they advise you to wear sunglasses outside because your pupils are still dilated.

So this is what happens in a belladonna fever. The pupils dilate. And you have to remember this is a homeopathic potency. It's not like taking atropine that you would have at the doctor's office. So it's an energetic dose.

So you see that and you look at their face. It's bright red, flushed. You happen to notice that the temple or the side of the neck where the arteries, you can see the artery at the side of the neck, carotid artery, it's throbbing and pulsating. These are all indications for belladonna.

In a child that has a high fever, you might even hear them say things like, "Oh, mommy. Why is that dog in the room?" So then you know you're on the right track and that belladonna is probably the best indicated remedy. And belladonna will work for many fevers in childhood also for adults. And so always keep belladonna on hand.

The other remedy to consider is aconite or aconitum napellus. So you will see on your little homeopathic tube that you buy there is a Latin name. So the other one is aconitum napellus. And you want to get these remedies in about a 30 CH. You will be able to do good work with that. So I live in a part of Canada in the foothills of the Rockies where we have Chinook winds. And sometimes some of the winds come up from the south. That sounds very strange in a conventional world, but sometimes that can bring on fevers.

You have your child outside. You're playing and all of a sudden, these cold winds come up. That night at midnight your child wakes up, and they don't have the dilated pupils, but they are very frightened. They might even say something really unusual like, "Am I going to die?" Because they are so hot. They are hurting. And you give a single pellet of aconite, and they will, in a good response, fall asleep, and again hopefully, in the next morning, that fever will break.

Now, typically, you might have to repeat a couple of more times. So belladonna and aconite, sudden fevers. Your child was well that day, and that night they are sick. So you can think of those two remedies.

And I'm going to give you one more remedy simply because sometimes our sicknesses, the child's sickness, especially viral illnesses are slow to develop. And this will be an instance where your child comes home from school. They feel a little bit feverish. It's not the high sudden fever like belladonna or aconite.

Just a low-grade fever. They are not really hungry. They go to bed early. They wake up in the morning, and they are fine. And they do this for three or four days in a row and so the remedy you want to give them at that point is called ferrum phos or ferrum phosphoricum. Sometimes referred to as the homeopath's aspirin, which is kind of a funny name. But what you don't have are those pictures that you saw in belladonna and aconite. You don't really see anything except maybe not feeling well in the afternoon, little bit of fever. So you give a little bit ferrum phos, and your child will start to get better.

Now, a good sign is that they fall asleep, and then of course, what happens once the fever breaks, we talked about it earlier in the call, is that you will start to see discharges. The immune system is kicking in, and it's detoxing.

So at that point you might need another remedy. And then you just learn more, take another course and find out what you need to help your child. So a cough might develop. A rash might develop. And it might indicate, depending on what your energetic vital force is communicating, it will give you very clear symptoms about what remedy you will need to have next.

Jonathan: I feel fairly confident that everyone feels like I do, Donna. I was not disappointed, and thrilled to have you a part of this event. Donna, I want to thank you so much for your time and I want to thank our listeners for joining us today. If you would like a copy of this program plus all the other presentations inside the Immune Defense Summit, simply click the banner you see on this page.

Thanks again for attending the Immune Defense Summit. Talk to you soon. Take care.

Suppressed COVID-19 Treatment

Guest: Dr. Vladimir Zelenko

Jonathan Landsman: Welcome to the Immune Defense Summit. I'm your host Jonathan Landsman, creator of NaturalHealth365.com. If you're worried about the coronavirus or any other bacterial or viral infection, this exclusive interview will prove to be very valuable. Enjoy!

Dr. Zelenko, thank you so much for being with us.

Vladimir Zelenko, MD: My pleasure, and thank you for having me.

Jonathan Landsman: I would like you to talk about what your experience is like and you know, how this all started for you.

Vladimir Zelenko, MD: Well, I knew that the plague was coming. I was following it from the Far East and when it went into Europe. And it was obvious that it was going to come here and hit New York City before it hit the upstate community where I work, which is in Monroe, New York. It is community of 35,000 people, and I'm the Primary Care Doctor for around 75% of the adults in that community for the last 16 years. So I saw what was happening.

And I spoke to my colleague at Lenox Hill Hospital, he's the head of the ICU. He's a world class, Pulmonologist and Critical Care Specialist. I asked him how he was treating patients vented or intubated with the coronavirus, and he told me the protocol that he was using, which was interesting to me. It was a hydroxychloroquine and Azithromycin. I started doing my research, I scoured what's out there. And I saw an interesting thing from South Korea, that they were using

hydroxychloroquine and Zinc as their protocol. And then there was a study that came out of France that they were using hydroxychloroquine and Azithromycin which had 100% cure rates in vitro, on the test tube. So I started doing my research, trying to understand the mechanisms of what was going on. And everyone knows that Zinc has a reputation of being a drug that's used for colds or minor viral infections.

So after doing some study, I realized that the way Zinc works, it inhibits viral replication within the cell by inhibiting something called replicase or RNA polymerase. And but Zinc has a biochemical property that makes it difficult to get into the cell, which is that it's a positive ion and cell membranes are lipophilic, it doesn't let the Zinc through easily. So it turns out that hydroxychloroquine is an ionophore, which is a fancy word for.... Basically it opens the canal, a channel that allows for Zinc to go from the extracellular matrix into the cell. So all hydroxychloroquine does in this setting is it opens the door and allows for the Zinc to come into the exact area where the virus is and is replicating. So that made sense to me.

And I'm also aware of people that get viral infections, especially bad lung infections, that they become more susceptible to opportunistic secondary bacterial infections. So it made sense to me to those that also to used Azithromycin as a cover just in case that a bacterial infection may come into the picture. So what I did was I combined the 3 drugs and I modified the dosing to what I thought would be more appropriate for the outpatient setting.

And I kind of made a 3 drug regimen. And I started seeing a lot of patients with the coronavirus infection. After testing the first few hundred you know, there was a 60% positive rate. And I actually stopped testing for a while because it took 3 days to get the results. And it was obvious to me both on history of exposure and clinical symptoms that the patient had an infection, so I didn't want to wait 3 days to initiate treatment. And my idea was to initiate treatment with this regimen in the outpatient setting in the correct population of patients.

So in other words, the young and the healthy patients that had no shortness of breath, statistically, they don't need to be treated, because their immune systems are vibrant enough that they could overcome this infection without any intervention. I believe the statistics are up to 99% get better. However, there is a subset of patients that are high risk. Either more than 60 years old or patients that have chronic medical conditions or they're immunosuppressed or they're on medication that suppressed their immune system. Those are very high risk patients, and data shows that there's potentially a 10% mortality rate with these patients.

Jonathan Landsman: I think what's important to point out Dr. Zelenko,

is that when we hear about the death rate of Coronavirus, they don't tend to make it that clear the way you just did as well? Yes, there is a risk for younger people, they get seriously infected and they have trouble breathing and it spreads throughout the body.

Of course, somebody could die at any age. But what's happening with the coronavirus from Washington state where we first heard, these were people in a nursing home. When we're looking at People in China, any of the people, by and large that are passing away, they have all of these other issues. It's important; diabetes, metabolic syndrome, they're on medications, they're extremely overweight. There's a lot of these things and then they get infected. Is that fair to say?

Vladimir Zelenko, MD: You're correct. That's the vulnerable population and we need to protect them. And so the overall statistics are not as important. We have to stratify the statistics by age group and by medical condition and risk. So again, the high risk category which I've mentioned before, they have up to a 10% death rate, mortality rate. So these patients are very high risk. And we're running out of resources to manage them. We're running out of respirators and ICU beds. So I thought it would be best to prevent them from getting into hospital. So it wasn't being done, but I decided to anyway, try aggressive treatment in this high risk population with this 3 drug regimen. And I'm not claiming to find any cures. I'm just here to view this as a frontline battlefield assessment and real time observation that I've seen, which I think is significant and needs to be taken seriously. And what have I seen?

Jonathan Landsman: And just to be clear, we're looking at two of these medications that have been around a long time. I mean, you could certainly speak to that. But Zinc is a mineral. I mean, yes; if you take an enormous amount, there is a Zinc toxicity issue that could be there, there's a risk. But really, all 3 of them, it's really not that all of them are drugs. The Zinc is just a mineral, right?

Vladimir Zelenko, MD: Correct ... zinc is a mineral.

Jonathan Landsman: So talk about your experience and in terms of looking at these studies. What did you exactly decide to do? What did you give these people? And again, mind you, right? To make it very clear for everybody out there. These were people that had symptoms, they were worried, they came to you, and they did not get admitted to the hospital as of yet. Correct?

Vladimir Zelenko, MD: So I have to give you some updated numbers, because things change with time. So my team treated 699 patients with suspected or test positive coronavirus. Of those 699 patients, approximately 200 were treated with this medication cocktail. And as of today, I've been doing this for last 13 days. So as of today we

have 6 patients hospitalized with pneumonia, 4 of them are on IV antibiotics; 4 of those 6, and are improving. And 2 of them are intubated unfortunately, with ARDS or acute respiratory distress syndrome, and are quite critical. Thank God no deaths so far.

So if you look statistically in this high risk group, even if you take the lowball estimate, so out of these 200 patients, if we were to say a 5% death rate, you would expect 10 dead people and many more intubated. And yet, what I'm seeing and what I'm telling you is I have zero dead people and 2 intubated and 4 admitted for IV antibiotics for pneumonia. That's a significant statistical several orders of magnitude improvement of outcome. So I am in contact with the White House directly, and my data has been presented to the highest levels of government, and my data is as well as sitting right now on the desk of BB Netanyahu. And hopefully.... I don't see any downside here. I'll tell you why. Everything in life is a risk versus benefit analysis. Now, I wouldn't give this drug to the young healthy population, these drugs.... Because they do have side effects and they do have potentially negative aspects to them. However, if you compare that to the risk of dying, 5-10%, let's say in the high risk population, it significantly outweighs the risk of taking the medication. It's a risk versus benefit, it's a no brainer actually. So these drugs are well known; hydroxychloroquine or Plaquenil, this is the brand name, is a very old drug used now currently for rheumatoid arthritis or other rheumatological conditions like lupus. It's also used for malaria prophylaxis like when people travel to Africa for example. I've used it many times, it's a drug that I'm comfortable with. And then Azithromycin or Zithromax is one of the most common antibiotics used in the country, well known safety profile. And Zinc is a mineral which is safe, and actually I think is the key ingredient here in killing the virus.

Jonathan Landsman: So again, the last part is what I think was so important, which is why I appreciate you joining us Dr. Zelenko, is because in the mainstream media, they're reporting about this so called therapy, something coming out of New York with this doctor. They don't even mention your name, and that's why it got me quite disturbed that I thought a lot of people were not really learning the complete cocktail. The hydroxychloroquine, right, is sort of the way you describe it, which I think is an extremely important point, is the channel that gets created to allow the Zinc to get from outside the cell into the cell. And the point of using both is to get that Zinc inside the cell, where research clearly shows that it stops a virus from replicating, doing its nasty deed if you will, inside the cell. That's the whole point; you got to get the Zinc in. And so the two are very important to put together, but yet most of the public is still not hearing that Zinc is part of this formula. And so again, your comments please.

Vladimir Zelenko, MD: I think your description is correct; biochemically accurate. That it's the Zinc that puts a monkey wrench so to speak, into

the replication of the virus, reducing the viral load, giving the person's immune system more time to overcome the virus before the virus causes catastrophic lung damage.

Jonathan Landsman: And of course, here we're talking about a very fluid dynamic situation Dr. Zelenko. You're talking about having your PA's, your nurses, I know I've listened to your conversations in the past describing what you do. They're analyzing this, you're doing sort of like a telemedicine, you analyze the situation, you're doing this with people who have some symptoms, but it's not really the end stage you know, God forbid anybody is 10 minutes away from dying. Obviously, the therapy or the treatments that these people need are at varying degrees depending on where they're at.

Why don't you talk about first what you're doing in terms of the actual amounts, but those people again to be very clear, that are not hospitalized, they don't have an air a tube shoved down their throat to help them to breathe. They're just sort of more at the beginning phases. What's the amounts looking like and how often do they have to take it, how long a period of time?

Vladimir Zelenko, MD: So again, we're developing these protocols. This is a new situation, a new virus, and I'm tweaking things as they go along. But currently what I'm doing, I'm using hydroxychloroquine 200 mg twice a day for 5 days. That's slightly lower dosing than what is being used in the ICU. In the ICU, they doubled the dose the first day to load the patient with it. Those are critically ill patients and I scaled down a little bit the dosing there. And for the Zinc component, I used Zinc Sulfate 220 mg, which I think gives you 50 mg of elemental zinc. And I don't think it has to be Zinc Sulfate, it can be any of the other formulations. The point is getting around 50 mg of elemental Zinc into the cell.

Jonathan Landsman: In the ICU.... Sorry to interrupt you for a moment, but I think it's an important distinction. I know you have contacts within these departments. Are they using Zinc within the hospital?

Vladimir Zelenko, MD: So hydroxychloroquine has a secondary effect which is very important. It has an anti-inflammatory effect and inhibits the cytokine cascade which leads to ARDS. So in that setting, when the patient is critically ill, we're dealing with a second disease, it's no longer just the viral infection. It's ARDS; Acute Respiratory Distress Syndrome. That's catastrophic lung injury with a death rate of over 50%. So at that point, it's a little too late I mean, I don't think Zinc would hurt. But we're dealing with a completely different animal. The key here is not to get into the ICU, the key is to treat and treat aggressively and quickly in the right population group, the high risk group. It's a race, it's a race between a person's immune system and the virus' desire to destroy the lungs. And we want to suppress, weaken the enemy as much as possible, so

that the person's immune system has time to overcome this infection. That's the key.

Jonathan Landsman: How many days does somebody have to take this?

Vladimir Zelenko, MD: Again, I'm working on developing these protocols, but it seems that most patients require only 5 days. Some patients still have some degree of symptoms, so I may extend it another few days. But on average, 5 days seems to work.

Jonathan Landsman: And also, just so you know, I know a lot of people I've mentioned to you Dr. Zelenko, are healthcare providers in my audience. I know you're extremely busy, that's why I appreciate you a few minutes here with us today. Are you actually doing any kind of consulting or conversations with other healthcare providers, physicians and other areas of the country? What's happening with that?

Vladimir Zelenko, MD: The whole world has been calling. I've been in contact with the Ministry of Health from Israel. I know the government of Brazil is looking into this. And they've been.... I think almost from every continent, I've been contacted by leading doctors looking for some insight, what I was doing, because ultimately everyone feels frustrated because we don't have any tools in an outpatient setting. And we're just waiting for the person to develop all these secondary complications and admit them in the hospital. That's a terrible place to be.

So to have a potential weapon against this infection, it appeals to a lot of people. So I have been consulted by approximately 100 or so high level physicians, I even have some colleagues doing this already. I have a very highly respected nephrologist, internal medicine doctor from Hackensack University Medical Center, her name is Rosy Joseph. She's an extremely highly respected physician. She's been implementing these treatments and she's had phenomenal experience with them, she let me know. And there's also a very high level physician, her name is Dr. Grace from Lenox Hill. She's the head of hematology and oncology, world renowned physician. She called me with giving me his blessing. And there are other very high ranking physicians, I spoke to a doctor who's the head of infectious disease in Hadassah Hospital in Israel, he is very excited, he's planning to do an urgent study on outcomes and prophylaxis. So you know, I stumbled across this kind of.... I'm not a researcher, I'm just a clinician on the front lines, and I saw improved outcomes, significantly improved outcomes. And if this pans out, this may be a very important part of the war against this infection.

Jonathan Landsman: As we close out Dr. Zelenko, I watched another video that you had done all by yourself from your car. And I think it's very important. I am not one here to just suggest that everybody should

just calm down, relax and do nothing about it. But you really outlined very clearly between listening to that video and your conversation with Mayor Giuliani. You really outlined what people should have as far as a clear perspective about what the risk is you know. Say someone in their 50s like myself or someone in their 20s or 30s or 40s feeling pretty good and lots of good energy and not taking medications and you know, all of a sudden they start, they get this coughing and they still feel energetically alright, and something is happening to them and they think in their mind they've got COVID-19 you know, walk us through this. Who is like okay, and you know, what should they do? Versus someone say 60 years or older that's diabetic or has some sort of metabolic syndrome somewhere on the spectrum, they're taking medications, they're getting a shortness of breath.

You know, walk us through that so people have real clarity as they walk away from this conversation.

Vladimir Zelenko, MD: Do you realize that everyone has to get this infection, because we need to become immune to it? Best case estimate is that the vaccine will be ready in 10 to 12 months. So until then, we have no vaccine.

So the only thing we can do is actually get the infection and overcome it. The majority of people in the low risk category will get infection. Some may have symptoms, some may not. Some maybe miserable for two weeks, but they will get better. Statistically, 99 or whatever percent of them get better. So there's the stereo anxiety in that population demographic is inappropriate. And not only is it appropriate, sometimes the anxiety confuses the picture because I have several patients calling me panicking over shortness of breath.

And I have to tease out as a shortness of breath from panic attack or from the virus. It actually has some clinical implications. So I think a person needs to be realistic, needs to be calm. And the high risk group, like I find myself in also, because I'm immunosuppressed and I only have one lung you know, that's the group where we have to be careful, we have to be vigilant. We have to check up on our parents and grandparents and we have to make sure that there is a continuity so to speak, of how people are feeling, so you have a sense, because a patient frequently can become very sick without recognizing that they're having an emergency. So if....

Jonathan Landsman: Also, I wanted to jump in for a moment though, something you just brought up that made me think. This social distancing idea, I'd love for you to get a comment about this because the idea being.... Let's say I'm 40 or 50 years old and I feel totally fine. And you know, I go to a store and somebody else had COVID-19 and it gets into me and it doesn't replicate in me because my immune system is so

strong. There is certainly a legitimate risk that I could walk into say, a parent or grandparents' home recklessly I would say, and possibly pass that on to them, and they're immune compromised and they could have a problem. What's your take on that? Is that true or false? Where do you stand?

Vladimir Zelenko, MD: It's true. And the thing is like this. The reason for social distancing is to slow and spread out the infection rate over time. Simply because if everyone gets sick at the same time, there's going to be a flood of critically ill patients that will overwhelm our capacity, and people will die like they're dying in Italy, where there's no respirators, so they die. So the idea of social distancing was to slow the spread so that we can have time first of all to develop more capacity, develop the vaccine, and develop possible treatments that will mitigate the severity, and hopefully not overwhelm the system, so that the critically ill will have the resources that they need.

Jonathan Landsman: That makes a lot of sense then to obviously do that. And so again, for those who are over 60 years of age and have all these other issues, we do have to be careful. Again, your treatment Dr. Zelenko is really focused on, you have very simple goals, I don't even want to speak for you because I love the way you put it. Your goals, you had about 2 or 3 goals, you talked to Mayor Giuliani about it. Please express it so people know clearly where you're coming from.

Vladimir Zelenko, MD: The goal number one is don't die. That's very good. Goal number two, don't get intubated. Goal number three, stay out of the hospital. And you know, let's help your immune system overcome this infection without any major complications.

Jonathan Landsman: This was great! Thank you Dr. Zelenko. I know this is going to help a lot of people out there. I hope the healthcare providers take this very seriously and do their own research just like you did. They've got a look into it. The literature is there, it does support the use of these medications, and also the idea of using Zinc and why it's so important to get Zinc into the cell.

For those of you out there who want to learn more about all of the stuff that makes the immune system strong, I don't think I have to share with you any more about where I'm coming from and what this entire event is going to be about is supporting the immune system. Please look into all the other presentations as well. Dr. Zelenko, thank you very much for being with us.

Vladimir Zelenko, MD: Thank you and God bless.

Winning Immune Health Strategies

Guest: Robyn Openshaw

Jonathan: Welcome to the Immune Defense Summit. I'm your host, Jonathan Landsman, creator of NaturalHealth365.com. I hope you're enjoying this event. If this is your first time listening to one of these presentations, great! If you've listened to many of the others already, you understand the quality and the effort that you know, especially if you've heard other events of mine, how much it takes to put into these things, over a year of work to get this done.

And today we're going to talk about winning strategies for immune system health with Robyn Openshaw, who I'm really excited to have as part of this event. Robyn, welcome!

Robyn: Thanks for having me Jonathan. I'm really excited to see you again and to share a little bit on this subject, because it is honestly one of my subjects I'm most passionate about.

Jonathan: Yea, it really is an incredibly important topic. I do want to just jump in and say if you've not heard me say this before, I really do, even though I've talked about oral health, how important that is connected to your whole body. I've done the Alzheimer's and Dementia Summit with brain health. It's extremely important. My dad has been going through it. Everybody knows my personal story who has been following me.

But Immune Defense Summit, this is so important because it ties into everything, right? Like if we have sores and infections and we're stressed out and blah, blah, blah, the immune system gets tapped as we get older and we neglect these things. This is a big deal. And that's when we see

all these problems. So immune health is really that important. I'm super passionate about it. Let's just jump right into it.

Robyn, a biggie, millions of people. I get it. A lot of people might be watching us. Hey, it's not me. But you know what? We know somebody that if something is wrong with them and they go see a conventionally trained doctor, antibiotics are given out almost like multivitamins. And I'm not putting it down. They really think it's that important.

Let's talk about this. What's going on with these antibiotics? What's your take on all of it, and especially how this impacts our immune system?

Robyn: Well, you know, the reason our standard care of doctors are handing out antibiotics like candy is that first of all people want them, because it's all they know. It's all they know. Most Americans don't know that the vast majority of the time when they get sick, they have a viral infection, which antibiotics don't touch.

The vast majority of Americans don't know that they might be dealing with the downstream effects of taking one course of antibiotics for years or decades. Most Americans don't realize that most of their immune system is in their gut, where if they take antibiotics, they are just wiping out that microbiome, which can take a long time to rebuild.

And so my main strategy, what I would like to talk about most is how to stay off the antibiotics, how to avoid it. The reason your average medical doctor is only prescribing antibiotics, even if he does not know if you have a bacterial infection, which actually has a chance of being killed by an antibiotic, or a viral infection which might be eighty-five percent of the time we get sick or more.

The only reason that he only prescribed antibiotics is not because they're so efficacious. It's because it's the only thing in his tool box. He is not going to send you to the health food store to purchase what I'm going to tell you are my seven, always have it on hand, old guard standby's. They work. They always work. They work best if you get started on it early.

He does not ever prescribe you those because he would get censured by his peers. He might get censured by his licensing board. It's just outside their knowledge base. And it's outside their insurance codes, because it's not a drug. And that is what they sell. The medical profession sells drugs.

This isn't a conspiracy theory. It's just look in the insurance codes. There are thousands and thousands of people in big buildings that are coding for those doctors. And if they can't code it, they can't bill for it. They literally do not get paid for what I could teach you right here on this class. It's less expensive, it works, and it does not wipe out your immune system.

So there are lots of consequences taking antibiotics. A little bit of time here. This alone would be worth your time on the summit, this interview. If you pay attention to what I am going to tell you here, it's one of the most popular things I've ever taught.

The video I did on this where I talk about how I learned to keep my kids, who are all adults and live away from home now, with their path of anti-viral and anti-bacterial supplements on hand, has been one of our most watched videos of all time. Millions of people have watched it. Tens of thousands have shared it. And it's because this is powerful information. And having this kind of information, we're talking about infectious illness here and using antibiotics for that.

But you know what, if you use strategies besides the seven supplements that I use, if you use the strategies that we'll talk about in our interview today, to stay impervious to viral and bacterial infections, guess what? You're also massively lowering your cancer risk. You're also massively lowering your autoimmune disease risk.

There are some basic principles that if you follow them, you make yourself very strong against the virus that runs through the neighborhood and the school.

Jonathan: You know what? This is not judging anyone at all. This is just being sincere, blunt, honest about it, however you want to put it. A weak immune system that is compromised, constantly in distress, not being fortified, not being nurtured, you're not going to be a happy person, right?

You talked about not feeling well, having a higher risk of cancer, heart disease--the list goes on--autoimmune disorders, over a hundred of them out there. You name it, they're out there. This is all happening because the immune system gets weak. And then we just have a miserable life.

Let's jump into it. You just mentioned something that maybe people are new to this, they're not even going to believe what you just said. It's like twenty-six plus years, all your kids, not antibiotics every time they get sniffles, earaches, all these things. How on earth as a mother did you get through something like that without having high anxiety? What on earth did you do?

Robyn: Yea. I'm very fortunate to come from a mother and grandmother who are very holistic oriented, who very much questioned the drug approach to everything. They had seen the damage that it can do. They knew the risks of it. They were really quite educated and self-educated on the matter and had really good critical thinking skills.

So I went into mothering pretty ignorant, because I hadn't had to study those things yet. But my first child was getting sick constantly, constantly, constantly. And in the first year of his life I was putting him on antibiotics and steroids. His immune system was down for the count. I couldn't put him in the nursery. I couldn't put him in day care. We were living in a bubble because he was so very ill.

One course of antibiotics and you just wiped out the immune system. And guess what? You take an antibiotic course and you're going to get sick over and over and over again. I don't mean to put a hex on you. I'm just saying I've seen this so many times. It's really undeniable.

And so then I learned. Then I started studying. And I'm kind of a person who just reads everything and asks every expert I can get access to. And when I learned that I had options and that I could number one, strengthen my son's immune system, rebuild it; and number two, use natural anti-virals and anti-bacterials when we do get a virus or bacterial infection. And everyone does. There's no one listening to this who has not had a cold, flu, or virus of some kind. Those two things, we were so empowered.

And when I did, I then had three more children. They are now between eighteen and twenty-five years old. And we have never once been on an antibiotic. And it's not because my children never get sick. They do get sick less often, far less often. And when they get sick, they sail through it in a day or two because of these lifestyle interventions, these things that we've learned to do, and because they've got their pack of supplements right there on hand.

When I tell you the story about my daughter that caused me to realize, oh my gosh, I have to be prepared in advance, which I really want to impress on everyone. Now, the minute they get something, they get right on these supplements and they knock it down. I was in Europe with my older daughter two months ago when my youngest son got strep.

Now none of my children have had strep. That's a pretty significant infection, but he's in a fraternity and doing the late night thing and eating college food. And so he's not as strong as he was when he lived with me. And he immediately started taking his supplements. And he knocked down strep with no antibiotics. That was just two months ago.

I could tell you story after story like that. But with four kids, for well over twenty-five years, to not ever be on an antibiotic, my point is, folks, you can do it. You could do it if it's important enough to you, if you know the devastation of antibiotics.

Don't get me wrong. I think that they are a modern miracle. The problem is, instead of it being a once or twice in a lifetime thing and you get on

that antibiotic to save your life and you've done some tests and you know it's a bacterial infection. Instead of that, now it's like just in case this is a bacterial infection, here, take this, and then good luck with the downstream effects of that. So yea, no antibiotics in the last almost twenty-five years.

Jonathan: It's great! Thank God! Robyn, you touched on it at the end. So many people are taking antibiotics, and they understand, they get it. Their gut hurts. They can't eat food. They feel horrible. They know all the bad reactions. They still do it anyway. It's not judging them. I think that most people just don't know.

Robyn: They don't know.

Jonathan: And then, they run into an event like this or they listen to someone that sounds like us. And it's so quick to just put in this bucket of we're anti-medicine, maybe we're a nut. Or here, here's another one, a third one. Well, it works for you, but not probably for me. But they're working with so little information. And so that's what makes us sound so strange.

But we know this works. And we've been doing it professionally now, talking to so many people over the years. You and I are kind of the same kind of age and time involved in this health and fitness industry helping people. So we both get it, time and again. Proof is in the pudding.

Talk about some of these alternatives. We're not trying to practice medicine. We're not trying to replace Western medicine. And you know, as my good friend, the late Dr. Nicholas Gonzalez, what an incredible medical doctor he was, if you listen to all of this and you still feel unsafe and don't trust any of this and you want to do antibiotics, go right ahead. If somebody wanted cancer treatment that was conventional, he said get the cab and just go right over to the hospital. We're not trying to convince anyone. But having said all that, talk about the alternatives that you know for a fact are much better than antibiotics in all your years.

Robyn: Yea, so I had an experience a few years where my older daughter, who just recently graduated college, was in like her sophomore or junior year. And she didn't tell me that she got sick until four days later. And then it was a text. And she said, "Mom, I'm dying." And so I called her. What does that mean? I called her and she didn't answer. She texted me and said I can't talk.

Well, I came to find out that she had gotten sicker and sicker. She didn't tell me. She was hours away at college. And I found out that she was throwing up in the shower. She was passing out. She was very, very ill by this point.

Now that is not the best time to start your natural supplement. Now you have an infection that is deeply entrenched. You probably have green or yellow mucus everywhere. You're coughing up a lung. There are all kinds of mucus in the back of your throat. That mucus is a breeding ground for viral and bacterial infections. And your body is going to have to work for awhile.

And it's when you get in that pretty advanced state of the infection really kind of having a lot of control that you end up on an antibiotic. But because for twenty-five years now I've been using these natural supplements, I am such a believer. Each one of them that I'll tell you acts on a different principle. So you're kind of like coming at it from a bunch of different directions. But none of them are going to compromise your overall health. None of them are going to knock your immune system down, like all antibiotic protocols do.

So when I found that out, I sent her boyfriend to the health food store to buy all the ones of these seven that I could get. And I sent her to the doctor at the InstaCare. And we weren't going to mess around at this point, passing out, throwing up.

I am not one of these people who says we're never going to do medications. Medications are not a first line of defense, not for my family. Like you said, not judging, just saying, if you want another option, there are other options. But I don't want it to be my first line of defense, because then I have to deal with rebuilding my kid's gut and immune system for a long time.

So I sent her to the doctor. And I said, Emma, if you get there and he hands you a prescription for an antibiotic; he's going to spend ten minutes with you and send you out the door. I want to get on the phone with him, and I want to talk to him before you leave and fill that prescription. Because honey, here's what the antibiotics are going to do. And I have already kind of covered that, so we won't go down that road.

I made a video about this later. And the reason I know that this is such an important subject that will interest so many of the folks who've joined your summit is because in twelve years as Green Smoothie Girl online, it's one of our top three viral videos, millions and millions of views. I really feel like people want to know about this.

So my daughter at the doctor, he does exactly what I predicted. He hands her an antibiotic. Go on, get out. He probably did that forty times that day. And she said, oh, my mom won't let me fill it unless you call her. And when I talked to him on the phone, I wanted to make sure he knew I wasn't a crazy nut job who won't give my child a medication that she needs.

And so I engaged him and elicited his help and said, "Hey, you and I both know..." This is brilliant for doctors, your children, whatever, your older children. Just start with something like, "You probably know this." That's what I do with my kids all the time. They don't know it's a little trick to bring their defenses down.

So I said to the doctor, "Well, you and I both know that that antibiotic is going to have a lot of consequences for her. And it's going to really knock her immune system down. And she needs her immune system, right? She's a college student. And so could you work with me while I get her on some natural supplements that I know work. I've used them for twenty-five years as a mother of four."

And I said, "And also, can you tell me, did you test for any bacterial infections?" And he admitted that he had not. He had not. So I got him to test for some bacterial infections. And we needed a day for it to come back. It came back negative for everything. I said, "Give me a little time. I'm going to get her on the natural stuff. It's going to take longer because this thing is really entrenched."

But I had a conversation with him where I did not insult his prowess or his ego. And I enlisted his help. And I told him what I was going to do while I gave it a few days. And I assured him that I would do the antibiotic if it came to that. And it was a great conversation. He was totally supportive.

He took the antibiotic prescription out of my daughter's hand, because I said to him, "She's desperate. She wants to feel better. She does not understand what you and I know, which is that antibiotics are going to really wreck her gut." So he took it out of her hand.

And I got her on the stuff. It took a little while. But guess what? A week later, she was on a plane to Greece. She had no antibiotics. She was all better. And I didn't have to feel really sad and worried about the fact that she had been on antibiotics.

So, to your question. I wanted to give that back story. The seven supplements that I always want to have on hand, and here's the thing before I tell you these seven supplements. And if you want to write this down or just go get the wallet card, it's greensmoothiegirl.com/immuneboost. And you can just print it out and stick it in your wallet. And when you go to the health food store, just buy these seven supplements.

But I want to say that what I learned from that experience, that if you get one thing from this whole conversation, get this one thing. It's too late, maybe, if you get sick and you go, oh, what was that on Jonathan Landsman's summit? And there was that Green Smoothie Girl, and she was talking about it.

Your body aches are setting in, the fever is hitting, and you have no energy. You're doing the best you can just to survive. And you go a couple of days and you're going to end up on an antibiotic, because now you've got the mucus. And now you've become this perfect host for infection to have control.

So you want to have them on hand. And so from this experience, I learned and I bought four sets of this stuff and one for me. I put it in a big gallon Ziplock bag. I sent it off with my two college freshmen this year. I check with them regularly and say, you know where that is, right? You know what drawer that's in?

You know that the minute you feel body aches, the minute you feel a headache, the minute you feel a sore throat, the minute you even think you might have something. And that's different than antibiotics. You don't want to take an antibiotic if you even think you might be getting something. But the nice thing about these seven supplements is that they are going to do no harm. It's like Hippocrates medicine--first do no harm.

Taking these supplements is not going to hurt them. And it will strengthen their immune system. So many times we start to feel like we're coming down with something. Take these supplements and the next day we're fine. We never even really came down with it. So have these on hand. Buy them. And it's your insurance.

So number one, beta-glucan. Fantastic supplement, so studied. There are hundreds of published studies on how effective this is in strengthening immune function.

Number two, vitamin C. Now don't buy the crappy acerola stuff. The supplement companies are now mostly owned by the drug companies. There's some crappy vitamin C out there. But find a brand that's like committed to being a whole foods basis, and it isn't that synthetic. So get a good brand of vitamin C. I've learned this one the hard way, just from researching and finding out a lot of vitamin C is pretty much garbage.

Number three is zinc. Again, highly effective, lots of science on what it does to stimulate immune function.

Number four, colloidal silver, or nano-particle silver. These supplement companies are getting better and better at increasing the surface area of silver, which kills bacteria and viruses on contact. A great thing to have on hand. A lot of the brands will have you spray it. Or it's a liquid that you put under your tongue several times a day. It works.

Number five, goldenseal. I like liquid goldenseal. It doesn't taste great. You can get this at any health food store. But it's an herb. And you know,

I've never had great results with Echinacea myself, my family and I. So I don't really use it anymore, like in terms of knocking down an existing infection.

But I had strep every three months the whole time I was growing up. And part of the reason why I'm so passionate about this subject is that I really wrecked my immune system growing up. I had penicillin so many times that one time I ended up with 107 fever in the hospital with an allergic reaction to it, because I took so many antibiotics.

Then they started putting me on erythromycin. My mother did not know better. So I had to rebuild my immune system and rebuild my gut as a young adult. When I was twenty-seven and pregnant with my second child, I got strep for the last time. Hopefully you just heard that. I got strep my whole upbringing. They tested me when I had a baby once and I was positive for it. And I was like, hey, I'm positive for it all the time. It lives in my body, but I have a strong immune system, so I never get it.

The last time I had it, I was twenty-seven and pregnant. So you can imagine, I didn't want to take an antibiotic pregnant. Now I'm wiping out my microbiome and potentially my fetus' microbiome. I took goldenseal and got rid of the strep naturally. And I never got it again. It totally works. That's my fifth one.

Sixth one, Kyolic garlic. It doesn't give you garlic breath. And again, a very highly studied natural compound that kills viruses and bacteria.

The last one, the seventh one, oh my gosh, this stuff tastes horrible. Put it in a little capsule if you buy it. But oregano oil. It just kills all the bad guys. It doesn't kill the good guys. It tastes terrible. Some people will put one drop of oregano oil--it's an essential oil--on their tongue and swallow it. If you are brave, then do it. If not, put one, maybe two drops in a little capsule.

The only thing I have to say about brands, everyone asks me what brand. I don't have brand preferences. I buy different brands myself. But get organic essential oils, if possible. Okay, end of sermon. Those are my seven magical antibacterial, antiviral supplements that work.

Jonathan: There you go. I mean it's that simple, Robyn. But again, we both know, and a lot of people listening to this, they can appreciate what I'm about to say. In the background, listening to you, tell us this is what you've got to do, there's still that doubt, right?

We've got family members, friends, doctors that we interact with rolling their eyes, making little comments, not even making it a big deal, but giving a very strong impression. Are you nuts, not doing the responsible thing to take a medication when you're that sick? You're going to do that

thing which we know is not harmful, but it's not going to do anything for you. You're going to get worse.

Then the panic, then the anxiety, because it all goes back to what's the underpinning. They're not really sure. Please listen to as many of these presentations as possible.

Vitamin C alone, Robyn, the story by Jim as part of this summit, talking about his brother-in-law, Allen Smith, down under, who had an unbelievable systemic infection. You've got to listen to the entire story again to get that confidence. Full in his lungs, full blown infected pneumonia, in a coma, life support, the whole thing. They dripped the vitamin C into him. He literally comes back to life. He's fine. They were going to pull the plug, and this guy was going to pass away, pass on.

So it's stories like that and knowing people that are succeeding, listening to as much of this information as you can, and then ultimately trying it yourself and having a positive experience. I would also add, Robyn, I'm sure you would agree, surround yourself with at least somebody, one person at least, who can support you on this journey, if you will, of encouraging you, thinking you're not such a nut.

And perhaps, of course, also ideally someone that's knowledgeable about these things that can kind of help guide you. And certainly an integrative health care provider would be very helpful to have before the eleventh hour. Obviously do it now, especially if you're feeling good. Get all these things on board now when you don't feel so bad.

Because like you said, you don't feel well and you're supposed to take something every half hour that's natural and harmless. But it's essential that you keep up the remedies throughout the day. And you're wiped out, exhausted, you feel horrible. Then you start having doubt whether this is going to work at all. You just give it all up. Then it doesn't work and you've got to go to the drugs. So a lot of this is important to keep in mind.

Robyn, let's spend some time now talking about some other things outside of that that people can do before they're even sick to help support their immune system, to help them just feel like they're on top of their game all the time.

Robyn: Yea. The thing is, and this one is a longer path to learn. And it's kind of what my whole full-time mission is these days. That's helping people live a healthier lifestyle so that they have a lot less fear of communicable diseases, like we've been talking about, but also the degenerative diseases that we fear like autoimmune disease, cancer and heart disease.

And all of them, our risks go way down, including infectious disease like strep and like staph infections and like meningitis and the scary things that we seen going around, when we eat a highly oxygenated, alkaline, high fiber, whole foods diet. What are those foods? And this is when you shift your diet in small ways. Learning ten recipes may be your goal. And the next year can be to learn ten recipes that use only.

And this is my whole diet, really. I mean I go out and I'll have a glass of wine, or even have dessert now and then. It's not that I eat a perfect diet. When I'm at home, my arsenal, the things that I buy, the things that I prepare, I don't have sugar and garbage in my house at all. And so eight-five to ninety percent of my diet is these are the whole foods.

And so you can find thousands and thousands of recipes out there that are easy to make, inexpensive, delicious, that feature greens, vegetables, fruits, legumes, whole grains. It doesn't have to be flour products. It doesn't have to be gluten grains. There are other grains. And nuts and seeds.

Okay, to those food classes, there is an infinite number of ways to combine them. And using a lot of these foods, having those classes of foods being your staples, really creates a shift in the immune system, where your body isn't fighting so much input of garbage.

Because all of the other stuff, a high meat diet, a high dairy diet, I mean there are a lot of antibiotics and hormones. Even the cleanest sources of meat and dairy are acidic. And they create a heavy load on the kidneys and the liver. So less of it. I don't eat meat myself, but I think people can be healthy eating meat if they keep it a minor part of the diet.

Dairy has got to go. The dairy has just got to go. Dairy is super mucus forming. If you want lots of that yellow and green mucus in the back of your throat, maybe you've never connected that before. But watch when you eat dairy.

And also when you eat processed flour products, guess what? It's not just the gluten. It may not even be the gluten. It's the fact that it was sprayed with Roundup twice. Wheat is the one food that is sprayed with Roundup twice. So unless it's organic and probably not from flour, definitely not refined flour, don't eat those wheat products, the flour products.

So cutting down those, and less coffee. And when you do drink coffee, make it yourself and make it organic. You can get a low acid organic coffee. There are some health benefits to coffee. I'm not saying you can't have coffee. Everyone may mutiny and might bounce out of this interview if I said that. I drink coffee, but I make my own, organic. I don't add crappy dairy creamer with sugar in it. You can buy almond milk with

a natural sweetener in it, creamer. So these are just some tips.

But remember, you want to have a high fiber diet, where that fiber is absorbing the toxins in your bloodstream, in your gut, removing them from the body, and high alkaline food, not having that acidic climate that gives rise to all the mucus. That is the perfect breeding ground for not just cancer, but also infectious disease. Again greens, vegetables, fruits, legumes, organic whole grains, nuts and seeds, these are your staples of a diet that builds and maintains a healthy immune system.

Jonathan: And Robyn, not to get too off track here, but this is really important to point out. Everything you talked about, colorful, well hydrated, loaded with nutrients, let's keep it really simple. That is what it's all about, someone that's immune compromised, run down, feeling mentally, emotionally, and physically worn out, stressed out, and drying up and shriveling up and just exhausted and low in energy.

You're talking about things that are vibrationally, physically, nutritionally, and the way they break down just so much easier on our bodies, so that our immune system can go deep. Focus on the things that one really wants to concentrate on or ought to concentrate on all the time to defend us from harm.

But if we're all worn out and we're eating foods low in water, low in nutrients, hard to digest, mucus forming like dairy, on top of being stressed out, worn out; oh my goodness, Robyn, that is the worst combination. And switch over to what you're talking about is such a relief for the body, and the mind, and the spirit.

Robyn: Yes. And we should say, too, there's more to strengthening the immune system than just food. We covered some basics of the food. And I highly recommend green juices. You can have them made at a lot of juice bars, smoothie places. Or you can make your own. Highly nourishing, highly useful to the immune system, green smoothies. I mean that's what I've been out there teaching for twelve years before anybody knew what a green smoothie was.

But you know, by background I'm a psychotherapist. So I'd love to touch on the role that other things beside food play in strengthening your immune system. And you know, stress gets tossed out there, like don't have stress. And you hear that, and you're like I can't eliminate the fact that my marriage is difficult or that I have an adult child on drugs, or that I hate my job and I live in a small town and I can't get a new job.

I just named three examples of very difficult problems that are potentially stressful. So I hear so much out there saying you ought to manage your stress. What does that mean?

Here's the thing. I want to point out that not all stress is bad. Lots of

stress is good. I don't mean lots of stress is good. I mean some types of stress are helpful. They are eustress. They are moving us forward. They give us purpose in life. I'm talking about a deadline for something that you're creating at work. That's food for me. It is both stressful, and it is a big positive for me in my life. If I sit around and do nothing for a few months, talk about a different kind of stress, right?

So I just want to point out that the kinds of stress to hone in, the kinds of stress that make you sick, are chronic, unsolved relationship stress, number one, relationships in your life that are toxic. And that word gets thrown around a lot in pop psychology.

But here's the thing. You've got to have the hard conversations. Have the conversations that we've been avoiding in our relationships. You might think there's no way to have that conversation. Go have it in front of a professional if you need to.

If it's breaking you, that can make you sick as much as a crappy diet. I would almost rather have you on a diet of nothing but dairy and processed food than have you in a relationship that every single day is dripping battery acid. So solve it. Figure it out. It's not worth it, costing you your life and your health.

And then, of course, there are the elderly. And the pharmaceutical industry really targets these two groups as being the ones who are most vulnerable. And they are the most vulnerable, young children because they have a developing immune system; and elderly people because they've just got a high toxic load, and they are more frail. They are not as hardy and hale as we are when we're younger.

So what I want to say, if you are responsible for another person or a family who's very young or elderly, and many of the women and men my age are caring for people at either end of those spectrums, is yes, they are vulnerable. And they are also the ones most vulnerable to the drug approaches.

The flu vaccine is just guessing at what bacterial infections are going to hit this coming winter when they're preparing it six, eight, ten months in advance. They put a cocktail of six or eight different bacterial infections that they're guessing out of one-hundred and fifty known infections. And they're usually way off. Sometimes they are a zero percent match for the infections that are coming up.

I don't want to say do not do the flu vaccine. I will never do the flu vaccine again. I was required to one year in graduate school. And I have never been so ill as that winter afterwards. I've never had a whole winter being sick like I did there.

So study up on that. But the flu vaccine is a different approach than what we're talking about today. The approach I'm talking about is strengthening your body so that you don't get sick in the first place, and then if you do get sick, dealing with it in a more natural way.

I just want to mention that these approaches that we've been talking about are even more important if you are responsible for a child, or if you are helping an elderly person. These approaches work for them as well. Absolutely know your options.

But when you have to go to a doctor, sometimes those antibiotics can be lifesavers, especially when it comes to bacterial meningitis, for instance. So just know that you've got to be prepared in advance. We have to have these kinds of things on hand. And we cannot neglect the lifestyle changes that need to be made so that we are less vulnerable to flu and infection.

Jonathan: Robyn, I want to thank you for your time. And I want to thank our listeners for joining us today. If you would like a copy of this program, plus all the other presentations inside the Immune Defense Summit, simply click the banner you see on this page. Thanks again for attending the Immune Defense Summit. We'll talk to you again soon. Take care.

Killing Viruses Naturally

Guest: Dr. Thomas Levy

Jonathan Landsman: Welcome to the Immune Defense Summit. I'm your host, Jonathan Landsman, creator of NaturalHealth365.com. Did you know that every year drug resistant bacteria, or super bugs, kills 700,000 people worldwide, and is projected to be more lethal than cancer by 2050? And infectious diseases still remain one of the leading causes of death. Cancer, cardiovascular problems, and diabetes are by far the leading cause of premature death in the world. But in reality, all of this is avoidable with a strong immune system. That's why I created this event; to help you understand the roots of disease and how to prevent and reverse life-threatening illnesses by reempowering your immune system.

Our show today; killing viruses naturally. Our guest, Dr. Thomas Levy, is a board-certified cardiologist, and the author of several books, including *Primal Panacea*, *Curing the Incurable*, and *Death by Calcium*. He is one of the world's leading vitamin C experts, and frequently lectures to medical professionals all over the globe about the proper role of vitamin C and antioxidants in the treatment of a host of medical conditions and diseases.

Generally speaking, the public is led to believe that the only best course of action when faced with a virus is to treat it with pharmaceutical agents. Taking it a step further, we're often told by conventional medicine that vaccines are an intelligent way to prevent disease. On the other hand, being in the health and fitness industry for well over 30 years, I can tell you that the general public is being told half-truths at best. And at worst, a bunch of drug company sponsored lies about how

to effectively deal with just about every virus known to man.

Today, you'll discover a simple yet powerful way to neutralize the threat of viruses without the need for toxic medications. The scientific evidence to support my statements are not only valid, but staggering in its substance. It's time to remove the unnecessary fear surrounding potential viral threats, and discover a safe way to protect our health. Please join me in welcoming Dr. Thomas Levy to our program. Dr. Levy, welcome.

Dr. Thomas Levy: Hello Jonathan. Thanks for having me on.

Jonathan Landsman: Dr. Levy, let's talk about this. How does vitamin C and other antioxidants as well relate to the immune system? Talk to us about it.

Dr. Thomas Levy: Well, they not only relate to the immune system, they are the actual, if you will, muscle of the immune system. There are at least 19 or 20, and probably a bunch more, different mechanisms and ways in which vitamin C, as let's say the prototypical antioxidant, strengthens, supports, and enables the immune system. There are studies out there that show very clearly the vitamin C not only stimulates T cell and B cell function; the important lymphocytes in the immune system. They stimulate the formation of antibodies. They stimulate the formation of natural killer cells; of interferon. They play a big role in modifying the internal milieu so that pathogens can be more effectively attacked by the immune system. So they are not just a relation to the immune system, they're actually, in every sense of the word, a vital part of the immune system.

Jonathan Landsman: Dr. Levy, I want to throw out a couple of things that I've learned from your work, your writings. Your books, by the way, are absolutely amazing. I highly recommend that anyone take the time to invest, and I use that word deliberately. Invest your time and very little money in getting your books. They really are an education. But one of the things, Dr. Levy, that I had found most interesting about all of your work is that you talk about how vitamin C is really concentrated in the white blood cells. And it's even centered within the adrenal glands, right? And we often hear, when someone is really stressed out, they could have adrenal fatigue. Or, your white blood cell count is really up. And people never hear that other part, that is really very valuable to know. That vitamin C is so critical for all this to be working well. Is that a fair way of characterizing it?

Dr. Thomas Levy: Yeah, I'd say so, Jonathan. And in fact, the main immune cells. By main I mean the monocytes and the phagocytes, and the different white blood cells. The monocytes in particular have; and this is an incredible statistic, but it's been well established. Have

80-fold; 8,000% more vitamin C concentrated inside them than in the surrounding plasma. So monocytes, which are usually your frontline immune cells when you have an area of inflammation, the first cells to show up are the monocytes.

Well, guess what? When you have severe inflammation, you have increased oxidative stress. So by definition, you've largely consumed most of the vitamin C in the area where the inflammation is taking place. So how elegant and coincidental, I think not, is it that the immune system, in responding to inflammation. Which occurs whenever there's an injury. Whenever there's an injury, whenever there's an infection. When the inflammation starts, the first cell that shows up from the immune system is, guess what? The cell that's most richly enhanced and concentrated with vitamin C; the monocyte.

Now, that, more than anything else, is pretty logical evidence that vitamin C is the main fuel by which the immune cells do their deeds. And the phagocytes, and the other things, they just go and engulf pathogens and other debris. Those are also strongly rich in vitamin C. Somewhere between 25 and 40-fold more than the surrounding plasma. So it appears in every sense of the word that one of the main purposes of the immune system; and I'm certainly not going to say it's the only one. But one of the main purposes of the immune system would appear to be, it acts as an effective delivery system for vitamin C to the areas in the body where it's most depleted.

Jonathan Landsman: And it's very important to appreciate, and I'm sure most people listening are going to get the message loud and clear, especially as they listen to the rest of this conversation. So many people are low in vitamin C. Because of the amount of toxic load in their body, the lack of vitamin C rich foods that people are eating. Very few are taking a substantial amount, I would say, of even supplementation, Dr. Levy. You know where I'm going with this. That a lot of people may say, "Oh, 500 or 1,000 mg of vitamin C, that's about it for me." Conventional docs will say; "Whoa, you better watch out. You don't need anything ever more than 2,000 mg of vitamin C."

And so I think a lot of people who even kind of think that vitamin C is valuable probably don't take nearly as much as they need for their particular situation. Because they got a little bit in the back of their mind that thing that they should maybe be afraid not to take too much, because god knows what's going to happen to them. You know what I'm saying, right?

Dr. Thomas Levy: Yes. And that's one probably of the main things that, if you will, ironically enough, keeps vitamin C from getting the deserved reputation. Is that anybody will say, "Vitamin C; oh yeah, that's good for you. I agree with you. You don't have to tell me anything more. I know.

Vitamin C is good for you.”

But they don't know. They don't know that, yes. Small amounts of vitamin C are good for you. Larger amounts are better for you. And even larger amounts are best for you. Mainly because one of the probable bad wraps that vitamin C got at the outset was being labeled a vitamin. The definition of a vitamin generally means small, miniscule amounts of a given substance necessary to prevent a deficiency of disease. Well, it's true that small amounts of vitamin C will prevent the deficiency disease scurvy, but it doesn't address the fact that vitamin C is even more important and critical in the sense of being a macronutrient. Not a micronutrient, but a macronutrient.

Vitamin C is arguably the most important substance you need to maintain at high levels in your body, because of its ability to donate electrons. It is literally the fuel on which every cell in your body runs. So we can exist and stay alive at all different levels. And we can exist and stay alive at low levels of vitamin C. But it's just amazing, once you become familiar with the literature and you start dealing with taking good supplementation yourself. It's quite amazing, at least initially, the people that have never experienced it as to what an incredibly higher level of health, and existence, and mental alertness, and energy, and just about every other good thing the body has to offer that you can achieve when you keep your vitamin C levels. Along with other important antioxidants, but primarily the vitamin C at these levels where the body actually works at its maximum and in its optimal way.

Jonathan Landsman: Dr. Levy, let's talk about this. Because this is equally important. How toxins are related to the immune system. Because we've got to appreciate what's happening inside our body.

Dr. Thomas Levy: Sure. Well, toxins are prooxidants. In other words, they're the exact opposite of antioxidants. And when I first came across this information, I thought perhaps it was an oversimplification. But as the years have gone by, I can tell you it's not. And the point being is that toxins, also known as prooxidants. Also known as free radicals. Also known as oxidizing agents. Toxins all across the board either directly oxidize or cause to be oxidized critical biomolecules in the body.

And the vitamin C works primarily to either encounter the toxins before it does its damage, and donate electrons to it so that the toxin becomes neutralized, or it comes along after the fact when a biomolecule has already been oxidized and is depleted of electrons. Then the vitamin C can come in and donate its electrons to that oxidized biomolecule, and restore it to its normal function.

And as simple and straightforward as that sounds, I can tell you that is the final common denominator of all disease. When you have more

toxins or prooxidants at the micro environment level of the inside of cells, and directly around cells relative to antioxidants, you have a state called increased oxidative stress. And 100% of all diseases, no matter how diverse or different they are, relate to what type of toxins. What's its chemical configuration? Where does it go? What biomolecules does it like to damage more than other biomolecules?

And it's the concentration and the duration and the location of all this oxidative stress, and the chemical configuration of the toxins that caused it, that ultimately give you your expression of high blood pressure. Lupus. Alzheimer's. Lou Gehrig's. Chronic arthritis. Heart disease. Cancer. The list goes on and on. But at the cellular level, it's all the same, and it's just a matter of, which biomolecules are more oxidized than others. And there you have your picture of chronic disease.

So toxins are really the only cause of disease. And you have to start asking yourself, if they're the only cause of disease, along with not having sufficient antioxidants, where do the toxins come from? Well, everybody knows what different poisons are. Mercury and everything like this. Polluted air. But occult infections that you don't know are going on, such as in the mouth, or in the GI tract and elsewhere. Infections are the most potent and primary producers of ongoing toxins and toxic exposure. So this is probably the main way in which infections cause mortality, morbidity and ultimately mortality. Is how much oxidative stress they're causing, and where they're causing it.

I mean, there are some areas in the body where you can have a large amount of oxidative stress, and you survive. You just get chronically ill. There are others where a small amount of oxidative stress could be rapidly fatal. This is why something like cyanide, for example. Cyanide, you inhale it. Its chemical nature allows it to get rapidly inside the cell, and oxidize or poison enzymes that promote the whole process of oxygen assimilation through the blood. So within a minute or two, you're no longer able to utilize oxygen, and you basically die of oxygen starvation. But it didn't take a lot to do it. Even though it didn't take a lot to do it, it was still oxidation that caused the problem.

On the other hand, you can be exposed to small amounts of mercury on a daily basis. That causes oxidative stress, too. But not at a critical point of energy exchange, like cyanide. So instead you just accumulate more, and more, and more in your body, until 15, 20, 25 years later, you start to have multiple sclerosis, or any of the many other diseases. But the bottom line needs to be reemphasized. The disease process inside the organs, tissues, extracellular spaces, and intracellular spaces is nothing more than having too many biomolecules oxidized or depleted of their electrons and unable to have a normal biological function.

Jonathan Landsman: Yeah, no doubt, Dr. Levy. Everything you're explaining so clearly is so easy to dismiss. And I hear what you're saying. In over 30 years in the health and fitness industry, the more I learn the simpler it seems. This whole idea that you painted of someone having chronic fatigue, or brain fog, and eventually just sort of passing out and dying.

It's like all degrees of how a cell may be inundated with toxins and express itself in pain, or dysfunction on a small scale, or a larger scale. And if you're a younger person, you could perhaps tolerate more, or less depending on what it is your exposed to. And certainly as you get older, and your body has already been subjected to so much pain and suffering, if you will, that becomes the point where someone skips over the line of, always kind of seeming ok, but now they're not ok. And that seems to be a point of confusion for a lot of people. But not when you understand what you have already explained so well. So let's jump into this. What functions of the immune system have vitamin C been found to impact? Explain this to us.

Dr. Thomas Levy: Similar to what I mentioned earlier, vitamin C strongly affects, for example, your ability to make antibodies. And this is a good point maybe to emphasis this. Because vaccinations have a lot of people concerned, and in my opinion rightly so. But I'm not going to get into whether or not vaccinations are bad, good. Whether you should get one occasionally or never get one, or that whole thing. We can leave that to another day.

But the thing that is unequivocally true that both the pro-vaxxers and the anti-vaxxers can agree on is that damage is sometimes done. And this damage is in the form of, guess what? Toxins. The toxins that are in the vaccine impact one person more than another. And what did we just say about vitamin C? We've said vitamin C is the ultimate antitoxin. Ok. So whether the toxins are contained inside a vaccination. Inside the air you breathe. The food you eat. The water you drink. The focal infections or infected teeth inside your mouth. No matter where the toxins are coming from, they cause toxicity by causing increased oxidation of biomolecules.

So, when you have enough vitamin C present, you can, as we just discussed, either neutralize the toxin directly or come in after the fact and help repair the oxidative damage that the toxin inflicted inside or around the cell by the vitamin C. Now, in the case of vaccinations, what is a vaccination supposedly trying to do? It's supposedly trying to cause an increased antibody response to the antigens that are in the vaccine that hopefully will cross over and cause those antibodies to attack whatever the infections disease was. Tetanus, pertussis, you name it.

Well, what did we already say about vitamin C? Vitamin C stimulates the

production of antibodies. So coming around full circle again, I'll go back to the original point I made and say, why do you think vaccinations are horrible or wonderful, if you're in a position where you or your child or your infant is going to take one. Right or wrong, absolutely take vitamin C with you. Because you're going to neutralize the toxins that are present. And you're going to augment whatever antibody response that you might get from the vaccine, which is supposedly the good effect of the vaccine.

So, this of course, is just one mechanism of vitamin C, with regard to the vaccines. But as we also mentioned earlier, it strengthens the T cells and B cells. It allows them to proliferate, so that you're not blowing them out. And that's your basic defense against everything; your T cells and your B cells. Your cell mediated immunity, and your humeral mediated immunity are the foundations upon which your body stays healthy. Fights off disease. Fights off the initiation of cancer. And cancer is really just, again, increased oxidative stress beyond even the slight increase in oxidative stress you see in chronically disease cells. When you start getting extreme elevations of oxidative stress inside cells, you start getting carcinogenesis.

So, all of these are things that vitamin C can help enormously in. And as you well know, it's very important even if we don't discuss it in any detail at this time, that everybody realizes there are two important phases to treating any patient with any disease. And the one phase is what we're talking about. Try to neutralize and undo the damage that's already been done, and is about to occur by other toxins that are present inside the diseased tissues. With antioxidants like vitamin C.

But just as important, and maybe more importantly, and it's rarely done on a regular basis by any group of doctors. Mainstream or alternative. Is to say, where did those toxins come from? Let's turn off the faucet. Let's stop the new toxins from being formed that are continuing to cause this damage on a daily basis. As my mentor, Dr. Huggins told me a long time ago when we were discussing this issue. He said, "Tom, you can't dry off while you're still in the shower." And as simple as that is, I think it's profound. And it's clarity of what is trying to be done here.

Which is, you can't just repair damage and expect a positive long-term result if you don't stop the daily inundation of what is causing that damage to be present in the first place. And this is toxins, usually from infections. Usually from focal infections, such as in the mouth. Infected tonsils. Infected teeth. Infected gums. These are what feed the oxidative stress that causes most heart attacks and most cancers.

Jonathan Landsman: Dr. Levy, for the Immune Defense Summit, we have great conversations about the value of probiotics, how to heal the gut. All of these things. But we also have presentations, like my

conversation with Dr. Stuart Nunnally, who was the past president of the International Academy of Oral Medicine and Toxicology, who was talking about the problems in the mouth. Whether it be mercury based silver fillings, root canal treated teeth that get heavily infected, cavitations, bone infections in the mouth, gum disease. He goes on and on. It's a very interesting conversation.

But as it relates to what you just said, that's so true. If someone is going to run out and get a detoxification program for their body, for whatever it is. A week, or two, or three weeks, they're going to take some probiotics. They're going to meditated. They're going to exercise. They're going to change their diet, eat some organic food. But, they don't address heavy infections that currently exist in the mouth, spilling into the rest of the body. Or infections in the gut or somewhere else, like Lyme disease.

Dr. David Minkoff is another presenter in the Immune Defense Summit, make sure you listen to his presentation about Lyme disease. If you don't take care of these infections, you're just running an uphill battle all the way, and you never get to the top of the mountain. Which is what I know you're talking about right now. So those are just some examples that I wanted to bring out.

This is going to be an interesting part of our conversation. Dr. Levy, what do vitamin C, inflammation, and the immune system have in common?

Dr. Thomas Levy: First, we've got to get some definitions out there. When you have, in a microenvironment, a small area of the body. A tissue, a few cells. When you have something going on, like an infection, and you completely and totally use up the vitamin C so that you have increased oxidative stress by definition, you have inflammation. So anywhere you have focal scurvy, a focal to complete absence of vitamin C in that microenvironment, you have inflammation in that microenvironment. And this is why, in my opinion, the immune system marshals the monocytes to an area of inflammation as the first cell to come there, is because they're super saturated in vitamin C. Which is the very substance that causes the inflammation to be present in the first place by virtue of its severe deficiency to absence.

So whenever you hear the expression, or the phrase, increased oxidative stress. That is equal; the same as inflammation. If you have inflammation, you have increased oxidative stress. If you have increased oxidative stress, you have inflammation. And if you have increased oxidative stress, or inflammation, whatever you want to call it, you have a focal severe deficiency to measurable absence of vitamin C in that area. So that's how all those things wrap in together.

And too often, in articles and everything else, the author's take off

with one term and don't even realize that they're saying another thing. Because it's very important at the outset to understand your definitions, because it seems like every author in the literature has their own pet phrase or pet way of referring to something. So you need a very clear idea at the outset that really all you're talking about is increased oxidation. Increased inflammation. Vitamin C deficiency. And less inflammation, less electron deficiency, is more vitamin C and other antioxidants present.

Jonathan Landsman: We're going to be talking about two very important topics. We're going to come back to vaccinations and infectious diseases, and what vitamin C has already been documented to do in these situations that people are concerned. And we're also going to finish up the program with the multi-C protocol.

But so important, what you just said, Dr. Levy, before we get there. You're board certified cardiologist. So many people are concerned about heart conditions. They see inflammation as being the root cause of heart disease. We hear that all the time. You just explained what inflammation is all about. What a difference it would make in this world if the attitudes would change in medicine. They would actually perceive every person that had chronic inflammation as someone that was deficient in vitamin C in some area of their body. Let's say in and around the heart. Let's up their vitamin C intake, and let's find out the source of these infections. These health issues that are driving this inflammation. This need for it to be going up.

And isn't it true, something else that I learned that I thought was really fascinating. And it all points us in the same direction. This idea of cholesterol rushing into an area to actually patch things up. It has some sort of protective or helpful mechanisms behind why it's happening in the first place. And what I'm saying is so important about that, Dr. Levy. And I'd love to get your comments; obviously, you're the expert, not me. But we're just going to take cholesterol or anti-cholesterol drugs, statins, to lower it and not even wonder why that's happening in the first place? You know what I'm saying, right?

Dr. Thomas Levy: Yes. It's interesting. And this is actually pretty old, the literature. Even though obviously mainstream current medicine still is almost desperately hanging onto the concept that, lower your cholesterol. That's all you need to do. Do everything possible to avoid high cholesterol. And if needed, which they consider to be necessary almost all the time. Use medications such as anti-statin drugs to bring the cholesterol down.

Well, let me first say that elevated cholesterol levels circulating in the blood are a factor, not so much in initiating atherosclerosis, but in growing the plaque. I mean, there's no question that cholesterol,

calcium, other lipids will help build up a plaque as long as they're high levels in the blood. So, the unfortunately simplistic reasoning used by mainstream medicine these days is, because that appears to be a fact, let's just lower the cholesterol at all possibility. So let that be the primary focus.

Well, if you lower cholesterol by drugs, you will, to a limited degree, decrease the rate at which the plaques grow. But what happens is, nothing addresses the question just hanging out there as, why was the cholesterol elevated? And it's very clear in the literature. And I've covered this in my book in the past; *Stop America's Number One Killer*, is that the more toxins you have in your body, the more your body makes cholesterol to help neutralize those toxins. Cholesterol is a natural toxin neutralizer.

So once you bear that in mind; let's say we have toxins from the mouth. Toxins from infections. Toxins from mercury. Air. Water. Food. Whatever. You've got toxins in your body, and the natural defense mechanism of your body is to elevate the cholesterol level to bind those toxins and prevent them from inflicting damage.

So, if that's the body's natural defense mechanism against these high levels of toxins, what are you also doing when you arbitrarily pull the cholesterol levels down, perhaps slow the rate of atherosclerosis a bit? You're now exposing the body to a large amount of toxins that are no longer being neutralized.

And in fact, and there are many studies on this, not just a few. It's very clear that when you use agents to lower cholesterol, that the lower the cholesterol goes, the great your chance of cancer. And that should make perfect sense. Because if you're talking about a situation where toxins are going unneutralized, one of the main things, depending on the area of where the go, the toxins do is to up ramp the oxidative stress inside cells, and cause malignant transformation.

So, there always to be thought into not only trying to correct what appears to be an abnormal factor that correlates to a problem you're trying to solve, you always have to think about the consequences. Not only of what you're doing, but the way in which you're doing it.

Now, when you lower cholesterol by effectively getting rid of the toxins, that's wonderful. And the body is now making less cholesterol, because there are less toxins that need to be neutralized. But that gets confused. People say; "Well, the cholesterol is low when you're healthier, but with the statins your cholesterol is lower and you're not so healthier." These are always considerations that need to be out there and unfortunately, they are still very rarely considered in the treatment of heart disease by most practitioners. I mean, just about everything my fellow cardiologists

and internists do is, "Oh, you've got heart disease? Let's lower your cholesterol."

And they really do it to a ridiculous degree. By that I mean, they'll take people with very healthy cholesterol levels of 200, 210, 220. 190, 180, and they'll try to treat those and knock them down to 150, 140, 130. The famous vegetarian diet, the Pritikin diet. The person that started that diet was a person by the name of Nathaniel Pritikin. And as it turned out, for whatever reason. I don't know why, but he had a particular obsession with heart disease and not having heart disease, and not ever getting a heart attack himself. So that was his own personal focus.

And before he ever devised his diet, he had quite an elevated cholesterol himself. I think something along the line of 270, 280, something along that. So, he realized that if you go on a strict vegetarian diet, you can lower cholesterol dramatically. So he went on a strict vegetarian diet, which became the Pritikin diet, and ultimately knocked his cholesterol down to 120, 110, 100. But the rest of the story you don't hear is that he then developed leukemia and died.

So, these are things you need to think about. You need to think about not only the consequences of what you're treating, but the physiological consequences of the way in which you're treating it.

Jonathan Landsman: Dr. Levy, it makes perfect sense. And killing viruses naturally, which is the point of all this. We're trying to make this connection for everybody about the virus is the toxins that are in our body. Even if it's, say, pneumonia. Or colds, even. Any of these toxic exposures we have in our body. Risks of cancer. Infectious diseases, which is what we're about to get into. Where so many people, millions, feel that vaccinations are the way to go. But nobody has considered yet enough, as a society on the whole, the value of vitamin C. And other antioxidants, as well.

That's why we're talking like this about neutralizing viruses. Neutralizing the threats within our body of these toxins that we're exposed to. But never forgetting that it's also equally, if not more important, to get away from these threats as much as possible. That's why the Immune Defense Summit, we talk about the oral health issues, and the gut, and other co-infections that are happening in the body, and how to effectively deal with them. Because if we knock those out, and then we add in all these antioxidants, it's a great 1-2 punch to keep us healthy all the years of our life.

So, Dr. Levy, again as I mentioned before with regard to vaccinations and infectious diseases, what has vitamin C already been documented to do for us?

Dr. Thomas Levy: My goodness. That's going to be quite a mouthful. But I tell you, that's perhaps one of the saddest parts of this story. They have well over 50,000, maybe 60,000 articles in the peer-reviewed scientific literature on vitamin C over the last 70, 75, 80 years. Many of them, initially Dr. Frederick Klenner's work, in which he showed vitamin C's ability, when properly dosed, to cure any of the acute infectious childhood diseases. Which is the reason, right away, for most vaccinations.

Now, they're expanding on that, of course. And they want to give shingles vaccines, and vaccines against, good grief, pneumococcal pneumonia. I mean, I've been in medicine 40 years, and I've seen one case of pneumococcal pneumonia, and now that's some sort of epidemic we need to vaccinate against.

But, be that as it may, it's very important to realize that vitamin C, along with other immune supporting elements. But in terms of an acute infection, there is not a single indication for which a vaccination is currently given or being recommended that will not be either prevented by vitamin C, or resolved by vitamin C.

Now, quickly, there has to be balance to that. I mean, you're talking about hundreds of millions, if not billions, of people around the planet. You're going to have some sickly people that are going to die of a given condition of infectious disease, whether they got vaccinated or not, and whether they get vitamin C or not. So I don't want to say that vitamin C is 100% of the time going to cure you of everything that you would be vaccinated against. But it would do it far more frequently than any purported benefit of the vaccine itself.

Jonathan Landsman: Dr. Levy, just to name a few things. First of all, with measles. If you get measles, it's a terrible thing when you're a child. But I just think there is so much hysteria, personally. My opinion. Over the whole measles thing. You get measles, you take some vitamin C, you're resting, you get through it. And then you have lifelong immunity, essentially. So the scare of measles, and get a measles vaccine, the MMR.

Which has already been shown, because of the CDCs own scientists, actually have come out and has told the public that there is scientific fraud over the MMR vaccine. That they actually have fudged numbers, destroyed data; I mean just the worst in science about this vaccine and its effectiveness. And it's actually been shown to cause a massive increase in autism in African American boys. Especially when they're giving this vaccine at such a young age. Any vaccine before 3 years of age or younger, that is a high risk for that child to get really seriously hurt. And the data shows that.

But yet the mainstream media, government sponsored agencies, they're not touching it. You've got a CDC scientist who wants to expose this. They're not bringing him to Congress here in the United States and letting him speak his mind. There is huge interest within the pharmaceutical industry to keep this information away.

So we know vitamin C would be helpful in that situation. Like you say with Dr. Klenner. He even cured, I think it was 60 cases out of 60 cases of polio; all of them. he took care of them with polio in the early 1900s. I mean, what was it? The 1930s, 1940s, Dr. Levy?

Dr. Thomas Levy: I believe 1939 was when he did it, yes.

Jonathan Landsman: Yea. So you got pneumonia taken care of, that's for sure. Over 200,000 views on a video I did with Dr. Andrew Saul, where he reversed his own pneumonia. Symptoms went way down from being heavily clouded in his lungs, hard coughing, feeling the worst. Within hours of taking several; thousands and thousands and thousands of milligrams of vitamin C. Every 6 minutes he was taking 2000. Every hour for 3 hours, and then by 3-4 hours later, those symptoms dissipate.

And Dr. Levy, I know you know about this a lot. Sepsis. Hospital infection, which is so dreaded. At least, certainly here in the United States. And vitamin C; one medical doctor has shown, can help them in just about every case. Can you speak to that?

Dr. Thomas Levy: Sure. The doctor that brought it to public awareness, Dr. Paul Marik, had been working with sepsis patients for a long time. And one thing that I learned from hearing about the stuff that he did. And this kind of shocked me, but then I thought about it, and it wasn't so shocking. Is that sepsis is the primary cause of dying or mortality in hospitalized patients. That's the number one cause of death in hospitalized patients, is the final common denominator of septic shock and death.

So just addressing this one issue is hardly inconsequential. It's enormously consequential. And probably, and I'm glad you brought this up because I think it's very exciting. Somewhere along the line, perhaps because Dr. Marik was very esteemed in his local community, or his hospital. Or among the doctors or nurses. Or he played golf with the pharmacist; I don't know. But unlike just about every other hospital in the United States, he was able to try intravenous vitamin C, along with some cortisone and thiamin, on a patient that was very hypotensive and near death.

And he started it, wrote the order for it, went home that night. Fully expected to come back and hear about the patient having expired. And instead, the patient was not only alive, but doing well. Off of all the

medicines that were needed to maintain a blood pressure, indicating the state of shock was reversing. And he was then all on board to start doing this on a regular basis.

And where, I guess things screwed up, maybe to say it in a cynical way. This got picked up by the local news media. And lo and behold, we now have lots of videos on YouTube and elsewhere showing local TV programs talking about, not only what vitamin C did in this one case, but the fact that he did it for about 150, I think, more patients, and took a fatality rate of 40-plus percent in this subset of patients and brought it down to 8, or 7, or 6%. And I've got to say, he wasn't using that much vitamin C.

Jonathan Landsman: Yeah. It was; I watched the video. It was 1500 mg.

Dr. Thomas Levy: Yes. When the body is out of vitamin C, it's incredible how even what a small dose can do. But I also think that just like Allan Smith in New Zealand, the New Zealand 60 minutes video patient of 2010. If they ever start just giving these sepsis patients routinely 50-100 grams the first day, and then 50 grams a day for the next three or four days. And perhaps adding the hydrocortisone and thiamin. I'm not going to say that those two things didn't help and have a synergistic effect as well with the vitamin C. Because hydrocortisone is something that you do use to help get a patient out of shock. And neutralize the inflammation. Remember talking about inflammation. It's the ultimately prescription, and naturally occurring, if you will anti-inflammatory agent.

So, I think probably in the future. I applaud Dr. Marik for this. Continuing, as you and I know, for patients with a wide variety of infections, the high dose vitamin C. I think it's a great idea to add anywhere from probably 20, 30, 40 mg of cortisol or a higher dose of hydrocortisone during the early treatment period. And I think the results would be even better.

But the big thing here is, it got out on regular TV. And regular people saw it. And regular doctors saw it. And I don't think I'm overstating the issue, Jonathan, to say the genie is out of the bottle. Anybody in the United States suffering from anything has the right to demand, and certainly their doctor to order, something that is nontoxic. Something documented to be highly effective. And something that is inexpensive. And vitamin C is all three of those. It's not expensive. It's not toxic. And if you look at the literature, it's very well established as being effective.

And, now, with this information out there, compliments of Dr. Marik on the mainstream media, individuals and families that have patients in the intensive care unit right now, let me make the announcement. If you say to your doctor, "I want IV vitamin C and cortisone for my family member who appears to be dying otherwise." And they say, "No, that's ridiculous,

that's bunk." You sue them. They don't have a leg to stand on. And we can finally once and for all bring this foolishness, and the suppression of vitamin C to an end.

Jonathan Landsman: Absolutely, Dr. Levy. That is the significance of what you just said. I hope people who are listening really appreciate this message. The genie is out of the bottle.

Dr. Thomas Levy: But first and foremost, if you're family member is dying and they refuse, you demand a transfer to a hospital where they'll do it. And then still pursue a malpractice and negligence lawsuit against the doctor and the hospital that refused to do it.

Jonathan Landsman: Absolutely. And Dr. Levy, I know you have your law studies, as well. Your law degree. So you know what you're talking about. And that's what we need to do. Because the point is, it works.

Dr. Levy, there are a lot of people out there, as I said, who just want to understand how to use all of this. We have *The Proper Administration of Vitamin C* as a gift for everybody that buys the Immune Defense Summit. It is a 19-page document that we are giving away as a priceless gift for those that buy the Immune Defense Summit. It was put together by Dr. Thomas Levy, and also thanks to Med Fox Publishing. It is available. But Dr. Levy, I've got you here. This is wildly popular on Natural Health 365. But I want you to say it in your own words, to talk about this multi-C protocol for reversing all kinds of health issues. Talk to us about it, please.

Dr. Thomas Levy: Well. First, like I like to say. We talked about the fact that resolving oxidative stress is only half the formula. We always need to address where the oxidative stress is coming from. Where the toxins are coming from, etc. But with regard to acute resolution of an infection, and strongly supporting and helping to reverse any of a number of chronic degenerative diseases. Or at the very least, stabilizing them and minimizing symptomatology.

I think after everything we've talked about so far, it should become obvious to anyone who is listening. Is that the more you can get inside and around the cells, and undo the oxidative stress that has been inflicted by the toxins. Which is done by antioxidants, primarily vitamin C, but there are many others. The important thing to remember is, like real estate; location, location, location. The most important factor in vitamin C therapy having the results you want is dose, dose, and dose. And if you don't get enough in the right places, you won't get the effect that you want.

Now, the multi-C protocol incorporates different forms of vitamin C. And I like to say, the goal, before you give up, if you do give up on using vitamin C to make any person, yourself or somebody else, at least feel

better and have less symptoms, you need to shoot for what I call total body saturation of vitamin C or ascorbate. And you do this by taking different forms.

The one form, liposome encapsulated. This type, even though you take it orally, gets more vitamin C inside your cells without the consumption of energy, than the same amount taken intravenously. And I'm not putting down intravenous. I'm just saying, different forms do different things. So you want to take liposome encapsulated.

And something that is very cheap, and very neglected, but an enormously positive healthy thing to do is to take, on a daily basis, bowel tolerance or near bowel tolerance doses of sodium ascorbate powder. Everybody has a different level. They've got to determine that for themselves. But ultimately, you want to take a certain amount of the sodium ascorbate powder two or three times a day. This not only gets more vitamin C inside your body, but it neutralizes the extremely potent toxins that are developing in your gut from poor digestion, which we all have to one degree or another, before those toxins ever get absorbed.

So you take the liposome encapsulated. And it's cheap. The sodium ascorbate powder, just about anybody can afford that. And even if there's nothing else I'm going to talk about that you can afford, you can afford to take bowel tolerance doses of sodium ascorbate powder on a daily basis. And your body and your health will be so happy that you did it.

So you have liposome encapsulated, it gets inside the cells. Sodium ascorbate, in the gut. Cleans out the toxins in the gut. Helps get into the immune cells surrounding the gut. You have a special type of vitamin C called ascorbyl palmitate, which is fat soluble. Regular vitamin C is water soluble. So the fat soluble gets into the cell membranes that are fatty in nature. And help reverse damage to the cell walls around important cells in your body.

And then finally, you have intravenous. When you're dealing with any sort of severe chronic degenerative disease, or advanced acute infection. For the most part, if you have it, you want all four types of vitamin C. But you definitely want your liposome encapsulated orally, and you want your intravenous. And if you don't have enough for the intravenous, then you need to step up with the sodium ascorbate powder.

But anyway, these four prongs. Liposome encapsulated, sodium ascorbate powder taken orally, ascorbyl palmitate, and intravenous vitamin C. These are the prongs to the multi-C protocol that will give a lot of people a great deal of relief. And some degree of disease resolution for some of them that they won't see with just about any other modality.

Jonathan Landsman: Again, like I said to you. The whole optimal administration of vitamin C is a gift given to anyone who gets the Immune Defense Summit. I think you're going to find that all of these presentations alone, just listen to them. You're going to come away with so many great things to do in your routines. but certainly the gifts are amazing, as well. Dr. Levy, I want to thank you so much for your time. And I want to thank our listeners for joining us today.

If you would like a copy of this program, plus all the other presentations inside the Immune Defense Summit, simply click the banner you see on this page. Thanks again for attending the Immune Defense Summit. Talk to you soon. Take care.

Supplements for Immune Strength

Guest: Michael T. Murray, ND

Jonathan Landsman: Welcome to the Immune Defense Summit! I'm your host, Jonathan Landsman, creator of NaturalHealth365.com. Did you know that every year drug-resistant bacteria or superbugs kill 700,000 people worldwide and is projected to be more lethal than cancer by 2050? And infectious diseases still remain one of the leading causes of death.

Cancer, cardiovascular problems, and diabetes are by far the leading cause of premature death in the world, but, in reality, all of this is avoidable with a strong immune system.

That's why I created this event: to help you understand the roots of disease and how to prevent and reverse life-threatening illnesses by re-empowering your immune system. Our show today—Supplements for Immune Strength.

Our guest, Dr. Michael Murray is one of the leading authorities on natural medicine. He has published over 30 books featuring natural approaches to health. As a graduate, former faculty member, and current member on the Board of Regents of Bastyr University, Dr. Murray is chief science officer at Enzymedica and represents one of the finest educators in the world about the power of nutrition to heal the body.

Do we really need to use nutritional supplements to keep our immune system strong? And if so, which ones are the best to focus on? And, most importantly, how can they help us with common health issues like colds,

the flu, or any other problems related to chronic inflammation?

Please join me in welcoming Dr. Michael Murray to our program. Dr. Murray, welcome!

Dr. Michael Murray: Jonathan, it's a pleasure. And thanks a lot for having me be a part of this program. We've done programs in the past. And this service that you provide is so valuable because the information is so practical that people can use and really make a difference in their lives. So thank you.

Jonathan: Oh, thank you, Dr. Murray. And it's absolutely what I want to do with the Immune Defense Summit. I want it to be a resource for people to go to time and again to really get concrete answers like you say because, as you know, I've often said on many programs I've created, this is so often suppressed and literally censored by the mainstream media, so many outlets out there, that it's getting harder and harder to get this kind of information. So I really do appreciate your time, as well.

Dr. Murray, let's talk about some of the supplements that are just really important for immune health.

Dr. Murray: Absolutely. First of all, the immune system is so complex. It's so metabolically active, it requires every known nutrient in order for it to function properly. So an insufficient level of anything, whether it's a vitamin, mineral is going to lead to impaired immune function. And that could lead to an infection or worse.

Jonathan: So when people talk about immune health and supplements, a lot of people say, "Oh, are they really that necessary because we can get everything from food, right? You know those people out there say, "You know, food is good enough." What do you say to those people?

Dr. Murray: They're not up on the research. We know that nutrient insufficiency is widespread in North America. We know that, while it's theoretically possible to perhaps get everything that we need through diet alone, the reality is that we don't.

And we also have the additional stress of environmental pollution, the stress of modern living, and a lot of anti-nutrients in our diet. So it just makes sense to take a little nutritional insurance. Take a high-potency multiple vitamin and mineral formula that provides the recommended dietary intake levels of all the known vitamins and minerals as nutritional insurance.

Jonathan: Dr. Murray, you did say, very quickly, something that I think is important to highlight for those people who really scoff at the idea that nutritional supplements are a necessary part, a tool, if you will, that we

use to keep our immune system strong.

This idea that we're exposed today more to toxins and environmental stressors than ever before, I'm sure you talk to people all the time about this. From poor oral health issues, which I talk about all the time. Mercury-based silver fillings, the mercury is leaching out into the body in to the digestive system wreaking havoc on our ability to absorb, to uptake nutrients.

Then we have all kinds of other issues, in terms of, genetically engineered food. The chemicalization of our food alone. What we're actually swallowing from most of these foods, especially for any one that goes out and eats in restaurants. None of that food is really supporting immune health. You know what I'm saying, right?

Dr. Murray: Absolutely. And you could make a strong claim that the biggest threat to human health today is related to diet, along with the increasing load of all these environmental pollutants, whether it's heavy metals or persistent organic pollutants like flame-retardants, pesticides, herbicides, solvents, etcetera. We just need to do everything that we can to make sure that our body has the tools it needs to be healthy and also avoid those things that really impair our body to achieve health.

Jonathan: I don't want this to go off too much into a tangent before we get to the key supplements that you recommend, Dr. Murray, to support immune system health. We're going to go over those in just a moment.

But it's important for people to realize that on their own, most people that go on the Internet and search for nutrition and what kind of nutrients do we need, you often find on the first page of Google, for example, all of these mainline, mainstream news reports from, say the Mayo Clinic, Harvard, the CDC, the FDA. They'll all talk about how nutrition and nutrients are important for good health.

But then, on the other side of things, and it's completely opposing that, is if, God forbid, someone were sick in any way at a doctor's office or in a hospital, nutrition is like almost the last thing that's highlighted.

It's all about surgeries, which I get it. Sometimes you need them. But then, all of these toxic drugs that have an impact on our ability to uptake nutrition into our body, which they say is necessary for life support. And also, all of the foods, especially if you look at, within a hospital, the foods are so toxic and so low in nutrition. You know what I mean, right, Dr. Murray? It's crazy.

Dr. Murray: Absolutely. Yeah, it doesn't make any sense. And it's like if you had a brick wall, and somebody destroyed it with a battering ram or something, you'd build it back up with bricks and mortar.

If your health is breaking down, let's build it up. And let's build it up through those building blocks of nutrition, a positive mental attitude, health-promoting lifestyle, and a health-promoting diet. I think that's the basic foundation and approach that we should be following.

Instead, we're trying to address rebuilding health by only taking drugs, which in many times, create more problems than they were designed to address. So we need to get back to the fundamentals. And I think we need to expand what those fundamentals are. And I think that nutritional supplementation is an absolute must in this day and age.

Jonathan: Yeah, that's absolutely it. Hippocrates said, "Let food be thy medicine," right. But back then, there were no genetically-engineered ingredients. There was no chemicalizing our soil and spraying pesticides and herbicides all over our plants. We weren't factory-farm raising animals and pumping them with hormones and antibiotics. We weren't shipping our food thousands of miles in crates and on 18-wheelers. And I could just go and on.

The point is supplementation is a valuable part these days. Our food is not what it used to be. And it's just very important to have a better understanding of this.

And I know that in medicine, Dr. Murray, not to beat up on the doctors, but it's important to state the truth, which is that, on average—and this is according to the *American Medical Association Wire* report, their online magazine. You can go and look at their own statements that admit—that a medical doctor going through medical school training is getting less than five hours of nutrition each year, out of their four-year education in medical school. And that totals, out of all their classroom studies, less than 1% of their total hours of education. That, to me, is mind blowing.

Why would we go to a doctor like that when we have someone like you to speak to about supplements? You know what I mean?

Dr. Murray: Yeah, that's a good point. And what they're learning in those five hours is very suspect, as well. They're basically brainwashed into believing that nutrition doesn't provide any benefit.

And the reality is that it's the foundation of good health. There's no question about it. The quality of our life, the quality of our health comes down to a number of things. And one of those things is the quality of food that we eat and absorb and also our level of nutritional status. And we can enhance that nutritional status through supplementation. And that can produce significant health benefits, particularly for helping the immune system function properly.

Jonathan: Right. So now, that was very important. People ought to, of

course, get nutritionally tested. That's for a whole other discussion. But it is important to go through some basic nutritional tests. Maybe, you could mention some of those that would be good for people to uncover where these deficiencies are.

But definitely, Dr. Murray, I leave it up to you now to spend a few minutes breaking down for us the key supplements that you recommend that would support nutritional health and, of course, immune strength.

Dr. Murray: Yeah, I think it's important to have a good foundation. So that, for me, involves taking a high-potency multiple vitamin and mineral formula. And what I mean by that is one that's going to provide at least the RDI, the recommended dietary intake of all known vitamins and minerals.

A deficiency of any nutrient can lead to impaired immune function. There are so many nutrients that have been shown to be absolutely critical for proper immune function that we just need to make sure that we've got all of those bases covered.

Zinc, for example, is one of the key nutrients for immune function. And it's one that many people don't get enough of through their diet. So supplementation makes a lot of sense. And typically, we're looking at at least 30 to 45 mg of zinc per day. That would be my recommendation.

Selenium is another nutrient that's really important for proper immune function. And 200 to 400 mcg of selenium is what's recommended.

And there may be some advantages to looking at different forms of nutrients. So, for example, with selenium, they found that the selenium bound to yeast, in particular, a form called SelenoExcell, had fantastic effects in reducing the risk of developing cancer, particularly prostate cancer. It's able to exert a greater antioxidant effect, a greater effect on the immune system. It gets concentrated in various tissues, including the prostate more efficiently. So it's far superior to other forms of selenium that haven't been shown to produce the same degree of benefit.

So I think that when we're looking at nutrients, it's not just the how much; it's what form that we're using. And when we're looking at the research with selenium, it's clear that that yeast-based selenium is a much, much better choice. We definitely need all the nutrients. Vitamin C, vitamin D, vitamin A, all of the B vitamins, and all the trace minerals and major minerals are all required. So taking a multiple vitamin and mineral formula just makes great sense.

You mentioned testing. And one of the essential test that everyone should get done when they go in to see their physician for a yearly

physical is getting a vitamin D3 level. You can also find various test kits. So, for example, VitaminDCouncil.org has one that you can get.

The reason you want to get a vitamin D3 test is that studies have now shown that it's rampant, the vitamin D insufficiency. And the consequences can be really devastating to our immune system. And that means, not only increased risk for infection, but also increased risk for cancer.

They have so much data on vitamin D3 because it was used in some very large studies in conjunction with calcium to try and prevent fractures and osteoporosis. And when they started looking at the data, they were just amazed at some of the results that they showed in terms of the ability to protect against cancer, particularly breast cancer.

And there have also been intervention studies where they have given subjects, either a placebo or vitamin D3, and looked at various aspects of immune function.

One study looked at the influence of vitamin D3 on preventing colds and flus and other respiratory tract infections. And what they found was is that the group that got vitamin D3, 1200 IUs per day, had no infections during the cold and flu season, compared to a very high percentage of those having colds and flus, if they were given a placebo. So it just makes sense to take a little extra vitamin D3. Most experts are recommending somewhere between 2,000 and 5,000 IUs per day.

Testing gives you an idea of how much you should be taking. It's really, really important. And not just for helping prevent colds and flus, but also for preventing autoimmune diseases. Autoimmune diseases are those where the immune system starts attacking the body, things like rheumatoid arthritis, multiple sclerosis, lupus, etcetera.

And vitamin D3 seems to be offering significant protection against those autoimmune diseases. So gee, with all the emerging data showing the importance of vitamin D3, I think people need to jump on the bandwagon and take 2,000 to 5,000 IUs daily.

Jonathan: Dr. Murray, I know there's a couple brothers, the Garland brothers, who are big with vitamin D. And they spoke about how some people, like you say, most people get tested, and they're going to be under that number 30, right. I thought first you should talk about what a sweet spot would be, in terms, of just vitamin D alone, the ideal levels.

But the Garland brothers were saying that sometimes, these people, to bring up their levels, if they're really deficient, might be more than 5,000 IUs. Like 6,000 to 10,000 IUs for a short time. But you got to test. You got to know your number. What is the ideal range? I know it depends on

each person. But there's a range, right, that we really should be going for?

Dr. Murray: Yeah, you definitely want to be above 45. I like between 45 and 70. Anything 30 and less, you're not getting enough vitamin D3. And that's going to increase your risk for a long list of health conditions.

Jonathan: And, also, clearly to help the vitamin D3 get absorbed, isn't K2 something that's important to have together with the vitamin D?

Dr. Murray: Vitamin K2 has some great benefits on bone health and cardiovascular health. As far as the data, we know that vitamin D3, on its own, produces all these great effects. But we also know that none of these nutrients work on an isolated basis. They're part of a system. They work very well with all the other nutrients. So yeah, vitamin D3, as it relates to the immune system, it requires all those other supportive nutrients, particularly zinc and selenium.

So again, I think that we really have to take a more comprehensive look at how these nutrients work in our body. And what we see when we really look at how they work is they're so interrelated. They're so dependent upon the other that we just need all of them.

And that's again, one of the key reasons why I recommend getting at least the RDI of all the known vitamins and minerals. And then there may be some special ones like vitamin D3, where we're going to go above that. I don't think the RDI for vitamin D3 is sufficient.

You mentioned the Garland brothers. Others recommend a high-dose vitamin D therapy, as well. I'm middle of the road, I guess. I recommend 2,000 to 5,000 IUs per day. If your blood levels are very low, then you can really boost up maybe 10,000 IUs for three months, 10,000 IUs a day for three months. And then, get retested. We certainly need those higher dosage levels than what has historically been recommended for vitamin D3 in the range of 400 IUs per day.

Jonathan: And, also, of course, for vitamin C, when they're saying, depending on who you talk to, like 85 mg a day to 95 mg a day, that's like crazy compared to what we're about to get into with colds and flus.

But, Dr. Murray, real quick before we get to the best supplements to prevent colds and flus, because a lot of people get hit with that, what about other tests like nutritional profile tests that would actually uncover these things and give really good feedback to people that they're nutritionally deficient? Are there any that you could recommend for people?

Dr. Murray: You can spend a lot of money doing testing for some

of the other nutrients. And it's not going to change what I'm going to recommend because even if you showed good levels, I'm still going to recommend taking a high-potency multiple vitamin and mineral supplement on a daily basis. If you're deficient, I'm going to recommend taking a high-potency multiple vitamin and mineral formula on a daily basis. So rarely do I recommend going in and getting tested for a wide array of nutrients.

That said, there are some indirect measurements of nutritional status. For example, homocysteine. Homocysteine is a metabolite of methionine. And if we're lacking B6, B12, folic acid, or magnesium, we can see elevations in homocysteine. So I think that test is very important because elevated homocysteine levels are linked to heart disease, strokes, some forms of cancer, and osteoporosis. So that's a good, good test.

C-reactive protein is a measure for inflammation. And that may also represent nutritional aspects. Low levels of the omega-3 fatty acids, for example, may result in excessive inflammation.

Not having enough antioxidant support in your diet or supplementation program can lead to elevations in C-reactive protein. Eating too much sugar and the wrong types of fats can also lead to C-reactive protein elevations.

So there are some markers out there that I think are really important to have tested on an annual basis. Definitely vitamin D3, definitely C-reactive protein, possibly homocysteine. Those would be the ones that I would focus on.

Jonathan: It's such a great point. I understand exactly where you're coming from, Dr. Murray. And I think the bottom line is if anybody has arthritis, they have other, say autoimmune disorders, or they have heart disease, or they're really suffering with immune system breakdown, and inflammatory issues, and inflammatory markers are up like what you're saying with C-reactive protein or homocysteine levels, obviously all the things that we're going to continue to talk about today, just a really good anti-inflammatory diet and all of these nutrients which tend to help your body stay in a more calm, less-inflamed state, all of this is going to help people.

So why don't we move towards those who are suffering, perhaps on a regular basis, these colds. Are they coming down with a flu each year? What are some of the key supplements that you like?

Dr. Murray: First off, anyone that is getting more than one cold a year, and if that cold lasts more than three or four days, that is an indication that they need some support to their immune system. And there are a

lot of different factors that can lead to impaired immune function. And nutrient deficiency is one of the key ones that we're focusing on today. But there are other things, as well.

For example, you see increased colds and flus in people that have impaired digestion or impaired detoxification mechanisms. And there's a lot of nutritional supplements that can help with digestion and help with the detoxification. So those are important considerations.

I know that, from our discussion last year, you highlighted the role that mercury plays and also just the oral cavity plays in immune function. So that's another key consideration. So we have all these different aspects that can influence our immunity that we have to look at.

And one of the key aspects, as I just mentioned, is nutrient deficiency. So again, taking that good high-potency multiple vitamin and mineral formula, extra vitamin D3, maybe some extra vitamin C. You mentioned it a couple of times.

The research is quite clear. Vitamin C can reduce the frequency, severity, and duration of the common cold. So why not take advantage of it and make sure that you get enough. And it's not 60 or 90 mg per day. It's probably in the range of 250 to 1,000 mg as a preventive.

And then, when you find yourself needing additional support, maybe you feel like you're coming down with a cold, most nutritional doctors recommend 500 to 1,000 mg every hour or every other hour, based upon bowel tolerance to try and reduce that severity of that cold. And it works. It really does. And the research supports it now.

And it's something that Linus Pauling is famous for. And he's one of the smartest guys that ever lived. I don't know why people would ever argue with him. Take advantage of that simple, inexpensive, natural approach to reducing the frequency, duration, and severity of a cold. Nobody wants to be sick.

Jonathan: Yeah, there's no doubt. I've often told this story. But it's worth repeating now. When I got hit with a flu, Dr. Murray, which is many years ago...I'm always taking thousands of mg of vitamin C alone, each day. Just, I feel great. And I just keep doing it. But when I got hit my last time, many years ago with these flu-like symptoms that got bone-shivering chills, it hit me like a ton of bricks. So all of a sudden, I knew I was in trouble.

My wife literally saved me. She brought like about 5000, 6000 right away at the beginning. And then, 3000 mg of vitamin C every hour, all through the night. Couldn't go to sleep. We're talking north of 30,000 mg of vitamin C. And the sicker you are, the more C you can tolerate. I had no

bowel discomfort at all.

And by the next morning, Dr. Murray, I was 80% better. By the night of the next day, we're talking within 24 hours, I had already gone through being chilly to very tired, keep taking the C all day the next day, to literally breaking out into an unbelievable sweat all within one day. I literally woke up in the early evening the next day saying to my wife, "I am all better." And that usually would knock me out for 7 to 10 days. So I give all the credit to vitamin C. You know what I mean?

Dr. Murray: Absolutely. And there are a lot of great herbal and other natural approaches to help with colds and flus. There really isn't anything in the drug world, whether over the counter or prescription, that works, as well as some of these natural approaches. Vitamin C is just one of them.

I know Echinacea has been maligned a bit. But there's no question that the better Echinacea products, the ones that have been clinically tested, do, in fact, work. It's just that not all the Echinacea products out there are providing the key compounds that really can help the immune system work effectively.

There are over 400 studies that have been done with Echinacea showing immune-enhancing activity, including a dozen or more double-blind placebo-controlled studies. So it can be very effective.

I like Wellmune, too. This is a yeast-based product. It's a beta glucan base product. And it has great science. Over a dozen double-blind placebo-controlled studies now showing it to be very effective at preventing colds and flus. And these studies that they've done, they've been in severe stressed individuals. For example, firefighters or marathon runners, they've been popular to study because those folks are under a lot of stress. And so they tend to break down and get colds and flus. So that's a good study population in those double-blind studies.

The Wellmune, which has also been shown to be effective in boosting various immune functions, when they tested it in these clinical trials, boy, the results are just phenomenal showing that this supplement, 250 to 500 mg per day, can be very effective in preventing colds and flus.

And then, if someone does get a cold or flu, again it helps with reducing the duration and severity. And there are so many other natural products. Zinc, even just zinc, there's good data with zinc showing an ability to help reduce the duration and severity of colds. So lots of choices out there.

I'm a guy that is a kitchen sink approach in some situations. And when you're battling a cold, I would recommend doing everything. You take

extra vitamin C. Take extra zinc. Find a good herb that helps with colds and flus, whether it's Echinacea, or just ginger tea, or some sort of good immune-boosting supplement like Wellmune, something that can help really give your body the tools it needs to shorten that duration because nobody likes to be sick. We want to be out there enjoying life. We don't want to be in bed, feeling not so good.

Jonathan: So, Dr. Murray, I know a lot of people are taking great interest because a lot of people are suffering with autoimmune disorders. I would like you to spend a minute or two just explaining, if you will, really clearly the nature of autoimmune issues. What's going on inside the body?

And then, of course, please take all the time you like. Talk about some of the supplements that you feel would be helpful for someone suffering with—really, there's like almost 100 of these different conditions out there. So what's going on?

Dr. Murray: Yeah, well, autoimmune diseases simply reflect the immune system attacking the body. So there's something that's gone haywire in the immune system.

And there's a lot of factors that can lead to the autoimmune condition arising. I mentioned vitamin D3 earlier. We know, for example, in multiple sclerosis and rheumatoid arthritis that vitamin D3 shows a tremendous association. That's why we see more multiple sclerosis, for example, the further North that you go because they're not getting sunlight. And vitamin D3 is something that our skin can produce if it's exposed to sunlight.

So there's a lot that comes into play nutritionally with autoimmune conditions. With multiple sclerosis and rheumatoid arthritis, there's actually a large body of scientific data showing the value of various diet therapies. One of the key things is to eat what's called an anti-inflammatory diet. You mentioned it earlier. And this is predominantly a vegetarian diet with the exception of cold-water fish. And this has been shown to be curative in many cases of rheumatoid arthritis.

The Swank Diet for multiple sclerosis, basically is a high-vegetarian diet with the exception of cold-water fish. And it has shown tremendous value in helping people with multiple sclerosis.

As far as supplements go, there's a lot that we can do with diet. And a lot that we can do with supporting that diet through supplementation. One of the key dietary supplements for any autoimmune disease is the fish oils. The fish oils rich in EPA and DHA, the long-chain omega-3 fatty acids, have been shown to be very effective in reducing the severity of various autoimmune diseases like rheumatoid arthritis. The dosage

has to be pretty high. 3000 mg of those omega-3 fatty acids, EPA and DHA, each day is really the minimum dose that's required to reduce the inflammatory process in these autoimmune diseases.

There are a number of herbal approaches and dietary supplement approaches. One of the most popular is the use of what are called proteolytic enzymes. These are enzymes that can be used as digestive enzymes to digest protein. But they also trigger the immune system and trigger the elimination of immune complexes that can lead to significant inflammation.

So taking a good proteolytic enzyme is extremely important in any of these autoimmune diseases, not only to help out with digestion, but also to activate the immune system in a way that leads to clearance of these compounds that can lead to severe inflammation and further tissue destruction.

Curcumin, the yellow pigment of turmeric, is another key consideration. There are different forms out there. I like the Theracurmin and the Meriva forms. Those are the two forms that have the best science behind them. So those are the forms that I recommend, either the Theracurmin or the Meriva.

Jonathan: And, Dr. Murray, for all of those people who are interested in finding out more about how to calm down autoimmune disorders, but any kind of condition where they just feel like their body is too inflamed, I would strongly suggest, and again, I know it sounds like it's coming from left field, but in the other presentations here in the Immune Defense Summit, we're looking at EMF pollution. Wireless devices, in particular, and its impact on the body, the immune system, and encouraging inflammation in the body. Please check out Dr. Dietrich Klinghardt's presentation. It is not one to miss.

Emotional stress is also very important, as well. And what we can do in terms of uncovering where it's really coming from, and what to do to discover what is happening to us emotionally, and how to overcome it. Niki Gratrix, check out that presentation.

And also, believe it or not, especially for those who are suffering with RA, rheumatoid arthritis, in particular, gum disease is very connected to that issue. So check out Dr. Stuart Nunnally, past president of the International Academy of Oral Medicine and Toxicology. He is blowing the lid on all the things going on inside the mouth between mercury and gum disease and cavitations, not cavities, and also root-canal treated teeth, a lot of toxicity in the mouth that pours into the body and causes inflammation. So it's very important to appreciate all of these things. Please check out those presentations.

Dr. Murray, you've outlined so many great things. Let's wrap up this conversation with what do you see as the new and exciting stuff that's going on, the research regarding supplements and immune health?

Dr. Murray: Well, I think, the area that I'm focusing on right now is digestive health and the microbiome. And good health really begins in the gut. Hippocrates said that. And so that's a key area of focus for me.

And so we're doing our own summit in the next few months. It's called the Digestive Health Summit. And I know you're going to be a guest on that summit. And we're going to look at the role that digestion plays in a lot of different health conditions. And one of those health conditions is an impaired immunity. And I look forward to having you on that summit and sharing the wisdom that you always do.

Jonathan: So in terms of some of the other research, maybe you'd like to add some things, Dr. Murray, about what you found might be useful for people.

Dr. Murray: Well, we're learning more and more about the role that gut bacteria play. And probiotic supplementation has been shown to reduce the development of allergies and help reduce the severity of allergies. It's also being looked at as a way to help with various autoimmune diseases. And we know that these gut bacteria play a critical role in immune function. About 70% or more of our immune system resides in the gut.

So if you're getting more than one or two colds a year, if the cold seems to drag on, if you're getting infections on a regular basis, it usually is a sign that something's going on in your gut. Maybe you've got leaky gut. Maybe you're not digesting food properly. Maybe you have food allergies. Maybe you're lacking various digestive factors like enzymes. So that's going to be a key area of focus for me moving forward.

Jonathan: And don't you also find that even not just the gut and immune system health, like in general, but when people have trouble concentrating and literally feel like something is wrong with their brain function, that something down under there, in the gut, could really be interfering with a person's ability to think clearly. Isn't that fair to say?

Dr. Murray: Oh, absolutely. Yeah, if we have impaired digestion, if our system is just not working properly, it leads to a lot of the various symptoms. Fatigue, we can't concentrate, we don't sleep well, we have poor immune function, we become more susceptible to colds and flus, all of these could be related to impaired digestion.

So improving digestion isn't through taking a drug like a Nexium or Prilosec. Those drugs actually block digestion. It's achieved by giving the

body the tools it needs to support the digestion. We're basically talking about digestive aids, enzymes, probiotics, other natural products that promote digestive health.

And detoxification plays a role in this equation, as well. So the two go hand in hand. We have to digest our food. And we have to eliminate waste. So that's a key area of focus for me right now. And that's something that we'll be talking a lot about in the Digestive Health Summit.

Jonathan: Dr. Murray, I want to thank you so much for your time. And I want to thank our listeners for joining us today. If you would like a copy of this program, plus all the other presentations inside the Immune Defense Summit, simply click the banner you see on this page.

Thanks again for attending the Immune Defense Summit. Talk to you soon! Take care.

Family Health: Where Immunity Begins

Guest: Dr. Heather Wolfson

Jonathan: Welcome to the Immune Defense Summit. I'm your host, Jonathan Landsman, creator of naturalhealth365.com. Did you know that, every year, drug-resistant bacteria or super bugs kill 700,000 people worldwide and is projected to be more lethal than cancer by 2050? And infectious diseases still remain one of the leading causes of death. Cancer, cardiovascular problems, and diabetes are by far the leading causes of premature death in the world. But in reality, all of this is avoidable with a strong immune system. That's why I created this event. To help you understand the roots of disease and how to prevent and reverse life-threatening illnesses by re-empowering your immune system. Our show today, Family Health: Where Immunity Begins.

Our guest, Dr. Heather Wolfson is a chiropractic physician who provides chiropractic and nutritional care to adults and children. She is married to Dr. Jack Wolfson, a cardiologist who embraces a holistic lifestyle and medical practice after meeting Dr. Heather. Today, I'm thrilled to have Dr. Heather share with you her incredibly healthy experience in helping people, including herself, to raise a healthy family. As you'll soon see, this has everything to do with creating a strong immune system. We'll talk about what to do before conception, the value of breastfeeding, the best foods for immune health, plus so much more. If you know anyone interested in raising a healthy family, don't hesitate to share this program with them right now.

Please join me in welcoming Dr. Heather Wolfson to our program. Dr. Heather, welcome.

Dr. Wolfson: Thank you, Jonathan. It's a pleasure to be here.

Jonathan: It's great to have you. Dr. Heather, let's talk about this. When does a healthy immune system really start? What do you tell people?

Dr. Wolfson: Well, believe it or not, Jonathan, most people would be shocked to know that our immune system begins way back when we were in our grandmother's womb. Every person was actually developed in our grandmother's womb because the eggs that a woman is born with, they're all present at birth. And she was created in her mother, which is our grandmother. So it is really an amazing fact and something just to reveal that we were inside of our grandmother's womb. So it depends upon the health of our grandmother. It depends upon the health of our mother. And certainly, how we were raised since birth.

Jonathan: Dr. Heather, already, I'm sort of cringing in a way. We have children and I know you do as well. How hard is this to explain to, I mean let's just say, a young woman alone, but of course even a young man? No offense to the young men out there, but I know how I was when I was younger. And there was not much you could say to me. Imagine speaking to an 18-, 19-, 21-year-old young person who thinks they can do just about anything to themselves and are not thinking yet at all about how they're actually creating that life or that future life that I say that they should potentially be interested in having, right?

Dr. Wolfson: Absolutely. I have an entire pediatric practice that I talk to on a daily basis and they're 2, 3, 4 years old. And I tell them, what you do today is going to affect you when you're older. And so not only did it start in our grandmother's womb, but we have to be careful with everything we put on our skin, everything we put into our mouth. And so I teach this generation from a very early age that everything we do is so important to pay attention to make sure that our food is organic, make sure we don't have any GMO ingredients or any pesticides or herbicides on our food. We have to make sure that what we're putting on our skin is healthy because our skin is the largest organ of our body, and we absorb almost 100% of everything we put on our skin.

So these kids today, they're really opening their minds. And especially my two kids, I mean we can be at a soccer game on a weekend and the group's snack was Doritos last week and a little boy was offering my 4-year-old a bag of Doritos. And my son said, "I'm sorry. They're not organic. I can't eat it." And I wasn't even in the vicinity. My kids know, they know better, and I show them where this food comes from and I show them the devastating effects from these foods and from the environment that we are raising these kids in today. It is really a sad state of affair of what our air, soil, and our water consist of.

So, on a daily basis, I am preaching this to the pediatric patients in my

practice, to my own children. And they're learning and they're getting it. So I know the adults can certainly understand what we're talking about and really make a change for their own health and the next generation.

Jonathan: No, I love it, Dr. Heather. So many of the speakers in this event have heartfelt messages. And they're coming from a place of passion. They live this kind of lifestyle just like I know you do as well. And before we get to the impact of breastfeeding on immune health, which is just so incredibly important, I just wanted to make one more comment. And I'm sure you would agree but I'd love to get your feedback.

It's so important to be working with a physician and to surround yourself, energetically, if you will, with people that have a real conviction in this. Like having a doctor like you speak to my child at 2, 3, and 4, I know you really mean what you're saying versus, say—and again, I'm not being disrespectful but let's be blunt about this. Going into a doctor's office where the physician is overweight, doesn't really have that heartfelt passionate feel for what he is saying, "Oh hey, you should eat better, improve your diet." But you know look at them, they got lollipops out in the front desk. They're having pizza and chocolate cake during the day or at night for dinner. You know what I'm saying, right?

Dr. Wolfson: Sadly, I do, Jonathan. And my own chiropractor, when I go into his office, he's got a bowl of Halloween candies sitting out 365 days a year. And he's got a big gut to prove that he's also eating that food. And I'm trying to educate him as well. He's got great hands, he's a great adjuster, but he's not living the lifestyle. Dr. Jack and I, we live, eat, and breathe this lifestyle because it is the only way to live to prevent illness today, and it's the only way that we can safely and humanely eat. We are big Paleo promoters.

So if I'm going to be promoting eating animal meats and organs, I certainly want people to respect and know where their food comes from. So we only eat organic grass-fed meats that have been humanely raised and slaughtered. We only eat organic food. We try and grow as many organic fruits and vegetables in our own backyard. But my husband and I, we really do live, eat, and breathe this and we look the part, we act the part. And my children spread the information to all their friends at school. They encourage them to be healthier and eat organic and tell their parents that we want organic food.

And my husband and I were given one of the greatest compliments I've ever received in my life, when we were just in New Jersey speaking at a chiropractic conference. And a very well-known chiropractor by the name of Dr. Ben Lerner said, "If everybody in the world lived and changed their lifestyle to the Drs. Wolfson..." And this was on a Sunday. He said, "If they all changed tomorrow, by Tuesday, the world would be saved," and it's true.

If everybody just stopped putting money in the pockets of Big Pharma, big industry, and they supported the small organic farmer and they changed what they were doing, the pollution, the air, everything, would change overnight and the health of this—especially this country. We've got some of the worst cases of atopic disease in children today whether it's asthma, eczema. My practice has exploded with atopic disease. And it's very depressing to see these in little kids today. So if we all change today, by tomorrow, this world and the health of every living species on the planet, would benefit.

Jonathan: And Dr. Heather, I pray every single second when I'm creating each and every one of these conversations with experts like you that people will see how easy and enjoyable this really is. I want to bring this down to Earth for people. Where are the threats to our immunity? From wireless technology, EMF pollution, toxic emotions, our thoughts, everything, you name it. And of course, we're going to get into food with you, environmental toxins. But all the things that we can actually do as well, which will be super powerful for our immune health.

So again, enough of that, Dr. Heather, let's talk about what the impact of breastfeeding is on immune health. Talk to us, please.

Dr. Wolfson: Well, I'm a huge proponent of breastfeeding. Obviously, it is what nature intended. I am currently nursing my 4-year-old, who is turning 5 on Wednesday. So it is only natural and normal to still be nursing at this point as we know that a child's immune responses don't even reach their full strength until age 5 or so. So we need to be nursing these kids. We need to normalize breastfeeding. And we need to teach these young women and even the kids, if they see it, if they see these young moms and older moms today, we're still giving—moms they are having kids in their 40s. So when we see the example set for us, the kids are going to grow up and think this is normal and something that they are supposed to do.

We've gotten so far away from breastfeeding. My grandma used to tell me that in her day—and my grandfather is 98 so that generation. She had told me that breastfeeding was considered—you were low class, you didn't have money. And if you were able to afford the formula, you were part of the upper class. And I was so depressed when I heard that years ago. And my mother, thank God, breastfed. My father is a chiropractor and it was definitely a demand of his to certainly not vaccinate us and definitely nurse us. And both UNICEF and the World Health Organization, the WHO, advise breastfeeding for at least two years or beyond.

So these are from some of the big agencies in this world recommending breastfeeding. It is nature's perfect food for a human being. I often say cow's milk is for cows, whale's milk is for whales, giraffe's milk is for

giraffes, and human milk is for humans. It is the exact food designed for a human child. And it is designed to change, literally, by the hour, depending upon what the situation is and what that child is exposed to. So those first six months are absolutely critical where the baby doesn't necessarily even have an immune response and they are using their mother—they're depending upon their mother's immune system.

And that gets me to the vaccine issue, it's these children are being vaccinated today, especially the young girls, if the immunity is only temporary and they grow up to have children, what are they passing on during those first six months, which is the critical time period to protect that infant? What antibodies are they passing on because they are no longer immune to the vaccine-induced immunity that they received as a child? And that's even if the vaccine worked as a child. They oftentimes fail and you do not develop proper immune response because you're so young and because vaccines are not 100% effective.

These kids need to be exposed to germs on a daily basis so we can pass on not only our natural immunity to our children but so that we can have strong, robust immune systems to last into our 100th year and protect us from more ominous and much more serious disease like cancer and dementia, autoimmune disease. We've literally traded in benign febrile infections for very, very serious conditions today.

Jonathan: And Dr. Heather, this is a special message for the young women out there who are considering breastfeeding, whether they should do it or not. I think it was just an amazing point you brought up just really quick for about 30 seconds, how when a woman is breastfeeding, there's this connection with the baby. That if the baby wasn't feeling well, like what you were just quickly saying, the breastmilk is actually adjusted to give the child what the child needs that given day. I mean, is it that sensitive?

Dr. Wolfson: It's so sensitive, it's literally seconds later. So the saliva from the child goes through the mother's nipple and the mother senses whatever is going on in that baby's body and what demands it needs. So the mother will produce certain antibodies to protect that child. So in nature, that baby is supposed to be everywhere where the mother is. And especially if they're together, the mother encountered the same germs. So the mom's body already knows what the baby's encountered and will develop antibodies to protect that nursing baby. So it is literally to the second that, that breastmilk is changing. And breastmilk is also tailored to the sex of the baby, believe it or not.

Jonathan: Dr. Heather, we are going to talk about the vaccine issue later on. I want to get your input on it. It's very important we all make informed decisions about our own health and really gather all the information in the summit so that we can really understand what

might be best for us. Let's move to the best foods for immune building because this is really important for anyone. I would suppose, especially for those who haven't been breastfed who've been so disconnected perhaps when they started off life. But now it's like, you know what, I want to take a different road. I want to start turning this thing around. So what do you suggest to people?

Dr. Wolfson: Well, we often joke that Dr. Jack's mom, she didn't do anything right and she has this guilt associated with it. And Dr. Jack says, "Mom, you are a great mom. And you didn't breastfeed me. You didn't co-sleep with me. You fully vaccinated me. You gave me prescription and over-the-counter medications and everything under the sun that wouldn't be considered Paleo and natural. But going forward, Mom, we need to teach others how to do it the right way." And so we are trying to change these moms to not listen and succumb to their mother-in-law or their best friend telling them, "Oh well, formula is just as healthy" and "let your baby cry it out" and "co-sleeping is dangerous."

We want to listen to our gut motherly instincts. And we know that, by nature, there's no mammal on the planet that doesn't sleep with their young. We know that vaccines are totally artificial and do not make sense just by nature's design. We know that we are supposed to be at our mother's breasts nursing and suckling for many, many years. So we follow nature. And when you follow nature, there's always a positive outcome. You can do no harm when you follow nature. It's the way we were designed to live.

Jonathan: You're speaking to something that I think is so critical, right. This is not to blow off our past and not think about it anymore. But I think it's very dangerous if we only think about our past, maybe not obviously the most perfect, I certainly didn't have one. But to just feel bad, right, about the past, which is almost in a sense so overwhelming that the next thing we do is essentially give up and don't feel inspired to look into ways of fixing the problem. Like what you just said, changing the course. And what enjoyment you get out of really just taking more control over your life and making things go in a different direction. As you say, and you meeting your husband, I'm sure you took your husband in a different direction and it's the best thing. I know Jack really well. He always says, it's the best thing that ever happened in his life is meeting you.

So again, going back to my question, Dr. Heather, best foods for immune building, what do you tell people?

Dr. Wolfson: Absolutely. And I do want to mention, Jonathan, that this is not about beating ourselves up from the past and what we did or didn't do with our children. It's about moving forward. And one of the most common questions I get is, "Well, I did vaccinate, I didn't breastfeed, I

didn't co-sleep, I didn't feed my kids healthy, what do I do now?" And it's never too late to start now in introducing the right foods.

So the best foods in my opinion and Dr. Jack's opinion, because we are the Paleo doctors, are the organ meats. And most people think that Paleo is all about the fillet and the T-bone steak and all these different ground beefs and all these different meats. But actually, the prized meats, by any mammal that eats meat, are the organ meats. And we do not eat these foods in the US, and they are the most important and critical during pregnancy, pre-pregnancy, post-pregnancy, some of the first foods for children to eat.

So what we typically eat in our house, I always joke that it's like the Fear Factor home, that show from years ago. And we do these crockpots of thyroid, thymus, adrenals, kidney, liver, all the foods that we need to introduce these kids to early on. And the next most wonderful food to encourage the growth of these kids and the growth of their immune system is actually spices. And my husband talks about this a lot in his book, *The Paleo Cardiologist*, and we have it on our website, thedrswolfsons.com. We talk about spices. And you can add that to anything from your organ meats, your salads. And spices can be anything.

So whether it be the Indian spices, whether it be just oregano and thyme and rosemary, all of these spices are anti-fungal, anti-viral. And my husband will tell you that majority of pharmaceuticals started with spices but you can't patent a spice. So you take some parts of it and then you manipulate it in a lab and then you make it a pharmaceutical and put a patent on it. Why not eat the healthy, safe stuff called spices that are in your spice rack? So we are big promoters of the organ meats and the spices for overall health and immune boosting.

Jonathan: It's interesting just that alone, the turmeric, right, which 1500 plus scientific papers have been written about curcumin, right, the element in that spice turmeric, and how powerful it is, how they actually show that it actually kills cancer cells. I mean, it's amazing. We're talking about a common spice just like what you were just mentioning and how powerful this is. But so much of Western medicine is completely disconnected from good, wholesome nutrition. They roll their eyes at why organic. It's just a little bit of chemicals on these foods, big deal. They're never taught this in medical school. So I know you appreciate this right, Dr. Heather? They are truly disconnected from this entire message of this event.

Dr. Wolfson: They truly are. It's a very sad state that we are currently in. And I wish organic food was really just called food and everything else was called toxic, genetically-modified, sprayed poison. We eat food. Food that has not been genetically modified in a lab, food that was

not genetically-modified so that it can withstand glyphosate, which is Roundup – a weed killer that they're spraying on GMO crops. I wish that our organic food was just called food so that we got rid of the stigma with organic.

And all of these people who don't buy the organic and they think that it's just a sham, these are the people that are showing up with the cancers and the autoimmune disease. It is a fact that by going organic you are eliminating the majority of the chemicals from your life. And of course, we have to pay attention to the air we breathe, the water we drink. Everything is filled with chemicals. But our food is so critical and we need to eat food, not man-made poison.

Jonathan: Dr. Heather, one of the big personal things in my life is I want to move in the next phase of my life to growing more food like what you speak about. But in all fairness, there are a lot of people listening that just can't do that, the space, the know-how. It's a little too overwhelming for them. I just love to throw out the fact that once a week, just take yourself and your family just like a field trip to a farmer's market and get to know the local farmers. And what an amazing fun time to get delicious, high-quality food, actually save money, and the connections you make, the people that you meet, the things that you learn. It's a lot of fun. It sure beats TV.

Dr. Wolfson: It sure does. We take our boys every weekend. We are at the farmer's market every Saturday locally here in Scottsdale, Arizona. And believe it or not, in the desert, you can grow a ton of food. And in our backyard right now, we're growing lettuce and a bunch of different spices. It is so simple. Anybody can do it. You can do it on a patio, in a high rise in New York City, San Francisco, you name it, you can grow something. And it really changes people. Especially when kids grow their own food, they actually eat the food. My kids go out in the backyard and they're just picking lettuce and kale and collard greens, whatever is growing, and they're just eating it right out at the garden.

And I had, in my son's kindergarten class a few years ago, we grew a huge garden after school and the parents told me, "We made a salad with all the ingredients." And they said they had never even heard of some of the vegetables that their children ate that day and they could never get their kids to eat these foods if their life depended on it, yet I was growing it with the kids. They had their hands in the soil with the seeds and the water and they learned how these foods grew. And when they grew, they wanted to eat it. This was their project. And you can really change kids if you just put them in nature and give them what we were designed to do and that is being in the sunshine, getting our hands dirty in the soil, and growing our own food. It's a beautiful thing.

Jonathan: Yeah, that's interesting. You just reminded too, you make

it a fun project, which is the word I keep bringing up. And when you say, "Oh, my family won't change this and that," I have seen what my very own eyes in spending time with kids in juicing, right, just throwing carrots and celery and all this into a machine and cutting them up and putting them in and having them hand it to you or put it into the machine themselves. It becomes this project and you see the juice pouring out. It's just fun and then they want to drink it and it's not like you're trying hard to convince them at all.

Dr. Wolfson: Not at all. And our kids are hands-on in the kitchen as well. And if they are part of the juice-making process, it's fun for them and they want to try it. We actually made what's called golden milk not too long ago and you had mentioned the turmeric and curcumin benefits. And we made a fresh, organic, Thai coconut from the meat. We took the meat, the water, and we blended that. We added fresh pressed turmeric root and maybe some cinnamon and a couple other spices and some raw honey. It was absolutely amazing. Great way to get some turmeric into our kids and they thought it was like a milkshake. So if they're involved in the process and you make it tasty, it will go into these kids, down the hatch with no problem.

Jonathan: I agree. I make the best smoothies myself and it's just like they're milkshakes without the milk actually. But they're so delicious with cashews and banana and crushed ice and just—I have a lot of fun with it and adding all kinds of super food powders to it. It's just so easy to have high nutrition without all the empty calories at all. It's just very enjoyable. But now, we've got to shift gears, Dr. Heather, and talk about something that I know you're seeing firsthand, I'm sure, every day. Especially for the new people that are coming in with all kinds of health issues and they're being exposed to environmental toxins, which are really threatening immune health. So can you please talk about how this all works and why this is hurting people so much?

Dr. Wolfson: Sure. Well, when we're exposed, let's say, to pesticides from our non-organic food, that is actually destroying our gut. It's killing off the beneficial bacteria and destroying just basically our milieu of our gut. And if we don't have healthy bacteria in our GI tract—believe it or not, 80% of our immune system lies in our GI tract—then our immune system is going to be depressed. It's going to not function optimally. So we need to reduce any amount of exposure to anything that's going to disrupt that environment of our gut.

And when we have patients come to our office whether it be for heart disease, whether it's an autistic kid I am treating or a child with eczema, we look to the gut to heal all "dis-ease." And as a chiropractor I call it "dis-ease" not disease because it is really just a lack of harmony within the body. We don't like to label these diseases, because, really, it's just the body not functioning optimally. And we have to take away what's

injuring the body and give the body what it needs, chiropractic care and probiotics and all the good fats and supplements that we need today. Unfortunately, even the healthiest organic Paleo diet is deficient in many minerals and vitamins because our soil is so depleted and because we have such a chemical burden from our environment that we do need to supplement with probiotics, with multivitamin and fish oil.

Our website is filled with at least three dozen of our custom-formulated products. There was nothing out on the market that was good enough for myself, my family, or my patients, so we've developed our own line of products that we are proud to call part of the Drs. Wolfson line. And our kids are drinking it. The patients are drinking it. We've got a greens formula. It is amazing what you can do with somebody's health if you just educate them and teach them that, for example, our ancestors were pulling carrots right out of the ground and eating them with dirt all over them, right.

They didn't wash them and scrub them in the kitchen sink with some sort of fruit and vegetable soap. They didn't shave the skin off the carrot, which happens to have more value than the inside of the carrot, more nutrients. They just took that carrot and ate it and it was teeming with bacteria, the good bacteria that our guts need. And so we were exposed to this day in and day out. And if we just get back to nature and get our kids back into the organic soil and eating out of our gardens, our health is going to really express itself.

Jonathan: And for those who are used to the kind of work that I've done over the many years, when it comes to environmental toxins, you might hear about heavy metal exposure and mercury and people don't even, for the most part—not everybody, but a lot of people, millions of people don't make the connection between mercury-based silver fillings in the mouth and how that literally goes directly into our gut and pollutes us every day with chewing and drinking, eating, that the saliva is mixing with that mercury-based silver filling and then pulling that mercury down. And we talk so much about the gut and its connection to the immune system, leaky gut syndrome, we get all that.

But that is a big area that I encourage everybody to listen to Dr. Stuart Nunnally as part of this event where we go into poor oral health and how that has a huge impact on our immune health. But so many other environmental toxins as you've mentioned already, Dr. Heather, in terms of the sprays and the lotions and everything in the home, just very important to try to clean up as fast as possible.

So Dr. Heather, we're going to move to an area now that we mentioned at the beginning, and it is a hot topic for a lot of people. But I feel like the nerves will be calmed down and people will be much more clear-minded if we first, number one, stay open-minded, and then number two, really

look at the facts. What's your opinion about vaccines? Should we get them or not? What do you tell your patients?

Dr. Wolfson: Well, we have a two-and-a-half-hour PowerPoint presentation, Jonathan, called Wide Awake on our website. And we've been doing vaccine seminars for 10 years, my husband and I. And we finally videoed it after many requests for a DVD. And it is two and a half hours of absolute facts from CDC, from medical journals. There is no opinion from the chiropractor or cardiologist in this seminar. It is 100% fact-based.

And I am 42 years old and, thank God, my father didn't vaccinate me or any of my siblings. He is a chiropractor and knew better. My children are 4 and 9. They have never been vaccinated and never will. Now, as far as me telling the world what I think, it's really simple. As far as educating yourself and learning the facts, you can make your educated decision, which after you learn the facts, there is no way that somebody could vaccinate themselves or their child just the way nature designed the human being or any animal to come in contact with the germ. It is totally unnatural to take a germ, whether attenuated or not, and have that attach to other heavy metals such as mercury, which you just mentioned before, aluminum, formaldehyde, MSG, antibiotics, aborted human tissue, animal tissue, and inject this into our bodies. Our bodies would never encounter a germ in this fashion nor encounter a germ attached to all of these deadly other components.

Now, the interface would normally happen in our lungs, we would normally breathe in a germ. So somebody, let's say, with chicken pox coughs or sneezes and that droplet goes out and the other person breathes it in and at the lung interfaces, where the immune system begins to learn and recognize and attack this germ. And then our body goes into a cascade of many, many different events, some of which science doesn't even understand or know about. And our bodies can respond the way nature intended to the germ. If we bypass the lungs, the gut, the sinus passage, then we bypass the most critical stage for our bodies to defend themselves. We mount fevers. We do different types of responses from our immune system to disable that germ or make it less virulent.

Now when a vaccine injects this, we don't have that opportunity. We've totally bypassed nature's protection. So just the concept alone is wrong. Even if you took sterilized water and then attenuated chicken pox virus, we are going down the wrong path and the germ will always outsmart man and science. They've been around longer than we have, and they're going to be here longer than we will be. We are destroying the human race with vaccination.

Jonathan: Dr. Heather, it amazes me when you hear, and I know you've

heard this plenty of times, how pregnant women should be so careful when it comes to eating something like tuna fish too often during a week because there's mercury in it. And yet like what you were saying, somehow, it's legal, it's so little, don't worry about it, and it's perfectly fine to have this mercury put into somebody's head with a silver filling with the thimerosal, which is mercury, pumped into a solution that then is directly injected into a small child that doesn't even have a fully-developed immune system.

And then on top of that, what you said about how injecting that into the body, into the blood, and the lymphatics, bypassing the digestive system, doesn't allow our body to protect us as much. Like that's perfectly okay. But pregnant women should watch out if they're eating tuna fish with too much mercury in it. And then there's also the other idea of these vaccines like the hep B vaccine that I don't know if many people really know that testing for that, which was injected into a child hours after they're born, millions of babies exposed to this every single year, they tested that vaccine for four days and it's okay, there's no problem, let's give it to everybody. It just doesn't make logical sense.

Dr. Wolfson: Vaccination is the biggest crime of the century. And when we talk about amalgams in the mouth. First of all, it's safe for an amalgam to sit in a child or an adult's mouth. But somehow it turns into a hazardous material and needs to be removed from a dentist's office with proper handling. So when you remove it from the mouth, you can't throw it into a garbage can, you can't flush it down the toilet. You need to call basically a Hazmat team to have it removed. But it was fine in our mouth, right.

Same thing with vaccines. We have set safety standards for all of these heavy metals from mercury to aluminum and they are far exceeded in every single vaccine, let alone the eight vaccines that they give at one time. There are 72 doses of 17 different vaccines by the time your child's 18, 49 doses of 14 different vaccines by the time your child is 4. Like you said, we are now giving pregnant women the flu shot and DTaP while they're pregnant. There are zero studies that say that is safe to the unborn child.

And when these children are born, they are then given the hepatitis B shot within their first hours of life in the hospital. And we know that hepatitis B is contracted through IV drug use and prostitution and it's a behavior that no newborn baby will be engaging in, correct? And on their second month of life, they're given eight more vaccines, and on their fourth month of life, they're given seven more vaccines. That is 16 vaccines from birth to four months.

And the United States of America has the second highest SIDs rate in the world. SIDs stands for sudden infant death syndrome. It should stand

for—it should be VIDs, vaccine-induced death syndrome, because SIDs occurs between two to four months of age typically. It is the highest incidence of the age at which they are dying between two to four months of age and it's no coincidence that we give the highest amount of vaccines in that short amount of time. It is an absolute crime.

And for a medical doctor, especially a pediatrician or an obstetrician, to deny that vaccines are causing this it's like they threw out their brains, literally just threw out their brains. They do not think for themselves anymore and they say if the science says that vaccines aren't causing autism and death, then they believe it. Let's just use some common sense here. We don't need a study that shows that we're supposed to breastfeed our child, that we're supposed to get sunshine, that we need to drink water. There's no study that we need that says vaccines are killing our children, literally.

Jonathan: And Dr. Heather, if anybody has any doubt about some of the things that we're talking about in this conversation, just simply ask for a vaccine insert. A lot of times you made reference, Dr. Heather, to something not having any kind of support scientifically for it being safe. Like, for example, injecting vaccines into pregnant women. It's absolutely admitted by the vaccine manufacturers. They know what to do legally to cover themselves, although all the vaccine manufacturers are not held accountable to anything that they're producing, but they still put that legalese into these vaccine inserts. And if someone would actually get a magnifying glass and a spotlight and actually read every sentence in those inserts, it would really just blow your mind. I don't know how else to describe it.

Dr. Heather, as we shift gears. I know you're a chiropractor. We don't have anyone else in this event talking about chiropractic care. How does this actually help to support the immune system? What's the connection?

Dr. Wolfson: Well, chiropractic is just amazing. I'll never stop being amazed every day in my office, whether I am seeing a patient with an ear infection or strep throat or runny nose, whatever it is. It is just mind-blowing what we see on a daily basis with chiropractic care. So when I say we don't need studies on this or that to prove anything, certainly, when you're getting chiropractic care, you see and experience the benefits of the chiropractor, we see it on a daily basis.

However, there are hundreds of studies, which prove that the chiropractic adjustment does boost immune function. The nervous system and the immune system have a very special symbiotic relationship. And when we affect the nervous system as a chiropractor, we are actually influencing the immune system and we can increase T and B lymphocyte numbers, natural killer cell numbers, our antibody

levels, the phagocytic activities, plasma endorphin levels. We can affect on such an amazing level the human body just with the chiropractic adjustment.

And that's really what I want people to take away from listening to this, is that a chiropractor should be not only adjusting every patient but discussing our environment. So if we adjust the patient and then they go home and eat GMO food that's sprayed with glyphosate, are we really doing them a favor? We have to address everything as chiropractors. I believe it is our responsibility to be the primary care physician, the gatekeeper of health. And we should be relying on our chiropractor to heal and to allow our bodies to heal themselves.

We often say the power that made the body heals the body and it happens no other way. But we need to take away what's interfering with the nervous system, hence, we call that a subluxation or misalignment of the spine. And that misalignment of the spine is interfering in nerve flow, which also then affects immune function, so we need to educate these patients that chiropractic is not for car accidents and low back pains. Of course, we're great at that.

But we affect the body on such a deeper level and that's the important message to take away today is to understand that chiropractic care is the greatest healing art of our time and everybody from newborn to the elderly needs to be under care. And I hope that every chiropractor knows that they need to take on the role far beyond just the adjustment and really address that person's environment.

Jonathan: By the way, for those who are interested a bit more about vaccines, I have a very exciting announcement to make. Make sure that you check out Dr. Judy Mikovits' presentation, her conversation with me as part of the Immune Defense Summit. She comes directly from the National Institute of Health. We're talking over 20 years. And she's going to have information that you've never heard before. She's going to basically really lift up the hood and have you look inside the vaccine industry and talk about vaccines like you've never heard before. So I strongly encourage you to check out that conversation as well.

Dr. Heather, it's a lot of great information. I want to thank you so much for your time. And I want to thank our listeners for joining us today. If you would like a copy of this program plus all the other presentations inside the Immune Defense Summit, simply click the banner you see on this page.

Thanks again for attending the Immune Defense Summit. Talk to you soon, take care.

How Chronic Infections Block Detox

Guest: Dr. Christopher Shade

Jonathan: Welcome to the Immune Defense Summit. I'm your host, Jonathan Landsman, creator of NaturalHealth365.com.

Did you know that every year, drug-resistant bacteria or super bugs kill 700,000 people worldwide and is projected to be more lethal than cancer by 2050 and infectious diseases still remain one of the leading causes of death.

Cancer, cardiovascular problems, and diabetes are by far the leading cause of premature death in the world. But in reality, all of this is avoidable with a strong immune system. That's why I created this event, to help you understand the roots of disease and how to prevent and reverse life-threatening illnesses by re-empowering your immune system.

Our show today: How Chronic Infections Block Detox. Our guest, Dr. Chris Shade, obtained his Bachelors and Masters Degree from Lehigh University in Environmental Chemistry. Dr. Shade earned a Ph.D. from the University of Illinois, where he studied the environmental and analytical chemistries of mercury as well as advanced aquatic chemistry.

During his Ph.D. work, Dr. Shade patented analytical technology to analyze mercury and later founded Quicksilver Scientific. Since then, Dr. Shade turned his focus to the human aspects of mercury exposure and the human detoxification system, researching and successfully developing a superior liposomal delivery system for the nutraceutical and wellness markets and also, specifically, clinical and analytical techniques for measuring human mercury exposure. He used his

understanding of mercury and glutathione chemistry to design a unique system of products for detoxification that repairs and then maximizes the natural detoxification system.

We're doing this program today because, in my opinion, Western medicine takes an inadequate look at the issues surrounding chronic infections in the body. For example, when patients tell their doctor that they feel low in energy, anxious, or depressed, all signs of a possible chronic infection, they are treated with toxic medications that never deal with the underlying cause of the problem. In other words, sleeping pills or anti-depressant medications ultimately do a poor job of curing anything.

So what about the underlying health issues of toxicity and poor nutritional status? Conventionally trained physicians rarely have the time or the understanding to help patients understand the true cause of any illness. Of course, by now, I'm sure you appreciate the value of a good detoxification program including better energy, less anxiety, and improved brain function. But wait, chronic infections can block our ability to effectively detoxify the body. What do we do? That's exactly what we'll talk about today.

Please join me in welcoming Dr. Chris Shade to our program. Dr. Shade, welcome.

Dr. Shade: Thank you very much, Jonathan. It's great to be here with you again.

Jonathan: Dr. Shade, as I mentioned earlier, this is just simply the reality, right, and I'd like you to comment on it. Chronic infections are rarely discussed in conventional medical circles. Yet, they're talked about a lot in the integrative medical world. I know that's what you're involved with quite a bit. Why is this going on? Why such a difference?

Dr. Shade: I think it probably has to do with the conventional model of medicine now, with these rapid-fire appointments and people coming in...You have to diagnose very quickly. You have some lab test that gives you a yay or nay. And you give them an antibiotic or you don't. And all that has to be turned over so, so quick.

And a chronic infection is much different. Your lab tests may or may not show it. You're going to do them but you're not going to rule out infections just because the lab test come back negative. There's so much you have to look at that it really takes a long time spent with the patient to figure out exactly what the root of the problem is. And, in fact, unfortunately the Institute for Functional Medicine found in their survey of functional medicine practitioners that the more time they spent doing functional medicine, the less money they make because these difficult

cases require a lot of time. And that's why they're not addressed right in mainstream medicine model.

Jonathan: I suppose also in all fairness, right, Dr. Shade, a lot integrative physicians, who I know are going to be listening to this, a lot of integrative health care providers who are really interested in all of this content, they too are to blame, I guess, in a certain way. Because I know there are a lot of them out there. And you know how much respect I have in the field. But they kind of take the Western medical approach, right? They kind of bring somebody in: "Oh, you've got digestive disorders. I'm going to give you my protocol." Boom, boom, boom. And they treat everybody the same. You know what I'm saying, right?

Dr. Shade: 100%. Unfortunately, in integrative medicine, we've many times taken an allopathic approach. With this symptom, gets this herb instead of this drug, instead of looking at the root causes. I mean, a fundamental difficulty is that fixing these people correctly, finding the root cause takes an investigative work. It takes some time and it takes a nuanced look into the interaction between toxins and infections. And the real art then is how to peel these apart. Sometimes you're going to have to start with toxins, sometimes with infections. And always there'll be some overlap of going back and forth between those two poles. And often, we don't want to take the time to really learn that art and dig that deep.

Jonathan: What we're about to get into is what some of these symptoms look like, right, Dr. Shade, in terms of the way we know, "Hey, maybe something is going on with the chronic infection." But it's important for people to appreciate what we've already said about how when you walk into a medical office, they're not treating you like a condition, which is what you're basically saying already. That someone walks in there, what is their work history like? Where have they been working—that's what I mean, are they around toxins? Do they have dental issues? Like those "silver fillings" that they make sound so innocent, when over half of that is a neurotoxic agent, mercury, a heavy metal, that you don't want in your body, the aluminum, the vaccines.

You really do have to find out about the individual in front of you. And that's where you've got a chance to try to get rid of these chronic infections before you have a really great chance of detoxifying somebody's body, especially those people really suffering out there. That's what this message is all about.

So, Dr. Shade, you can comment on what I've said. Or if you want to, just kind of go right into some of these symptoms that suggest a chronic infection really is the issue.

Dr. Shade: Yeah. Well, that's where really spending time looking at, of course, the symptoms that they have now. But what's the history

to get where they got? Where have they been? Where have they been travelling? As you said, what have they been doing for work? Because the symptoms of infections and the symptom of toxicity overlap so much that it's often hard to pull them apart.

And why is that? It's because the infections often create toxins of their own, especially if you're looking at GI based infections, dysbiosis, and parasites. They will create toxins, which give you a toxic effect. Or they're creating inflammatory states that are creating a leaky GI barrier and you're getting inflammatory compounds in.

So, why do you feel bad when you have infection? One part is the toxins. The other part is the inflammation created by the infection. So, things like a leaky GI tract will get lipopolysaccharides into the body, which will create inflammatory states, which will give you a malaise that's very similar to an infection. Now, you can say that from the infection in the GI tract, or it's the translocation of the endotoxin reacting with toxins you knew and giving you those negative effects.

But the important thing here is that it's kind of hard to pull apart which of the symptoms are from toxins and which are from infections. And I have this funny thing that's been going on in my view of the whole field. There have been times where I think that toxins are the most important thing. And then there are times where I think that infections are the most important thing to go after. And then I'll cycle back and I'll think it's the toxins. And how can I vacillate in between these views? It's because the two are so overlapped.

And so, you're asking me directly about what are the symptoms of when you have chronic infections. And again, like I said, they'll be similar to toxins. So, brain fog and fatigue are the most common things that are really driving people. And along with that brain fog, you want to see is they're high degree of anxiety?

Now, brain fog and anxiety can be effects upon the glutamate receptors in the brain. And this can be direct neurotoxic insults. And this can be from toxins like mercury. It can be from mold toxins that are in your environment. It can be from Roundup that's in your food.

But you can get the same hypersensitization to glutamate receptors by glial activation. And glial activation can happen... That's when your immune system and your brain gets activated and starts making inflammatory cytokines, which it's normally not supposed to do. And it can do this in reaction to presence of infectious agents and infectious toxins. But it could also do this in reaction to the lipopolysaccharides you're getting from your GI tract.

And then there are certain environmental toxins, things like DDT and

similar chlorinated, halogenated hydrocarbons that can also activate the glia like an infection would. And then, of course, Lyme disease also activates the glia. So, either way you activate that system, there is neuroinflammation that results from it. And the neuroinflammation can create these symptoms of brain fog and anxiety.

There can be a lot of autonomic nervous system dysregulation that comes from that. And that can cause all kinds of different organ disturbances that aren't really related to direct attacks on the organ, but they're related to autonomic dysregulation that in turn then creates a disordered blood flow or perfusion problems in different organs where you'll starve an organ of the resources that come with blood. And it could be because of a neurologic effect from either infections or toxins.

So, how do you know?...And I'm still not giving you any clarity on how you know it's a chronic infection. One of the ways that we know directly here is when we try to detoxify them and they get symptomatically worse. So, when we detoxify people from our care and this happens all the time. People will come to us. They're not sure what the problem is because this is overlap of symptoms. They thought it was Lyme disease. They go. They get a test for Lyme disease, and it comes back negative.

So, the person who did the test goes, "No, you don't have Lyme." So, they say, "Well, let's try mercury. Maybe it's a mercury problem. Or some other heavy metal." And they'll come to us. We'll do some testing. We'll find some metal. Well say, "All right, let's go after a detox program." And we'll put them on a detox program that, for us, always involves upregulating glutathione levels and glutathione processes in the body.

And that in turn, turns up being the immune system. Then the immune system, if it sees an infection then, it starts that inflammatory immune response that makes you feel worse. They'll call into us. They say, "Look, I'm trying to detox. And every week you said it's supposed to get better, but it gets worse." And we'll say, "Oh, did you ever test for Lyme before?" They'll say, "Yeah, I did. It came back negative." And we'll tell them, "Go back and test again." And eight times out of 10, they'll come back and they'll say, "Oh, my God. Now I test positive for Lyme."

The reason is that the tests—and this is where testing can become a problem, or at least you get false negatives—the tests for Lyme are based on immune response to the Lyme. And one of Lyme's greatest strengths in its attack on you is its ability to downregulate the immune system. And part of that is lowering glutathione levels. And later, we'll talk about the overlap between glutathione levels in the immune system.

So, when we do the detox and we bring up the glutathione system, the glutathione system brings up the immune system and that brings out the reaction to the infections. And so, whenever you try to detox, and

it's really not working, you're running into a lot of problems, you always have to suspect that chronic infections are involved in that mix.

Jonathan: Dr. Shade, not to get too off topic, but I just feel like it's so pertinent to what we're talking about in terms of infections. Sepsis, right, in the hospital. I heard a number the other day that just rocked me off my chair. A medical doctor talking about how vitamin C is helping people in the hospital, with a thousand people a day dying in the United States from sepsis, this infection, which, okay, it's not a chronic infection. But, man, conventional medicine is definitely not dealing with this properly.

And now what he's doing is putting in some IV drip of vitamin C. It's neutralizing this threat. And it's literally saving hundreds of lives. If we can get this, and a lot of what you're talking about today, put through hospitals, how could we turn things around? Like, how fast, right?

Dr. Shade: It's huge, huge, huge. I've talked about sepsis in my last glutathione lecture. And yeah, I'm aware of the great results of vitamin C IV on sepsis. And I would say that glutathione would play a similar role, if not more direct. Because sepsis, this usually often like a perforation of the GI tract and there's a little bit of a spilling of the contents into the system, and it's not the infection but the disordered immune response to it.

And so, instead of attacking the infection, then the sepsis, the immune system attacks the whole body. And it often goes into the lungs and creates an uncontrolled inflammatory response, which is, in immune terms, related to Th2 and Th17 where the Th1 reactions that are supposed to attack the actual microorganisms causing this immune assault, that aspect is not even functioning.

And that disordered immune response is what happens when glutathione levels are low. The Th1 activity, which is your innate immune activity, which is most responsible for killing things, gets turned way down. And the Th2 activity, which is more antibody-related and a little bit more prone to collateral damage, goes way up. And having these weakened people, with low glutathione systems, and they get these infections, they have this disordered response that kills them instead of the infection.

And this is happening in chronic infections a lot. And that goes back to why doing the mercury detox with glutathione was actually triggering the people to feel worse. It was actually restoring their immune function and they're starting to attack the infection. So, getting a better handle on all these different triggers and how to control the immune system is the biggest thing that we need to do in functional and integrative medicine in the next five years. And it's the biggest thing we then have to transfer over as a knowledge base into conventional medicine, so they can make

better use of their resources in fighting these infections.

Jonathan: Dr. Shade, I know you are leading the way. And I want to give everybody a big heads up and get ready to start taking some notes because we're going to dive into things. We're going to be covering a lot of extremely important points. So, let's get started. Dr. Shade, we've got different kinds of chronic infections. We've kind of mentioned that a little bit already, Epstein-Barr virus.

You've mentioned Lyme, candida, parasites. It goes on and on, other gut issues going on. And a lot of times people—this is not a joke—they may be dealing with two, three, or more of these things all at one time. So, especially for those healthcare providers out there who are listening very carefully, how should we start to deal with this kind of issue or multiple issues at one time?

Dr. Shade: Yeah. This is an amazing field. And I'm so fulfilled to be a part of trying to figure this out.

Now, when these clients come into you, there's a lot of good testing that can be done. And it's important to do the testing. But it's also important to recognize the limitations of the testing. So if you are testing for presence of viruses, viral titers, there are tons of tests available to use through just LabCorp. And a lot of bacterial tests, some fungal antibody tests, all of those are available. And there's a lot of different places to get Lyme tests. And then, of course, for parasites, there are conventional parasite test. But you're better off going with some of the more advanced testing that's available from Metagenics or Doctor's Data, Dr. Amin down in Arizona.

But, we need to, number one, know the limitations of the tests. And in the question of the parasite testing, this is the worst testing available to us right now. Worst in terms of the amount of false negatives. You miss parasites left and right. Because we're either looking for immune response to them and their job is to control the immune system. In fact, parasites are fantastic at creating that Th2 shift, with a lower Th1 activity, raise Th2 activity.

And in the GI tract, that's so that they can support the activity of all their partners in crime there in the food web that they are trying to create. They want you to have more food intolerance so there's more undigested food coming to them. And they want you to have less immune vigilance so you're not controlling their populations. So, it's hard to do immune testing against the parasites.

And then actually finding a parasite, they are only coming out once in a while or in the most acute cases. The really good, chronically well-developed parasites are behind biofilms. And biofilms are your biggest

enemy to being able to test for these things. And they'll only come out during the most acute phases.

And you won't see them very often. Then, when you go into testing for Lyme disease, there are very often false negatives. If the immune system is not up to par and is not reacting to these, you can often miss the boat there.

And so, I encourage people to do testing, find whatever that they can, and use those as markers for the effectiveness of the programs. And it'll also give them some specificity in their approach. I really like people to look at this like as a complex infection of a number of different organisms altogether, often living inside a biofilm.

I really like the testing from Steve Fry at Fry Labs, where they stain biofilms. They even have, after the staining, they have some genotyping that can be done with next gen gene typing. They don't have everything matched, but they have a match for a lot of the organisms that live in biofilms inside the body. And it can indicate to you, that kind of testing, that you're dealing with a complex issue there where there are multiple organisms inside the biofilm. And you can attack it, knock it down, but it can re-grow.

So, I'd like people to look at this as a syndrome and to work on it over a long period of time, rotating different antimicrobials, but always trying to bring the activity of the immune system up and always trying to bring the toxins down. Because there is a direct interaction between the infections and the detoxification where there is a sort of downward spiral between the two.

Jonathan: It really is a delicate and sometimes not so delicate balance that you are describing, Dr. Shade. Again, to give people a real sense of urgency, we're talking directly to those people who are really suffering with their health: brain fog issues, inability to concentrate, so much fatigue during the day even though they're sleeping at night, to one degree or another, but just never having the energy. Their mood is down. I could go on and on. Clearly, a lot of issues going on.

If they were to take high quality supplements or eat organic food a little bit, and sometimes go out to restaurants, or have a little bit too much alcohol during the week, or just one or two sugar desserts during the week, "Oh, I used to have five or seven. Now, I'm only having two or three," I mean, Dr. Shade, just for 30 seconds or so, in your professional opinion, knowing what's going on with the physiology, the biochemistry inside. I mean, it's like taking one step forward and two steps back, what I'm describing. Isn't that true?

Dr. Shade: It totally is. And it's because this blend of toxemia and

infection is together debilitating the system, beating down the mitochondria, beating down the adrenals, and keeping the immune system hyperreactive to everything that's going on. That's how the systemic chronic disease develops itself. I had said that there's this interaction between inflammation and detoxification. Do you want me to get into that now?

Jonathan: Yeah, I absolutely do. You're right on the same track with me. Let's really dive into it now. How the chronic infections are definitely playing a huge role in hampering our ability to detoxify the body.

Dr. Shade: So, toxins weaken the immune system, which allow infections in. But infections create inflammation. And inflammation is the biggest blocker of detoxification. And we have to understand, inflammation is a pro-oxidant activity aimed at killing an organism. And it's supposed to be a short-lived event, a couple of days while you go after some infection. And you come after the infection with pro-oxidants, with hydrogen peroxide, hydroxyl radical, hypochlorous acid. And you go after them to kill them with these. And to do that and create an environment where you can do that effectively, you turn down antioxidant activity.

But detoxification is within the domain of antioxidant activity. So this is fine over a short amount of time. You turn down detox, you up regulate immune function and pro-oxidant activity. You kill the organism and then you turn up detox to clear away all those remnants. But what happens to people when they get in the chronic cycles is they get chronically inflamed. And that's chronically weakening detoxification. So you're chronically accumulating toxins from the environment in addition to the toxins that are created by the infections.

And then secondarily, this chronic inflammation is creating chronic opening of the GI barrier, creating leaky gut, which is bringing dysbiotic toxins from the GI tract, and pro-inflammatory compounds like the lipopolysaccharides in. And the body is just stuck in this cycle where it's got all these toxins that are beating down its energy generation. And the toxins are also keeping the immune system from getting up on top of it. And the immune system is dysregulated so that it's hyper reacting to everything. And all these different toxins and inflammation is hitting the brain, and the adrenals, and as I said, the mitochondria. And it is just holding you down, down, down and everything you put in tends to inflame the system more and make it even worse.

Jonathan: Dr. Shade, I just feel like I want to jump in and say to anyone who is felling overwhelmed, please don't. We are painting a picture here to really give you that sense of urgency. But I would also add that if you feel like this is too much for you, and you don't even have a really good health care provider, I've got to tell you, I just feel like it's important to mention that you find someone that can help support you along the way

here. Because with your mood down and feeling like there is no hope in one way or another and that you can't get things done, I can tell you, without a shadow of a doubt, that is absolutely not true. You can get the help. There are ways to do it. We're going to get into it right now. So, just know that there's hope. There's a path for you.

But if you need that support, it's really important to get someone close to you that can help you, at least, until you get out of the woods.

Dr. Shade, that's why I'm really focusing on the people who are really sick out there, don't feel well. How do we best support the body to resolve these chronic infections that we've been talking about already and the poor detoxification pathways, how do we get started here?

Dr. Shade: Yeah, that's great. And it's good you point that out because often in my lectures—the first half of the lecture will be all the bad news. And it does get overwhelming. And you feel like, 'man, when am I going to be able to pull myself out of this?' But know that I've seen some horrible, devastated cases pull themselves out and get right back into the game. And it does take a while.

And it takes diligence and patience. And it takes the right moves. And it takes a good practitioner to work with somebody that can support you in this. Somebody that can help guide you with this. A lot of the summits we've done in the past on detoxification, you can do some of this stuff yourself. But with chronic infection and toxicity, you're going to want some professional support to help you pull through this.

But let's start by talking about how we start in the detoxification side of this. So first, let me say, that not only does inflammation block detoxification. But a lot of the infections can do this, too. And some toxins can even do this. Now, let's look at mold toxins. Mold toxins can either be coming from your environment, say, you've got mold growing in the walls of your house or in your HVAC system. But they can also be coming from infections in, say, your sinus cavities or you've got molds growing in there.

And those mold toxins are able to block NRF2. NRF2 is a protein that we've looked to during detoxification because it goes into the nucleus and it signals all of the genes for detoxification to be turned on all at once. So, it mounts this big detoxification response in the cell. But the things that turn this up are often slight toxins. And if NRF2 is blocked or not able to mount this response, and then these things that we think of as detox elicitors are actually slightly toxic to us.

So, I think that in chronic infections, there might be toxins that made by, say, Lyme disease that do this as well. So the kind of things that I'm talking about that are NRF2 upregulators would be like lipoic acid, broccoli sprout extract like sulforaphane, or wasabi extract, polyphenols,

even, like pine bark extract, green tea extract and diindolylmethane, all of these are NRF2 up regulators. And when you're really in a sick state, you can't go right to these right away. We want to start with more passive detoxification and then move into more active detoxification.

So, the use of binders in the GI tract has been a big focus for me recently. And in fact, we're about to release what we call The Universal Binder, which is a mixture of charcoals and clays, chitosan, IMD, which are metal binder, and a couple other compounds that will bind not only environmental toxins in the GI tract, but some of the GI-generated toxins like the endotoxin or lipopolysaccharide, I said, that is so pro-inflammatory that binds very strongly to charcoal. And a lot of the other toxins that are made by the parasites and the bad bacteria, they'll bind onto these mixtures.

So, starting with these mixtures that are stopping the toxins from getting from the GI tract into the body and grabbing the toxins that are coming out from the liver. This is an important first step that's going to start draining toxins out.

Then we're going to slowly move into supporting liver drainage, and kidney drainage. So, by supporting liver drainage, if you go see any of my webinars on neuroinflammation, we talk a lot about using phosphatidylcholine and bitter herbs for supporting the momentum of bile through the liver and out through the gallbladder and into the GI tract. Now, why is that so important? We know that bile is going into the GI tract to emulsify fat so that you can digest them.

But it turns out that the transporters for moving bile out of the hepatocyte and into the gallbladder are the same transport system that is moving toxins out. So, when bile doesn't flow, toxins don't flow. And this easily happens to people who have parasites and people who get chronically inflamed. There is just this stagnation in the liver.

So PC is used to stabilize, that's phosphatidylcholine that's derived from soy and sunflower lecithin, pure PCs stabilize membranes in the hepatocytes so that they can be active in detoxification. But the PC is donated into the bile flow, too. And fluidizes the bile, pushing bile from the hepatocyte out through into the bile tree, whereas bitter herbs are stimulating the flow through the bitter receptors in the mouth, in the stomach, in the pancreas, and they stimulate flow of bile through the gallbladder into the small intestine. So, that flow of bile is crucial to moving the toxins out of the liver.

But something that people often miss in its importance is the bile is an antimicrobial in the upper GI tract. There should not be a lot of microbial growth in the small intestine. And the bile is part of being an antimicrobial there, as well as emulsifying the fat so they can be

absorbed instead of being fermented by the bacteria there.

And the last thing that bile is doing is bringing glutathione to the small intestine to support and health of the small intestine. The only place where we're actively transporting glutathione from one place to another is from the liver, to the gallbladder, into the small intestine. So that momentum to deliver, this is one of the biggest blockages that happens to chronically sick people.

So, getting the binders in the GI tract and starting to get that flow through the liver into the GI tract is the most important set of things to do. And then, in addition to that, once you open that all up, you do start a lot of toxins moving. And when you see me lecture on the liver pathways, when that block happens, where the liver can't pump into the bile, toxins are backflushed into the blood to go to the kidneys.

Now, this is really important. I'd say go to the kidneys, but they actually have three feats. One, the toxins dumped into the blood. They can be pulled in by the kidneys and dumped into the urine flow, which is good. Or, if that's not working very well, they stay in circulation. And then you'll see them hit the brain, increasing neuroinflammation or come out to the skin. So, you'll see people have rashes and such.

So, whenever you're starting to detox and you have an increase in neurological symptoms or skin symptoms, it means you're failing the process these out. And you have to increase PC and bitters to move things strongly to the liver. You have to increase binders so that you're not re-circulating toxins. And you have to support the kidney so the kidney's getting things out. That is an overview of detoxification applied to cases where there is infections and toxins together.

Jonathan: Dr. Shade, I hope everybody got that loud and clear because you, for one, have taught me so much on appreciation of a good detoxification program by appreciating all of these systems. And you know, you and I have talked about what I personally went through many years ago.

Boy, everything you said is just so important. When someone is suffering with health issues, make sure of course, working with a great healthcare provider that will help you to appreciate where all these toxins are. Do you have mercury fillings in your mouth? Are you exposed to a lot of fumes? Is there mold in the house, like Dr. Shade just said?

Obviously, the first step would be a big first step. Get away from those toxins as soon as you can. Remove those from your immediate space, which we've talked about. Cleaning up the diet, so important. Don't cheat, right? This is about taking good care of yourself and eating well. We're going to close out the program with different nutritional

supplements that Dr. Shade recommends. And botanicals, you're not going to want to miss this.

But just an overview, higher fiber intake, so important as well. If you're constipated and you're not eliminating and then you go through any kind of detox program and it backs up and gets re-absorbed into your body, you could be creating very serious health consequences. So, that exactly what I was getting from what Dr. Shade was just talking about.

And of course, be well hydrated. Dr. Shade, I'm sure you've seen this a lot, people who are really sick. I know this is an overgeneralization. But I think it's pretty safe to say that a lot of them are dehydrated, which doesn't help kidney function. It doesn't help anything, right?

Dr. Shade: Absolutely. And you're right on the money there that if we had to focus this down to one single thing to pay attention to, it is the GI tract. Always having the binders. And high fiber is a binder. And charcoal is a binder. Clay is a binder. Chlorella is a binder. Those are all very commonly available thing. Always moving through there, these things through there, working on getting the right balance of microbes with probiotics in the GI tract. Working to support the lining of the GI tract. Keeping the bad food out of there, finding out what am I allergic to. Am I allergic to gluten? Am I allergic to dairy? Am I allergic to some oil that I eat?

You have to stop these things that are creating inflammation and stagnation in the GI tract because, what did I say about the immune system and the GI tract? 80% of the immune system is GI tract located. So, focusing on that is probably the single most important thing that you could do.

Jonathan: Okay. Now we're going to get into your real specialty. Let's talk about the nutritional supplements, the botanicals, these different elements that you can bring into the body. Of course, taking care of the big picture first, which is what we just talked about, to just improve our ability to detoxify the body.

Dr. Shade: Okay. We can go on for hours about this, obviously. But I want to get into a couple things. First, I want to go through a couple aspects of supporting the core system. And then we can talk about some of the antimicrobials because you can go in there with antimicrobials just like you could go in with antibiotics, you can go in with herbal antimicrobials.

But if the core system isn't supported, something is going to re-grow there. And this is a really important point. Something is going to re-grow in a compromised system. That's why you don't want to get too reductionist about your approach. You don't want to say, "Well, there's

the bacteria. I'm going to kill it and everything will be okay."

So first, let's talk about the system. We just said number one is GI. So, I already discussed all the different binders you're going to use. We'll have our universal binder out very soon. One of the aspects of that are some things that help the GI lining, and that would be aloe and acacia gum. There are some bad gums out there. But the Acacia gum is a natural gum that supports the immune system in the GI tract and is immunomodulatory and supports the lining of the GI tract. And when people are sick, they have a lot of GI issues. So that's a very helpful tool in the GI tract.

Then we said we want to keep the liver moving. And that's phosphatidylcholine. But now, phosphatidylcholine is not just for the liver. In fact, there's fantastic data on PC being a crucial aspect of a healthy mucus layer in the GI tract. And they've used that with irritable bowel patients. And they've seen that they're PC deficient in the mucus lining of irritable bowel patients, as well as it's feeding the healthy cell membranes in the GI tract, as well as the liver. So phosphatidylcholine is a big one for you.

Then, the bitter herbs. The bitter herbs is a big focus of mine. I had developed Dr. Shade's Bitters No. 9 a few years ago to help drainage. And now we're moving on to even more potent bitters. And when you're really in a stagnated place, the main herb extracts that I go to are gentian extract, which is the quintessential bitters extract; dandelion root extract, which is not quite as bitter but a good support for the liver; and what I've really gone to a lot recently is ethanolic extract of myrrh.

So, myrrh, we know is an essential oil. We know the 3 kings story. The three kings story of using frankincense, myrrh, and gold is often re-cast in an Ayurvedic light of frankincense being *Bowellia*, which is anti-inflammatory and anti-fungal. Myrrh, is a huge bitter herb. In Ayurveda, it is the dominant bitter herb. The way Western herbalists would use goldenseal, Ayurvedics use myrrh. It is a very strong bile mover and a very strong antimicrobial, as well.

So, some combination of myrrh, gentian, and dandelion. And I often put in some *Solidago* extract, that makes a very potent, very bitter mixture that you could take half to one teaspoon of at a time for really pushing a stagnated liver. And remember, I said the way to know you have a stagnated liver are any skin infections, or when you go to detox you get more brain fog or you go to detox and you feel stress or pain in your kidneys, your lower back area.

So we got GI. We're going to move liver, now glutathione. Glutathione we've talked in terms of its ability to help us detoxify mercury. But what did I say about when we go after mercury when Lyme is actually the

real problem? The body's reaction against the Lyme goes way, way up. Glutathione is crucial for restoring a Th1/Th2 balance and enabling your body to target the intracellular infections.

Glutathione is exceptionally effective on viruses. And I know in a lot of schools, they're not sure about using glutathione for Lyme disease. And they're worried that glutathione will benefit the Lyme disease. But when done properly and you're supporting detoxification and slowly bringing up glutathione levels, you're going to hear your immune system restore itself very nicely. And then you can move on to adding in antimicrobials.

And let me tell you as a caveat, there are times when you have very acute infection where you want to start with antimicrobials and then move to detoxification. But here in the detox I'm laying out, with GI, then moving liver, and lightly bringing up glutathione, we don't move too many toxins. We're just setting up a support for draining toxins. And when you start healing the microbes, there's going to be a big release of toxins. That's why anybody who treats Lyme is always having detox as part of the treatment. So, here I'm laying out a nice, more receptive, rather than active, detox. And now were going to go antimicrobial.

So, antimicrobial compounds we use the most, you're going see some products come out from us that address what's called Doose syndrome, which is a term for chronic cyclical parasitism in Chinese medicine. It's basically talking about infections that live in biofilms and how do we deal with them. And the main antimicrobials that we use are artemisinin, which is an extract of artemisia and that's very strong in Lyme disease. We do have a liposomal artemisinin.

But we're also incorporating whole artemisia extract, as well as propolis, which—like if you're going to have one go-to that you want to add in without worrying too much, propolis is probably that. And then, essential oils. Essential oils are such strong antimicrobials. You've got cinnamon, clove, oregano, thyme, savory, even orange oil is an antimicrobial. But the cinnamon, clove, oregano, savory, thyme, those are incredibly potent antimicrobials. Those can all be used as a combination of antimicrobials to lower GI and systemic microbes.

And then, for general immune support, I mentioned glutathione already, but of course B-complex is a big thing towards keeping your immune system happy. Vitamin C is huge. You see that used in sepsis, but the immune system is using tons of vitamin C. You'll be using grams of vitamin C per day. You can use it as a liposomal vitamin C, sodium ascorbate, magnesium ascorbate, mixed ascorbates, lots of different ways to bring vitamin C in and it's good to spread it across the whole day.

And then some of the things that are known for upregulating the

immune systems, of course, medicinal mushrooms have a long, long history of that. My friend, Bob Walker, likes to say, "Slippery when wet always supports the immune system." So that's the polysaccharides, not lipopolysaccharides, but polysaccharides in the mushrooms. When they're wet, they're a little slippery.

The same is true for polysaccharides that you'll find from oat bran. Large arabinogalactans are a good immune system stimulant. And then there are stronger herbs like astragalus. Astragalus is really good for shifting a balance from TH2 back towards Th1. If you see people with lots of food allergies, they are hyperreactive to supplements and foods but they have all these infections, astragalus is a great herb for shifting you back and working with the glutathione to shift back that dominance to Th1.

And then there's lots of different systems out there. If you've got Lyme disease, Lee Cowden's NutraMedix systems, Stephen Buhner's herbal extract systems, Byron White Formulas, those should all be used with a practitioner. But what I just gave you there is an overview of some of the tools available to you to add in once you've done the sort of system preparation that we would do with the tools we have at Quicksilver.

Jonathan: Dr. Shade is, obviously, I don't have to tell anyone listening to this program, the brains behind Quicksilver Scientific. And I just want to take an opportunity to thank your company, Dr. Shade, for being so supportive of the Immune Defense Summit.

This is such a critical message. Everything you just talked about, all I kept thinking about is, 'it's no wonder so many people don't feel well from being dehydrated...And I'm thinking about, in particular, the Western world, and certainly people that live in the United States, they've gotten away from eating things like dandelion greens and mustard greens and watercress, any kind of bitter herbs. They've gotten away from that. You're using extract to help human beings come back to life, right?

We're talking about not eating enough fiber. We're talking about being exposed to so many toxins today. On an unconscious level, the things that we buy, where we may be living in our apartments or in our homes that are so toxic with fumes or mold or anything like this. And you couple that with all the things going on nutritionally in the body, it's no wonder that this is a perfect environment for infections to grow, all of their waste products to spill into the body.

And it's time, it is so time to put a stop to all of this. Stop the toxins. Bring these things in. And I love your message, over and over again, Dr. Shade. This is not about taking a capsule once a day for 30 days, and everything will be okay. It's about taking an honest look of what's going on with us as individuals and then just taking it day by day, shifting our attention more and more to all the things that you talked about.

Any final words, Dr. Shade, as we close out?

Dr. Shade: No. You really hit it there. The getting better from this is about shifting to a real holistic lifestyle. And that is a long, long, long-term shift. I've met some guys who really understand the gut biota far beyond most of the people who lecture on it. And the only true way to long-term change things, it's not taking probiotics now fixes everything. It's shifting your diet long term to lots of fibers, lots of leafy greens.

And getting back, from the bitter perspective, getting back to the intense flavors and the intense colors that natural cycle of the bitters into our system. That is what's going to keep you. We will help you with interventions to shift that all back on to the right path but it's a long term, hard look at your daily lifestyle and how you're going to make that help you to be the strongest person you could be.

Jonathan: Dr. Shade, just a little fun note to finish things up, as I do all of these interviews for every program I do, I'm always smelling frankincense. I have the essential oil in a bottle. I keep it close to me. And I don't understand things like you do. But it's like I'm an addict already at this point. I just keep smelling it. And I just really enjoy it. And I feel like, in all honesty, it is a brain function thing. Something about it keeping me more focused. I just enjoy it. You know what I'm saying?

Dr. Shade: Absolutely. It's so beautiful. All the things like that, the sandalwood, the frankincense, they do such good things for you. And we probably only understand half of the mechanisms. But the mechanisms we do know are nothing but good.

Jonathan: Dr. Shade, I want to thank you so much for your time. And I want to thank our listeners for joining us today. If you would like a copy of this program plus all the other presentations inside the Immune Defense Summit, simply click the banner you see on this page.

Thanks again for attending the Immune Defense Summit. Talk to you soon. Take care.

How to Avoid the Threat of COVID-19

Guest: Dr. Michael J. Gonzalez

Jonathan Landsman: Welcome to the Immune Defense Summit. I'm your host Jonathan Landsman, creator of NaturalHealth365.com. If you're worried about the Coronavirus or any other bacterial or viral infection, this exclusive interview will prove to be very valuable. Enjoy!

Dr. Gonzalez, I've talked to Dr. Levy, we were talking about a lot of stuff going on here in the United States and throughout the world. He's been with Dr. Richard Cheng - who I also interviewed for this event - they went over the China together. And now I'm so glad to spend some time with you, very grateful. I know you're over in Puerto Rico ... so, before we get into why you feel the coronavirus is so dangerous ... why don't you just tell us what it's like Puerto Rico? What's going on?

Michael J. González, N.M.D., Ph.D.: Well, there's a big lockdown right now. Actually right now, everybody should be in his house by 7 o'clock. And the lockdown goes from 5 a.m. to 7 p.m., and only certain cars are permitted to go in the streets. Like you have to have in your license plate.... Like the pair numbers go one day and unpaired numbers go another day. So we're kind of pretty much in a lockdown here.

Jonathan Landsman: It sounds to me little bit like partial Martial Law. What happens if you were to go out past 7 o'clock? Do you get fined or something?

Michael J. González, N.M.D., Ph.D.: You get arrested.

Jonathan Landsman: Wow!

Michael J. González, N.M.D., Ph.D.: So it is Martial Law. But you know, to a certain extent, it's kind of necessary because you know that the main protection against the virus is non-exposure. So if you don't expose yourself, you're not going to get it. So that's what they're trying to do, to lower the exposure to the virus.

Jonathan Landsman: You know, maybe I could ask you this Dr. Gonzalez, because you just brought up an interesting point. There are people out there, and I've literally talked to physicians who say look, everybody has got to actually get it to become immune. You're talking about this idea of you know, they call it social distancing, but it's really basically the physical distancing.

Michael J. González, N.M.D., Ph.D.: It is physical distancing. Yes.

Jonathan Landsman: So the physical distancing that we're talking about here, there are those that say, well, hey, everybody has got to get it to become immune. And also the idea that the physical distancing is really just to slow down how many people are going to get it at one time. So what's your take on all this?

Michael J. González, N.M.D., Ph.D.: Well, I think that's the main idea. The main idea, is "not to crash the healthcare system." Because if you get everybody sick, you're not going to have all what's necessary to treat them. So basically, it's to try to slow down the acquisition of the disease in order to have hospital beds and respirators for the people that really need it. If everybody gets sick at the same time, you're not going to.... You know, it's going to crash the health system.

Jonathan Landsman: For those who aren't familiar with your work, you've been practicing medicine for a very long time. Just give us a little background where you come from.

Michael J. González, N.M.D., Ph.D.: Yes. Well, I'm a biologist really, that's how I feel about who I am. I have worked a lot before in Molecular Medicine in that sense. And I have worked in a lot in research, teaching.... And the clinical practice has been limited, I don't do much clinical practice. I was forced to clinical practice by Dr. Miguel Bediaz who was a student of mine, and he forced me back into clinical practice to help him out. So we've been publishing cases, ideas, theories and you know, working hard and trying to make this place a better place for everybody.

And I think if we really understand how to really bring health, I think that's the best way to go. And the way we do it, it's trying to understand the healthy state. Because the Chinese used to say that there's no disease, they're only unbalances. So the important thing here is to keep the body in a homeostatic way you know, to optimize all the systems so

the body will take care of itself. So that's what we try to do. Some people call it ultramolecular medicine, some people call it integrative medicine, some people call it functional medicine, but it's kind of the same thing.

Jonathan Landsman: We're going to talk about protocols later on, what you see in terms of diet and supplementation. We talk about that a lot at NaturalHealth365 of course, talking about keeping the immune system healthy and strong as our best defense. Obviously, that's a no brainer, and it's important to focus on that. But for a moment Dr. Gonzalez, talk a little bit about what you see as being the real danger behind the Coronavirus. I mean again, some people have said "Oh, come on. This is no big deal, it's just like a flu." So where do you stand on this?

Michael J. González, N.M.D., Ph.D.: Well you know, it's a different issue. It's a new virus, we don't really know. I mean, everything is guesswork, because we don't understand; it's a new virus, it looks like SARS, it looks like the coronavirus that are the ones that produce the common cold, and the SARS has proved there's damage to the lungs, so it's a combination of both. So it has the fast infectivity of the coronavirus, and I would say, the pathogenesis of the SARS.

So you don't know how it's going to behave in people in particular. Some people, it could be just like a common cold, and for other people that could be a death sentence. So we don't really know. I mean, we know that older people, people with comorbidities are at more of a risk. But in that sense, anybody could be a risk because if you have too much maybe ACE-2 receptors, you might be at more of a risk even if you're young. So males are probably at more risk because they have more than females. And if you take certain medications, it might even.... So we don't really know.

The point is, the first thing is basically try to not be exposed. Probably you're going to get it sometime, but the important thing is that you get you know, not everybody the same time so you're going to have some hospital beds if you really get sick. The problem is that if we leave this disease advance.... Let's say you have a scratchy throat or you have developed something, that's where you have to attack it really hard, and that's what we're pushing into. People getting any symptoms, getting IV Vitamin C. But before that, you have oral Vitamin C can protect you, at least a gram 3 times a day may do the work. I mean, there's no guarantee, only guarantee is that in life, you have to pay taxes and then you're going to die.

But from the information that we have, information even from China, people taking at least 1 gram 3 times a day, 1 gram 3 times a day will probably help you protect yourself. There are other things. There is Zinc, maybe you need 25 mg or more of Zinc. There's Selenium, there's magnesium, Vitamin D, it's very important; Vitamin D, probably

between 5000 and 1000 a day. I was saying about Selenium, probably 200 micrograms at least, but it has to be an organic form like Selenomethionine. And magnesium, probably magnesium citrate, which is a very highly absorbable form and it's cheap. N-A-C; NAC will probably increase your glutathione and it's going to protect your lungs.

Also quercetin, it's a bioflavonoid that is going to also help with your lungs and heart. You have to protect your heart and lungs because that's where the cytokine storm attacks most strongly. So if you protect these areas, you're probably going to have a milder disease, it's going to be not as bad as it's going to be for people who have not taken these precautions. Two other very important things are that you have to hydrate yourself, you're doing the right thing right now. You have to be hydrated. If you're not hydrated, because all these nutrients, they're going to distribute themselves in water. So you need to be well hydrated; that's one thing. The other thing, please try not to eat too much sugar or refined carbs, because that's where all these bacteria and viruses really thrive. So that's another thing. Try to keep your diet as primitive as possible you know; nuts, vegetables, fruits and a source of protein.

Jonathan Landsman: I think it's great what you're talking about as you were mentioning all these things Dr. Gonzalez, I'm thinking about the people out there to get a little bit more clarity about this. And let me explain to you what I mean and then of course get your response to it. The idea that there's a Coronavirus, right? There's bacterial, there's viral infections that are out there. Even besides Coronavirus. But obviously, everybody is really concerned about this Coronavirus like it's a new thing, which it is. There's going to be many more new things like this that happen. There are opportunistic infections, they're out there, we can get it from somebody, it can get into our body, it can get into a cell, 100 cells, 1,000, 10,000, a million cells.

I think what we've been talking about already that's a key important point for people is we can get exposure to viruses. Why do some people get sick and some people don't? It is all about the immune system. Things start to come up like you mentioned, the cytokine storm. What a difference that can be, right? The storm can be a heavy sprinkle, or it could be a downpour, or it could be you know, a hurricane and a tornado and a monsoon all at one time and throw in a snowstorm all at once. I mean you know, the worst conditions on top of having a depleted body that can't take it anymore. A body on medications, a body that's overweight. A body with the medications where a blood is sluggish. The lymphatic system is sluggish and polluted with all kinds of toxins. And now you get the coronavirus or any other kind of bacterial viral load, and it just pushes you over the edge, and it does hit you hard in your heart, your kidneys, your brain or your lungs, right which is the coronavirus. So your take on this of what I'm saying, because basically what I mean

is, look, the virus is the virus, but we need to keep focused on what are we doing to mitigate the threats? What are we doing to buffer ourselves? And again, some of the things you've talked about, we'll get into Vitamin C, magnesium, Vitamin D. All of this though, is really an anti-inflammatory lifestyle, right?

Michael J. González, N.M.D., Ph.D.: It is, yes. Well, I couldn't explain it better than you did. I mean, you have the whole picture. That's what's going on. People do not take care of themselves, then the virus just takes opportunity of that. Once you have your weakened or exhausted immune system, it's going to be easy for the virus to invade and do whatever it wants to do.

One thing I wanted to clear before that is that, why this virus is a little bit different from the rest. This virus has 3 characteristics that are very important. And one is that you get infected with a lower viral load. That means that you need less virus to get infected. So that's one thing it inherits from the coronavirus, that it can infect you pretty much easily. The other thing is that it lives for a long period of time on different surfaces. So that makes it more dangerous in the sense that with less you can get infected, and it's going to be there alive for a while, so it's going to be presented in those places, so you could get infected more easily. The other point here is that it seems to be mutating pretty quickly. So what that does is that your immune system is going to take longer to recognize and battle it. And by that time, you already had that cytokine storm, it's going to be longer in your body. So if you're in a risk group, it's even worse for you. Because the chances are, it's going to get complicated and you're going to need a respiratory support, and one of these respiratory machines. And once you get on the respiratory machines, the odds are against you.

Jonathan Landsman: I couldn't agree with you more Dr. Gonzales, here in the United States, I talked to a lot of healthcare providers. And look, I mean again with all due respect, and my heart goes out to those that are suffering that are laying there in the hospital, I know what that's like. I've been with many people when I was working one on one with people, and my clientele would go into the hospital. And I saw firsthand what it's like at that point when someone is so depleted, so weak and dependent on IV drips and all the machines to kind of just support life.

But the point is what we're talking about here is if the person is drowning in their own fluids, if their body is fully infected, and they've got something stuck down their throat to open up their airway so they can breathe a little bit more for another few days before they die, which is exactly what's happening. Because these people are not being treated well ... you know, you're helping us to understand how important it is, the dosage. Right, we're going to talk about the difference between oral Vitamin C and IV.

I'm sure your point isn't that everybody has to run out and get IV Vitamin C. You and I were feeling pretty much asymptomatic, we're feeling okay. It's not like we have to go to a clinic every day and get 10,000 mg of IVC. You know, talk about the dosing and what we need to do to stay out of the hospital. And then of course, I'd like you to go into how important it is that everybody, certainly the healthcare providers out there who might be watching this, to dramatically shift gears, if they're in front of someone very infected and their lungs are getting damaged. They do not take the same 500 mg of Vitamin C a few times a day, that is just not going to do it, right? So help us understand that you know.

Michael J. González, N.M.D., Ph.D.: Well, that's an excellent question. And the point here is that the devil is in the dose, not in the details. But the thing here that happens is that many hospitals are treating already compromised patients with 1.5 grams. I think that's too little. And they're saying they're having pretty good results. They're combining it with antimalarial and antibiotics, and they at least add zinc and Vitamin C. I think those should be the main actors of this picture. I think Vitamin C and Zinc should be the main actors, and the antimalarials and antibiotics should be the secondary actors.

But that's my own take, right? But in any case, what you're saying it's exactly I mean, people could might as well, if you're going to be home or you don't have the virus, maybe 1 gram 3 times a day is enough. If you start feeling bad or scratchy throat or whatever, then you really have to increase your dose. And I would go for the bowel tolerance dose, which is basically taking Vitamin C maybe 5 grams every hour until you develop diarrhea. Once you develop diarrhea, let's say that you develop it at 50 grams.

So you take 45, and that's probably your dose you're going to take for maybe 3 days, and that will probably maintain you without having the disease getting worse or getting more complicated. And it might even be enough for you to in be okay 3 days. But the thing here is that, one thing is a very important. Vitamin C, it's water soluble. But the thing is, when you ingest it orally, you have a limit, a gut limit, a gastrointestinal limit for it.

But when you're sick, that increases because your body needs more, it is going to spend more. One of the things that one physician told me, he said, oh well, I don't know why you use Vitamin C, it doesn't work, it's water soluble. You take it, you drink it or you put it through the vein, it goes out of your body. I said the same thing with water. Don't drink water for 7 days and see what happens. The point is that's the pharmacokinetics and the pharmacodynamics. Basically yes, you're going to have Vitamin C, let's say you put it IV, in 30 minutes it's going to get off your body. But the cells are going to absorb some of it. And that has a physiological effect, which people are forgetting.

I mean, the physiological effect is what? It forms more collagen, it enhances chemotaxis of the white blood cells, it increases the formation of interferon which is antiviral protein, it increases antibodies. And so it's like giving enough arms to your army, giving them the bullets they need in order to fight this. So if you don't get the Vitamin C, you're never going to have the enough lysosomes for the white blood cells to really attack bacteria and attack the viruses. And the other thing that Vitamin C does in addition to all these things, is that Vitamin C is able to mop up all these free radicals that are formed from the cytokine storm. So that's why they gave this Vitamin C IV in pretty large doses in China, and the 50 people that got the IV Vitamin C, none of them died. And they were complicated already. So I mean, that gives you the message that Vitamin C has various mechanisms; it's non-toxic, it's fairly cheap, it's easy to put.

So I see no excuse in not using Vitamin C as part of any protocol against any viral or bacterial infection. There's a case that has been highly exposed on YouTube about a case of Avian virus, the person was going to die. And once the lawyer forced the hospital to give them the Vitamin C, and once a Vitamin C was given, in 3 days, the lungs were cleared, after they were so congested that he was going to die. So I mean, Vitamin C may not be specific for COVID-19 or for SARS COV-2, but it works because it's nonspecific and it has so many mechanisms. I haven't seen anything more antiviral than Vitamin C if you give me the proper dose. Because if you use.... You know, one of the excuses is always oh, it didn't work. It didn't work because you're not using the proper dose. It's going to happen not only with Vitamin C, it could happen with any medication also.

Jonathan Landsman: I think what's tricky about all of this stuff Dr. Gonzalez, is the western mindset, right? People would say: "Come on Dr. Gonzalez, come on Jonathan, stop beating around the bush." Most people just want to know – if they get admitted into the hospital - how much vitamin C should I take? And I think it's very clear from our conversation. Fortunately or unfortunately, it's just something that's important to understand that this really is based heavily on scientific research.

Why Vitamin C, why Vitamin D, why magnesium, why Zinc is such a valuable antiviral agent? Zinc for sure. We could talk about that for a moment and how it's being used as part of a cocktail very effectively against the Coronavirus. But all of these things are grounded in great science.

But, it's an "art form" to develop the "right amount" for you ... based on your age, your level of infection, how long you were that way before you decided to do something in a more say natural way, versus me at my age and my level of infection, and how quickly or how slowly I decided to respond to the really serious health situation that I was going through.

This is what determines whether someone is going to be more or less successful. And it really is that kind of an answer. There isn't any other way around this. I think the main message that you were trying to say before, which is the most important thing is, as soon as you feel a little off, jump on it with all these natural antiviral, antibacterial substances as quickly as you can. Right?

Michael J. González, N.M.D., Ph.D.: Yes! You're totally correct. But the point here is that there are many variables. And that's going to determine exactly as you said, the degree of severity of the disease. But that's the advantage of Vitamin C over many other agents, is that Vitamin C has so many mechanisms. That even if you have many variables that go against you, Vitamin C may cover many of them, because it has so many mechanisms.

Jonathan Landsman: Alright, so again, a little bit more specifically with Vitamin C. Orally, does it matter the kind of Vitamin C that people get? Because obviously, there's so many different kinds. Sure, at our site, we talk about a Vitamin C not from China. People still misunderstand that; they call it like a racist thing. It just means that it's not from where China tends to make their C, which is genetically modified corn. We don't source that.

But there's all kinds of Vitamin C. I feel like any amount of it from anywhere, it's still going to be of great benefit, especially when you're in a serious situation. But talk about the forms of Vitamin C and the advantage of IV Vitamin C when you're very very ill in serious health condition. Just walk us through that, you know?

Michael J. González, N.M.D., Ph.D.: Well, to make the story short, right now, any Vitamin C that you could get a hand on, get it, because it's scarce right now. But liposomal forms are highly absorbed, amino ascorbates are kind of easy on your stomach. Ascorbic acid may be hard for some people. For me, it's okay. I could take ascorbic acid with no trouble. You mentioned a very important thing on non-GMO Vitamin C, it's probably important. There are people that have had some reaction to Vitamin C that comes from corn, it's probably because it's GMO also. So you have to really watch out for that. But at this point of time right now, any Vitamin C that you could get a hand on, get it.

Jonathan Landsman: And what about the idea of again, IV Vitamin C? Why is that so effective? Why is that used for people who are critically ill?

Michael J. González, N.M.D., Ph.D.: Well, Vitamin C, once you put an IV, it goes directly into your system, so you pass that in absorption barrier, you don't have to worry about that. I have a good friend who I admire and love a lot. His name is Dr. Steven Hickey from England. He developed a model called the Dynamic Flow Model. And he says that

by manipulating your intake hourly, you could probably get something pretty much similar to what it is IV.

And it is to certain extent, but there's still some differences. And the point is that if you're really sick.... let me tell you, if I'm really sick, I want the IV. If I'm with a mild type of disease, I'll take the orange no problem. But let me tell you; you can't have an IV Vitamin C treatment all day I mean, with your hospital setting, you might have a continuous dosing of Vitamin C. But if you're home, you're not going to be able to do that. So the point is if you get IV Vitamin C, you want to keep levels in blood high, you're going to have to combine with oral, so you're going to have to combine. But always you need to I mean, the oral thing is something that's practical in order for easy intake. But once you need higher doses, it becomes a little bit more impractical. But it depends; if you can't get, if you have no availability of IV Vitamin C, hey, used to bowel tolerance dose and Hickey's Dynamic Flow Model. But if you're really feeling sick, if you have a chance of IV, go for IV. But always have your oral home, because you're going to have to kind of complement the IV with the oral.

Jonathan Landsman: So, just a quick story which I do like to tell, because it illustrates the point that if I get a scratchy throat.... Little rundown, I'm getting up as I tell my story all the time, 4 or 5 in the morning, I work till you know 7, 8 at night, you're looking at easily 13, 14, 15 hour days. So I've got a lot going on. And I know my body; when I feel a little rundown and I know something's definitely in me and replicating and it might get out of control and I start upping my powder and liposomal and a combination of it, and it's 25,000, 30,000 milligrams, there is no bowel discomfort. You know, maybe then at a certain point at around 30,000 for me in my mid-50s, reasonably healthy most of the time. When that's going on with me for a couple of days or so, I can go up that high, feel a little grumbling going on in my stomach, like oh, it's getting close to bowel intolerance, a little gas, that kind of thing. But here's my point.

As I reach that threshold and maybe back off a little bit for a couple hours, and then I keep it up like I'm streaming it into me all day, at night, when I'm not able to sleep too well for a couple days, I'll get up, I'll take a little bit more. What I'm noticing is these symptoms never get worse. And over the course of 2 or 3 days, I know what I used to be like when I was younger, it would just get worse and worse and worse. It was like I truly felt like the Vitamin C was a whole mess of soldiers, keeping the enemy contained. And then literally when it built up enough, it overcame that enemy and squashed it, and over 2, 3 days, I would literally pop out of those symptoms and feel better. That's when I felt like I would play this Vitamin C game really well. Other times when I'm a little lazy and I don't take as much, boy, that viral, bacterial load, it rears its ugly head, and I feel even worse.

So I hope this story helps, but I'm sure you understand where I'm coming from, right Dr. Gonzalez?

Michael J. González, N.M.D., Ph.D.: Oh, definitely. We have done a lot of weird things using Vitamin C in IVs. We have had a person with influenza, and we went up to 120 grams of.... And that really, it cut even a runny nose. He had a really bad runny nose, it even cut that. And using also the oral forms, we have had pretty good stories, people taking even near 70 grams for pretty bad influenza. So I mean, there are different stories. The other thing is that even the oral and the IV, people have to at least when they have this really bad infections, keep it for at least 3 days. Because if not, if you can kind of feel better, but if you drop Vitamin C, the virus and the activity is going to pop off again. So you have to really make sure that they're down for good.

Jonathan Landsman: And really quick Dr. Gonzalez, as we close out, I just want to mention this. Obviously if people listening to this and they don't get really the opportunity to listen to the other exclusive interviews I've done just about the Coronavirus when it comes to this whole immune defense thing; Zinc has been in the news a lot as an antiviral, right? And we've even seen a medical doctor in New York, Dr. Zelenko who I interviewed as part of this program, actually do the program.

And in his own words, he says "You know what? Zinc is probably the key." And what he's explained is, through all this research which anyone can check out, the hydroxychloroquine acts as a channel, it opens up the cell, right? So whatever they say about this antimalaria type drug and how it's.... Again, all due respect, not making fun of it. That it's some super wonder drug for the Coronavirus, the reality is it opens up the cell and allows Zinc, which is not easy to get into the cell. It allows an oral dose of zinc, and which he was saying is about basically in the end 50 mg a day of zinc, to get right into the cell. And the zinc in the cell is stopping the virus from replicating and doing its real nasty deeds later on, if it just runs out of control. So what's your take on all this?

Michael J. González, N.M.D., Ph.D.: Well, I think it blocks reverse transcriptase, which is the enzyme that the viruses use to replicate. So I think that's the big value of the antimalarial, that it really helps Zinc get in. I think as I told you, secondary actor, I think Vitamin C and Zinc are the primary actors.

Jonathan Landsman: You know, the "Z-pack" they were talking about it in studies as well right? You take the azithromycin. And that's really a bacterial thing, secondary infections, oh, let's tell the person to take his Z-pack, 1 pill for 5 days in a row, because who knows what other kind of secondary things might happen from a viral invasion? And again, going back to, I don't think harping on Vitamin C too much, but man, there are so many great natural things that can mop up extracellular stuff that's

going on, intracellular as well, to keep things sort of tidy and clean and not so much collateral damage, that do we really need the azithromycin? But of course in a big pharma era, that obviously sounds like a reckless thing to say, you know what I mean?

Michael J. González, N.M.D., Ph.D.: Yes. Probably NAC and glutathione will do the job but you know, they're not as sexy.

Jonathan Landsman: Wow, that's another great thought, is also the idea of glutathione. And especially.... You know, what's your feeling on this as we close out? One last thing, which I know is important and I'll be interviewing somebody else about this quite a bit. But this idea of focusing when you are going to try to lay down at night, to get these nutraceuticals in you, these wonderful nutrients into your body in the evening, when your body is more well rested. Literally, physically, and it gets a chance to do all of that wonderful detoxification, that neutralizing. You know, using the circadian rhythm, using the night time as the time will you want to nourish yourself with all of this stuff, and certainly not back off on this. Even if you wake up at night to kind of take this stuff into you, how valuable is that? No?

Michael J. González, N.M.D., Ph.D.: I think I'll tell you, actually what I do, I take these nutrients at least 3 times a day, I take them when I get up. Even if I'm doing the intermittent fasting, I take them with water and I don't take anything else. And then in the in the middle of the afternoon, I take another bunch, and at night, I take my other group. But I think it's very important as you said, because those hours, when you limit your intake, the mitochondria restores itself. And not only the mitochondria, the whole body. It's time to repair and all that sort of thing. So you need the nutrients all the time, but at that time, it's especially good to have them around.

Jonathan Landsman: Great information Dr. Gonzalez. Bottom line, I want these kind of conversations to not put people's fears at ease – “mindlessly.” If anything, it's quite the opposite. To be very thoughtful, to be aware of people like you and your work and it's magnificent.... but any final words? Go ahead.

Michael J. González, N.M.D., Ph.D.: One more thing. The important thing is that the immune system is a very complicated system. It requires many metabolic steps. And many metabolic steps require a lot of enzymes. And a lot of enzymes require a lot of cofactors. And what are cofactors? Vitamins and minerals. So we have to make sure we have enough vitamins and minerals, that we arm our immune system and give them the necessary armament to fight all these diseases.

And the only way of doing that is correcting our metabolism with what? With the cofactors; the things that makes the enzyme work and makes

the metabolism run. So mitochondria are going to be very happy if we have all the nutrients necessary, and it's going to respond by having our immune system optimized. Optimized and ready for any attack. People talk about enhancing immune system. It's not really an enhancing, it's basically having it ready to work in a fast and efficient way. That's what we want.

Jonathan Landsman: And I love what you're saying at the end. It's all about cellular energy. Keep your energy high. I hope you enjoyed this conversation. And thank you again Dr. Gonzales, I really appreciate you being with us. Thank you.

Michael J. González, N.M.D., Ph.D.: Thank you. Thank you for the interview.

Pandemic Preparedness: A Survival Guide

Guest: Mike Adams

Jonathan: Welcome to the Immune Defense Summit. I'm your host, Jonathan Landsman, creator of NaturalHealth365.com. Did you know that every year drug resistant bacteria, or super bugs, kills 700,000 people worldwide, and is projected to be more lethal than cancer by 2050? And infectious diseases still remain one of the leading causes of death. Cancer, cardiovascular problems, and diabetes are by far the leading cause of premature death in the world. But in reality, all of this is avoidable with a strong immune system. That's why I created this event; to help you understand the roots of disease and how to prevent and reverse life-threatening illnesses by reempowering your immune system.

Our show, "Pandemic Preparedness: A Survival Guide." Our guest, Mike Adams, also known as The Health Ranger, is an outspoken clean food advocate and a critic of the over-drugging of America with toxic pharmaceuticals. As an award winning investigative journalist, he has actively pursued a path of discovery into food ingredients, composition, and contamination, ultimately transitioning to a food scientist with a world class analytical laboratory he built from the ground up.

Today, among his many responsibilities and accomplishments, Mike is the editor of NaturalNews.com, the internet's number one natural health news website, now reaching well over 7 million unique readers a month. As a director of CWC labs, Mike and his team put the things we eat every day under the microscope to expose the hidden truth about the contaminants in our foods. In his book, *Food Forensics*, Mike reveals what we cannot see on our own, and tests levels of lead,

arsenic, mercury, plus much more in common foods and nutritional supplements.

I think Mike sums up what this conversation will be like for you when he said, "Every person that prepares is one less person that will panic in a crisis." Sadly, over the last several decades, a trend has emerged, which leaves people feeling mostly afraid and disempowered about their future health. The mainstream media and most conventionally trained medical experts promote the idea that we need to fear every bug, virus, or infection coming our way. Unfortunately, for too many people, just the phrase "measles outbreak", or the word "Ebola", has them afraid for their life.

So the question remains; what can we really do to protect ourselves and our family if and when the next pandemic strikes? Are there natural ways, which are perfectly safe and effective, to defend us from harm? Today we'll reveal just how powerful our immune system can be if given the right nutrients and support. I'm sure you're going to want to take lots of notes, so let's get started. Please join me in welcoming Mike Adams to our program. Mike, welcome.

Mike: Thank you, Jonathan. It's great to join you. Wonderful topic; we're going to share a lot of great information. Where would you like to start?

Jonathan: Well, Mike, I think probably the best way to begin the program would be just to talk about; what is the most likely source, in your mind, for pandemic outbreaks? What do you see?

Mike: Well, this answer is going to surprise a lot of people. I'll talk about intentional release of biological weapons in a second, but in terms of unintentional pandemics, the real origin comes from immunosuppressed people. Because you've got to realize that viruses are mutating in the wild all the time. Every year's flu virus, for example, is a different strain. Even the CDC openly admits that. Which is why, by the way, this year's flu shot only really is effective against last years' flu strain, not this years' flu strain. So taking a flu shot doesn't really do much for you. That's why they don't work on most people.

A far better strategy is to boost your immune function. Your immune system already has a blueprint for fighting off common viruses, such as influenza and many, many others. But most people suffer immunosuppression because they have poor nutrition. So they lack vitamin D, for example. Vitamin D activates a tremendous army, if you will, an immune system army to fight infections. All kinds of infection. Including tuberculosis, and drug resistant tuberculosis. Not just influenza or measles or other things. But vitamin D deficiency, which is widespread across our population today, creates vectors of opportunity for all kinds of infectious diseases to take hold in people and spread.

Now the mainstream medical status quo likes to say that vaccines alone are the determining factor. And that they claim unvaccinated children spread disease. It's actually not true at all. Many of the outbreaks that happen today, especially measles outbreaks, happen among children who were fully vaccinated among measles. But vaccines don't work if your immune system is suppressed, because your body can't build the antibodies that fight off diseases; even if you're vaccinated. And if you have a strong immune system, you don't really need that vaccine because you can fight off those infections anyway. So the vaccine is over 99% useless in the case of measles and mumps. Whereas strong immune function is more than 99% effective.

So the answer to your question is these diseases are spread mostly by people who have poor immune function, bad nutrition, they live on junk foods, they don't get sunlight, they're vitamin D deficient, they are unhealthy. They are the ones that carry disease and spread disease. Whether it's tuberculosis or influenza or what have you.

A lot of immigrants, by the way, who come from third world nations where they have poor nutrition, they carry a lot of infectious disease with them as they're coming into the country. This is why screening programs are very important for the health and safety of not just immigrants themselves, but also of course the population at large. There's an outbreak of measles right now, I think, in Minneapolis that is spreading like crazy across the immigrant community. It's not hard to understand why. Many of them are vitamin D deficient. Many of them are from Somalia; they tend to have dark skin, which blocks sunlight, which blocks vitamin D production. And they live in a very far northern latitude, so they're not getting much sunlight. So vitamin D deficiency and tuberculosis outbreaks go hand in hand.

So that's the non-intentional pandemic vectors. Now, do you want me to cover the intentional vectors now?

Jonathan: I think what we'll do is, and it's going to be an interesting part of our conversation. We'll probably leave that towards the end, Mike. But I would like to add a couple of other things. I know we're about to get to the CDC's response to all of this that you're describing already and what we can learn from that. But before we get there, I think a couple of things are worth noting. You had mentioned about the dangers, actually. It sounds so contrary to what most people would think. But actually getting a vaccine in an immune compromised individual can actually cause so much more of a serious health problem for those people, as well. Wouldn't you say?

Mike: Well, that's absolutely true. What vaccine scientists know very well. Let's start with a basic fact here that nobody disagrees with. The theory of how immunization works through a vaccine intervention is

that the vaccine introduces a weakened virus into your system, and then your system responds to the weakened virus and builds antibodies that would protect it against full-strength viruses in the wild. That's the theory of immunization accepted by every doctor everywhere. And the CDC as well. In order for that to work, though, your body has to have a strong functioning immune system that can respond to the invading viral strain or protein fragments or whatever it happens to be.

For that to happen, you have to have some level of nutrition and health. And since so many people are nutritionally compromised, what the vaccine companies have begun to do; actually for many years, is they've added adjuvant chemicals that are inflammatory chemicals to try to cause a heightened, magnified, inflammatory response in the hopes of kind of cajoling the immune system into responding when it otherwise wouldn't, especially in immunocompromised individuals.

These substances, adjuvants, turn out to be highly inflammatory to the nervous system as well. And they are responsible for the seizures. They are responsible for the adverse reactions, the comas, the brain damage that has happened across many, many people. The UK government, for example, just paid out a massive award; tens of millions of dollars equivalent, to families of children who were brain damaged by the swine flu vaccine. And that brain damage was caused by the adjuvants in the vaccine. So it's interesting. The theory of vaccination is not, by itself, necessarily dangerous to people. It's what they put in the vaccines other than the weakened viruses that makes them especially dangerous.

Many people have now come to realize that it's actually safer to get chicken pox for your child, in a chicken pox party, rather than have the chicken pox vaccine. Which, if you read the vaccine insert, it says that this vaccine can cause you to have chicken pox, and to shed the chicken pox virus and to spread it to other children. So the more people learn about vaccines, the more they realize that they're not safe the way they are formulated today. Although they could be made safer if the manufacturers took the toxic chemicals out of them. Does that make sense?

Jonathan: It makes a lot of sense. I would hope that the Immune Defense Summit really shines a light, which is the whole intention of this event, on what really matters, Mike. And it's about having a strong immune system, which is what you've been talking about already. Just really quick before we get to something really interesting that people can learn, from the way the Centers for Disease Control and Prevention responds to some of these pandemics, it's going to be an interesting part of our conversation.

But the ideas I mentioned at the beginning, this whole idea of Ebola scare; everybody can remember. I remember it was in the fall time,

where this whole thing broke out. It was put out there as if everybody in the United States was going to get Ebola. And please don't misunderstand me. My message is really clear. Ebola in an immune compromised person is a horrific condition. It's going to eat you up alive, and it can most certainly kill you. But we all have to really take notice. Did it really take hold in the United States?

And again, not that I wish the most impoverished situation for anybody in the US. But the poorest people in the US still have better nutrition and better immune systems by and large than all of those people who were hit in all of those countries in Africa. I just think it's important for people to realize that the one thing that the mainstream media and government-sponsored, so-called health agencies would have us believe is that all of this is terrible. It really isn't in a person that has a strong immune system. And they don't talk about that at all, how to keep the immune system strong. I mean, just vitamin D alone, Mike, nobody is mentioning that out of a government health agency. And that alone, if we just keep those levels up, if we gave these people in Africa better nutrition, cleaner water, my goodness, their life would be so much healthier, and then nobody would have to run around so afraid. They would be empowered with really important information. You know what I mean?

Mike: Well, I want to be clear on this. There are some viral strains that are considered level 4 biohazards, such as Ebola and Marburg, for example, where even a person with a fully functioning healthy immune system does not have necessarily the capability to defend against that kind of viral assault. So Ebola and other similar viruses are considered level 4 biohazards. They've been weaponized by some countries into biological weapons. I don't want to imply that vitamin D alone could prevent an Ebola infection if you come into contact with that person. Because I don't think it can.

However, there are some things to keep in mind here. Number one, the CDC brought Ebola to the United States and then allowed it to spread in the hospitals in the United States. So the CDC was complicit in the spread of Ebola in America. And it was a very, very lucky outcome that they managed to get it under control. It could have been a lot more out of control. And what it demonstrated was the CDC's utter incompetence. And the complete incompetence of the hospitals and the training of nurses who were effectively just touching Ebola patients with no real protection. They weren't wearing fully body suits, or visors over their eyes, for example. And you can touch an Ebola patient and infect yourself by scratching the corner of your eye. You're infected; you have Ebola.

The second thing we need to learn from this is one of the nurses in the Dallas hospital who was infected was treated with such a toxic cocktail

of pharmaceutical chemicals by the CDC, that she suffered severe long-term organ damage and later sued her employer for damaging her organs with these extremely toxic drugs. So the CDC and the medical system as we know it today does not understand how to treat pandemics in a way that doesn't damage or even kill the patient.

Now, what we have learned recently. This is a very fascinating example. Malaria, of course kills many, many people all over the world every year. There is an herb called wormwood, also known as *Artemisia annua*, which has been demonstrated in a small clinical trial to have a 100% cure rate for late-stage, advanced malaria patients who are on the edge of death. Every one of them recovered. And yet the medical system will not promote *Artemisia* herb as a malaria treatment or cure. Instead, they're rolling out a malaria vaccine to make sure that the vaccine manufacturers make money. So there is a systemic suppression of natural cures for all of these pandemics by the medical establishment.

Ebola and other similar pandemics have been treated for thousands of years very successfully in traditional Chinese medicine. There are old, ancient Chinese medical textbooks that talk about how to treat pandemic infections with Chinese medicine. If you look at the molecules that are the chemical constituents of many of those herbal and medicinal ingredients, they do contain very powerful antiviral compounds that can be used, and have been used, throughout history to save many, many lives. And yet the entire medical system does not allow any real discussion of that. In fact, the FDA and FTC threatened people who were talking about natural medicine in response to the Ebola outbreaks. So there's that.

And finally, I want to mention this other important aspect to all of this. Any viral infection, or bacterial infection, that has a very high fatality rate tends to have a very difficult time spreading. That's because the more quickly it kills the patient, the less the patient has an opportunity to spread that disease to other people. So very high fatality infections, such as Ebola, are more easily crushed, or put out, by the CDC or medical professionals.

The real threat to humanity is not Ebola. It is a viral pandemic that has a very high rate of being able to be spread, that has a long incubation time in the patient, that is symptom-less in many people but fatal in other people. In other words, a low-fatality rate combined with a high transmission rate. That is the kind of pandemic that will ultimately threaten and probably wipe out quite a large portion of the human population. And by large portion, I mean 10, 20, 25% something like that. If you go with fatality rates higher than that, that viral strain usually doesn't have a lot of success spreading. So you're not going to see like a 90% wipe out of humanity. Because there wouldn't be people left to spread it in the early stages. I hope that makes sense.

Jonathan: It does. You know, Mike, I think it's probably just a hard thing for people to hear, generally speaking. This idea that the Centers for Disease Control, their response is lame. They don't really seem to handle things in any way that makes any good common sense at all. With all of the intelligence, all of the technology, all of the science that they have at their disposal. And yet this is how they take care of things. But it's hard for people to believe, Mike.

Like the CDC is so invested in the flu vaccine, they purchase so much from the pharmaceutical industry. So it's no wonder that if someone listens to a CDC video, or they go online and they do some search about, "What should I do about staying away from the flu," for example. Or something else. All they ever say is, "Your flu vaccine is your best defense." Like I said; there's no wonder. Because they're financially all in. They would never talk about nutritional strategies. Anything that would empower an individual to have a stronger immune system. They're just staying focused, like you say, with Big Pharma.

Mike: Yeah, exactly. The CDC really functions today as the marketing branch of the pharmaceutical industry. The vaccine manufacturers, in particular. The former head of the CDC, Dr. Julie Gerberding, now works for Merck in their international vaccine division. And most people who work in the CDC, or even the FDA, they hope to leave government and get a much more lucrative job in the vaccine industry or the pharmaceutical industry. So when you have this what's called revolving door policy of regulators working for the industry that they regulate, you end up getting a very incestuous relationship, where the regulators really don't regulate the industry, they simply promote the industry.

So, the CDC is really an anti-science organization. Its claims of protecting humanity are utterly false. It has no real interest in protecting people. It only has a financial interest in promoting the profits of the vaccine manufacturers. Even if it costs lives. Such as this malaria situation we just discussed. Why doesn't the CDC tell people to stock up on *Artemisia annua* herb, since it has a 100% cure rate. The answer is, because the CDC drug companies don't make money off of that herb. Because you can't patent the herb. You can't patent it, you can't charge \$500 a dose. Anyone can grow it. It grows wild all over the world. People can pick it and harvest it themselves. Chew the leaves and cure malaria. It's really that simple. But that's the last thing the industry wants people to find out.

Jonathan: As I said at the beginning, you're going to most definitely want to jot down some things that really resonate with you in terms of how to protect yourself from a pandemic outbreak. But, Mike, before we get there, I know for sure that we're going to talk about the areas that could get worst hit by pandemic. That's really important.

But I know this is also a particularly special message for all the people out there who are looking to get away from being so afraid. If you're dependent on pharmaceuticals, and you're a prepper out there. Or someone that wants to just generally live a more independent, free lifestyle. Right, Mike? I know you say this a lot as well as your messaging. People who are hooked on these drugs and are not really busy trying to find all the natural ways to boost up immune health. To get free of these pills. Which, even if it takes time, what a great effort to take. If you're not doing that, and you've got everything else. Land. You're growing food. But you're hooked on these pills; how free really are you? You know what I mean?

Mike: Well, that's right. And here's some shocking facts that a lot of people may not know about where these pills come from. Hopefully people know that we're reaching the end of what's called the antibiotics era. The drug companies, which synthesize these artificial chemicals, they really don't have any solutions now for all of these drug resistant strains, such as *C. dif* or MRSA. Or other super bugs. There are even super fungi now that are killing people in hospitals across America. We're not very far away from a time when a simple scratch or even a simple surgical procedure in a hospital may kill you because of an infection of a so-called super bug that the medical system has absolutely no answer for. They have no chemicals that work anymore against the super bugs. And there's nothing in the pipeline.

However. If you really understand where these chemicals come from, let me tell you about biopiracy. So the drug companies, when they are looking for chemicals that are certain molecules, they look across the plant world. They want to find special molecules in plants and in fungi, by the way. Right now there's a gold rush into fungi by drug companies to try to find specific molecules that might be the future antibiotics.

The problem with all of that is that the drug companies steal these molecules from nature. That's called biopiracy. Stealing them from a lot of garden flowers right now. Just common flowers have amazing chemicals in them that are drug candidates. But then the drug companies isolate those chemicals, and then they alter them so that they can patent them. And then they tell us that plants are useless. So they say, "You have to use our chemicals, which we stole from the plants. But the plants are useless." That's absurd.

Now, in reality, plants are synthesizing molecules all the time. Literally, plants take carbon out of the air. They breathe in carbon dioxide. And most of the molecules that are antibacterial that are found in the plant world are carbon based molecules. In other words, they are organic molecules. They may have a carbon structure, a benzene ring. Or combinations of carbons and oxygens and of course hydrogens and so on. You can bring up the molecules on a website like chemspider.

com. For example, vitamin C, which is synthesized by orange trees. You find vitamin C in oranges. How did the vitamin C get there? The orange tree synthesized the vitamin C, which has carbons and hydrogens and oxygens, I believe. And it does that by reassembling those elements from air, and from water, and from what it finds in the soil.

Well, other plants can make powerful drugs and medicines, essentially, that are antibacterial and antiviral. Nature is doing it all the time. If you have a backyard, there are probably antiviral compounds in the weeds in your backyard. So the truth is, you can grow many of these natural medicines yourself. Everything from oregano, to basil, to rosemary, thyme. The list goes on and on and on. There are powerful antiviral herbs you can grow yourself, so you're not dependent on the drug companies. And if there is a pandemic, you have a vastly improved chance of surviving it just by taking your own natural medicine versus going to a hospital where you're likely to be killed by a superbug infection.

Hospitals are the death zones in every outbreak. The nurses get infected, the doctors get infected, the patients get infected. And that's where all the sick people go who have poor immune function who are the worst carriers and transmitters of the disease. So in a pandemic, you want to stay away from the hospital, and you want to rely on natural medicine as much as possible, in my opinion. I know doctors would disagree with that, but many of those doctors will be dead in the pandemic. So their opinions don't count, in my view. If you want to stay alive, you need to turn to natural medicine.

Jonathan: So, Mike, I would imagine then some of the areas that are the worst hit by pandemics, I would think are bigger cities. But like you just said, would hospitals. What do people need to know? Because when it really hits and then all of a sudden, they have to start thinking about these things on their own to survive, what would you tell them?

Mike: I would just summarize what I just said. Look, hospitals are going to be the death zones. That's true in every major pandemic. Whether it's in Africa, the United States, or Canada. Hospitals are the death zones. You likely don't want to go there. I'm not saying that if you have a doctor and you trust your doctor, then sure, call your doctor. Get some advice. But be aware of the risks of going to a hospital.

And be aware of the risks of relying on a logistics supply of drugs that will run out almost immediately. Because the pipeline for pharmaceuticals is very thin. It's very small. You can't rely on it, especially if everybody is rushing to get the same drugs at the same time. And they can't make a vaccine quickly enough, because it takes a couple of years to make a vaccine. And the pandemic has probably burned through the population long before that time.

So the alternatives that will keep you alive are found in the world of mother nature synthesized compounds, which again is happening all the time all around you. In every forest, in every field. Even in the ocean. The algae, the fungi. Everything. The seeds, the leaves, the tree bark. They all contain powerful medicinal compounds. In fact, one of the cures for malaria is also a tree bark. And much of Chinese medicine is based on tree bark. Even cinnamon, the spice, is made from tree bark. So there are plants all around you that are synthesizing these molecules. So I recommend you get a book on natural antibiotics, natural antivirals, and find out which ones you can grow yourself, which ones you can stockpile as medicinal substances. And just have that as a backup medicine chest in case something horrible happens in terms of a pandemic outbreak.

Jonathan: For those who are really interested in diving deep and making this extremely simple for you, I strongly suggest that you listen to the presentations here in the Immune Defense Summit by David Christopher, who is a master herbalist. He goes through many things that you can have at home in the comfort of your home, safely taking care of yourself. Even if you're not feeling well.

Also, Marjory Wildcraft talks about natural antibiotics. Many at-home remedies that you can understand from her. It is a fantastic conversation that I strongly suggest you listen to. And many of the other talks here at the Immune Defense Summit talk about how to keep the immune system strong in a general way all the time. And also most importantly highlight the things that threaten immune health. This is extremely important. Everything from wireless technology to all of the toxins in our food.

And also even supplementation; some to take, the others to avoid. These are very important, because anything that's threatening the immune system and distracting it. I use that word deliberately. From doing its really important job of protecting us from things that could really end our life. This is what compromises our immune function, especially as we age. It makes it easier for us to get overcome in one way or another.

Mike: Let me just add this; it boosts your confidence and safety. I actually flew into Taiwan many years ago, right in the middle of a bird flu outbreak where they were taking people off airplanes and putting them in quarantine. And when I got off the plane in Tai Pei, they had military people there and medical people there wearing masks. And they would take your temperature. And if you showed symptoms, they would quarantine you.

So I flew into Taiwan during that time. I did a lot of immune boosting nutritional supplements and practices to just be healthy. I didn't wear a mask, and I didn't have any fear whatsoever. Because I knew that my

body could fight off a bird flu infection. So I walked around the city. I was on the airplane there and back. I had no problems whatsoever.

If these pandemics, they tend to really do their worst damage in weak, immune suppressed people. People who are susceptible to the infections. And if you eat a junk food diet, and you take a lot of pharmaceuticals and you don't go outside, you don't get any sunlight. If you're an unhealthy lifestyle person; especially if you're obese and sedentary, then you are at high risk of contracting these infections, and you would not want to take that flight like I took. But if you're a healthy individual, it gives you a measure of safety and confidence moving through the world.

Jonathan: Yeah, no doubt. And I know it's a difficult thing for someone to hear this message if you're new to it. But I can assure you that everything that Mike is talking about is so true. In my 30-plus years in the health and fitness industry, where I really ran mostly. Now I'm on the internet, but mostly these brick and mortar places. People came and visited to get in shape.

And anytime somebody was sick, they were always so nervous, so fearful. Always talking about, "I don't want to make you sick." But I knew all those years, just keeping myself healthy and strong. Through all these years, my experience has taught me, without a shadow of a doubt, that when your immune system is strong, you don't have to worry. But every time I would say to someone, "Oh, don't worry. You can still come to the fitness club. You can still workout."

Or if they had an appointment with me as I was doing athletic training with somebody. "Oh, don't worry about it. You feel like you're coming down with something. I'm not worried. Let's see what we can do together. Maybe some stretching." They always looked at me like I was some alien from another planet. Like, "Are you sure this is the right thing to do?" It just illustrated for me, Mike, what you're saying is true. It is sad that they were suffering. But it was their immune system and their battles they were battling inside their body. And yes, perhaps a little contagious if they were standing next to someone else who was immune compromised. But for me, I was always ok. Not even 50/50. 100% of the time, thank god. It just always showed that what you're saying is so true.

Mike: Yeah. There's so much misconception out there about how your immune system really works. If your immune system wasn't functioning, you would be dead already. Because you live in an ocean of millions of different viruses. You're living in an ocean of mold spores, and fungi, and bacteria. You've got literally more bacteria inside your body; more bacteria cells than you have human cells. Believe it or not. And of course, many more viral proteins than you have bacterial cells.

So you are living; you, your physical self is actually indistinguishable in essence from viruses and bacteria. You are part of that ecosystem. So if you didn't have a functioning immune system, you would already be dead.

And yet people walk around today thinking that if they're not vaccinated, there's 100% chance they'll be infected by measles. And if they are vaccinated, there's a 0% chance. There's no accuracy in those claims whatsoever. The truth is, even if you get the measles, you have a near 100% chance of overcoming the measles and responding in a healthy way and not dying. Because I don't think there's been a single measles death recorded in the United States in decades. It's not a fatal disease, in fact. And really getting the chicken pox, and getting the flu from time to time is allowing your immune system to overcome it actually strengthens your immune response. It makes you more resilient to future infections.

This is why people who live on farms, they're in touch with soil microbes. They're in touch with animal viruses. They have fewer allergies and fewer health problems and stronger immune systems. This is why you shouldn't be afraid of digging in the dirt. You shouldn't be afraid of being around people who have the flu if you're healthy and have a strong immune system. Just like you described.

Jonathan: And you know, I hope this doesn't sound like it's coming from left field, but when you say putting your hands in the dirt and being in touch with nature that way. The Japanese sure as heck appreciate this idea of forest bathing. Forest walking. And being in nature like that. Now, when we walk through a forest for whatever; even a hike for 30 minutes, 45 minutes, and we come back out to civilization, if you will, to our car. Why do we feel such an ease? Such a relaxation and tension is just gone, and we just feel so uplifted? Our spirits go up. What is it? Just the oxygen?

People need to think about the powerful messages that are being sent by those trees, and by the leaves, and by the air that is flowing through and all around us and inside of us. What we're breathing in. That is a real biochemical thing that is immune enhancing. So getting in touch with nature is not some woo-woo thing.

But I know we could go on and on about that, Mike. Why don't we talk a little bit more at the beginning what we mentioned about this idea that most people think vaccines will prevent pandemics. Because that's simply what's pushed in the mainstream media to millions and millions and millions of people. So, talk about this a little bit more. Because I know there are populations of people, like with the measles outbreak you just mentioned. That get vaccinated, and yet they still get sick. Now that doesn't make sense to someone who is new to this information, but

it doesn't make it any less true. Can you talk about this?

Mike: Well yeah, absolutely. And I can talk about it from even a mainstream science perspective. Mainstream science, of course, teaches natural selection, survival of the fittest, and Darwin-style evolution. So if you believe all that, and most people do. I do as well in terms of natural selection and survival of the fittest. What it means is the very fact that you are alive means that vaccines are not necessary for survival. Because how did you get here since vaccines are a relatively new invention, and yet humanity, your ancestors, have survived through thousands and thousands of generations. How did they do that without vaccines, right? Simple question. How is humanity even here if vaccines are necessary for disease prevention?

The answer is that vaccines are not necessary. Your ancestors actually survived because they had functioning immune systems. And a very high portion of your active DNA, as much as 25% of your genetic code that's active, is responsible for surviving infections. Pathogens, bacteria, viruses, and so on. So you are part of a long line of survivors who did not need vaccines and who did not have vaccines. And the reason pandemics took hold, like polio and cholera and so on, is because in the 1800s we had a large expansion of population without good public sanitation. So they didn't have good functioning sewer systems in cities like New York, and London. And people weren't washing their hands. They didn't even believe in germs at that time. They didn't know about germs in the 18th century for example. It wasn't until the microscope came along, and many years after that doctors began to understand they should wash their hands.

Semmelweis, right? The doctor who worked in the birth center, and he taught other doctors to wash their hands to stop the death from sepsis infections in new mothers. And of course, he was laughed out of the medical establishment. They put him in an insane asylum, and said he was imagining germs all over the place and he was crazy. And those doctors weren't washing their hands, and women were dying. It just goes to show you; if you're ahead of the medical establishment, you're called insane by the establishment, even if you're correct.

So there's a lot of fascinating history we could go into here. But today, the best thing you can do is realize the medical establishment is always decades behind human knowledge, and we know that the answer to all of this are found not in vaccines but in living in better harmony with the natural world.

Jonathan: And again, what is not popularized but is a simple truth. And they're never going to put it out there. People who do get sick, and then of course they put out in the news, look at all this outbreak, you better run and get your shot for one thing or another. People should really see

the actual numbers. The people who are sick actually were vaccinated.

Mike: Yes. Very often the case. Exactly right. The people getting the disease are the ones who are already vaccinated against it. And we've also seen cases where some vaccines have been shipped out to companies accidentally containing live viruses when they were supposed to contain weakened viruses. And when those are injected in children, they give them the disease. So vaccines, in some cases, are actually causing the pandemics. And that's why the pandemic is spread among children who are vaccinated. It can be a bad batch.

There's no quality control in the vaccine industry. None whatsoever. Because they have no legal liability. Many people don't realize that you can't sue a vaccine manufacturer for a faulty product. You can sue a car manufacturer if your car blows up, or if the brakes fail, or if the steering wheel falls off. But congress granted vaccine companies absolute legal immunity many years ago. And so you can't sue them when their products are faulty, or contaminated, or kill people. And for that reason, vaccine companies have no incentive for quality control. They literally don't have anything to fear. They can put anything in a vaccine. Literally, anything. They could put radioactive isotopes in there if they wanted to, and they could give you cancer from radioactivity, and you can't sue them because they have legal immunity. So what does that tell you?

Even the herb industry has quality control standards that the vaccine industry doesn't. Because you can sue an herb manufacturer if they have a faulty product. You can't sue a vaccine company.

Jonathan: And you know, people just need to really think more about this. I know it's a little bit more accepted or understandable that for viruses; forget about it. You're throwing antibiotics at it; it doesn't make any sense at all. And people already are clear of the fact that antibiotic resistance is a very real thing. Throughout the Immune Defense Summit, we talk about this in many of the presentations, how to actually handle it in a much better, safer, more effective way that is not going to hurt your body.

There is a mentality in conventional western medicine. That mindset is carpet bomb the body with drugs to try to kill something. And then the collateral damage is so bad that you talk about immune compromise. You end up really just physically getting injured from the toxicity of the treatment. So that's what motivated me to spend about a year of my life putting together all of these people so you have one great resource to really dive in, listen wherever you are driving around. Listen to these presentations two or three times. I am not just saying that. I promise you. Listen to this kind of information two or three times, you're going to get at least 50% more out of this and it's going to help you and your family, no doubt.

Mike, as we close out the program, we did touch on it at the beginning. It's a really, I don't want to say scary topic, but really out there for people who are new to this information. The threat of intentional releases of viruses via a bioterrorism type act. And you were saying how the government of the United States really sort of let things in and were really very lax to say the very least with their policies, and how to protect people in the United States, but unintentional release of viruses?

Mike: What people need to realize is that viruses are now relatively easy to alter genetically and create in relatively small laboratories because of advances in genome editing or protein editing type of technology such as Crisper. And Bill Gates has even warned about this. I usually don't quote Bill Gates, but in this case he's correct, that now, relatively small, inexpensive labs could be run by one or two people with a small budget, have the technology available to them at this point to create very, very dangerous bioweapons.

Now, these will become the weapons of choice for terrorists in the near future for a couple of simple reasons. Number one, when you release them in a city or wherever you release them. A subway, let's say. A train station. No one can trace it back to you. Secondly, unlike chemical weapons such as sarin gas, which disperses, biological weapons self-replicate. So they can spread and spread and spread. And eventually they could infect the entire world population, almost. Whereas a gas weapon or kinetic weapon such as shooting a crowd, obviously it's over when it's over. It doesn't spread. But a virus can spread.

The other thing is that many nations have, of course, invested a tremendous amount of money in the weaponization of viruses over the years. Including Russia, the United States, China, Iran, and probably North Korea. A very, very high probability that North Korea has, as well. And there's been talk of even North Korea having agents in the United States that are going to receive commands possibly to release bioweapons when the time is right for them. Whatever. They're insane, of course. They're very dangerous. But the technology is within the realm of what North Korea could accomplish.

And also, remember this. That viruses can be smuggled into any country, any city. You can put viral strains in something extremely small. You could even hide them inside your own body relatively easily. So this a weapon system that is almost impossible for governments to track, almost impossible to stop once they are released, and now incredibly easy for small labs to develop. So if you put all that together, there's a pretty high risk in the years ahead. Especially given the political chaos in our world today. That some rogue nation or rogue group within a nation is going to eventually release a bioweapon with devastating effect. So it's kind of inevitability at this point.

Jonathan: You know, the bottom line in my opinion. And I agree with you, Mike. It is up to each and every person to decide what feels best to them. Talking to their doctor, talking to family and friends. Bottom line is it's an individual's decision. I'm not telling anyone what to do. But the way I see it in summing up everything, avoiding very sick populations in times of a pandemic. Obviously, I wouldn't want to personally run to a hospital where there's all these people that are sick. And all of these medical professionals with an extremely limited point of view in terms of how to help me, god forbid something was going on. They would only be able to treat in one way; with these toxic medications. Throw it at the people; if it works, great. If it doesn't, I don't know. We'll try another toxic drug. And that's it.

Clean water, it's obvious we talk about that during the event. Doing everything you can to purify your water. The best quality food that you could possibly eat locally and obviously from local farms. That's what this is all about. The herbs we talk about through this event. Homeopathy, so important as well for children that aren't feeling well. Instead of running them to a hospital, we've literally got story after story in this event of things you can specifically do for all kinds of ailments and treating it with herbs, homeopathy, and supplements like vitamin C. Which are literally the most powerful, simple, safe things you can do. Again, I'm not telling somebody what to do. They've got to do it on their own, do their own investigating. This event covers all of that. Mike, any other final words before we close out?

Mike: Yeah, a final thought on all this. This is a lifestyle. This isn't something that you do after your infected. Because by then it's too late. If you're going to survive a pandemic, you need to live a lifestyle that keeps your body healthy 24/7. To keep your body healthy with good nutrition so that you are resilient and able to adapt to infection vectors. That's what's important. You can't live an unhealthy, obese, sedentary lifestyle, and then get an infection and say; oh, I'm going to eat some salads now, and I'm going to get healthy now and hope I overcome Ebola. You know what I mean? It's too late at that point. And that's not going to turn out very well for you.

By the way, obesity and sedentary lifestyles are huge factors in all of this. Exercise is a crucial component to immune function and proper health defense against all kinds of infections. So, don't become consumed by what we call green allopathy, where you just want to have an herb or a food that you think is a drug, and you take it like a medicine. But the rest of your life is a health mess. You need to be fit. You need to reduce excess body fat. Don't be obese. You need to get off the couch. You need to get some sunshine. You need to maybe do some outdoor gardening, if you can. Or walk in the forest. Do something in nature in addition to these supportive therapies or nutritional supplements that can help, like vitamin C, you mentioned, and so on. Don't think that a pill is going

to save you. It doesn't work that way. It's a holistic approach to being resilient.

Jonathan: Mike, I want to thank you so much for your time. And I want to thank our listeners for joining us today. If you would like a copy of this program, plus all the other presentations inside the Immune Defense Summit, simply click the banner you see on this page. Thanks again for attending the Immune Defense Summit. Talk to you soon. Take care.

Home Remedies for Infections

Guest: Marjory Wildcraft

Jonathan: Welcome to the Immune Defense Summit! I'm your host Jonathan Landsman, creator of NaturalHealth365.com. Did you know that every year drug-resistant bacteria or superbugs kill 700,000 people worldwide and is projected to be more lethal than cancer by 2050, and infectious diseases still remain one of the leading causes of death?

Cancer, cardiovascular problems, and diabetes are by far the leading cause of premature death in the world. But in reality, all of this is avoidable with a strong immune system. That's why I created this event to help you understand the roots of disease and how to prevent and reverse life-threatening illnesses by re-empowering your immune system.

Our show today, home remedies for infections. Our guest, Marjory Wildcraft, is the founder of The Grow Network, the online home of a global network of people who produce their own food and medicine. "Home-grown food on every table" is the solution. Marjory was featured as an expert in sustainable living by National Geographic, and is a regular guest on many national and radio and television shows.

In addition, she is the author and producer of several books and videos, but is best known for her DVD Series, *Grow Your Own Groceries*, which has over half a million copies in use by homesteaders, foodies, preppers, universities, and missionary organizations around the world.

For the vast majority of the population, infections still remain a very scary topic. Our public schools, mainstream media outlets, and most

conventionally-trained physicians remain unaware, and in many cases uninterested, about how to naturally eliminate the threat of infections without the need for toxic medications. We know that the overuse of antibiotics is a bad thing. But what's the alternative?

Today, we'll take a closer look at nature's most powerful, natural antibiotic. Can you guess what it is? And stick around to the end of this program where we'll reveal many other natural home remedies for infections designed to help you avoid the need for toxic, conventional drugs that produce so many unwanted side effects.

Please join me in welcoming Marjory Wildcraft to our program. Marjory, welcome!

Marjory: Hi, Jonathan! Thanks so much for having me on.

Jonathan: Oh, it's so great to have you, Marjory. I've respected your work for so long. And that's why I'm very excited to have you a part of the Immune Defense Summit. Marjory, tell me a little bit about the science behind—and I'm about to give it away—garlic. And why it is superior to any pharmaceutical antibiotic.

Marjory: Yeah, I'll be glad to do that. It's such a simple thing. And everybody's probably already got it in their kitchen. We overlook it. But garlic is really your best first-home medicine and the best thing to start learning in order to start treating infections. And it's kind of really simple, but an easy way to visualize this. Garlic has at least 25 different compounds in it that are antibacterial, antiviral, antifungal. It has a lot.

Now, you compare that to a pharmaceutical like, let's say, penicillin. Well, penicillin has one compound. It's penicillin. Tetracycline has one compound. It's tetracycline. So when a bacteria comes in contact, and you're using penicillin to treat something, well, eventually some of those bacteria can figure out, "There's only one thing that I've got to deal with." And eventually, it mutates or it comes up with some way to defeat that. And then we have bacteria that are resistant to penicillin or tetracycline. That's what's going on right now, is that we have all these bacterial-resistant antibiotics is because the bacteria figured it out.

But garlic, when a bacteria goes up against garlic; well, it's got like 25. Actually, they're discovering more compounds all the time. But they basically never have a chance to figure out how to mutate and go beyond that, because it's just too much coming at them. Garlic has been used for all of recorded history, and even beyond that in pre-recorded history, by humanity as a medicine, and specifically for infections and for treating this way, that it's almost astonishing to me that we're not using it in our modern day.

Jonathan: Yeah, Marjory, I think a lot of it—and it's really sad what about I'm about to say—is a big disconnect. It's about being in the kitchen, and talking to your kids about how to crush and take care of garlic, and how to consume it. That's what we're about to talk about right now. But I think that's really it. Maybe you can comment on this. That so many people, sure they've heard what garlic is. They know what it looks like. But they wouldn't think of taking it raw because it's so foreign to them. And the taste is so strong. And they've never even heard that garlic could actually help or be a natural antibiotic because again, nobody taught them this. They never had a personal experience.

So let's dive into this a little bit. How do we get started taking garlic? What are the dosages, right? Because we all tend to be more of a Western mindset here. What's the dose? And in what circumstances is it very useful to take as a natural medicine?

Marjory: Yes, let's do that. So first of all, I use it in several different ways. And the first way is if I'm just starting to feel rundown. You've been traveling too hard. You've had some 6 a.m. flights, which means you got up at 3:30 in the morning. Or like before Christmas, and you know you're going to be in confined spaces with a whole bunch of family members who have traveled hundreds of miles. And you're going to be exposed to all kinds of stuff. Or you've just been working too hard. You're feeling a little run down. Nothing's materialized yet. You don't have strep throat. Or you don't have a fever. Or nothing's really happened. But you can feel yourself getting low. That's a good time to take garlic.

Another time, of course, is if you've gone too far and you have that cough, or that sore throat, or that bronchitis, or whatever is going on. Or let's say you've been outside in the yard working. And you've got that laceration on your leg. Or let's say, you just went to the dentist. And they took a tooth out. Rather than taking antibiotics that they're going to give you from the pharmaceutical, you can just use garlic as a treatment.

Now, the way to use it is to take a clove of garlic and peel it. And then, you can either use a garlic press or you can just use a flat side of a knife. The two things you want to do is make sure that it undergoes pressure and it gets oxygen. It gets contact with the air. I'm kind of minimalistic in my kitchen, so I don't have a garlic press. So I just take the flat side of a knife and I just crush that clove of garlic. And then, I mince it, mince it, mince it. Turn it over a little bit. Mince it, mince it, mince it. Let it sit for a couple of minutes. And then, you just take; feel into your body and feel out what you need. But generally, I'm talking about a teaspoon of that, which is going to be about a clove. You may take a little more or may take a little less.

The great thing about nature is she's so much more forgiving. Our computers are like, if you miss one little dot and you're hosed, and it's

going to give you a 404 Error. But nature's fine if it's one teaspoon or two teaspoons. But basically, one clove of garlic minced up like that.

Now if I'm taking it just to prevent something, like I just feel something's coming on, I'll take cloves three times a day—once in the morning, and once at lunch, and then once in the evening. If I have an infection that I know that I'm dealing with, then I may take six cloves a day or even eight cloves a day, spaced out throughout the day. And you definitely want to feel in with your body and how it's working. Do not take garlic on an empty stomach. Make sure that you've got some food in your stomach because she is very, very powerful medicine. She's quite strong medicine. And if you're doing a lot on an empty stomach, it can make you quite nauseous. So you want to make sure that you've got some food in you when you're taking it.

Another way that I use garlic is ear infections. I'll take that same clove of garlic, prepared the same way. Again, we've pressured it by using the side of a knife or a garlic press and minced it up. And I'll put that clove of garlic into some oil like an olive oil or a coconut oil. And just very, very gently warm it, not hot at all, but just gently warm it. And then use that warm garlic oil in whatever ear that may be having an earache. And that's just a wonderful treatment. The oil helps soothe the whole ear canal. And then, the garlic, of course, provides that antibacterial, antiviral.

If there is an earache, that's what we're doing. And then, sometimes we just do that, summertime we've been at the lake with the kids. And they've gotten water in their ears. There's no telling what was in that lake water. And we're just doing it as a preventative measure to make sure nobody does come down with anything. So treating earaches and using it in your ears or preventing it. And then, also, using it when you have an infection or when you're feeling run down. Those are some of the most common things that happen in a family. The easiest way to get started and pretty simple techniques.

Jonathan: Marjory, I also like the common-sense approach that you're taking that is, bottom line, most effective. And that's this attitude that you're just putting it into your daily routine. A little bit each day if you're feeling fine. But like you say, when you're feeling more stressed and you're coming down with something, it's about the art of understanding your own body, how serious it is, getting an experience using garlic. And you'll figure it out over time, "Hey, these days, the way I feel right now, I need this amount." But then, when it's more serious, "Oh, boy, I've got to really ramp it up."

There's a lot of good science behind the effectiveness of garlic. But when it comes to figuring out individually what to do, it's just about enjoying the process. I'm sure you would agree where you just try to figure these

things out as you go along. And you're not really going to hurt yourself, except like you say, unless it's on an empty stomach.

But why don't we talk a little about, as you say, this is potent stuff, as I'm sure anyone, even if they haven't taken it, can understand garlic is powerful. What are some of the ways to make the garlic go down a little easier? This is important.

Marjory: Yes. And I will step back one second, Jonathan. And garlic really has a lot of incredible potencies. And there are people using this to treat very serious things, like cancer. Don't try to treat cancer on your first usage. Get used to it in the simple home medicine ways with small things that help empower you and build your own strength and your own confidence in the material.

And some people have recommended that you chop it up and you put it in a bit of honey. And you know that song. I don't know if it's Julie Andrews. *"A little of honey makes the medicine go down."* I actually would not recommend that because honey also a sugar. And sugars just tend to feed whatever's causing an infection to happen. It's basically fueling the infection, while you're also trying to fight the infection.

I'd recommend putting it into maybe some butter. Maybe a teaspoon or a tablespoon of butter with your garlic that's been minced up, and then spread that on to something that's appealing to you like a little piece of bread or a vegetable or something like that. That does tend to take off the biting edges and makes it go down a little bit easier. Now, I'm the kind of person, I just love butter. And I'll eat butter raw. But make a little spread out of it with the minced garlic and butter or an oil. And it'll go down a lot easier that way.

Jonathan: Yeah. And then, of course, I'm sure you're recommending that people are not taking conventionally-raised butter products or anything like this. The best is always good, in terms of quality, right?

Marjory: Absolutely. Yeah, grass-fed. Yes.

Jonathan: So another thing that I know a lot of people are going to be thinking about is, "Okay, great, Marjory, I'm going to give this a try with garlic. And I'm going to feel probably a whole lot better." There's no doubt about it. But do you have any tips about how we can avoid smelling like garlic?

Marjory: Yes, I do. And, Jonathan, to go back also to the point you made. When you're doing this, take the garlic for a day, and see how you're feeling. And then, take it for another day. And see how you're feeling. A lot of herbal medicines are not like "Wham, bam, thank you, ma'am," kind of things. They work with your body. And you will start to notice

a difference. And if you don't, then, by all means, look for some other treatment. But do give it a day or two to get going. So don't feel like, "Oh, I just took it once. And it's not working." You got to let it work.

Yeah, smelling like garlic. So what I found is if you're using fresh, raw garlic, it tend to not to make you smell nearly as bad as when you're using cooked garlic. So that's one thing, is if you're using the raw garlic, generally you don't. And, also, if you've minced it up, and had it exposed to the air, and you swallow it and get it down, you generally will not smell as strongly as the other ways that you could possibly eat garlic.

And then, the other thing is, is you feed it to everybody else around you. And so if everybody's eating it, then nobody seems to mind it. So that's the other way to do it. The other thing is what is the price of your health? If you've got a little bit of garlic smell, that's not a huge issue in comparison with the possibility of having an infection that could ultimately, possibly kill you. But really, in general, just raw garlic when prepared that way, generally does not have a strong odor, as when people eat the other forms of garlic.

Jonathan: What about also, Marjory, just speaking to this idea that people say, "Oh, boy, they're talking about garlic today. I'm going to take some garlic powder. Or I'm going to start adding garlic to soups. You know the cloves, I'll crush it like they say with the side of a knife and throw it into a soup. Cook it for 45 minutes or so, a little rolling boil or something." Is all of this the same thing as raw garlic? Can you speak to those concerns?

Marjory: Yeah, there's actually, I've got a list of seven mistakes that people commonly make when they're taking garlic. And that is the first one is actually using cooked garlic. When you cook garlic, you destroy the active components of it that are antibacterial and antimicrobial. So you really need to use fresh, raw garlic.

The other mistake people make is that they use old garlic. And the way to tell you've got fresh clove is that it's firm. And it's white or pearly colored, which is the color of it. If it's starting to turn yellow or brown or black, that's old garlic. And especially if it's getting a little mushy, that's old garlic. So you definitely want to use fresh garlic. And you don't want to cook it. And those are the first two.

Another mistake people make is they go, "Oh, well, I just can't handle this idea of eating it raw. I'm going to get a pill. Or I'm going to get my powdered garlic." Pills and powdered garlicks also are not going to be effective. The powdered garlic, the moment it was powdered would be okay. But the chances are you've bought it. And it's been on a shelf for a long time. And all the constituents have deteriorated. So avoid pills and powdered forms. They're not going to be effective.

Another mistake that people make is they take too little. And we talked about that a little bit earlier how they take one clove. And they go, "I'm not feeling anything." Let it go for at least a day or two days. And keep checking in with your body. And see how you feel. And see what you notice. Again, most herbal medicine is gentle medicine that works with your body. It's not that wham, bam, thank you, ma'am. And this is what we want. We want medicine that's more gentle that works with us. So definitely stay with it for a day or two at least before you start to notice it. Often people start to recover from whatever it was. And then, they forget that they had felt bad. They don't even check back in with themselves. So don't take too little. Make sure that you go with it.

And a corollary to that, another mistake people make, this is 5, is they stop too soon. So they do start feeling a little better, and they stop. But I'd recommend that you go for another day or two, depending on the severity of what you're trying to accomplish. If you're just trying to prevent getting something at a big convention you're about to go to, let it go for an extra day or two after the event. If it's an infection that you're treating in some other part of the body, and you're starting to feel better, be sure to continue the garlic for several more days because your body is going to need that support. And just because the symptoms are gone, your body is still dealing with a lot of things. So stopping too soon is another mistake people make.

Here's another big mistake. This is 6. And people think that just because they're taking garlic, they can just continue to eat junk. You've got to help the garlic. So you need to eat a healthy diet. So you're going to be focusing on eating your vegetables, and your fruit, and your whole grains, if you do that. You're not eating anything that's packaged. And you're definitely not eating any junk foods. And you're avoiding those cheap oils, or rancid nuts, or things like that. You're eating whole, fresh foods. And you're really helping your body as much as possible.

So it's so, so discouraging. I have an herbalist friend of mine who she says sometimes people will come in. And they want a tincture for this. Or they want an herb for that. And they've dropped their McDonald's bag in the trash. And she's like, "Out, out, I'm not going to even...You know, get out of my shop. I'm not even going to talk to you." You got to eat good food.

And the seventh mistake—and this one is a little bit controversial. But I like to go ahead and err on the side of conservancy—is garlic is an antibiotic. It's a powerful antibiotic. And so when you're taking the garlic and then also when you get done with it, you should make sure that you're going to be restoring your gut bacteria. The controversy comes in, there are some people that say, "No, the garlic does not really hurt all the beneficial gut bacteria." And then there are other people that say, "You know, but it does." So again, I like to err on the side of conservancy.

And so make sure that you're eating some fermented foods. Make sure that you're taking some probiotics. And that you're improving your gut bacteria. And you don't want to ignore that part of it because it is an antibiotic. And it's quite a powerful one. The ones that I like to use are Prescript-Assist by Enviromedica, and *Saccharomyces boulardii* by Klaire Labs, and then Bifido Complex by Kirkman are my three go-to ones. I feel like I really need to do it, in addition to my own homemade kimchi and sauerkraut.

So those are the seven mistakes that people normally make. And make sure that you're using fresh garlic. You're not using cooked garlic. You're avoiding pills and powdered form. That you're taking enough. That you're not taking too little. And that you're continuing it. You're not stopping too soon. And that you're eating a healthy diet. That you're avoiding the junk. And that you're working on making sure that your gut bacteria stay healthy and vibrant through the process.

Jonathan: Marjory, that was so powerful. Everything you just said. My mind was thinking about all the other natural remedies out there. And just about everything you said, especially in terms of give it a little time, right. In general, what we're talking about is natural medicine supports and nourishes. And it's like the way I visualized it when you were speaking is, it's like bringing the body back to life, right. Or if just we were thinking about eating some food to survive, would we just have a little food, and then just skip it the rest of the month? It's impossible. So our body will break down, fall apart, and die if we neglect it.

So these natural medicines are just really beautiful ways of bringing things into the body that help stimulate, in a positive way, not hyper like coffee, stimulate, and nourish, and keep the body vibrant, and alive. And when it's sluggish and infested with all kinds of infections, whether it's bacterial or viral, it takes a little time to wake the body up. So give it that one to two, three days is just such great advice.

Taking too little, oh is that a classic one. Conventional medicine loves to do this with say like vitamin C. "Oh, hey, someone has full-blown pneumonia. And they take 500 or 1,000 milligrams of vitamin C once a day. Look at this as vitamin C as nonsense. It doesn't do anything at all." Yet, I know for a fact, Marjory, that enough vitamin C onboard can literally eradicate pneumonia within hours, medically documented. Lungs clear, instead of clouded. But it's not from 500 or 1,000 milligrams. It can be, depending on the individual, tens and tens of thousands of milligrams within a short period of time. One, two days magical things happen.

So it's right in line with what you're saying about taking too little, big mistake, and stopping too soon. You stop some of these remedies, and then the infection rages back. That literally happened to me when it

came to a full-blown flu. I was taking C, backed off. And then, it came back again. And I didn't keep going because I felt so good. "Oh, hey, why do I need it, you know?" And it was catching myself like, "Oh, it's a drug." Well, these natural medicines really aren't drugs, for the record. They are not drugs. And we are not looking to take one thing, and then not think about it anymore. These are natural things that should be in our body that help defend us from getting hurt.

And restoring gut flora, oh, my, God. Oil pulling, for example, I've been promoting it for a long time. But wow. There was a dentist that made me think about, "You know what? It's killing bad buggies in the mouth." But swishing, oil pulling for like 20, 30 minutes, maybe it's like killing some of the bad buggies or the good buggies like that should be in the mouth all the time. There's like a point where you get too clean. And that's not healthy either. So minimize the oil pulling, just like what you're warning with the garlic. So I could just go on and on. Your advice was so great. But now, let's talk about a magical way that makes garlic even more potent. Is that true?

Marjory: It's absolutely true. Yes, and it is magical. And that is there's a very well-known thing in herbal medicine that the plants that grow near you and closest to you are going to be more potent medicine. And growing your own garlic is a very simple thing. You plant it in the fall. It grows over winter. And in almost all of North America, it does fine, even in the snow, in the cold.

And there is a magical thing that happens when you tend plants that are your food and medicine. So you go up to that garlic. And you're providing it with water and nourishment. And you're tending it. And you're creating...They're living beings. And you're creating a relationship with it. That medicine will have a potency that is unbelievable. And it really doesn't take a lot. It's a small crop. It grows in a very small space. And it's very easy to grow. And growing your own, I can't tell you how many more-fold potency it is.

Really, in just like a 4 to 6 square-foot area, you can grow like a good amount that would sustain you for a year. And there's lots of varieties that also store well so that you could use that for the year. But developing a relationship with your medicine that way, even praying over it. Other than just the physical level of caring for it, and tending it, of the watering, and the fertilizing, and the planting. But the other layers of prayer, and thankfulness, and gratitude, and being around it.

And also on another physical layer, one of the reasons why herbalists say that the plants that are growing right near you have the most potency, is because those plants are going through the same thing you're going through. So they are going through the same extremes of heat, or cold, or dryness, or moisture. So they're in tune with what

your body is in tune, because you live right next door to each other. It's different from say if you're living in Texas and your garlic was grown in California, that garlic was grown under a completely different environment. Now, it's still a very potent medicine. But if you really want to get the most potency and really have a magical experience, the medicine that you grow yourself adds a whole another dimension to what you can achieve.

Jonathan: Marjory, I know you have so much experience growing amazing gardens of food and really sustaining your family. So I thought just as a side note for a couple of minutes, maybe you could...And again, we don't get anything for recommending any products at all. But when you talk about growing garlic or some of these other herbs, where would you go? Like, someone who gets motivated listening to you and wants to start creating some boxes around outside or maybe a greenhouse or something, where can they go? What company to buy some seeds? What do you recommend to people?

Marjory: Actually, at TheGrowNetwork.com, that's the website we created. The Grow Network is the online home of a global community of people who are producing their own food and medicine. And that is the sole purpose of that organization that I founded is just that. And we have recommended seed companies. We have all different types of techniques. Once a year, I host a big summit similar to this one where we talk about all the different ways to grow and use food and medicine. So TheGrowNetwork.com is going to be the way with the best resources.

Jonathan: Excellent! And, Marjory, I know that people are hanging on here saying, "All right, so what's the deal here, Jonathan? I mean, home remedies for infections? And you've spent this whole time with garlic. I get it. You respect it. It's important." But I'm going to turn it over to you now. What are some other home remedies to deal with infections?

Marjory: There are a whole bevy. And I recommend garlic because it's the easiest. It's the simplest. It's probably the most potent and most powerful one that you can start out with. But yes, once you get comfortable and familiar with that, there is a whole world. For example, last year, I was out harvesting some tomatoes. And I got bit by a venomous snake, a copperhead. And you treated the whole thing at home. I used prickly pear for that, which it's a prickly pear. It's a cactus. You take the thorns out. And I made a poultice of that. And poulticed up my foot for two days, and was back to work and fine on the third day.

I've treated spider bites, lacerations, an infected tooth, an abscessed tooth. I had, it was like a grapefruit hanging off the side of my face with this abscessed tooth I had. And again, I used a combination of prickly pear. And then, also, there's another wonderful plant called plantain, which grows everywhere as a weed that you can use as a poultice to

help with these infections.

There are a lot of also wonderful herbs that you can take as teas that are also supplemental. Different types of oreganos are also very, very well-known antibacterial or antimicrobial. There are a lot of plants that, for example, when I go camping, just a cedar tree. I'll take some of the leaves of a cedar tree and break them. I wouldn't call them leaves—but what do you call them? Scales. You know what I'm talking about.

Crunch them up, and put them in a bit of water, and put that in a pot. And then every now and then, I'll just dip my hands and rinse them in there. And it's a homemade antibacterial. Instead of buying one of those things from the grocery store, it's a way to keep your hands clean, especially when you're outside and outdoors in a wilderness area, hygiene is a very important thing.

In the Southwest, I do the same thing with a chaparral bush. The chaparral is a wonderful, wonderful antibacterial plant that you just make this chaparral water. And I teach my kids when we go camping, "Just rinse your hands in the chaparral water every now and then, as a personal hygiene preventative." There is a whole world and a whole plethora of things that are available to us.

I talk about garlic a lot just because it is one of the most potent. And it is the simplest. And it's the easiest. And it's also the most accessible. I did talk about there's real magic in growing your own. But believe me, there's a ton of great potency and medicine in just any fresh garlic that you get from the grocery store. So you don't need to start out growing your own. That's just if you really want to take it to the next level.

But eye infections—have you ever seen those old movies from the 1950s when the guy put a piece of steak on his black eye?

Jonathan: Sure.

Marjory: I have done that for when I had a big, bad case of conjunctivitis. And my whole eye was swollen shut. There's something about that meat that drew out the swelling and the infection. It was quite amazing. And then again, with some eye washes, again with herbs that have the antibacterial quality such as chaparral.

So I want to encourage you to realize that there's a tremendous amount that you can do. Start simply with little things like earaches. Or just taking care of yourself before going off on some crazy travel adventure or big family gathering where you know you're going to be exposed to a lot of stuff. Start simply with little things and get empowered. I see a lot of people sometimes trying to learn 50 different herbs. And they just get lost. I'd say focus on one. Just focus on one. Get to really know it real

well. Get some experience with it. Get to where you trust it, and you have a relationship with it, and then pick up another one. And the one that I recommend you start out with first is garlic.

Jonathan: Marjory, again home remedies, people's Western mindset right, "Just give us a pill. Tell us the actual herb," or something like this. But a lot of what you also said earlier on is important to point out again. When it comes to staying away from infections, someone that tends to get infections all the time or just generally feels run down, which is probably in a lot of cases a sign that there are low-level brewing infections inside the body, it's just a great idea to stay away from things like drinking too much alcohol. And the sugar, like you mentioned with honey. Any kind of sugar intake is feeding the infections, right.

And, also, another thing—and I'd love to get your comments on what I'm saying—the idea that I think a lot of people need to reconnect and find an enjoyable way, maybe mixing it with some sort of homemade dressings, but to bring in some of these bitters back into someone's life, the bitter greens. Because we don't have enough of those bitters in our body, which is an essential flavor. We've lost touch with it. A lot of people, "Ooh, that's gross!" But actually, it's enjoyable once you get used to it and a really good thing to stay healthy. What's your take on what I'm saying?

Marjory: Absolutely. And with bitter and with sour, I used to always hate sour. And I found that the more I would just go ahead and embrace sour. Maybe just lick a lemon every now and then or take a squeeze of lime. The more that I began to embrace that taste and flavor, the less I wanted sugar. It was one of the ways to help really kick the sugar habit. Now, kicking a sugar habit is, I will admit, it's quite a challenge. It's an extremely addictive thing, but yes.

And then, also, those other tastes, bitter for sure, that has historically has been the medicine. "You got a tummy ache, eat something bitter, you know. If your lettuce is growing outside, and it's gotten kind of hot, that's great. Those leaves are kind of bitter, munch on that, you know." So yes, absolutely bitter and sour are some tastes that we've been missing. And that they help complete the palate. And they actually bring a lot more of your taste sensations and flavor sensations alive for when you're enjoying the rest of your other food.

Jonathan: So some of these greens, I'm going to throw out a few. And then, of course, I'll allow you to close out the show, Marjory. But talking about these bitter greens—dandelion greens, mustard greens. Oh, boy, I'll tell you. Just like literally chew those up in your mouth just a little bit. Don't kill yourself over this. But you just start introducing that. And you'll find that your taste buds do change. I love what you're saying, Marjory, about how it does change the way you perceive other foods that aren't

even bitter, as well. So again, it goes back to that thing I said before about bringing our bodies truly back to life. A vibrant life, that's what we all want.

And another thing to help us enjoy water, which we hear a lot through the Immune Defense Summit, hydration is important. We all get it, but not a lot of people enjoy drinking the amount of water that really is good for them, say half their body weight with clean water.

But something that I personally do that, not all the time, but it really keeps things up for me when I feel like I need to have water, but I don't really want to drink it. I just put in about an 8, 10-ounce glass of water, one drop of the lemon essential oil. Just one drop, and it lights up that whole glass of water. It is so delicious. I love it. I get to drink the whole thing. And I get the added benefit of the lemon oil. I don't know I'm just throwing that out there because I know there are so many simple ways to do what we know is healthy and enjoy it so much more. You know what I mean?

Marjory: I do. And one of the ones that I love, and it's so simple, is just a teaspoon or a tablespoon in a quart of water of apple cider vinegar. One of the alive vinegars, like a Bragg's. One that's still got the mother in it. And it's amazing how that will actually, same thing—you'll have a quart of water. Put that teaspoon or tablespoon of vinegar in there, that fresh live vinegar, and it just makes that whole drink so much more, like it stays in your body better.

I also like different herbal infusions. So clover blossoms is one of my favorites. Comfrey is another one. Oat straw, which is also good for toning and calming the nervous system. And so I'm often sipping on a different herbal tea or an herbal infusion, again just gives hydration.

And rest. Rest is another one. I'm sure you've got a lot of speakers talking about the importance of sleep. And your body rejuvenates and regenerates in sleep. If somebody's got chronic infections and chronic issues with their immune system, deep nutrition, sleep, breathing, those are some of the basics.

Jonathan: Wow, so true, Marjory, right, just that little bit of the mindset. Like, you were saying how when we're rushing, and rushing, and we're so busy trying to create, and do things, but sometimes, what an amazing home remedy for, let's say an infection that might take hold very soon, that we catch ourselves maybe half a day or a day before we might really get sick.

And we just say, "Take a deep breath, calm down, let go a little bit." All of these little mental processes that we go through that reset our entire body that maybe then those little infections that are in there, they don't

get a chance to take hold because mentally and emotionally, we have made a shift inside that actually does stimulate our immune system. Does that sound crazy to you?

Marjory: No, that sounds like the way it works. Jonathan, that sounds great.

Jonathan: Marjory, I want to thank you so much for your time. And I want to thank our listeners for joining us today. If you would like a copy of this program, plus all the other presentations inside the Immune Defense Summit, simply click the banner you see on this page.

Thanks again for attending the Immune Defense Summit! Talk to you soon. Take care!

Dental Dangers: The Roots of Disease

Guest: Dr. Stuart Nunnally

Jonathan: Welcome to the Immune Defense Summit. I'm your host, Jonathan Landsman, creator of naturalhealth365.com. Did you know that every year drug-resistant bacteria, or super bugs, kill 700,000 people worldwide and is projected to be more lethal than cancer by 2050, and infectious diseases still remain one of the leading causes of death? Cancer, cardiovascular problems, and diabetes are, by far, the leading causes of premature death in the world. But in reality, all of this is avoidable with a strong immune system. That's why I created this event. To help you understand the roots of disease and how to prevent and reverse life-threatening illnesses by re-empowering your immune system. Our show today, Dental Dangers: The Roots of Disease.

Our guest, Dr. Stuart Nunnally, maintains an integrative biological dental practice in Marble Falls, Texas, where he and his partners have treated patients from all 50 states in the United States and 30 countries. He holds fellowships in the Academy of General Dentistry, The International Academy of Oral Medicine and Toxicology, and The American Academy of Ozonotherapy. Dr. Nunnally is board-certified in naturopathic medicine and integrative biological dental medicine. He serves on the teaching faculty of the Academy of Comprehensive Integrative Medicine and the American College of Integrative Medicine and Dentistry. And he frequently teaches on all aspects of biological dentistry.

Today, we'll be issuing one of the most important warnings you'll ever hear about your health and, more importantly, what you need to do next. If you've been suffering with chronic health issues like fatigue, body pain, and even serious disease symptoms like high blood pressure

or cancer tumors, this conversation will be extremely valuable for uncovering the reason why these problems persist even when you've tried many protocols like conventional drug therapies, eating a healthy diet, taking nutritional supplements, or other healing remedies. Bottom line, poor oral health seriously threatens our immune system and overall well-being. If you want to fully recover and live the best life possible, I strongly suggest you listen very carefully to what you're about to hear.

Please join me in welcoming Dr. Stuart Nunnally to our program. Dr. Nunnally, welcome.

Dr. Nunnally: Well, thank you, Jonathan. It's an absolute pleasure for me to be on the program.

Jonathan: It's great to have you and as I've spoken quite a bit already throughout the Immune Defense Summit, Dr. Nunnally, this is just probably one of the most important conversations. We talk about so much in this event. But this issue of poor oral health cannot be ignored. And I know after listening to this program, people are going to really wake up and understand how important this really is.

Dr. Nunnally, when did you first realize that poor oral health was directly linked to immune-related issues?

Dr. Nunnally: Well, Jonathan, I suspected it really most all of my career. It's hard to believe but I started in dentistry 37 years ago. And I had a little bit of a holistic outlook on dentistry from the get-go because I knew that mercury, for example, which was being used so much in dentistry, could be problematic. I used to teach chemistry and I knew that, that metal, mercury, being the metal in a mixture of amalgam could never stay contained in there. So I realized early on that with mercury being the immune suppressant that it is, that, that was an issue as far as dentistry goes and as far as our oral health goes.

But then it really wasn't until about 15 years ago that I began to understand the impact of other issues, other metals, that are used in dentistry and just other infections that we can have in our gum tissues and in our jawbones, which can impact our systemic health. Most of this was because I got sick myself about 15 years ago. It actually was a mercury toxicity issue. Of course, I'd had some mercury fillings as a child. But in the course of my treatment—by the way, my mercury fillings had long since been removed.

But as it turns out, the materials that we had used to replace them were also highly reactive for me. So that was an issue, but I was, at that time, only vaguely aware of a concept called cavitations. And that being a little, not necessary little, but an infection in the jawbone. And in my own

case, when I had those infections cleaned out—these were where I'd had wisdom teeth removed 30 years before—my health began to improve.

And so after having had that done on myself, I began to see other patients respond very similarly. And then, Jonathan, I became aware of the root canal issue and the fact that there's a toxicity associated with those teeth. And all of a sudden, I was thrown into a completely new world, a world where I had never honestly contemplated that we, as dentists, could have such an impact on our systemic health. So that's when it really came to light for me when I became sick, myself, now almost 15 years ago.

Jonathan: Dr. Nunnally, I've been doing this pretty strong for the last two, three years. Constantly creating programs to try to get people aware of the fact that when we talk about stress, we all can appreciate that this is not good for our immune system. But it's amazing how little is still being discussed in the whole scope of things in terms of the constant stress that is happening inside the mouth, like you say, from infections or metals. It's incredible on a healthcare level, the healthcare professionals, how few are still looking at this. I know this is a big passion for you as well to get out there and educate that's why I'm so glad you're part of this event. But I'm sure you would agree this is something that still needs to be talked about so much within the healthcare community, right?

Dr. Nunnally: Well, it does and it's very interesting. We, as dentists, even though we take the same basic courses as our medical colleagues, we tend to forget our biochemistry and our immunology and our pharmacology. And I have to say, we become so focused on the cosmetics and that part of dentistry that oftentimes we lose our focus in terms of what dentistry can have to do with our systemic health and vice versa. It's really a shame that most physicians in this country are not educated on the impact of the oral health on our systemic health. And so there's been this division that unfortunately I think is only recently beginning to be bridged, thankfully, by you and a number of other holistic physicians in the world who now understand that if you don't get the toxicities in the mouth cleared up, you have a very difficult time with the systemic health challenges.

Jonathan: And I want to make this point really clear as we're about to go through some very important information, Dr. Nunnally, and it's for anyone listening to this message. We're going to be talking about mercury-based silver fillings in the mouth; root canal treated teeth; cavitations, which you just mentioned, Dr. Nunnally; and gum disease. No doubt, we'll cover each and every one of these topics and also finish strong in this conversation with some of the best strategies to keep our teeth and gums healthy. Very important information, right?

But I'm also acutely aware of how overwhelming this can be for people listening to this message, talking about all these issues in the mouth, most people not liking to even see the dentist, worried about these issues, what am I going to do about my teeth. And what I'm trying to say right now is I would like everybody to shift gears, right now, in their mindset and just view this as a very exciting, wonderful opportunity, including the healthcare providers out there who might be uncomfortable hearing this information, knowing that they haven't talked to their patients, their clients about this. So what is my point?

So much of what I've learned in training high-performance athletes is, don't spend time so much dwelling on the past and what you wish you could've done, what you didn't do. Focus on this information, how does it resonate with you, and pick something that you really feel you need to do and get focused on it and get busy taking action. What a great opportunity for all the healthcare providers out there to do so much more in their practice, great for their business, great for them on a personal level, helping so many more people, and it's great for each and every individual.

Okay, so enough of that. Dr. Nunnally, someone has mercury-based silver fillings in their mouth, what do you tell them?

Dr. Nunnally: Well, first of all, most of our patients come with some awareness. Maybe their physician or healthcare provider or naturopath, someone has told them, "Boy, this mercury can be an issue." And the reason that can be an issue is because mercury is recognized by, I think, virtually every toxicologist in the world as the second most toxic element on the planet, only behind plutonium.

So in my opinion, it has no place whatsoever in the human body. The argument, over the years, has been that mercury didn't leach from the filling once it was mixed into this amalgam, that it stayed in the amalgam. But that theory has been totally debunked. And it definitely leaches out 24/7. Heat will make it leach out more. Chewing makes it leach out more. Brushing your teeth. Anything that stimulates the surface of course will make it leach out more. But no matter what is done, it continues to leach 24/7.

So there are some people, for example, Jonathan, who are much more susceptible to the effects of mercury, just like there are some people in this country who are much more susceptible to the impact of asbestos or cigarette smoking. All of us have these different degrees of susceptibility. So we tell patients that, first of all, we would not recommend them having any kind of mixture in their mouth that contained mercury.

And then, second, we go on to say that there are physicians around the

world who have recognized that when these are removed, oftentimes, patients' symptoms begin to get better. And those symptoms can be—there's such a long list of symptoms associated with mercury toxicity, Jonathan, that they can range from anything from a rash to a brain fog to toxicity of the liver or kidneys, you name it. And it loves to impact neurological tissues. So anything associated with nerve tissue can be impacted by mercury.

All that being said, our recommendation, of course, is to replace it and to replace it with a material that's biocompatible. In today's world, Jonathan, it's not that difficult to determine the biocompatibility of a material because, through a simple blood test, we can analyze which materials a patient is compatible with and which ones they are not.

Jonathan: And of course, it's very important, Dr. Nunnally, that people don't just go to any dentist to get these mercury-based silver fillings taken out of their mouth because they could literally cause so many more problems, especially if someone has heart problems, any kind of neurological problems, brain disorders of any kind. It's just very important for everybody, even a healthy person, to be careful that they're choosing the right kind of dentist. To do this with the right safety protocols put into place, right. You want to speak to that for a moment?

Dr. Nunnally: I think that's important, Jonathan, because if we remove these in a fashion where the patient is not protected, then the patient is going to have quite an exposure to the mercury, more so than if the mercury amalgam was left in place. And so, let me just mention that there's an academy in this country to which I belong, and I think it's a fabulous academy, it's called the International Academy of Oral Medicine and Toxicology. IAOMT.org is the website. And on that website, there is a protocol that's been established, which will definitely protect the patient and also, by the way, protects the dentist and the dental staff from being impacted by the mercury debris as a mercury filling is being removed.

I would recommend that people go to that website and there's also a list of dentists who have been certified in removing mercury fillings in a very safe way. The acronym that the International Academy of Oral Medicine uses is SMART and that stands for Safe Mercury Amalgam Removal Technique. So SMART-certified dentist has gone through the training to remove these in a very safe way. And I think that would be a really good first step for a patient who's looking for a dentist who has trained in a way to remove them very safely.

Jonathan: Again, as I said before, don't be overwhelmed by this information. Listen to this summit over and over again, the conversations that matter to you the most and take down some notes and make sure you organize your thoughts before going ahead and doing any of these things. After all, we're talking about your health.

Dr. Nunnally, how do root canal treated teeth increase our risk of disease? This is important.

Dr. Nunnally: Root canal treated teeth are, by their very nature, dead teeth. And we don't think of any place in medicine leaving a dead entity in the body and then that entity would be safe. Dead things are not tolerated well in the body. And so a root canal treated tooth is a tooth that's had its blood supply and the main nerve within the tooth removed. And then that is filled with a fairly inert material. And to tell you the truth, Jonathan, there are oftentimes people do tolerate root canal treatment well. I have old patients who have had root canals for years and they seem to be healthy people.

But I will say that there are many people who do not tolerate them well. And the reason they do not is because there is a high degree of toxicity associated with these teeth. And what I mean by that is that bacteria are left within the tooth when a root canal procedure is done. There's no way to sterilize the entire inside of the tooth. So you have remaining bacteria. And in a single-rooted tooth, Jonathan, there are two to three miles of microscopic tubules that bacteria can reside in. Once the nerve and the blood supply have been removed from the tooth through the root canal procedure, the body can no longer present its own immune system to help clean that up because there's no blood supply.

So you can't get white cells and the antibodies in to clean up the remaining bacteria. And so now you have this nice little warm tooth as an incubator. And when the bacteria—the natural process of the bacteria is to produce toxins. Those leak out of the tooth and then they can become a systemic health challenge. The toxicities from root canals have been associated with all sorts of health issues.

And once again, the toxicities, they're so potent that there's really not a barrier to them so they can impact heart tissue, they can impact kidney tissue. There's certainly physicians around the world who feel like they can be a contributor to cancer. And most of the physicians would say, most positively, there's a link towards breast cancer. I'd have to tell you that although I've seen that written about, I've never seen a really good scientific peer-reviewed paper on that. But there are many astute physicians around the world who have made that correlation.

So that's the issue with root canal treated tooth. It's still dead and yet it harbors bacteria.

Jonathan: And it's important to understand we hear about bacteria and, well, we just take some antibiotics. In a lot of cases, the antibiotics have no effect. They can't get in there to deal with it, right?

Dr. Nunnally: Well, that's the problem. With no blood supply to the

tooth, the antibiotics cannot get there, you're right.

Jonathan: So it's just important to appreciate that this may not be for everybody, this message, but most definitely something to consider if you've got heart problems of any kind, high blood pressure, circulatory issues. We talk a lot about leaky gut, gut issues, and autoimmune disorders and physical body pain and brain fog. Dr. Nunnally, what you mentioned earlier about the brain fog and issues with dementia, these are all things that need to be considered when we think about how are we going to avoid toxicity, the exposure to too many toxins. And it brings us right back to these issues with the mouth.

Dr. Nunnally, that moves us right along to this thing, which I know you've talked to me quite a bit in the past about this. There's a very funny story about what you thought cavitations were at the beginning and this is after you being a trained dentist. So all the dentists out there shouldn't take this too seriously or feel too bad about it. But I would like you to talk about now, what you now fully understand are cavitations and why we should care about this.

Dr. Nunnally: Jonathan, it's interesting but still the majority of dentists in this country are not familiar with the word cavitation. And I wasn't for many, many years. I heard about this from my physician. I was at a conference and a physician was sitting next to me and asked me if I did cavitations. And I said, "Well, of course I do." I had said I do them all day long. Well, as it turns out I thought she meant cavities.

And she was really talking about doing a surgery on old extraction sites in the jawbone. She went on to say, she said, "I can't tell you how often patients come to our clinic." She's a very well-known physician and had patients from all over the world and she said "how often they come to our clinic and we have them have their cavitations cleaned out and the patients get well."

So I went on to begin to investigate this. And then when I got sick myself, one of the parts of my treatment was to have my own cavitations cleaned out. And it had a significant impact on my health. They were about the size—each one about the size of an acorn. And the toxicity within those was—I'd never quite seen anything like it. In fact, back in those days, we would send the contents of these to the University of Kentucky to have a toxicology report read on them. And I remember at one time asking the biochemist about this. And he said, "I've never quite seen anything like this in terms of toxicity." In other words, the bacteria that were in these, being anaerobic bacteria, can produce a very toxic material. And it's only because we have such marvelous bodies to start with that we can fend this off.

So I began to investigate this more and more. I, literally, sent hundreds

of these off for toxicology studies. I never had one that did not come back extremely toxic. And now we know, today, Jonathan, 15 years later, we know that almost all disease has an inflammatory component. We especially know that about these neurodegenerative diseases like Alzheimer's and autism and so many of the neurological diseases have an inflammatory component. Well, there's hardly anything that can be more inflammatory than these toxic cesspools of bacteria that are embedded in the jawbone. By the way, the jawbone is not the only bone that can have these. The hip is a very common place to get what we call a cavitation. And in the literature, Jonathan, these were referred to most often as jawbone osteonecrosis.

Jonathan: Dr. Nunnally, I want to take a step back for a moment and I think it's a very important step back. And that's this idea that everyone has in their mind, well, how do I know, right? What do we do exactly when it comes to root canal treated teeth to discover whether they are infected in our mouth or not? And also about uncovering whether someone has a cavitation from, say, a wisdom tooth that was pulled out 20, 30 years ago.

Now, here's the thing. So I lay the groundwork. We've got people out there with root canal treated teeth or perhaps with a wisdom tooth that was pulled out 20, 30 years ago, whatever. They have no physical pain. No symptoms at all. They're health-minded, health conscious I should say. They care about their future health. They don't want something to happen eventually down the line. So do they just go to a dentist and get an x-ray because—you know where I'm going with this, Dr. Nunnally. There are a lot of dentists, they might take a regular x-ray and say, "Everything looks fine, I don't see any kind of infection at all." So can you kind of walk us through that a little bit for a couple of minutes?

Dr. Nunnally: Well, sure. And the issue is, Jonathan, that, most times, the toxicity and the pathology or the disease that's associated with either cavitations or with root canal treated teeth, most times it's not painful. So oftentimes, a patient can bite down on a root canal treated tooth and not really tell the difference between it and any other tooth. I will tell you, based on the research, that the tooth is still infected but some infections don't hurt. It's not that uncommon. Many of us have had sinus infections and other infections that simmer and they're not painful. There are many, many diseases that are not painful. But the presence of pain or the absence of pain is—neither one is a good tool to use in terms of whether we should or should not treat something.

So let me get to your question and the question is, should everyone go have his root canal treated teeth removed? And I would say, "You know what, I don't think so." There are some people who tolerate them very, very well and I think—and sometimes a root canal treated tooth is holding for example a bridge in place. And if that tooth is removed, the

patient loses the whole bridge. The flip side of that is, sometimes root canal treated teeth are either a small or a large portion of the puzzle in the patient's systemic health issues. Because I've seen this time and time again over the years that when physicians have referred their patients to us to remove those teeth, oftentimes the patient's systemic health symptoms have greatly improved.

So I think each case needs to be weighed case by case. We don't take it lightly. I don't take it lightly at all about removing a tooth because it's very difficult. Very difficult to replace the tooth in a manner in which it's as good as it was when you first received it. Let me tell you, I don't think it can be done. There are opportunities in this day and time to do fairly biological implanted teeth. But I still would say this, Jonathan, if a patient has systemic health issues and that person and/or his health provider cannot determine the cause of the illness, it's very wise to look at oral health issues. It may very well be a result of a diseased tooth or gum tissue.

Jonathan: And just to be clear though, to crystallize it for us, Dr. Nunnally. In terms of uncovering it, how do we go about, say, with a root canal treated tooth, is it a standard x-ray that would show up an infection? And also, the cavitations as well, how do we go about actually testing and revealing, "A-ha, you have an infection there. We know it for a fact"?

Dr. Nunnally: Great question. The standard two-dimensional x-ray that we're all used to and we've all had for years is not a great diagnostic tool. Fortunately, in today's world, we have a new tool. It's actually a CAT scan of the jawbone. It's called a cone beam, a cone beam image, and they're much more accurate because we can then see the tooth or the infection in a three-dimensional way. And so I think, now, that's become the gold standard for detecting these areas of infection in the jawbone.

Jonathan: Excellent. And Dr. Nunnally, we're moving to another area that is just so important. And I say it this way because, one, I feel it's undiagnosed so much. And I also think it's got no respect at all. It's underappreciated how stressful this can be on our immune system, and that's gum disease. And when I say it's underappreciated, I'm talking about just the reference I've made many times in the Immune Defense Summit of somebody say brushing their teeth and other conversations I've had with many of the other experts in this summit.

They brush their teeth. They see a little blood when they spit out, oh, that's not a big deal. But I mean, it's amazing to me if there was a little blood coming out of somebody's finger or their arm or their leg, what's going on here? They would take it pretty seriously. But somehow a little blood coming from the gums and the mouth and spitting out in the sink, people don't realize, there's some trouble literally brewing in your

mouth. So can gum disease stress out our immune system? What do you talk to your patients about?

Dr. Nunnally: Gum disease can definitely be a big stressor to the immune system and that's such an inflammatory component that challenges our immune system. There are a number of bacteria that can be challenging. I think probably the most is the presence of spirochetes. Spirochetes are little anaerobic bacteria that love to burrow into our gum tissue.

But that's not really their favorite tissue. They like to go from burrowing into the gum tissue, enter into our bloodstream, and then they love the coronary vessels in the heart. They also love the cerebral vessels in the brain. So you're much more prone to heart attack and stroke when you have these bacteria in the mouth, very, very common.

The way we detect them is that we take a little sample of bacteria from under the gum line and we look at that under a microscope. And there are many dentists now in the country that use microscopes. Many more than when we started. I would think we've been using one for 10 or 12 years. But you simply take a little sample. You look at it under microscope. We can blow it up onto a computer screen and we can see what bacteria are there. And that's the way to do this.

Now, Jonathan, we used to operate in the dark when we were cleaning people's teeth and trying to get people's gums healthy. We would, for example, see a patient come back every three months and still their gum tissues were bleeding, but we had no idea what bacteria were there until we started using the microscope.

Now, we know exactly what's there and we can target the therapy. We love to use ozone, for example, to literally use the ozone and blow the ozone gas between the gum and the tooth, it's amazing how quickly that will remove the bacteria. And then we teach patients what to do at home. They can, for example, take a water pick and put some hydrogen peroxide, maybe an ounce of hydrogen peroxide in the water bath and jet that mixture of hydrogen peroxide and water under the gum line, and they can do a huge job on removing the bacteria themselves.

And so, it's interesting to me over the years, watching our patient base. We've seen patients go from poor oral health under our care to almost flawless oral health, where their gum tissues are just robustly healthy. And I can't tell you how many of those patients, over the years, have also become so much more healthy systemically.

It's interesting, when you take care of the gateway to the gut and the gateway, which the mouth is. When you take care of that gateway, it's interesting how much healthier the rest of the body becomes. How

much healthier the microbiome of the gut becomes when the gateway, the oral health is improved.

Jonathan: Yeah, I couldn't agree with you more, Dr. Nunnally. When I was growing up through university training and body and joints and all of this and exercise physiology and small intestines and large intestines, somehow the gut was just sort of down there. We had an esophagus, but there was such a disconnect for me, personally, in terms of the mouth, all the way through that tube, all the way down into the stomach, small intestines, large intestines, right out to the anus. The idea being that this long tube from our mouth all the way down to the bottom, that really matters that we take good care of it.

This is, as you say, it's a great word, the gateway. Whatever is going in there, our body has to constantly, whether we like it or not, not even having to think about it at all, it is constantly going to work. Is this friendly or unfriendly? Should I let this in or not? And when that breaks down and that intelligence isn't there anymore, that's when we start to see this chronic inflammation that goes on after a while. People wonder why don't they feel well after years and years. Eventually, the way I look at it, Dr. Nunnally, the body then just gets tired and that's when real trouble presents itself.

So, obviously, we talked about a couple things that we're going to be doing for strategies to keep our teeth and gums healthy. We're going to finish off strong talking much more about that. But real quick, interesting to note, Dr. Nunnally, about that test with the microscope, that I know when I go to my periotherapist inside the dental office that I go to, she's just wonderful, really letting me know what's happening with my mouth. When you take that test, it's good to get a one. So people to understand this, there's one, two, three, four kind of score that at least I get in my dental office. I don't know Dr. Nunnally, how you're scoring it on your end.

But the idea being this one that I always receive, I actually go with her into that little room. I check it out under the microscope, look at it on the computer monitor, the screen, and it should look really like a moon crater, nice and quiet. And the way I'd like to put it is like no cars on the highway at like one or two in the morning, really quiet. You see some floating around, some cells, it's nice. But you certainly don't see any of those wiggly spirochetes, those little creatures, wiggling around on the slide image at all. And if you're like a three or a four and you've got a busy highway like it's rush hour and you see all these rods going on and these spirochetes all over the place, that's where you got a real problem inside the mouth. And it doesn't just stay there, you've got these little suckers running around all throughout your body too most likely, right?

Dr. Nunnally: Exactly. And when we see patients with that, when the

microbiome of the mouth has become unbalanced—and by the way, while we're on there, using a mouthwash that's high in alcohol can so blitz the microbiome that you're not left with bacteria. There are some wonderfully friendly bacteria in the mouth that we need to have there. We do not want to absolutely nuke all of the bacteria and remove the microbiome of the mouth any more than we want to nuke the microbiome of the rest of the GI with antibiotics.

So when I see patients, for example, Jonathan, who chronically use alcohol-containing mouthwashes, I'm telling you, most often they don't look healthy and it's because they've lost this vital microbiome in the mouth. But conversely, when we see patients who have poor nutrition and poor oral hygiene, and they have, what you're talking about, these three's and four's, the way we rate these on their slide when we take a sample from the mouth, all those patients are struggling systemically too. Because what we see, again, in the mouth is a reflection of what's going on in the rest of the body and especially the microbiome of the gut.

Jonathan: And so I'd also like to add that for those who want to really understand more about what's going on with the mouth, when you do get your checkup—and I'm sure Dr. Nunnally you're going through this with a lot of the people that go to your office. What are your pocket sizes, right? Get them measured. Don't just go to these dental cleanings and especially don't go to these dental cleanings I should say and get these deep cleanings that cause lots of bleeding.

If you're heavily infected, you've got heart conditions, you've got other health issues, it's very important that you take good care of your mouth and calm things down before causing so much bleeding that could really spread this infection, these bacteria, all over the place. So, Dr. Nunnally, you can definitely address that. But, obviously, it's important that people to understand what's going on in their mouth and what they can do to bring their pocket sizes down, right, those openings around the teeth that harbor all of these infections. Talk about some of the things that we can do to calm the fires down inside our mouth.

Dr. Nunnally: Sure. Well, one thing again is using—we found that using a water pick can be one of the very, very best techniques for that. Just simply flushing out the pocket with water and especially with the hydrogen peroxide in there can be a fabulous way to help shrink those pockets and, literally, blast the bacteria right out of the pocket. So I love that technique.

Another one is simply to take a wooden toothpick or Stim-U-Dent and massage the gum tissue, press on it where you're trying to express the bacteria and their contents right out from under gum tissue. In other words, you're disturbing them so they can't sit there and colonize

and have a tea party under your gum tissue. And then probably most important is nutrition and not eating a high carb diet because all these bacteria love carbohydrates. So if you can starve them to death by not giving them a dose of carbs every few hours, as we're accustomed to doing with our diets here in this country, then you also will have an impact on them.

I like one other thing too while we're on this topic, Jonathan, and that is, if you take and make your own toothpaste by—and this is what I'd say, and believe it or not, this is what my grandmother did when I was growing up. She had a little glass jar in her bathroom and she had a mixture of baking soda and salt in it. It was about 80% baking soda, 20% salt. She would just dip that, her wet toothbrush into that and made her own toothpaste. The baking soda is a great neutralizer of bacterial toxins. And of course, it's a basic compound so it neutralizes acids. And then the salt was antibacterial. If you want to amp that up just a little bit, put a little hydrogen peroxide, 3%, on your toothbrush and then dip that into the salt-soda mixture then you have a fabulous toothpaste. If we'd all do that once a day, our gum tissues and our oral health would be much improved.

Jonathan: And then just a couple other things, Dr. Nunnally, for people to do if they want to get a little fancier and I'm just saying that in a funny way, because it's really very simple, easy to do. Talk about some oil pulling with like just a little teaspoon, a flat teaspoon of oil that we put in our mouth and swish around; and some of the essential oils that I like, like clove or neem or peppermint, I find those to be very pleasant, makes the mouth feel great. Can you talk about your professional opinion on all of this kind of stuff, kind of bringing this into our day-to-day routine?

Dr. Nunnally: I'm actually a big fan of it. It's very gentle. It continues to preserve the microbiome of the mouth and yet it does help cleanse the teeth and it does help lower the bacterial count. So I'm a big fan of oil pulling. I do it sporadically myself. And it seems though, of course, the problem with oil pulling is about the time you have a good mouthful of oil and you've been swishing, someone comes up to have a conversation with you.

So you just have to do it discretely. And I like to actually take a jog and I'll oil pull along the way. So that's one thing that I think is very, very helpful. And then essential oils, neem and peppermint oil and oil of cloves, all of those can be very, very helpful. They help lower bacterial contents and some of the bacteria that we're not fond of while preserving bacteria that we want to keep and, of course, they help freshen our breath at the same time.

Jonathan: Keep in mind for those who are interested in oil pulling, one

of the good ideas for sure is to not—when you're obviously swishing around, obviously, you don't swallow that oil then because you've got all that stuff mixing with the oil, you want to get rid of it. But don't spit it out into your sink, into your plumbing, make sure you're putting it into a bag and throwing it away in the garbage. That would be a lot smarter for your plumbing for sure.

Dr. Nunnally: Absolutely.

Jonathan: Dr. Nunnally, I want to thank you so much for your time today. And I want to thank our listeners for joining us. If you would like a copy of this program plus all the other presentations inside the Immune Defense Summit, simply click the banner you see on this page.

Thanks again for attending the Immune Defense Summit. Talk to you soon. Take care.

The Health Impact of Wireless Technology

Guest: Dr. Dietrich Klinghardt

Jonathan Landsman: Welcome to the Immune Defense Summit. I'm your host, Jonathan Landsman, creator of NaturalHealth365.com. Did you know that every year drug resistant bacteria, or super bugs, kill 700,000 people worldwide; and is projected to be more lethal than cancer by 2050? And infectious diseases still remain one of the leading causes of death. Cancer, cardiovascular problems, and diabetes are by far the leading cause of premature death in the world. But in reality, all of this is avoidable with a strong immune system. That's why I created this event, to help you understand the roots of disease and how to prevent and reverse life-threatening illnesses by reempowering your immune system.

Our show today, the health impact of wireless technology. Our guest, Dr. Dietrich Klinghardt, is founder of the Klinghardt Academy, the American Academy of Neural Therapy, medical director of the Institute of Neural Biology, and lead clinician at the Sophia Health Institute. Since the 1970s, Dr. Klinghardt has contributed significantly to the understandings of metal toxicity, and many other environmental pollutants with regard to its connection to chronic infections, illness, and pain. He is considered an authority on many topics, and has been instrumental in advancing various fields within biological and antiaging medicine.

I'd been looking forward to this conversation for some time, because it's my deepest belief that electromagnetic frequency pollution, especially coming from most of the wireless devices used today, is a significant risk factor of disease. Yet the mainstream media remains silent about the dangers. Why? Unfortunately, in my mind, it's all about profits

over public safety. The telecommunications industry has no financial incentive to investigate the problem. But that doesn't make this issue go away for any of us. If you suffer with chronic disease symptoms like fatigue, brain fog, autoimmune disorders, or even persistent cancer cell growth, this program will prove to be invaluable to you. Please join me in welcoming Dr. Dietrich Klinghardt to our program. Dr. Klinghardt, welcome.

Dr. Dietrich Klinghardt: Hi Jonathan.

Jonathan Landsman: Dr. Klinghardt, why don't we start off first by talking about how does Wi-Fi, this wireless technology we're talking about today, affect our brain. This is important, because this is the way we're thinking and the way we're feeling, no?

Dr. Dietrich Klinghardt: Absolutely. Some of these questions are best answered by pointing towards some research that has been out for quite some time. In 2006, Olle Johansson from the Karolinska Institute, that's where the Nobel Prize for medicine is awarded, did a study on the connection between Alzheimer's disease, which is the ultimate brain disease, and Wi-Fi. And basically what he did, he did a map in Sweden of areas of high density Wi-Fi radiation, you, know, where the amplitude of the totality of the radiation was high in areas, versus where it was low. And then did a map of Sweden where the highest density of Alzheimer's disease was. And he found that the two maps are absolutely identical.

There is absolute, from a scientific point, no other explanation but that rapid increase. And it was 2006; and he predicted that we're going to have an avalanche of Alzheimer's disease in the next 10 or 15 years. Two years ago, a study came out that the leading cause of death from neurological diseases is Alzheimer's disease. It's 80% of all neurological deaths. And by the way, it's no longer cancer and heart disease where people are dying from. People are dying from neurological diseases. That's the number one cause of death now in the US. And in the last 20 years, there was a 663% increase in women dying from Alzheimer's disease. In 20 years.

So bringing those two numbers together; first of all, Johansson already pointing out that it was Wi-Fi causing it. And then these numbers, because the parallel exactly the increase in radiation that we had since 2006. The numbers are increasing exponentially, and what we're exposed to. And it's a disaster.

And in terms of the politics behind it, this was the number from 5 years ago, already in terms of financial money turnover. The Wi-Fi industry, telecommunications industry, was already at that time four times stronger than the pharmaceutical industry. And of course with that, the government sells off frequency bands to the industry, reaping in a huge

amount of money that way. So because of that, the government has not changed its safety procedures for us.

The highest level of safety offered in any country in the world is Russia and Iran. They have the strictest upper limits of how much people are exposed to. and basically, Russia is saying; I have a statement from Putin from this a few days ago. He says, "We don't need to go to war with America. America is committing collective suicide. We can just wait until they're all crippled with autism, and then we're going to take over the world." that's basically where we are.

But I don't know if I completely answered your question. But we're in the middle of a disaster of brain disease caused by Wi-Fi, or at least strongly contributed to our exposure to microwaves.

Jonathan Landsman: You know, they're usually very careful with their language, Dr. Klinghardt. But I often point out to people something that I think more people just need to think about, and it's when they enter these hotspots. You know, they go to these cafes, or these delis, or schools, or wherever it is that they're going. The restaurants, and they see these hotspot areas where we can just walk in with your computer and use things wirelessly.

Or downloading; how excited people are that they can download videos on their cell phone. And they don't realize that this 4G, that now is rapidly accelerating to 5G technology, just means that more and more of these cell phone towers that are going up all over the place. Instead of two cell phone towers directed an individual, it's going to be more like three towers directed at them. And like you said, it's this microwave invisible radiation that is literally bombarding and frying all of us. Our brains and our whole body. That's fair to say, right?

Dr. Dietrich Klinghardt: Absolutely, yeah. We're in the middle of an unfolding, uncontrolled disaster. Fortunately, there are other countries, like I mentioned, that are catching onto this that are setting safety standards that are much, much higher than what we get here. And also I want to say about the Wi-Fi thing; in cafes, we're really not that much concerned about somebody going to Starbucks and having a 2-hour session in a Wi-Fi environment.

I'm concerned about the people that work there that are exposed to it 8 hours a day. And I'm concerned about the people sleeping throughout the night with their Wi-Fi router on, and the cell phone tower nearby. It's the 24/7 exposure that kills the brain. It's not the one or two-hour stents you do in the hotspot.

Jonathan Landsman: I want people to really take careful note of the end of this conversation where Dr. Klinghardt and I will be talking about

the best ways to protect ourselves in and around the home. Because like you say, Dr. Klinghardt, it is all about the intensity of our exposure, and the duration of our exposure.

So, moving along, Dr. Klinghardt, this is a massive problem. We hear it all the time. Certainly in the natural health world about autism, and you know we're hearing about vaccines, and digestive issues, and on and on and on about all these troubles that children are having as they are developing from birth all the way through their early years. What is the connection between autism and Wi-Fi. What are you seeing?

Dr. Dietrich Klinghardt: Ok, so of course there is a hugely strong connection. I can answer that. Let me first answer it a little bit in terms of science, and then in terms of our experience. I think George Carlo may have been the first one to write the paper on observing pregnant women that are exposed to higher levels of Wi-Fi are more likely to give birth to an autistic child, or to a child that later on will be diagnosed as autistic. Or, a child that will be, because of the exposure, be much more vulnerable when the vaccines come and other epigenetic, traumatic insults come. So he was the first one.

But then I answered that by actually doing a small study. We had 10 autistic children, and 10 healthy children. And we went back to measure the amount of microwave exposure in the local where the mother was while she was pregnant. And we found a 20-fold higher exposure to Wi-Fi in the women that gave birth to a child that later on was diagnosed as autistic. 20-fold increase compared to the healthy group. And with that Wi-Fi, it's the first and only factor that's ever been shown to predict whether somebody is going to become autistic or not when they're in the belly of they're mother. It's a huge thing.

And of course, I tried to publish it, and couldn't find a publisher who was willing to put that on, because one of them told me, honestly. If we publish this, we lose forever our sponsors from the communications industries. And we can't just simply not afford that. The rest of them was less honest with me. So these are two pointers. There are many other papers now that are suggesting the connection between autism and the exposure in the womb to Wi-Fi.

An interesting number, one paper shows that when you have a certain density of Wi-Fi and other electromagnetic fields to the skin of the mother, to the body of the mother, that the womb and the membranes that surround the child, concentrate the Wi-Fi 20-fold. That means whatever measurement we do on the outside of the body, it increases 20-fold, that number, inside where the fetus is. And that of course leads up to devastating numbers; devastating exposures.

And maybe to say one last thing; in other countries. In China, when you

are pregnant, by law you have to wear protective shielding cloth over your womb where the baby is. Policemen stop pregnant women on the street to check if you're wearing your protective silver-coated cloth. We'll get to that later. But that is what other countries are doing. I just want to point in a certain direction here.

Once America has become demented, which we are very well on the way, China, Russia, and Iran are still going to be there, and are going to be blossoming. So it does not spell the end of humanity; it just spells the end of the US, as we have known it. You may have all the nuclear bombs in the world, and all the nuclear ships, or whatever, but you will not be able to build any of them anymore without the Chinese or Russian help. So you won't have the workers that have the skills or the hands to do so. You cannot build a nuclear aircraft carrier with a bunch of autistic workers.

Jonathan Landsman: Dr. Klinghardt, I'm hoping that this event, the Immune Defense Summit, is going to have a huge impact, certainly throughout the whole western world. It is easy to share this information with a friend. I hope someone does that right now. And I think it's worth mentioning, Dr. Klinghardt, while we're on this topic around the home. Even though we're saying Wi-Fi and wireless routers, what about, god forbid, somebody is unaware of this that this point, these smart meters that are attached to the outside of people's homes. And if they don't have it yet, please be on guard. Don't let this happen to your home. People are sleeping in their bedrooms on the other side of this. Those women that are pregnant. Those older people that are having trouble with their brain function. How serious could that be, right?

Dr. Dietrich Klinghardt: Absolutely. All the research points; it's the cumulative effect that all the sources of Wi-Fi have. We have the Wi-Fi router in the home; unfortunately also most of the cordless phones that are used in the US are based on Wi-Fi technology. And they use 900 MHz, and they're broadcasting 24/7 into the rooms in the home. Then we have the baby monitors, a huge source of it. And then the alarm systems in the house. And the new source, of course, the new kid on the block, is the smart meters since a few years.

And smart meters have some devastating amounts of radiation into the home. Usually in a sheet that kind of goes horizontal through the house on the level where the smart meter is. So, there are ways of shielding that. There are also ways, if you don't have a smart meter yet, to protect your home from it. I simply recommend looking up the website *Take Back Your Power*, from one of our local friends here, who has established a worldwide campaign against the smart meters. And you need to kind of accumulate a little bit of knowledge, also, how to get rid of it. There are certain communities where the city planners and the boards of the city were bribed by the telecommunications industry. They

pass laws. It's not allowed by the citizens to protest against the smart meters, so you're doomed.

Maybe just my first case that I had with this. This was a patient who was mild Parkinson's disease, and I had him very beautifully under control. He was married to a German woman, so I was kind of close to the family. And in spite of my care, there was a sudden downturn in his health, where his Parkinson's, suddenly overnight, became much worse. We were struggling with it, and we couldn't figure it out. And within 6 months he was dead. Then I went to the house, and I saw the smart meter. And it was established two days before the downturn of his health. There was a clear relationship between this person dying after the installation of the smart meter.

Basically the electric utility company installed that without informing the people. Really, it's akin of manslaughter caused by the company. And of course, the US has passed laws that protect these industries where you can't really legally go after them. And that has to change. There is a major, major change needed to protect the citizens in America. It's like the only country in the world that sacrifices its citizens.

We've got the fluoride in the drinking water. We've got, in California, at least, the push for the vaccines whether you are genetically suited to tolerate them or not. 25% of people are not. And we've got the glyphosate in the food chain. It's the only country in the world that under the name of whatever profit or power, whatever it is, it kills, it sacrifices its own citizens. That has to change.

I'm here, you know, opposed to you and most people that listen. I'm here in America by choice because I love this country. And actually want it to be great again. I moved here in 1982 when America was great, and it has lost a lot of its shine because of this. Because of the polluted brains. The American citizens are not the same anymore that they were when I came here. So I want to see that again in my lifetime. I want to help you guys to bring that back. I'm not an evil guy, and I'm not against the industries or the politicians. But people are misguided. Nobody has put the picture together. There is concerted effort here in destroying the human brain in North America. It's a collective suicide that we need to stop.

Jonathan Landsman: Dr. Klinghardt, I know another area of concern that we want to really highlight during the Immune Defense Summit, especially when it comes to wireless technology, is a real call to all the parents out there sending their children to school. And of course, it's a noble idea. Let's send them somewhere where they can get a good education and be a productive member of society. But I know you have a lot to warn people about when it comes to all this Wi-Fi that's going on in the school buildings, right?

Dr. Dietrich Klinghardt: Absolutely. So let me say something to that. Of course, I'm involved in England very much in the school system, and I give talks to school boards and teachers and parents. And it's very clear that the moment Wi-Fi enters the schools, there's a large percentage of students whose performance drops dramatically, whose health drops. It's all published. Whose health drops hugely because of the impact on the immune system. The behavior stuff in children; they become hyperactive. They stop sleeping at night. They get skin disorders. They get neurological problems. It is very, very clear.

My friend, Magda Havas, in Canada is very active in fighting the battles on their front. We've managed to get the Wi-Fi out of a number of schools in England. In France, it's very, very well known. So the last French government was very reasonable. They took the Wi-Fi, as far as I'm informed, out of all schools. So they have wired connections. They're still working with computers, but they're arranged so they have wired connections. And where that wasn't possible, they only switched the Wi-Fi on if there is; they have classes where they learn computer skills. And these classes, when they need to draw things from the computers, so they switch the Wi-Fi on only for those moments. Which is no more than one or two hours a day. Which again, hugely decreases the cumulative exposure of it. So there are ways of working with it. And most schools, state schools, they have the money to create wired connections. Where each desk has its own plug-in connection. That's totally safe.

We used to have Microsoft, next door to Microsoft. Microsoft doesn't use wireless in their halls. They use fiber optic systems, which are much better. And they're completely safe. So the companies that are high up in the communications industry, they do not use wireless. They use broadband, or they use fiber optic connections. So it's a devastating thing for the students, and of course depending on; I like to say here what makes people much more sensitive to Wi-Fi, the one factor. Yes, there is some genetics that goes into it, and some other things. But the main thing that goes into the equation is the accumulation of toxic metals in the body. Metals are the antenna for microwaves. They're in resonance with it.

So we'll be finding a hugely increasing body burden of aluminum in our people. And again, America is the country that insanely sprays aluminum into the air, trying to affect the temperature and to deflect the sun. We've got air measurements that are absolutely catastrophic. We've got rain measurements that are catastrophic in terms of the amount of aluminum in it. But also titanium, barium, strontium, and other metals. And we're inhaling that.

Kids are, especially when children are exposed to it before they're a year and a half old babies, they have no blood brain barrier. So whatever babies inhale in terms of metals, metal dust, nanonized metals, goes

straight to the brain and stays there. And that becomes the antenna for the microwave to dock onto to deliver its energy into the central nervous system. Because metals have a propensity to end up in the central nervous system.

If the mother had amalgam fillings during pregnancy, we know that the fetus is exposed to a huge amount of mercury that travels across the placenta straight into their brain. And those will be the students, when they're now 10 or 12 or 15 years old, that are much, much more vulnerable to the exposure of Wi-Fi in the schools.

And maybe, since we added actually one thing that is increasing, the latest paper on that is by Marco Ruggiero, shows that the other part that makes us vulnerable, not so much on all the studies done on how Wi-Fi affects the human cells. And yes, the University of Athens shows it's devastating. It destroys about one-seventh of our enzymes. They get either inhibited or destroyed. We've got about 65,000 or so metabolic enzymes, and about one-seventh in their research got permanently altered or destroyed by Wi-Fi.

Ok, that's one thing. But who in us is extremely vulnerable to the Wi-Fi is the microbiome. The bugs that live in us. And the bugs in us, we know now that 80% of our immunity is the microbes in us. We have microbes in the lung; they're protecting us against pathogens that we're inhaling. We've got a microbiome, certain selection of microbes in the sinuses. They're protecting us from pathogens that are trying to come in. They fight with them and get them out. And you've got microbes in the gut, which we all know. They actually are not only defending us against incoming parasites and microbes and pathogens, but they also are a huge part of our metabolic system. That means they're actually digesting our food for us, and then preparing the food into something that we can actually absorb.

Many B vitamins are created in the gut. We know tryptophan and other amino acids are created by the bowel bacteria. And we know that the current estimate is that we've got 10 times more microbes in us than we have our own body cells. But when we actually go to the DNA, we've got hundreds of times more bacterial, fungal, and viral DNA in us than our own DNA. And all of those microbes, and this is the research by Ruggiero, are highly, highly vulnerable to microwave and are completely destroyed, altered, mutated by the microwave. And that needs to be taken into account. This is the most important part of our immune system. It's permanently altered. This is on top of the alteration and the destruction caused by glyphosate, and atrazine, and some of the other herbicides and insecticides that end up in us. So these are huge issues. And the research the government uses, of course, was highly selected research that doesn't show the damage. But they looked at the wrong system.

Jonathan Landsman: Yeah, without a doubt, I want people to pay close attention to what Dr. Klinghardt has already said about heavy metal toxicity being so seriously related to all the Wi-Fi that we're being exposed to; this wireless technology. Wendy Myers, make sure you check out her presentation in the Immune Defense Summit where we're talking about heavy metal toxicity. There are several other presentations in this event, as well. that will help you with detoxification, extremely important.

So many other things to touch on, but real quick, Magda Havas, Dr. Klinghardt had mentioned, out of Canada. For those who are interest in looking into her research. M-A-G-D-A, and her last name is H-A-V-A-S. So that's one person, great resource. And Dr. Klinghardt mentioned Josh Del Sol, who is a good friend of mine. He is out of Take Back Your Power. You can look up his website. Great resource for information here in the United States. And also the third one, a dear friend of ours here at Natural Health 365, Dr. Olle Johansson, PhD, out of Sweden. He was actually one of the featured speakers in the Alzheimer's and Dementia Summit. And that was an event that I did last year. For those that purchase the Immune Defense Summit, you'll also have an opportunity to get the Alzheimer's and Dementia Summit. I strongly recommend that for anyone who is concerned about brain health.

Dr. Dietrich Klinghardt: Let me just interrupt you, because there's one more important thing I need to say regarding the heavy metals. There's one study that shows if a person has silver amalgam fillings in their mouth, that exposure to Wi-Fi actually liberates the mercury in those fillings and creates a mercury vapor. So the filling dissolves at a much, much accelerated rate. And the mercury vapor stays in your central nervous system. Only 20% of that comes out of your body. 80% permanently moved from the teeth into your brain. That's one thing.

The other thing is research by George Carlo showed that the exposure to Wi-Fi blocks, especially the enzymes, that we need for detoxification of metals. That means metals become entrapped in us the moment we're exposed to Wi-Fi. Which, of course, is all of us. So the heavy metal toxicity, which is, some of you know, has been my area in medical for over 40 years. It's a huge issue. Understanding that metals in us make us vulnerable to Wi-Fi, and then Wi-Fi actually ensuring that the metals stay in you. And not only that, but dissolving metals wherever they are and making them bioactive again. You know. So these are huge issues.

Jonathan Landsman: Dr. Klinghardt, it is absolutely great. I'm so glad you're highlighting that. Dr. Stuart Nunnally, a past president of the International Academy of Oral Medicine and Toxicology is one of our featured speakers in the Immune Defense Summit. Please make sure that you listen to his presentation. His conversation with me is really fantastic about poor oral health, and we absolutely cover mercury based

silver fillings. This is a very serious problem, Dr. Klinghardt.

Now we're getting to another very serious problem that people talk about all the time, and they're popping the sleeping pills because of all the sleep disorders that we're seeing here. But not enough physicians, like you Dr. Klinghardt, are talking to their patients about what is their bedroom environment like? With the wireless routers, the cell phone next to the head. I know so many kids out there in their teenage, and 20s, and even 30s and beyond, they're leaving their cell phones so close to their bed. Please talk to us about the connection between wireless technology and all of these sleep disorders that we're hearing today?

Dr. Dietrich Klinghardt: Yeah. So, of course, the insomnia. And very few people talk about it correctly. The insomnia that we are having now world-wide in the western world is simply an outcome of inflammation in the brain. And the biggest driver of inflammation in the brain is microwaves. That's published. I think every other study, recent studies on microwaves mention the inflammation. The inflammatory pathways are activated in our system. That's the one thing.

The other thing is, of course, is those people get insomnia from the Wi-Fi, then have metals in their brain. Metals that shouldn't be there. And so, if you've been exposed as a fetus to the amalgam vapor of your mother, from the mercury, then you get a couple of vaccines with mercury adjuvants and aluminum adjuvants all end up in your brain. There's a certain threshold. Of course, as a young person you're outgrowing that. As long as the brain cells are duplicating, they're diluting the metal content that they every time that cell divides.

The next cell only has half the toxic load than the one before. So for a while, you're kind of growing ahead of the problem. And then when you reach a certain age, the bioaccumulation increases from food sources, from vaccines, from inhaling it. Mostly now we're dealing with the persistent contrails that are raining down metals on us. And it's in the water, and it's in the foods. The aluminum content has hugely gone up in everything.

So there's a certain threshold. And when we reach that, we will get insomnia. And then, of course, the first step is to protect the body from Wi-Fi. And we're not even talking about cancer, but we know from studies that were done that calculate the risk. If you have the cell phone close to your ear, as long as it's in contact with the greater field. So if it's active. The more hours in the day you're exposed to it, the higher your cancer rates.

However, that cancer comes, especially brain cancer, thyroid cancer, melanomas. They come with the delay of approximate 20-25 years. So we're already seeing that now. Hey, I'm in the business to help these

people, so for us it's a good thing. I want to say that here. The more cancer we have out there, the more neurological disease, the more patients we get, great. It's great for our business. But I promise you, we'd be much happier to never see a patient again if this insanity stops.

There are studies out, for example, that show Wi-Fi suppresses your GABA receptors. GABA is the calming neurotransmitter. We know it causes brain inflammation, so depending on what part of the brain is inflamed, you get different symptoms. But our main treatment for insomnia is the complete protection from electromagnetic radiation. Not just Wi-Fi, but also from other sources of electromagnetic radiation. And that is usually very, very doable in most homes.

We also insist that people, when people can afford it, get the Samina Bed System. It's called Samina. That has a grounding pad woven into it, and uses certain natural material that absorb at night the moisture that the body gives off, and gives the moisture back off in the daytime. The reason I'm saying that is there's a connection with insomnia and the moisture contained in your mattress, because that makes it a microwave receiver. The water content. We measured some of the bed systems, the moulding beds that are so popular. The Sleep Numbers and others. We weighed some of these mattresses when people bought it, and a year later they were up to 12 pounds heavier than they were a year before. This is all accumulated sweat. It then soaks into the mattress. Those mattresses, first of all, become mold growing. And there is certainly a connection with insomnia and mold exposure.

By the way, we didn't get into that, but the mold in the homes becomes much, much more virulent and produces many more mycotoxins when the mold exists in a Wi-Fi field. In the microwave field. So microwave drives the growth of molds, different molds. And the molds produce a lot more spores because they also feel attacked, so they want to multiply faster. And the mycotoxins that are released are much, much more virulent. So there is a direct connection between the wave that we have now of mold illness and Wi-Fi.

And people have not put that together. You know? It's not the poor mold that's at fault here, it's the Wi-Fi that drives the mold. So there's a huge connection between the mold and the bedding plays a huge role in that in the homes. And the Wi-Fi exposure at night. So when we treat insomnia, we look at that. We look at the bedding, we look at the Wi-Fi, and we look at the metals in the brain. We need to address the three issues with a wonderful success rate, where everybody else has failed.

Certainly there still is not a real medical drug that restores restorative sleep. We know at night is when the lymphatic system of the brain, the so-called glymphatic system, is active. And the brain detoxes at night. But only if you are in deep delta sleep. The moment you bring Wi-Fi into

the home. Even I have to say worse than the Wi-Fi is the cordless phone because it's 10-12 Hz. That means it keeps you in a high alpha rhythm. You can never go into a lower brain rhythm because of the so-called entrainment. You know, the brain always mimics the rhythms of the environment.

So, the deep restorative sleep is needed for the brain to detox at night. So when people sleep in the Wi-Fi field, their brain cannot detox at night. You may get away with that for a year or two, or as a teenager maybe 5 years, but then the natural bioaccumulation of metals, it will concentrate in the brain more and more. Will eventually lead to the breaking point, where you wake up one morning, you haven't slept and you're not rested. You don't know how to get out of it. And most people, of course, resort to sleeping pills.

Which, I want to say this one example. This one that ended sleeping pills for me, a study my brother was involved. He's a psychiatrist. They looked at valium, and they actually looked at a biomarker of valium in the system. They found out patient having had one week exposure of valium, 30 years later they can find residues of that one week of exposure to valium in the fatty tissue of the patient. Which includes the brain. 30 years later, after 5 or 6 days of having taken valium. That's the only period the patient took that drug. So most of the sleeping aids that we have in the US are valium derivatives. Many of the newer ones have never been studied for long-term effects. So it's a wild world out there.

But our treatment for insomnia starts always with shutting off the Wi-Fi, cleaning up the bedroom in many different ways, and detoxing metals from the brain. And most of the time this is successful. We're getting people back to deep restorative sleep that way.

Jonathan Landsman: So, Dr. Klinghardt, as we close out the program, obviously it's invisible what we're talking about for so many people. But what's great is we can give feedback. We can show people how toxic an environment might be. Just talk for a minute or two about how we can measure our exposure, and then please go on as we close out the last few minutes, with some of the best ways that you are helping your patients to protect themselves in and around the home.

Dr. Dietrich Klinghardt: Of course. For measuring the beautiful thing about Wi-Fi, it's a physics related issue. And of course, there are instruments in physics that can measure the amplitude but also the frequency range of what we're exposed to. We used to use a German company, Gigahertz Solutions, they have an instrument called the 35C. Which is usually adequate for measuring the amount, the amplitude, and the density of Wi-Fi in any location in the home. There are cheaper instruments in the US that are less specific. But I would suggest to orient yourself Magda Havas; her website always makes the latest

recommendation of what the latest instrument is.

The trouble is the industry isn't sleeping. So we went from 3G to 4G, requiring different ranges of measurement, and now we're going to 5G, which this instrument can no longer measure. And so, there is a problem there. and there are dosimeters now, which are fantastic. That means it's a thing you wear on your body that actually measures your cumulative exposure throughout the day, wherever you go. And again, I would suggest you go to Magda's website to see what she is recommending currently.

We pretty much have given up on measuring, because there's always something that escapes you. Like the tetra, it's a low frequency field used by the police and ambulances, which is devastating to the health of people. That needs yet another instrument. We like to also measure still the magnetic field and body voltage. I've taught a course, Creating a Healthy Home, years ago, that's available through Klinghardt Academy. We go through all the measurements in that video. It's a set number of things that we would like people to test. Body voltage, the magnetic fields in the home, and the Wi-Fi exposure, which we do with the 35C instrument. And that gives us very, very good, excellent numbers.

But, we know now if you have a cordless phone in the home, which is now dying out because people don't use landlines anymore, so they have cellphones. But if you have a cordless phone, get rid of it, and go to Radio Shack, and buy for \$20 a corded phone. You can have several outlets in the home if you need to have it in several places. That's number one.

Number two, the responsible use of the cell phone. We're not so concerned about people using the cell phone because these are short, should be relatively short exposures. However, if you are more than 1 minute on it, there is a recent study on Epstein Barr that shows a 7-minute phone call on the cell phone can permanently reactive your Epstein Barr virus. And Epstein Barr virus spells breast cancer, throat cancer, prostate cancer, malignant lymphomas, and all that. One single 7-minute phone call activates Epstein Barr. Hey, that's a number.

So what we like people to do is there's a system called the Bluetooth system. Where the loudspeaker is on your chest, somewhere away from the body. Then there are plastic tubes that guide the sound to your ears. If you need to make a longer phone call, you should only use it with that. Or you get yourself in an area. Go back into your care. and use the loudspeaker on the phone to keep the phone away from your body. That includes not touching it with your hands. These are just some general rules.

Number three is how to protect the home from the incoming radio

waves from the cell phone towers nearby, and from the neighbors. So, we recommend the German system building biology. They have developed wall paints that can be applied to outside the home or inside the home with a graphite paint that's electroconductive. It creates a faraday cage, basically, that needs to be grounded into the ground wire of your electric system, and shielding curtains that are made from silver coated cloth that deflect the incoming radio waves. That's pretty much what we do with all of our clients.

If that's not possible, there is what's called a sleep sanctuary that looks like a mosquito net that's put over the bed that reduces the radiation to one-ten thousandths on the inside of it. There's a website, www.littletreegroup.com. That's Lynn, that's a friend of ours who sells these mosquito nets out of the shielding cloth for our patients. And we really insist that every child in the world should sleep under this to have protection.

And if you have neighbors underneath you, then also the underneath of the bed needs to be included with the system. So it's basically a faraday cage that you sleep in. I'm sleeping under that. Many of my patients do. Certainly all the parents put their children under it that actually listen to my advice. It's been phenomenal. We've had more recoveries from autism with this single measure, by putting the child under a faraday cage. And within 2 years, many of them have recovered without any biochemical intervention. Without any other thing that we're doing.

There are daytime strategies. When we maybe need the Wi-Fi router on. Only switch it on if you need it, if you're actually doing something with it. Then there are the Stetzer filters. Stetzer filters reduce the wires in the wall from the electric system all carry now the internet on it. You can retrieve it from there, also. And it creates a field in the house, in every room, that has electric plugs. That is not just pulse with the 60-hertz cycle, but has piggy back on it what is called dirty electricity. That means the entire internet plus a million other things. And our cells are hearing that, and get very, very confused the Stetzer filters out a simple system, condenses. They are put as plugs in the wall, and they greatly reduce that dirty electricity.

And again, Magda Havas has on her website a great video that shows a couple of dramatic cases of improvement of a Parkinson's patient and several others. When the moment the filters are put in, they stop shaking. The moment the filters are taken out, the shaking is back. So that's part of the daytime strategies, is to use Wi-Fi if you have to only for the short periods of time that you actually are searching on the internet or have to download something, and then switch it off immediately. Disconnect it immediately.

There is an issue with the new mercury containing compact fluorescent

lights, also emitting microwaves as a byproduct of the way they're designed. So you have to get rid of them. They're absolutely deadly. Again, Magda Havas is the main person. She's a professor of biology in Canada, so she's not a lay person. She's a genuine professor in good standing. So this is not a small thing. The lighting is a huge issue that contributes to the Wi-Fi. Definitely no cordless phones in the home. And I think that's it, for the purpose of the summit. Yes, you have to fight the smart meter issue, and you have to learn a little about it. You can shield it with a couple of layers of aluminum foil between the smart meter and your home. That's sort of the idiot's way of reducing at least the impact of that.

And of course, there's some internal protection you can do. There is a rosemary tincture that has been found to be dramatically effective in reducing the oxidative damaging effect, the inflammatory effect of Wi-Fi. Rosemary tincture, and the other one is propolis tincture; bee propolis tincture. I use the company BioPureUS.com that makes these for us. And it's a fantastic tool. Used wisely, you can protect the body to a certain degree.

The other thing is that everybody needs to get the metals out of your brain. We use an ionic foot bath for that. I use a company called Ki Science. Their ionic foot bath they have costs about \$500. That's a fantastic tool. We have a study that's not published, but we got the research data that after one single 30-minute foot bath with that instrument, you increase the aluminum excretion by the kidneys by 600%. That's an absolutely huge number. Without using any chemistry. So, remember to protect from Wi-Fi, it goes together with detoxing metals. And then we found the electro hypersensitivity we can greatly reduce in people. We haven't really talked about it, it's like an electro allergy. We can greatly reduce that by giving people pretty high amounts of methylated folate. So that's a trick that we found here in the office that works very well.

Jonathan Landsman: Dr. Klinghardt, you have offered plenty. And of course, people can check out Klinghardt Academy. They can look you up at Sophia Health Institute, as well. Dr. Klinghardt is available, and his whole staff there. Great resource of information. Dr. Klinghardt, I want to thank you so much for your time, and I want to thank our listeners for joining us today. If you would like a copy of this program, plus all the other presentations inside the Immune Defense Summit, simply click the banner you see on this page. Thanks again for attending the Immune Defense Summit. Talk to you soon. Take care.

Cellular Stress: The Link to Disease

Guest: Dr. David Jockers

Jonathan: Welcome to the immune defense summit. I'm your host, Jonathan Landsman, creator of naturalhealth365.com. Did you know, that every year drug-resistant bacteria or superbugs kill 700,000 people worldwide? And is projected to be more lethal than cancer by 2050? And infectious diseases still remain one of the leading causes of death.

Cancer, cardiovascular problems, and diabetes are by far the leading cause of premature death in the world. But in reality, all of this is avoidable with a strong immune system. That's why I created this event: to help you understand the roots of disease and how to prevent and reverse life-threatening illnesses by re-empowering your immune system.

Our show today - Cellular Stress: The Link to Disease. Our guest, Dr. David Jockers, is a functional nutritionist chiropractor. And creator of DrJockers.com. He is the author of, *SuperCharge Your Brain: The Complete Guide to Radically Improve Your Mood, Memory, and Mindset*, and *The SuperCharged Recipe Book* with over 180, full-color recipes to help you take back control of your health.

In addition, Dr. Jockers is a sought-after speaker around the United States on such topics as weight loss, brain health, healing leaky gut, thyroid function, natural detoxification, and disease prevention. And he currently owns and operates Exodus Health Center in Georgia.

At lightning speed, our cells perform vital tasks, on a second-by-second basis to keep us alive and well. When we are overrun by too many

toxins, or starving for nutrition on a cellular level, that's when we run into problems especially if these issues go on year after year without being properly addressed. Today, we'll gain a deeper understanding about cellular health and, most importantly, what we can do to keep ourselves healthy and strong all the years of our life. Please join me in welcoming Dr. David Jockers to our program. Dr. Jockers, welcome.

Dr. Jockers: Jonathan, so great to be on with you. And what a great topic. I'm so glad we're getting this out to the masses and really helping teach people how to take care of their immune system and really how to take care of their cellular health. That's kind of the foundation.

Jonathan: Yeah, no doubt Dr. Jockers. I'm very excited to be talking to you today about this topic. Because, cellular health—it's funny. That's the way I look at everything we do from our thoughts and our emotions to the food we eat, the supplements. We're gonna talk about oxidative stress. So many things, but the idea is, when it says watch out for this or that because it'll affect you, it's really our cells.

That's what we are. Of course, bacteria as well and all of those things. But that's what we're made up of. So, why don't we talk about what exactly a cell is. And how does cellular energy production really work?

Dr. Jockers: Yeah, absolutely, so cell in a sense is a whole inner world of itself. And so our body is made up of trillions of cells. I've seen many researchers talk about different numbers. But we know that they're definitely in the trillions. And basically, within every single cell, and the cells are quite similar, although they may have slightly different functions, like a liver cell is gonna have slightly different functions than skin cell. But they're very similar. And it's a whole world of itself. There's a membrane and within that there's a whole bunch of different organelles.

So just like we have organs like a liver there's organelles within the cell like mitochondria, and a nucleus, and a Golgi apparatus and all these different organelles that have vital functions in life and health. And so these cells, they live their life. They produce energy. They do their required job. And then they replicate or they die. The body has these natural switches. These cell suicide switches to kill them off, so that they don't replicate and cause problems. And mess up the natural genomic function. So these cells I think of them as just an inner world.

And that's what really produces all the energy. That they are responsible for everything. And we hear a lot about, for example, look, well, to the gut for the cause of all healing. A lot of times we're looking at organ systems. And I'm a big fan of that too. I mean, we got to look at various organs. But deeper than the organ is we've got to understand what's happening at the cellular level and start to address what's happening

in the cells to make sure that we have a clean environment, an environment that's able to produce energy at an optimal level, at the cellular level. And if we do that, then the organ systems are going to start to function better.

Jonathan: We're gonna talk about what exactly oxidative stress is because we hear that term a lot. You know, Dr. Jockers, this is thrown around quite a bit in the natural health world. And how it actually affects the health of our cells. But I think that's what it's all about here. This is not some obscure topic we're talking about today. If someone has chronic fatigue, if they have pain in their body, their shoulder, their back, they're feeling like they have brain fog, digestive problems, it's not just one cell. We're talking about millions and millions, if not trillions, of cells that are not communicating well. And that's what we're talking about here right?

Dr. Jockers: Oh yeah, absolutely. I mean there's a key communication dynamic. And really, ultimately all the cells need to be in harmony. They need to be communicating in harmony. And so you brought up the term oxidative stress. And basically, oxidative stress is when we have this bombardment of free radicals or this, in a sense, extra or this unpaired electron, these molecules that are unstable. They have an unpaired electron.

And they cause problems. They start to damage the cellular structures. So you think about it like, just some crazy guy running around town. Just punching people and just going in a sense. Like taking a baseball bat, and just banging down doors. And that's basically what these unpaired electrons are doing. They're just cause of wreaking havoc.

Now they are normal part of metabolism. So even a healthy body. Okay, somebody that's very proactive at their health. They're going to produce oxidative stress and free radicals. And they're actually healthy when they're kept in check because what they do is they prime our body. And our body responds by producing antioxidants. So it's called endogenous antioxidants. When our body produces antioxidants or these compounds that trade an electron to these free radicals and neutralize them on our own.

And we'll talk in this interview about what kind of foods and nutrients and supplements we can take to support our antioxidant defense systems. But you know the most important thing is helping your body produce its own antioxidant defense system. And that's that endogenous formed. Endo- means within, and -genous means formation.

This is formation within, so we need some level of free radical oxidative stress. The problem is when we're not producing the antioxidants

effectively, and we've got just a bombardment of this oxidative stress. It starts to damage the cellular structure. And within the cell, it starts to damage the key organelles like mitochondria, which is like the engine of every cell in the body. It produces all the energy.

And when our mitochondria become damaged, it alters our metabolism. We start to become basically like dirty energy systems. You think about a car that doesn't have the exhaust under control. So it's just releasing all this bad exhaust. And it's getting really poor gas mileage. That's what happens to the cells of our body when the mitochondria become damaged. And then we're not able to protect the genome itself, the DNA. And when the DNA starts to become damaged and mutated, now we start to develop cells that are functioning completely abnormal. And over time, that's gonna lead to the formation of chronic disease.

Jonathan: Dr. Jockers, this is so important. Just for a moment, or so, we could go on a little bit more before we get to the best nutritional approaches, to protect our mitochondria and our DNA. So often, and I'm sure you hear this all the time as well, Dr. Jockers, somebody will say, "I don't get it." And I'm not making fun. I'm saying they're genuinely confused why a person feels so sick now when they felt fine for so many years. But it's everything you just said. It's the bombardment of the small amount of toxins that in the mainstream media, conventional medicine, they roll their eyes.

They don't produce enough news about it. They don't warn people enough. In fact, they do even worse of a disservice to society. They say, "Oh, don't worry about that little bit of toxins in the vaccines. It's so small. Don't worry about the poisons in the personal care products or the stuff in the furniture. It's so little. Don't make such a big deal about it."

And then these people get bombarded year after year with bad diet, lack of good nutrition in their body, and now that 20/30-year-old that seemed perfectly fine, 40-50 years old, the brain breaks down, the liver, the heart, the lungs. I mean this is what we're talking about here. The stress is too high the nutritional status is too low, and that's why we've got to take a more serious approach about this. I'm sure you would agree with what I'm saying.

Dr. Jockers: Oh, yeah, absolutely, without a doubt. So all of these toxins they have an accumulated—in a sense, a bioaccumulation effect, so we start to accumulate them. And they're causing this free radical stress. When we're younger, our body's better at producing—again, we talked about the endogenous antioxidant production. The cells are better at protecting themselves when we're younger.

Well, as we continue the onslaught though, over time, they get worse

and worse. They start to function even worse. I mean, think about any sort of machinery that we have. And most people that are listening to this have a car. And we all know that the more you drive that car, obviously it's gonna start—over time, that wear and tear is gonna stress the overall automobile. It's not going to be able to recover as well. And over time, the tires can blow out. And you got to get all the repair that's done on it.

Well, it's the same thing in our body. The more that we've got this accumulated stress without the necessary maintenance and, also, just prevention strategies, like in a sense, just avoiding toxins. Without that, these cells are going to be overwhelmed and overstressed. And you know when we think about it, it's like, okay, last year I felt good, and then all of a sudden six months later, I had chronic fatigue or whatever it was. Our body runs off of thresholds. And so basically you might be right under the key tipping point as far as environmental toxicity accumulation, as far as your body not able to produce enough endogenous antioxidants.

And then all of a sudden, one day you hit that tipping point. And it seems like everything gets worse. And then it's just a vicious cycle from there. Because when your body's not able to repair well, when you're not able to heal and repair and generalized stresses start to overwhelm you, it just gets worse and worse and worse. Think about like an avalanche. It starts off with a little snowball but over time it starts to build momentum. And then it gets to the point where you know no human force is going to be able to stop it because it's rolling down the hill so fast.

When I'm working with clients that have chronic disease, I let them know. I'm like, "You know what? Where you're at right now in your health, it's kind of like a big Mack truck that's going downhill at 100 miles an hour. The first thing we got to do is gently hit the brakes. We're not going to stop this thing immediately. We're just trying to decelerate it until we're able to get it to a full stop. Then we've got to turn that truck around. And then we've got to start going uphill and slowly build momentum and accelerate uphill." So that's a process that's going to take time.

The very first step there though is we've got to decelerate the momentum. And that's what we have to understand is that healing takes time and the development of chronic disease takes time. But the more that we can support our cellular structure, our cellular energy systems, and our ability to cleanse and detoxify, the better off we're going to be. And we're going to start to build that momentum.

Jonathan: No doubt, Dr. Jockers. I would put my energy level at 52 years old against anybody in their 20s, getting up at 5:00 in the morning and

going to sleep at 9:00 at night. But I'll tell you, I'm not saying it to brag. What I'm talking about, is exactly what you just mentioned. I've made adjustments. I mean I laugh at myself in my teenage, in my 20s. When I was a high-performance athlete, I mean it was pizza, it was eggplant parmesan, gyros on white bread. It was whatever kind of iced teas. And hey, an hour later I could just change my shoes. Hit the road and go for 10, 12 mile runs. And everything was just fine. I could go to sleep 10, 11, 12 o'clock at night, and the next day, let's just rock and roll and do it all over again.

Now, I've got to be more careful. Like you say, I've made adjustments. I go to sleep earlier. I make sure that the liquids I'm putting in me, and the foods, and the supplements, are right on target, so that my brain function, and my energy is lasting great.

And I'll tell you what. My mood, my temperament, all of that is so much more stable, and at a higher level, because I am taking better care of myself on a cellular level. So let's just dive right into it. I mean, I said that not about me. But I'm really giving a strong shout-out to those in their 20's and their 30's. Please take this message so seriously, as somebody who's older. What are the best nutritional approaches to protect the mitochondria and our DNA? That's what this is all about.

Dr. Jockers: Yeah, absolutely. And you know, just to jump on what you just said. This should give everybody a lot of hope, that not only can you turn around chronic disease. But also at the same time you can age extremely well. I mean that idea that you start going downhill when you're in your 50's, 60's, and 70's. That's not true at all. That you can actually get better and better and better. Your energy can be better. Your mental function can be better. We can, in a sense, put off aging and really just have an incredible energy and quality of life. Who knows? Ninety, 100 years, I would say at this stage, and then with technology possibly longer in the future.

And so, as we jump into nutrition we got to look at the big things with nutrition is really blood sugar stability. That's really where I start with clients. Is getting their blood sugar balanced? We know that most people in society are consuming a diet that is higher in carbohydrates. And basically, what happens there is your body starts to become very good at producing energy through what we call glycolysis or basically breaking down glucose and forming energy with that. And so it upregulates all the enzymes and everything it needs in order to produce energy from glucose. And we do need to produce energy from glucose.

However, we want actually the predominant amount of energy to come from, fatty acid metabolism. And so, the reason why glucose metabolism, we don't want that to be the predominant is because it produces very little cellular energy. We look at this component called

ATP, adenosine triphosphate, and basically glycolysis produces two net ATP.

Meaning that after the cost of the production of it, there's only two molecules available. Now it can produce it very fast. And that's the benefit. So if we're doing anaerobic exercise, exercise without oxygen, we're going to produce our energy through this, again, this glycolysis system where basically we're breaking out sugar. And that's key. And we've all experienced kind of the burn that comes with that. And that's the byproduct called lactic acid. And that's a byproduct, when we don't have oxygen to recycle, we end up with this buildup of lactate. And that's a good thing.

It's a good mechanism that the body uses. And we can actually use that lactate, and throw that, convert it into pyruvate. And throw it into mitochondria. And produce a lot of energy out of that once we have a presence of oxygen. Now here's the thing, what we want is we want to be very good at producing energy from sugar when we're exercising at a high intensity, or running for our lives, or whatever it is, doing something stressful. However, when we're at rest, which should be most of the day, like if we're driving in our car or if we are working on our computer, whatever it is.

If we're just relaxing, watching TV, we should be producing the vast majority of our energy from the breakdown of fatty acids. And when we break down fatty acids, we produce something called ketones. Which are byproduct in the liver. And those are extremely clean. We don't produce a lot of metabolic waste. Whereas, when we are using glucose as energy, we're producing a lot of waste. Think about it like pollution out of a car. You know a lot of exhaust coming from the car. And when we break down ketones, we get a ton of energy.

I mean, ultimately if we go through the full energy cycle. Krebs cycle, and electron transport system, we're going to get roughly about 34-36 net ATP. So you think about that compared to the two, significantly more energy production, 17 to 18 times more energy production from that and very little metabolic waste. So, we want to teach our body become more of a fat burner. Rather than a sugar burner. And one way to know you're a sugar burner is if you consistently are craving sugar or if you feel like you need to eat every, let's say, three to four hours.

If you feel like I have to eat or if you're noticing that you're getting what we call hangry between meals. So it's starting to affect your mood, your hunger, your cravings. You start to notice those changes. That's a classic sign that you are sugar burner, sugar craver. When you're a fat burner you actually are going to be able to go longer between meals and feel really, really, really good when you're doing that.

And the reason why, is because your body starts to upregulate all these different enzymes to break down fat, to produce energy. So it gets really good. Because we have all this stored fat really on our body. And so it's very good at breaking down stored fat and using that as an energy source. And it conserves all the stored sugar in our muscles, called glycogen, and our muscles in our liver. Because the body says, "I don't want to use this. I'm going to conserve this. But I really want to break down the fat and use that as an energy source."

So we get this consistent flow of energy coming from ketones. And that's so good for the cells and for the mitochondria. And it actually has been shown—a ketogenic diet done well has been shown to what we call mitochondrial biogenesis, where we get a growth of new mitochondria. And the more mitochondria we have within a cell, the better cellular energy production, the better we're going to be able to protect the DNA.

So nutrition-wise, we want to become a good fat burner. So what does that look like? Lots of good fats. Things like avocados. We want to use coconut oil, coconut products. You can get things like MCT oil, which can be very helpful for producing ketones. Olives and olive oil are very, very good as well. We can use some full-fat dairy, but I always recommend grass-fed. Like grass-fed butter or ghee, can be very, very helpful. Really good fat sources. So we can be using things like that on this nutrition plan. We also want a lot of nutrients. Okay, nutrients are going to help protect the antioxidant defense systems. They're going to protect all the intracellular structures. And they're going to downregulate inflammation in the body.

So where do we get these nutrients? And ultimately, we want nutrients with minimal amount of sugar. Because we know anything that turns into glucose is more or less—the formation of glucose has some level of anti-nutrient effect on the body because, again, it takes a lot of energy and nutrients to break down glucose as energy. So the low sugar nutrient-dense things that we want to be consuming a lot of are going to be, for example, herbs like turmeric, basil, oregano, thyme, ginger, cinnamon. These things are loaded with antioxidants that help buffer oxidative stress.

And they also work on genetic pathways that are involved with inflammation. They down regulate those pathways as well. They also can stimulate abnormal cell apoptosis or the cell death of cells that are bad that we don't want growing in our body. So these herbs are amazing. So you want to put them all over our foods. We want to use them in abundance. We can do herbal teas, essential oils. We can do lots of different things to get these herbs in and around us, even breathing them in from essential oils, drinking them in teas or green juices and stuff like that. So we get these herbs in.

Also low glycemic fruit like berries, lemons, and limes. So a lot of people

will say, "What about bananas?" Bananas, certainly, they're not a terrible food. However, they just don't have a whole lot of antioxidants and they do have a lot of sugar in them. So as opposed to a blackberry or a blueberry, which has tons of antioxidants, significantly more than a banana, and is lower glycemic, lower sugar impact.

So I'm a fan of doing berries, lemons, and limes. Very low sugar, rich in vitamin C, at bioflavonoids. Bioflavonoids are powerful for cellular health and for mitochondrial function. So I love lemons and limes. Also doing non-starchy vegetables. So we got things like broccoli, cauliflower, cabbage, asparagus, cucumbers, arugula. I mean we can go on and on with all these non-starchy vegetables that are really, really good for the body.

And then also we're adding in some clean protein. We need the protein in order to basically form a lot of the cellular structures as well as really components of the immune system. So where are we going to get protein from? We're going to get that from grass-fed, organic animal products. That's a great source of protein. So that's what we're looking for there. You can also get different types of protein powders. Like a good pea protein or hemp protein. You can get collagen protein. All different types of protein powders. And the advantage of protein powder is it's predigested.

And a lot of people, especially people are struggling with chronic disease. They have trouble producing enough digestive juices to really metabolize meat well. So for some of these people, they actually do better when they go on a lower meat diet but use a lot of protein powders to get the amino acids in while their body is getting better at producing digestive juices in order to metabolize the protein. So we want to get that clean protein in. Also, we can do some nuts and seeds and different things like that. Ideally, I like those soaked or sprouted. Like sprouted pumpkin seeds are awesome. And a good source of fiber, B vitamins, and zinc.

We also like to do fermented foods. So things like kimchi, sauerkraut, pickles, stuff like that. It's fermented, and so it's basically pre-metabolized. There's a lot of enzymes that come with that, probiotics that are really good for the body. There's also fermented drinks like coconut water, kefir, apple cider vinegar, kombucha different things like that that can be really good for the body.

And then as far as sweeteners, to sweeten up your food, instead of sugar, I really recommend using something like stevia or monk fruit. Because those don't have an effect on your blood sugar. And there's a lot of clinical research out on Monk fruit, the [mogrosides 23:45], and Monk fruit and the steviosides and [rubiosides 23:48] in stevia and benefiting the immune system, benefiting different components of the

body and just supporting the body overall. So those are things that don't affect blood sugar. They're natural, and, on top of that, they support healthy cellular function.

So I'm a fan of using those as sweetening agents. In our typical diet, if we were to take it like through the meals, you do something like this. You'd wake up in the morning. You'd drink a lot of water. Herbal teas are great. So you can do herbal teas to get more herbal antioxidants into your body. Water, get minerals in. So you want either like an organic broth, vegetable broth, or it can be like an organic free range chicken broth. Or you can put salt in your water. Get some Himalayan sea salt, put that in your water. 95% to 97% of us need more minerals. Those minerals support energy production.

At the cellular level we're really energetic beings, ultimately. And we think about how electrical energy runs through our body, it's all using electrolyte gradients. So calcium, magnesium, sodium potassium. So getting good salts like Himalayan sea salt, or a good salt that has tons of these trace minerals, so important for health and also the hydration necessary for conducting these electrical currents.

So doing a lot of good sodium. And good mineral-rich salts as well as broths and things like that. I'm a huge fan of doing a lot of liquid nutrition because I feel like it's very easy on the body to digest. So when we're eating solid foods, it takes a lot of digestive juices to break that down. It's a lot of energy expenditure to break it down. Whereas smoothies, the digestion's already done, so we're able to extract the nutrients without doing a lot of work on it, which especially when somebody is trying to heal a chronic disease, that's necessary.

So, good protein smoothie with something like coconut milk, or maybe even avocado. I'm a huge fan of doing protein puddings. I love avocado in my smoothies with coconut milk. I get that good fat in there. It's more of like a pudding texture to it. I put in a good high-quality protein powder, either like a bone broth collagen powder or maybe a pea protein-based, hemp protein combination, something along those lines that I put in there. If I want to flavor it, I can flavor it with stevia or monk fruit again. I can put berries in there. If I want a little bit a little bit more antioxidants, polyphenol antioxidants in there. So that's great. If I can do chocolate well, I do raw cacao, which is very rich in antioxidant polyphenols. They're great for the body. So you can do something like that for breakfast. For lunch, big, huge salad with avocado and pumpkin seeds on it.

And then for dinner, you could do some sort of a healthy meat – grass-fed beef, wild-caught salmon, bison, lamb. Something good, sustainable. Not too much of it but a decent amount. And lots of steamed veggies. So broccoli, cauliflower, asparagus, stuff like that. Steam it up then melt

some grass-fed butter or ghee on it. Cook your meat in coconut oil. Pour the coconut oil on top of the meat afterwards, so you get more of those good fats in there. You've got the ghee on top of the vegetables.

You put a lot of herbs on everything. Basil, oregano, thyme. I always tell my clients you should be able to smell the meal across the house. It should be so aromatic because, you're using so many of these herbs. Squeeze fresh lemon or lime. Both of those are great. Or use like an organic lemon juice or lime juice, or apple cider vinegar works too, on both your meat in your vegetables. The acids in those will help to metabolize help to break down the vegetables and the meat, making it easier on your digestive system. The more we take stress off of our digestive system, the more energy our bodies can have healing.

So we do that. It also tastes good. You think about like lemon pepper chicken. Tastes great that way. And you know when you put that on the vegetables, it tastes awesome. And you could have a side salad, if you want more veggies with that. And you know, a lot of people will tell me things like, "I struggle to get my kids to eat vegetables." And I always tell them, "Well, you just didn't put enough butter on it."

Because if you put that grass-fed butter on your broccoli, and the herbs and the lemon, and things like that, it just tastes so good. So it works really well. And if you don't want to do butter, do coconut oil. Melt the coconut oil on there. Just that the fatty oil type of texture. And how it takes on those herbs and the lemon lime. I mean, it's just such a great flavor. So you know you want to get an abundance of these vegetables and these good fats around it. You know, a moderate amount of clean protein. And if you do that, you're going to start to notice significantly more energy. You're gonna reduce inflammation in your body. Your brain's going to function better. Your immune system is going to be better and life gets significantly better.

Jonathan: Dr. Jockers, that is absolutely amazing. I'm just thinking of all the registered dietitians and the nutritionists out there. Every single one of them needs to listen to what you just said three to six times. And I'm not kidding around. This kind of list that you just brought out - high nutritional value, easy to absorb into the body. Because what I'm also getting from you is not over eating.

You got the highly nutritious liquid aspect to what you were talking about, where you're bringing easily into the body on a cellular level all of this nutrition in liquid form, easy to absorb, not super high in calories. And even when it comes to grass-fed beef, or wild-caught fish, which is what I enjoy from Vital Choice. These are delicious foods where you need a small amount. You are very satisfied. Dark greens like kale. You sauté that in a lot of garlic. It is absolutely delicious.

Dr. Jockers: You're getting me hungry over here.

Jonathan: I am with you 100%. The liquid drinks in the morning that I have with the freeze-dried powders, the green powders that have barley grasses. They have all the grasses in it. Medicinal mushrooms. They got the seed vegetables in it. And I just mix that in water with the turmeric, a liposomal turmeric I'm squeezing in there with a powdered vitamin C. And just stirring all of that up. You know, it's a 16, 18-ounce drink. That coupled with my smoothie drink, of about a 20-ounce glass I'm sipping on in the middle of the late morning, middle of the day, type thing.

Now you're looking at 40 plus ounces of fluid that's very high in nutrition, not that high in calories. But man, I'm satisfied and I'm doing interviews like this until I have a meal later on. Just like what you said. And it works. You're taking stress away from the body. People are over eating too much right?

Dr. Jockers: Oh yeah, absolutely. And you know the big thing is it is just understanding that the more we can take stress off of digestive system the better off we're going to be. Our digestive system is only one cell wall. And that's because our body has to be good at absorbing nutrients. It has to be good at getting nutrients from the intestine into the bloodstream. So we've got to realize that the better we are producing stomach acid and bile and pancreatic enzymes or using liquid nutrition, like we're talking about, which is highly bioavailable. Highly absorbable. The better we're able to do that, the better we're going to extract nutrients. And therefore, we need less overall amounts I guess you could say or volume of food because we're extracting those nutrients. We're going to make the most of those calories.

And again that puts less stress on the digestive system which means we're going less inflammation in our gut, less of a chance of leaky gut and autoimmunity and overall systemic inflammation that affects a myriad of different tissues in our bodies. So, I'm all about getting that liquid nutrition in. The super foods and antioxidants like you were talking about. Yeah, getting those in on a regular basis. Creating a ritual around it. Setting up your meal plan and your strategies to get these things on a regular basis.

Jonathan: And I realize, Dr. Jockers, anyone listening to this program who's new, it may sound overwhelming. But I just want to say it for the record. This is not difficult. It really is easy. It's comfortable and it feels good. You just have to listen to these presentations in the Immune Defense Summit over and over again. Just relax, take it all in. Start making some notes. And whatever resonates with you, get started one by one to make this an easy part of your lifestyle.

We're going to get into lifestyle activities now that really enhance cell

health. That's what it's all about because we're going to feel so much better on every level: the way we think, the way we feel, and the way we physically are. Dr. Jockers, one of the big things I mentioned—two things actually—is chewing your food a lot to get it into the cells. That's like common sense. And number two, you want to know if you have some sugar issues that you mentioned early.

I know you talked about intermittent fasting quite a bit in your work. You just go all night sleeping. And then wake up the next day like I do. Just get that liquid nutrition that I described. Go to about 11:00-12:00 o'clock. If your mood is starting to go south, and you're just like, "Get out of my way I got to eat," that's going to really reveal some blood sugar issues which I don't have at all. So how do you explain that? And talk about some of these lifestyle activities that are really important to get busy doing right now.

Dr. Jockers: Yeah absolutely. So, you know as far as like the nutrition we're talking about blood sugar. So I would say first thing let's get that blood sugar stable. So, I recommend starting by doing an overnight fast of 12 hours. Where in the morning when you wake up, the first thing that you should be thinking is, "Let's get water into my system." So basically, you're dehydrated. You've gone through the night. You're breathing out water vapor. So you want to hydrate well in the morning.

And so, for example, if you drink eight ounces of water and you're feeling kind of nauseous or like that's all you can do, then start with that. Ok? But work your way up to where you're drinking about 32 ounces of water the first 15 to 30 minutes after you wake up. And ideally putting something like lemon in there. Something along those lines or even doing some salts like we were talking about.

That will immediately start getting your metabolism going. It will help you move your bowels. And we want to get that bowel activity going. And that's going to help. And that's kind of the first step before we start moving into a longer intermittent fast. But over time, what you'll notice is that when you hydrate well and you're consuming a diet like I'm talking about and you keep your stress under control, you prioritize sleep, getting good sleep on a regular basis—we'll talk about that in a second. Your blood sugar will be much more stable. Your morning blood sugar will be lower. Typically, I'd like to see mine usually in the 70's or 80's.

Ok, and so your blood sugar will be lower but you won't be hungry. And you actually feel good. And then you just hydrate throughout the morning. And you'll notice that you're really not even hungry until sometimes lunchtime, or sometimes longer. And that's when you can go ahead and you can actually drop it down to two meals at that point. Two to three meals in an eating window, like a six to eight-hour eating window.

Where you consume food between, let's say, 12:00 and 6:00, or 11:00 and 5:00, or 11:00 and 6:00 or something like that. What works best for your body. The whole time you're looking at what does my hunger levels look like? What does my energy look like? If I notice my energy is starting to go down, it's a sign my blood sugar is going down too far. And my body's getting a little bit stressed. If I notice my mood is being affected and I'm getting that kind of hangry type of reaction, that would be an issue. Or if I'm noticing a lot of cravings. Those are all signs that blood sugar's imbalanced. So we need to continue to work on getting the blood sugar stable.

And that's a time where you should break your fast if you're noticing that. Or at least go with water and electrolytes. That's usually the first step I'll tell my clients. "Hey if you're noticing your energy goes down. First thing you do, water with salt, or a broth, or something like that." And then if you if you do that, you drink eight to 16 ounces of that and you still notice you're hungry, you're having cravings, your energy's down, then go ahead and consume something.

Have some sort of a healthy, good fat, nutrient-rich meal or snack. And that can help sustain you. So water first. Water and electrolytes first. Then go into food. Obviously, we need to get our calories in throughout the day. So, you're looking at trying to still eat two to three healthy meals a day and possibly a snack, depending on where you're at. But getting those in. We need to really prioritize sleep.

Sleep is when the cells heal and rebuild. And so basically, we want to make sure that, ideally, we're being in bed, before 12 for sure. And every hour of sleep before midnight, is equivalent to three hours of regenerative capacity after midnight. So, Jonathan, you said you're in bed by nine. That's awesome. My wife and I, we're more like 10:00, 10:30. And yeah, trying to get good seven to sometimes nine hours of sleep.

You know the healthier you are, typically the better you feel. You'll typically feel well, if you are healthy, less than eight hours of sleep. If you need eight, nine, 10 hours of sleep, it's because your body needs it. You're probably adrenal fatigued, probably have thyroid issues. And your body needs that in order to heal and regenerate. You got to listen to your body. You know if you're trying to push it on six hours and you're feeling fatigue and you're depending on caffeine all day, you need more sleep.

And if your body's saying, "Hey, I need nine hours of sleep." Don't think of it as, "Hey, I'm just disadvantaged in life." Think about it as a season. That you're in a season where your body's really trying to heal. And you need to prioritize that. So getting to bed before midnight, for sure ideally. Earlier the better; 9:00, 10:00 o'clock is great.

Having an electronic curfew is important too. Ideally about an hour before bed, just turn off electronics. Turn off your TV, your cell phone, your devices, your computer, things like that. And talk to your spouse or read a book. Do something. Sit down and take some deep breaths. Meditate. You know there's lots of different things you can be doing. You spend time in prayer. You can journal. And there's lots of things that you can do that are going to really help speak to your spirit and inspire you that don't depend on you being glued to electronics. And so I think that's extremely important, for really good healthy sleep. And good mitochondrial function, good energy production. So be doing that.

I'm also a huge fan of regular exercise. And so going out and walking on a daily basis. Ideally barefoot walking. My wife and I were trying to get a barefoot walk in every single day around our neighborhood. I try to get on the grass bare feet, at least 15 minutes every single day. You know if I'm at a beach. My wife and I, when we vacation, we always go to beaches typically. And so we try to walk on the beach, on the sand. Getting your bare feet on grass, dirt, sand or even concrete, will help to conduct a healthy electromagnetic frequency that helps to basically restore harmony, and homeostasis, this level of balance, to your electrical systems or your body, your electromagnetic frequency that all of us emit.

And so when we're around cell phones, microwaves, and computers, and all this kind of stuff we are being bombarded by, in a sense, an invisible toxin that we can't see. But it's having an effect on our bodies energetic systems. And so the way that we can help buffer that, is grounding ourselves. By getting out again bare feet. Just touching the earth. Mankind has adapted to the natural electromagnetic frequency of the earth, and it's healing. And people ask me, what happens if I go out to the field? Or what happens if my yard has been sprayed with herbicides? I tell people, I've grounded on baseball fields and soccer fields that I know were sprayed with a ton of pesticides.

I always feel so much better when I do it. So I think that the benefits outweigh the risks. As long as it's not like fresh. You know if they'd just sprayed it. I would stay off of that. If you're breathing that, those toxins in right afterwards, that wouldn't be good. But other than that, get out barefoot. Again even the concrete will have a healthier electromagnetic frequency.

But the thing that stops that is the rubber sole. So if we're walking in shoes and rubber-soled shoes or sandals, then that's going to blunt that electromagnetic frequency. That's why barefoot is good. And you'll just feel better when you do that. So doing that. Going out for hikes and getting out in nature. Trees themselves emit a really healthy electromagnetic frequency. So, sitting by a tree, or taking a nap by a tree. Even tree hugging can be really, really healthy.

So getting out in nature on a regular basis. You know if you're healthy enough, start doing some resistance training. Where you're doing strength training. One of the best things for cellular function is doing things like sprinting and strength training. Now if you're battling a chronic disease, you've got massive fatigue, that's a little bit more advanced. But you're out there, you don't have those conditions, and you want to optimize your cellular function, definitely doing strength training on a regular basis. Doing interval sprints. That is a great way basically to help strengthen and increase the amount of mitochondria in your cells and increase their level of efficiency. So those are just a few of the great lifestyle strategies. Deep breathing, positive thinking, and we can go on and on with a lot of things. But I think that's a great start.

Jonathan: Dr. Jockers, it is absolutely magnificent. Everything you just said. Because for so many people that have immune compromised situations. It's a general statement. I know but, a lot of people feel wired from head to toe on a cellular level. Their energy is down, yet their thoughts are scattered. They have anxiety issues. And here it is, we're talking about taking a deep breath, chewing your food more. Actually, getting that light, that artificial white light away from your eyes at night. They even make glasses that people can look into which is something that I do. And about two hours before I go to sleep, they're on my head. They look kind of cool. They're a little tinted.

But you know what, I feel it on a nervous system level. And that's what we're talking about here. Getting your nervous system to calm down so that you are ready to go to sleep. You go to sleep and that's where the regeneration is happening overnight. Your brain actually shrinks. Everything gets help, so that you can detoxify your body.

The idea is to get into these rhythms as soon as possible so that our body is up and alert during the day and calm and relaxed to go to sleep and regenerate at night. Every one of the things that you said are just fantastic. So as we close out the program, Dr. Jockers, equally important, especially for those who are compromised in one way or another—they're struggling with their health—what supplements do you personally use? And what do you recommend for optimal cellular function?

Dr. Jockers: Yeah, absolutely. My number-one supplement for cellular function is magnesium. I have seen so many people's lives transform just with magnesium supplementation. In fact, a lady in my office, she had POTS. Which is postural orthostatic tachycardia syndrome, where, basically she'd go from sitting to standing and her heart would just start pounding out of her chest. They say this is an incurable condition. Yet, I've had 30 people in my clinic with this that all of them are better, with the condition got completely gone.

One of the big things is magnesium. So most people are magnesium deficient. Most people in society are magnesium deficient because we use magnesium whenever we're under stress. When we're trying to metabolize sugar, for example, we're using magnesium. And most people are not consuming a lot of magnesium unfortunately in their diets. And you know if we live a stressful life, it's almost impossible to get enough magnesium in our diets.

And I've seen this to be so huge for myself and vast majority of my clients, getting good magnesium into their system. So I have a product called Brain Calm magnesium that I put almost all my clients on. And they see significant changes right away with that. So that's huge. Also vitamin D can be very important for our cellular—I mean vitamin D and magnesium just play a role. Vitamin D plays a role in over 2000 genes and gene expressions in our body. And that's a good percentage of our genome in general. So just so critical for mitochondrial function, for energy production. Magnesium plays a role in over 300 enzymatic functions. We look at those two nutrients. And we use them up. I mean vitamin D, we use up faster when we're under stress, sensitive magnesium. So we've got to support those.

And then we look at the outer part of the cell and we're thinking fatty acids. OK so we talked about getting good fats in our diet. But also long chain, omega-3 fats can be really, really helpful for improving hormone sensitivity, neurotransmitter, like serotonin sensitivity, dopamine sensitivity to help improve mood, brain function. Neurological cell, neuronal cell energy production. So good long chain omega 3s. I'm a huge fan of a purified fish oil. And for a lot of my clients, I use a purified fish oil that also contains liposomal curcumin.

And I know you had mentioned liposomal turmeric, so a great supplement. And this product also has lysosomal glutathione in it which is the master antioxidant that protects. The DNA protects your mitochondria. So if you're having chronic inflammation in your body, or autoimmunity, that's a sign that you're glutathione deficient and you need to support your glutathione pathways.

So that's a great supplement to be using as well. There are other things to support intracellular energy production. Like coenzyme-Q10 can be really, really good. I see a lot of clients that are very low in coenzyme Q10, B vitamins. Particularly B-6, B2 riboflavin, B-6, folic acid, or folate I should say, B9 and B-12 are all really, really key with that. Zinc also. Zinc is a really, really key one. I've seen a lot of great results getting people on, basically, a regular zinc supplement.

And that's really good for protecting against heavy metal toxicity as well as just supporting your immune system and your body's natural hormone expression. So those are actually a great start, a great blend

of nutrients right there, that you can supplement with, that you will see changes in your physiology and your cellular energy production, when you start to add things like that in.

Jonathan: And of course, Dr. Jockers, my own personal favorite that I talk about a lot is Vitamin C. I'm sure you would agree.

Dr. Jockers: Oh yeah. Absolutely. Vitamin C. Huge. So many people are very deficient in vitamin C. So we definitely want to support vitamin C. And so I'm a huge fan of using that. Supports the adrenals. The immune system. And just so important for the body.

Jonathan: You know I've said it before. And if you've been listening to many of these presentations, I hope you don't mind me saying again, please take the time wherever you're driving around. Use it as part of your walk just relax and listen to these presentations again and again. Because if you just listen to this one, for sure two or three times, I guarantee you, no exaggeration, I really mean this, you're going to get so much more out of this presentation. So please have a listen.

Make sure you share this with somebody else who you feel needs to get this message, because, if it's not for us, how is this message going to get out there? Dr. Jockers, I want to thank you so much for your time. And I want to thank our listeners for joining us today. If you would like a copy of this program, plus all the other presentations inside the Immune Defense Summit, simply click the banner you see on this page. Thanks again for attending the immune defense summit. Talk to you soon. Take care.

Candida & Immunity Solutions

Guest: Donna Gates

Jonathan: Welcome to the Immune Defense Summit. I'm your host, Jonathan Landsman, creator of naturalhealth365.com. Did you know that every year drug-resistant bacteria or super bugs kill 700,000 people worldwide and is projected to be more lethal than cancer by 2050? And infectious diseases still remain one of the leading causes of death. Cancer, cardiovascular problems, and diabetes are, by far, the leading cause of premature death in the world. But in reality, all of this is avoidable with a strong immune system. That's why I created this event. To help you understand the roots of disease and how to prevent and reverse life-threatening illnesses by re-empowering your immune system.

Our show today, *Candida and Immunity: Solutions You Need To Know*. Our guest, Donna Gates, is the international best-selling author of *The Body Ecology Diet: Recovering Your Health and Rebuilding Your Immunity* plus *The Body Ecology Guide To Growing Younger: Anti-Aging Wisdom For Every Generation*. Make no mistake about it; Donna is on a mission to change the way the world eats. *The Body Ecology Diet* was the first of its kind: Sugar-free, gluten-free, casein-free, and probiotic-rich. In 1994, Donna introduced the natural sweetener stevia to the United States, began teaching about fermented foods, and coined the phrase "inner ecosystem" to describe the network of microbes that maintain our most basic bodily functions everything from digestion to immunity.

Over the past 25 years plus, Donna has become one of the most respected authorities in the field of digestive health, diet, and nutrition. In 2013, she completed an advanced fellow with the American Academy

of Anti-Aging Medicine. And today, all I can say is if you know anyone suffering with Candida, be sure to share this program with them right now. Because the problem with Candida can affect every aspect of our life including energy levels, brain function, and even our emotional wellbeing. But the good news, we have solutions right here.

And I just want to take a moment just to say that Candida has been talked about for a very long time by a lot of people. But I know Donna for some time now and I promise you, you spend some time with us right now, you're going to hear things about Candida that you have never heard before. And I assure you, you're going to want to get a pen and paper out to be ready to take some notes. Really valuable information.

Please join me in welcoming Donna Gates to our program. Donna, welcome.

Donna: Wow. Thank you, Jonathan. That was a great introduction. Thank you, first of all, from having me on but also for picking this topic. When you asked me to do it, I thought, 'I don't know if anyone is going to want to listen to this topic of Candidiasis' because, like you said, it's been around forever and at least two decades now. Probably people think they know everything that they need to know about it. But I don't think they do. So thank you for picking this topic for us to talk about.

Jonathan: I know how important it is, Donna. And it really is a pleasure to have you a part of this event. So important. Donna, like you said, the topic of Candida has got great interest all over the place. Everyone seems to be talking about it in one way or another. Because bottom line is they're aware that it is a problem. When did you become involved in learning about this and helping people to overcome this infection?

Donna: Well, I started taking antibiotics at the age of 15 for my skin and unknowingly created a yeast infection in my body and never was healthy from that point on and started looking for answers. So I've tried everything out there that's available. Every diet, anything you could do, I tried it. And then I met Dr. Crook and he had just written his book, *The Yeast Connection*. I tried his diet. It wasn't quite right, like heading in the right direction but not there. So I took everything I knew, started from scratch and took all this information I've learned over all the years and what this condition, what we knew about it at that time, which really was not very much.

He and Dr. Orian Truss really—I mean they deserve tremendous credit for awakening people to the fact that we have this yeast condition in our body, this yeast. And it's always been with me and ever, forever, like as long as we've lived. But they brought that out and I knew right away it was really important. All the people that thought they had chronic

fatigue or fibromyalgia, all these symptoms are the same as the yeast infection. So I sort of took it apart. And over all these years now more than 20 years, I've looked and studied this condition. And I'm more convinced than ever that it is the basis of so many—that you have to correct this condition, this inflammation in your body.

Jonathan: So Donna, let's talk about it a little bit more in a closer way. What exactly Candida is? Because like you say, we all have it to some degree. But what is causing this to be such a problem especially these days?

Donna: Well, if you would ask me that 20 years ago, Jonathan, I would've said antibiotics. That's what happened to me. You take the antibiotics. They kill off all the bacteria in your gut. You lose your immune system when that happens. And then the yeast overgrows. So yes, that is a cause particularly of a yeast infection in the gut. If I say Candidiasis or Candida or yeast infection, I'm talking about the same thing. You can also get—this infection can go into the body. And I now realized, 20 years later, that it's naturally present all over the body, inside and outside the body. There are trillions of yeasts naturally present in our body. It's only when they change into their pathogenic form that they become an issue for us. And it's very, very easy to change them.

Anything that weakens an immune system like pregnancy, for example, when a woman becomes pregnant, her immune system is suppressed. And it's supposed to be so she doesn't reject the baby. But that's the time really when a woman's yeast infection will become very acute and that leads to autism, by the way. We know, we just assume, with all of our body ecology babies that they're born—we just assume they're going to be born with a yeast infection and we want to be sure we keep that under control right away from birth. And so we've consistently prevented autism for the last 15 years by doing that.

And then anytime you do anything that's immunosuppressive such as undergoing any type of cancer therapy, sometimes people have organ transplants, and then they suppress your immune system and continue to do that for the rest of your life. Just stress and so many diet, there's many, many ways that we're suppressing our immune system, that's what this summit is about. And anytime you've got lowered immunity, the yeast, which are very opportunistic, take over and they start being in control.

Jonathan: So it's very clear then what you're talking about, when the immune system is challenged or probably a better way to put it is having difficulty fighting off, fending off all these things, that's when we see this rise up and take over the body. I mean, it's a clear sign if someone has a Candida issue, that they're immune system is really stressed out. They need to take care of it, right?

Donna: Well, that's one of the key steps in overcoming the infection, is that you must strengthen your immune system because it's really the immune system that has to do the work of bringing the infection back under control, changing the yeast that are now in a pathogenic form. In that form, they have tentacles. They travel throughout the body. They attach to something and burrow into it, create a lot of infection.

So if it's in the lungs, they're creating infections in the lungs and the sinus cavities. About 85% of sinus and ear infections are actually from stupid chronic things, like even urinary tract issues for women, they're yeast. They're not caused by bacteria, so antibiotics won't work. And again, they can attach to anything. They can attach to the wall of the colon and burrow into the colon and then that becomes—the lining becomes very inflamed but they move through that because now it's porous. And they can get into the body and literally travel anywhere.

And when they autopsy people, particularly somebody with AIDS or with cancer that's undergone a lot of cancer therapy, their immune system—when they die, they often die of the yeast infection because you can die from it for sure. And sometimes babies are born with such a severe yeast infection, they die from it. We're not told this. But when they autopsy someone, say that's died from cancer, they will see the yeast all over the body. It's like a carpet, a white carpet. I'm sure everybody has seen moss, a bed of moss growing up a tree, it's like that but it's white. So it's easy—it's really actually easy to prove this.

Jonathan: So Donna, just to be clear, I know we're going to talk in a moment about who really is at risk for this really terrible thing to happen to the body. But is it an infection just in the gut or is it elsewhere? What's going on here?

Donna: Yeah. It could just be in the gut. And maybe if you're fortunate and you've got a strong immune system, you take an antibiotic and it kills off all the good bacteria, that hopefully you have a good microbiome in your gut, but now you wipe it all out, some antibiotics completely wipe out the entire microbiome in the gut in a day, in one day, leaving the yeast in there all by themselves and they multiply extremely rapidly and they can take over the entire environment of the gut just like that. And then there's nobody in—no other microbes in there eating the food or competing for the space so they literally take over. And that is a yeast infection. And that can cause a lot of gas and bloating every single time you eat, constipation. That's actually the easiest area to correct that and bring it back into balance again of all places that you could get it, I would rather if you can have it in the intestines because that, I know, that's pretty easy to bring under control.

Jonathan: For those who are interested, I want you very much to get a closer look at Microbiome Medicine with Dr. Raphael Kellman. He is

one of the speakers at the Immune Defense Summit. So make sure you check that out. And also we're going to dive really deeply into gut health and the things that influence the gut in a negative way and a positive way with Dr. Edward Group. So be sure to check out those conversations as well.

So Donna, talk to us a little bit more about who really is at risk? You mentioned pregnant women. I suppose they're part of this or what's going on?

Donna: Honestly, everybody. We all carry yeast in our body, trillions of yeast at all times and is in on us. They can very easily change into a pathogenic form just like that. And my biggest concern for the last 15 years or so, once I started working with children with autism and I started asking this question like, where does it start? Where does autism really come from? And then I started looking into the prenatal period. I studied prenatal development in college and there wasn't very much known back then but now there's an enormous amount of information.

But believe it or not back 15 years ago, we didn't know about the microbiome yet. It wasn't hot like it is today. So I started looking to see does autism started in the womb? And what I began to be able to figure out and uncover—and also from verifying this with my moms, because every single one of them will admit that they had yeast infection. But what happens when a woman becomes pregnant and her immune system is suppressed, her yeast infection will become acute.

Now, why would she have a yeast infection? Well, the children of the baby boomers are who are having babies that—they are at the child-bearing age right now. And if you go back, like I'm 70, so I have a daughter who's in her 40s, early 40s. And that's the age a woman would have a baby. But I remember very clearly being a new mother and your baby gets something like a sore throat or ear infection, you take them immediately to the pediatrician who gives them an antibiotic.

And then that looks like it takes care of the infection but it comes—pretty soon, they've got another infection and then—so it didn't feel right to me and I ended up changing to a more holistic group of pediatricians. But I do remember very clearly those days, they were literally handing out antibiotics to babies and young children and everybody, adults. Everybody took them almost like they were candy because they look like this amazing miracle drug. Nobody asked about the backside of—everything has a front and back or a positive and negative. And that's something we teach all the time in body ecology, the principle of balance. Everything has a front and a back to it. If you see a good food, look for the backside to that food, because there will be one and it may not be right for you then.

So knowing that, I started realizing that during the pregnancy, the women having babies today have a yeast infection. They took a lot of antibiotics as a child. They admit to that. Now that they're pregnant, they're progesterone goes up so does their estrogen and their glucose. And these are all natural normal healthy things that should happen during pregnancy. But they happen to feed the yeast. So her maybe low-grade yeast infection is now acute. And we, women, pass our infections on to our children. And then they're born with them.

So this is really, really important to know because if we'd like to get rid of our autism like wipe it out, you prevent it from happening at all by starting off with a premise that these children are born with yeast infection and their immune system will be weak and low as a result of that and they're not candidates for vaccination. The whole concept of vaccinating or somebody vaccinating a person is that they have a really strong immune system. You put a virus, one single virus in their body and their immune system overcomes it. And then has a memory to recognize that virus again and then fight it.

Well, this is not what we're doing to our babies. And so these children are especially at risk. And so that's when I said we prevent it because we teach our moms right from the very beginning how to eat during the pregnancy to have a strong immune system to pass on a healthy microbiome to their child, but also to make sure that microbiome is established at birth and then to build their immune system from that point on. If you just decide to vaccinate, make sure your child is super healthy and ideally older than birth. Some babies are vaccinated at birth. So this is really, really vital information to know because if you look at the statistics for autism, they continue to climb every year. Stephanie Seneff believes, according to her calculations that every other baby by 2025 will be on spectrum. So obviously, it's way easier to prevent this. And this Candida connection, I mean, there's a big connection to Candidiasis and autism.

Jonathan: It's a really scary picture and you've definitely woken up a lot of people listening to this message already, Donna. If you are considering vaccinations, please listen to Dr. Judy Mikovits, who's part of the Immune Defense Summit. She's out of the National Institute of Health for over 20 years in vaccine research. I guarantee you that will be time well spent. Be sure to listen to that before you take another vaccine.

Donna, please review for us so we can identify this. That's what this is all about. What are these symptoms that we're talking about, the Candida, that becomes a problem?

Donna: Well, if it's just in your gut, you're going to have gas and bloating and constipation and diarrhea, the gut is all messed up. But in the body,

it depends on where it goes. And the yeast secrete toxins. It's not even just the yeast. Like the yeast can't get into the brain but their toxins can. So they're affecting the brain, mood problems, lack of energy. They're the same symptoms that you find in all these other conditions. Like people think they have fibromyalgia, they think they have chronic fatigue.

But you look at their symptoms, you look at Candidiasis, they're exactly the same. All kinds of autoimmune conditions have the same symptoms. So I don't think symptom is really what we should be looking for. We really need to be looking for history of antibiotic use and the type of diet that you've been eating all your life long. And just have you suppress your immune system in any way to allow this opportunistic infection to take hold in your body. The symptoms aren't really the place to look.

Jonathan: So Donna, I'm with you. Symptoms, forget about it. If someone's tired or they've got aches and pains or a foggy brain, okay, they're symptoms. We got to figure out what's causing these symptoms. Talk to us first about the test. What should we know about the right tests and what it tells us?

Donna: Well, the organic acids test, which you can get from Great Plains Laboratory and also from Genova Diagnostics, they've had this test for years. There's a marker on that on the organic acids test that is arabinose. And if you see that marker is high, you know the person has a yeast infection. There's another marker that I have come to look at because of my work with autism. I noticed it's very high in children with autism. It's called quinolinic acid. And then I noticed that these kids don't sleep. They really don't sleep. They're parents have to lock the door of their room at night so they can go to sleep. And I began looking into it. There's a tryptophan, the amino acid tryptophan, suppose it goes down this pathway into 5-HTP and serotonin and into melatonin.

Well, if you have inflammation in the body, which you would, if you had a yeast infection, a lot of inflammation, tryptophan doesn't go down that pathway. It'll go down another pathway called the kynurenic pathway. And the end of that pathway turns into quinolinic acid. So what I've noticed, consistently, is that when we work with the parents and they bring the yeast infection under control, they notice in a few weeks, their children start sleeping.

And then they'll do the test again, the OATs test. And that marker will be low now because they've brought the yeast infection under control then that shows that the inflammation is very low now. And then now the tryptophan is going down the right pathway into melatonin and they can sleep again. When it goes the other pathway in the entrance into the quinolinic acid, that's a brain toxin like glutamate is and like ammonia is.

We make a lot of nasty toxins. So we talk all the time about heavy metals, chemicals on our food, those are bad for sure. Radiation, we're getting a lot of that right now. Those are bad. But I don't think nearly enough attention goes to the endogenous toxins, the ones that are actually made in our body. And a lot of them are just naturally made by the very process of the way the body operates.

But, you see, nature has a way of turning those toxins, negating them into something harmless. But toxins that would be created by the yeast for example and all the elements, glutamate is important but not too much, quinolinic acid should never be high like that. We really need to pay attention to these toxic endogenous toxins that these infections are producing. I think yeast is at the top of that list.

Jonathan: Why would you say, Donna, that it's so hard to get rid of it in the first place?

Donna: Well, first of all, it's a naturally-present organism and it's not going to go away ever. You can bring it back into its harmless form and that's the best you can hope for. And that is done with diet and a strong immune system. But when they're present and in control of things, it's a very stealth infection. They can hide from the immune system by changing form. Go back to a harmless form and then changing themselves back again. They have a really strong, strong signal to the brain to feed—to crave sugar.

And they want you to eat sugar. They want you to keep your body acidic so that—because that's just a perfect environment for them. You're feeding them basically. You crave sugar because they tell you to eat it and then you feed them. But they also make estrogen. And the estrogen—they feed off of the estrogen that they make but it makes us, men and women both, estrogen-dominant, children too.

One of the worst things they do is they—the thyroid makes the hormone called T4. And it has to convert into T3 to be useful. So T4 turns into T3. But if you have yeast in your body, they secrete a really nasty toxin that keeps T4 from turning into T3. So the person who has a low suppressed thyroid, they have—they're cold and they're weak and tired. What a perfect condition for your host to be in if you want to control their body. So they're really hard to get rid of. And also, they're producing—well, I think we should probably talk about that somewhere along the way because the toxins that they're producing are so nasty.

Jonathan: We will probably get to that, Donna. I'm just curious. So, from you, we are aware of the fact that Candida dies off, right? You have this excess and we've got to kill it or bring it down. But that, for a lot of people, is not easy to tolerate. So what do you speak to your clients about, about making this a little bit more comfortable along the way

getting to a more balanced state, right, that you've been talking about?

Donna: Well, when you start on a program and you start starving them for example, they are unhappy about that but they start to die. Nothing lives if you don't feed it. So they start to die. When they're dying they're secreting toxins. They secrete them when they're alive. They secrete them as they're dying. They are toxic after they're dead and your body has to actually remove them unless people, their detoxification system isn't strong enough to eliminate all this toxic material. So I am a really big believer in enemas and colonics in the early days that they very much help remove this—it helps the body rid itself of toxins.

When I introduced the enemas to the autism community years ago, the mothers probably thought I was crazy because they didn't know what they were. They're young, modern, well-educated women that they didn't ever hear of an enema. But some started doing them with their children and found really amazingly, nasty material that was eliminated in the enema and the huge improvement in the children. The children got—we often heard stories of the children literally bringing the enema back to their mom or to ask for the enema because they felt so much better. Because in the very early days, I'd watched the kids really suffering a lot.

As their moms change their diet, the yeasts are dying off. They would have these terrible flu-like symptoms. And the moms always knew that after that stage pass, the kids would show improvement. But I kept thinking this is really unnecessary, I've just got to tell them about enemas and finally got up the courage to do it. And some did it with amazing results.

So I'm convinced that it's an essential part of this therapy to help your body eliminate these toxins. And it's really interesting too because the first thought that our moms had was, 'Well, how did they have all these toxins in their body, they just are two years old. Maybe you'd expect that from a 30-or a 50-or 80-year-old but why a 2-year-old?' Well, because we are making them. And they're so toxic down in the—the last part of our digestive tract or colon, where the stool has formed and then it's supposed to leave and all the toxins go with it, but that just isn't happening. And then the rest of the cells are constantly—so the way our cells detoxify, gets rid of its poisons.

And so as soon as you start something on a healthy diet and the yeast start to die off, these cells become stronger. The first thing they do is they want to get rid of their toxins and they push them out into the bloodstream. They go to the liver. They're broken apart. In phase two, certain things are clumped on to them to make some water-soluble. They're put in the bile. The liver makes bile and the toxins go into that bile and they're handed to the gallbladder. When we eat, the gallbladder

drops the bile and the toxins down into the small intestines and then it starts to move on out. The bile stimulates peristaltic movement. So things start moving along and moving out of the body. That's what's supposed to happen.

But the bile is super toxic and very, very acidic and almost paralyzes the gut and there's too many toxins. And so these poor cells that thought that they were getting rid of some toxins are now having to—new toxins come right back into them. And so they just kind of begin to give up the fight and weaken and die off. And so you've got this really awful, vicious circle going around and so you really have to rely on this old-fashioned technique of enemas or even colonics. They're very, very old. There are all kinds of reports of it being done hundreds and hundreds of years ago, even thousands of years ago. So it may be a strange thing to you but it's something that I think everybody learns to do. And if you want it comfortably, go through this initial period without all this die-off. You just simply get yourself an enema bucket and start doing an enema every day.

Jonathan: I think it's so interesting already, Donna, what you mentioned about how this infection, right, this overgrowth, can literally cause your body to crave certain foods, which we shouldn't be eating, obviously, all these simple sugary garbage-y foods to feed more and more this yeast overgrowth and also how it is affecting our mood as well. So I'm kind of sick and tired of anybody who, as a healthcare provider, is saying, 'Hey, Jonathan, hey, Donna, to change a life, whoever it is they're talking to, you just got to have willpower. Willpower is what's it's all about'. But it's not addressing this kind of overgrowth, which is literally altering the way the person thinks and the way they feel. So having said that, Donna, I know there's a big connection between stress and Candida. You're a great teacher about this, please talk to us about it.

Donna: Well, stress very simply raises your blood sugar. And your glucose goes up and right away you're feeding your yeast. So anytime you're stressed out, you're feeding your yeast. And stress destroys the good, healthy microbes in the gut. You need those good, healthy microbes to—they are your immune system. So you've actually got a double whammy going on there. You're feeding the yeast. You're weakening your immune system because you're stressed out. So I'm, for the last several years, really into genes, nutritional genomics, and I love looking at someone's gene report and tying a lot of interesting pieces together.

But one of the things I'm very clear about is, genetically, many of us that are alive today have genes that they are the kind of genes that—so we are stressed out because we have those genes. And like one of them, for example, is COMT, C-O-M-T, and some people call it COM-T, I mean there are different pronunciations for that but it's C-O-M-T. So that gene is not

working to—isn't a great gene to have in some ways today because we're stressed out all the time. I mean, even when you turn on the news at night, that's stressful. And you turn on the TV thinking, 'Oh, I'm going to watch a TV show and kind of chill out here'. Well, every TV show is super exciting and it gets your cortisol up.

With the COMT gene, your dopamine, your adrenalin stays up long after the stress is over, many, many people have this gene and others but C was the survival gene. If you had that skill, that quality a thousand years ago when you were living in a jungle or something, you would've been the one who lived longer because you have had your—you've been very alert and very, very on guard for anything jumping out and trying to kill you.

So here we are passing this gene along in today's age and we're easily stressed out. So that's why I think that things like thionine, [inaudible 30:56] and CBG that people are getting more and more into that's been in the autism community for about five years now and it's so safe you can even use it with children. We do need to take tools like that, many, many of us do. Unless you're one of those lucky people that don't have any stress in your life. I don't know anyone like that. I've heard you don't either, Jonathan.

Jonathan: No, I have no stress at all. Basically, I keep my feet up when I do these interviews and I just completely relax and there's no stress at all. No, seriously, Donna. This is an important part of our conversation now. Please talk to us clearly about your treatment protocol. This is so important.

Donna: Well, I have to bring in the part about the toxins that the yeasts produce because that's part of the protocol. They make at least 79 different toxins that have been identified, sometimes I see a list that say there's way more than that, perhaps even 100. But one of this gliotoxin and it shreds apart the DNA inside of our white blood cells, that's your immune system. So again, this is where the yeast is very, very capable of suppressing the immune system. Mannin also poisons the immune system. If people have psoriasis and skin conditions, that's a different toxin called thymosin and arabinitol is affecting the brain, the nervous system, and the immune system.

But the really, really bad one that I tend to study the most is acetaldehyde. Anybody that's ever been drunk, had too much wine or whatever to heal a whatever, you know that you don't think the same way anymore and you feel—you can't remember things and you're just like drunk. That's what happens when the yeasts are producing acetaldehyde and the infection is really, really bad. It's affecting our brain and you feel kind of spacey and really foggy and can't remember things. That's because of the acetaldehyde. And so the treatment has to

bring these toxins under control.

The other thing that very, very few people know about, and this is a very important thing because I just look around the world and see all the teachers and experts out there teaching wrong information, because they're not taking into consideration the fact that the person they're working with probably has an active yeast infection. And that other toxin is oxalates.

So the yeast actually take the collagen, like if you're eating a bone broth, for example, and you've made a lot of collagen because that's really popular right now, the yeast will use that collagen to make oxalates. Now, oxalates are these tiny, little crystals. They're microscopic, obviously, so I mean really tiny. And so they're only in plant foods. They're not in animal protein or any dairy or eggs, chicken, never there, only in plant foods. And they're in certain plant foods in very, very high amounts. And it's believed that they're in the plant so that the insects wouldn't eat them up because those tiny, little shards of crystals would tear up the insect's mouths so they leave the plant alone, which is a good thing. And then nature wants us to eat plants, I mean, I've recommended an 80% plant-based diet forever and I know plants are really important but that's where your oxalates are, but that's okay because nature plan for us to eat these plants.

When we are born, we don't have the certain bacteria in our gut. But around the time there are teeth coming in, we start crawling around in our environment, a new microbe enters the gut called Oxalobacter formigenes and his one and only job is to eat the oxalates and that is about the time we start. Our teeth come in. We start eating plant foods. He's right there to eat up those oxalates. But he's also one of the microbes that are wiped out when you take an antibiotic and he never comes back again. He's one of the missing microbes that Martin Blaser has warned us about. Now, I have a whole theory on how to fix that but it's such a huge problem because the oxalates are very high in spinach and Swiss chard, sweet potatoes, yams, beets, nuts and seeds, unfermented soy, and chocolate and cocoa and cacao and all, and that's what people are eating so much of. We think nuts and seeds are healthy and we're eating all, putting almond milk, cashew milk in our smoothies. We have a bar during the day with cashew butter in it and we put spinach in our smoothies and so on.

So the amount of high-oxalate foods that people are taking is staggering because we really shouldn't have more than 15 mg a day, now they're in thousands of milligrams a day. So unknowingly, they are creating oxalate stones all throughout their body. They can do an autopsy on somebody and open up the bone and find the stones in there. There really are stones, little quartz-like stones. And then that's a bad thing if they're in your bones because they weaken your bones but that's also

where very important stem cells are generated from. And so you don't want stones in your bones. But they're all over. I mean, these crystals can get into your eye. I did an interview on Body Ecology Living with Dr. William Shaw, it's our podcast, and we're talking about oxalates because the Great Plains Laboratory tests for oxalates to see if people are high in them. And we're talking along, we're talking about what a big problem that oxalates have been in the autism community. And he mentions that over two dozen children have pulled their eye out from the tremendous pain that the oxalates have caused because they cause pain throughout the body, particularly in the joints, people think they have arthritis when really what they're eating is a lot of foods that are high in oxalates.

So here's the treatment, getting to that answer to your question. Diet is absolutely essential. And it has to be sugar-free. You don't want to feed the yeast. It has to be gluten-free because there's a gluten-yeast connection too. The yeast, they're protein and gluten is a protein and they look identical to the immune system. So if you're eating foods with gluten in them, and I don't even like for people to take any flour products actually, if you really want to have a healthy gut. But gluten, when you eat it, it enters the bloodstream and the immune system thinks it's another more yeast, which it's already exhausted from dealing with. So it has to be a gluten-free diet. It has to be dairy-free initially. And one of the things you want to do when you prepare foods, raw isn't ideal in the beginning because you really need warming foods that warm the body and help warm up the thyroid. Because remember, when the T4 isn't converted to T3 because of the acetaldehyde, that's the toxin that prevents T4 from turning into T3. So T3 isn't going into the cells. The person's cold, they're tired, they're weak, and they need warming up. So I tend to recommend people eat more warming foods in the beginning for this condition.

And you want to strengthen the immune system. And so that's where you want to focus on probiotic foods and certain microbes like I've become a big, big fan of the Bacillus spores. Many of your functional medicine doctors today are selling Megaspore and finding tremendous results from putting people on that. We sell a version of that, that can go out to the regular public called Just Thrive on our website. Just Thrive, that's the spore. Because those spores when they go into the gut, they're very hearty. And they have the ability to start giving directions to other microbes in the gut and they're very good at helping us establish the diversity.

So the secret to a really healthy microbiome is diversity. And then we—I've always recommended fermented vegetables and I like for people to put a starter, our starter that we sell, has plantarum in it. Plantarum is really amazing microbe too and it's good at degrading histamine. It degrades oxalates, which is really important. It produces folate. It's very antiviral. And if you ever have to take an antibiotic, most antibiotics

can't destroy plantarum, so you won't get that overgrowth of yeast in your gut. So I start people off on, unless they have sebo or super big problems with histamine at the moment, I don't start them on the fermented foods, always the spores. I think that the Megaspore or the Just Thrive are really very important. I thought they're so important, I created a new protein shake that is amazing that has the spores in it as well. Because these spores also help you break down, they're really good at digesting proteins. And undigested protein turns into another toxin, ammonia, which is really affecting the brain too.

So you want to take things like the probiotic shake, probiotic protein shake. You want to have the spores. You want to eat probiotic foods like the fermented foods. And ideally, if you are willing to go to the trouble to make them yourself and put in the plantarum, that's ideal, otherwise, just buy them in the health foods store but get on them. And then your diet has to be a low-oxalate diet. Not super low but you want to stay off the real high oxalate foods that I mentioned, which are nuts and seeds. I'm sure everybody at this point is just like becoming so frustrated and depressed like, 'What will I eat? I eat nuts and seeds all the time. I put cashew milk in my smoothie. I love it. I have a bar that I carry around with me', but not nuts and seeds, not chocolate. Everybody—I keep getting these emails, chocolate is very good for you. It has a front and a back to it. The back side is it's very, very high in copper, which by the way, the yeast, they throw off your zinc-copper balance so we end up really high levels of copper, which makes you even more estrogen-dominant and your zinc is very low and zinc is a super, super important mineral.

Anyway, so you've got to be on these more low-oxalate foods. So chocolate, cocoa, and raw cacao are out; nuts and seeds, spinach, Swiss chard. And beets are fine if you ferment them. Sweet potatoes are very high in oxalates. What I teach people to do is to take the sweet potato, cut it up into cubes, and then boil it for a little while until it's real tender. And then if you pour off the water, you've poured some of the oxalates down the drain, lowering it. And then another thing that's really, really popular right now are high-fat diets. Everybody's raving over those. But is a high-fat diet really right? Everything has a positive and negative, front and back side to it. A high-fat diet will kill off certain microbes in the gut and destroy the diversity in your gut. They particularly have found in a research that a high-fat diet destroys wadsworthia. And when it destroys the Bifidus and then the wadsworthia flares up and that's a bad microbe to have in your gut. But when you look at the genes, some people have genes where they should not be on a high-saturated fat diet, absolutely not. One of those genes was the ApoE4 gene, which causes Alzheimer's and cardiovascular disease. So a high-fat diet isn't for them either. Another reason high-fat diet isn't good is with this connection to oxalates. Because if you eat a high-fat diet, the fat binds the calcium and calcium, it holds on to the oxalates so they they're

escorted out into the stool.

Now, the spores have an enzyme in them that are very good for eating oxalates. So again, another reason to work yourself up where you're taking maybe four, two and two, capsules of the Megaspore or the Just Thrive per day. Particularly, take them—always to try to take them when you're eating anything with oxalates in it. And then also take calcium citrate and magnesium citrate and drink a lot of water to help flush those oxalates out of the body. So it really has to be a sugar-free, gluten-free, dairy-free diet, very mindful of oxalates. And you want to make sure you bind them up in the stool so they leave your body and you have the right microbes in there to eat up the oxalates since *Oxalobacter formigenes* is long gone. And then having a diet, every meal you're having some fermented foods or probiotic liquids.

So you can take probiotic supplements but the foods have more diversity in them, like the probiotic liquid that we make. The drinks are very rich in diversity of microbes. They're really a probiotic, not really a drink, probiotic. And then back to fermented vegetables have a tremendous amount of diversity on them because they—every time you make a new batch, they came from different places, that means a brand new plant. It's got its own little ecosystem on it. And you're bringing that, say, cabbage into the kitchen and shredding it up and packing it into a jar letting it ferment for a week and then eating it.

Well, that amazing little ecosystem complex symbiotic relationship that those microbes have with each other that's on that cabbage, you're getting that when you eat that cabbage. And there's no way we, human beings, can produce a probiotic that has that diversity on it. So definitely want to eat fermented foods too. So that's kind of our protocol for getting people well and bringing that yeast infection under control. You don't want to feed it. You want a strong immune system. You want the right microbes in your gut to have a healthy gut because that's your immune system that's ultimately going to bring this infection under control.

Jonathan: Wow, Donna, unbelievable. I told you, for those listening to this program, you would hear things you've never heard before. And I've done many of these shows, almost 500 programs I've created in about five years of doing this. I know that if you're new to this information, it's easy to be overwhelmed. My number one suggestion is take your time. Take a deep breath. Listen to this program one more time and you will get 50% more out of listening to a program like this just by listening to it one more time.

Donna, great information. Do you have any final thoughts for people out there?

Donna: Well, I've totally—ditto to what you just said. I think that these summits are an amazing way for people to learn. We didn't have them a couple years ago. They didn't exist. And now, I know how much work it is to put one on because I've done them too. And they are just—they're full of priceless information that really your doctor doesn't know. It's up to us today to be responsible for our own health and it's going to continue to be that way. And first and foremost, you have to have knowledge.

So I'm very grateful, Jonathan, that you had me on and gave me this chance to talk about this. And I totally agree that people need to hear it probably more than twice because it's a lot of information being thrown out at you. I listen to webinars all the time of all kinds of professionals and experts and I almost always listen to them two or three or four times. Because every time I do, I hear something different, that's very important that I'm ready to hear now. And so that's why people should buy these summits and play them in their car, play them in the kitchen when they're cooking or whatever. But I thank you for doing it, Jonathan. That's really what I want to say. Thank you.

Jonathan: Oh, it's my pleasure, Donna. And I couldn't agree with you more. I am honored to be in this position. And I'll tell you, I take a little bit of a strong look at this now. I've been saying it for some time but it's getting much tougher these days. If you go on the internet, of course we understand if you go to a conventionally-trained doctor, they're not going to tell you this information. But even if you go on Google, Facebook, social media outlets, there is so much suppression that is going on, so much censorship going on that the only path to information that they allow, most of these social media outlets and Google, search engines, is to have only conventional wisdom. Anything that is produced by the pharmaceutical industry and all of this information is really very hard to find on your own. So that's why I believe these summits are so valuable.

Donna, I want to thank you so much for your time. And I want to thank our listeners for joining us today. If you would like a copy of this program plus all the other presentations inside the Immune Defense Summit, simply click the banner you see on this page.

Thanks again for attending the Immune Defense Summit. Talk to you soon. Take care.

How to Stop the COVID-19 Cytokine Storm

Guest: Dr. Thomas Janossy

Jonathan Landsman: Welcome to the Immune Defense Summit. I'm your host Jonathan Landsman, creator of NaturalHealth365.com. If you're worried about the coronavirus or any other bacterial or viral infection, this exclusive interview will prove to be very valuable. Enjoy!

You know, I have to tell you Dr. Janossy, everywhere I go, I'm asking people about COVID-19, Coronavirus. What do you think? Are we going to get back to normal or is this the new norm?

And it's so divided; people are talking about how they think this is the new norm, 6 feet apart and don't get close to people, and other people think we're going to get back to normal within weeks, which I don't think so at all. You know, before we get into some of the many important questions I have for you Dr. Janossy, what's the climate like in Canada? Are people very scared?

Dr. Thomas Janossy: Yes. Fear would be the number 1 thing, and the lack of knowledge. And that the problem is that as the authorities repeat the same thing, and there's no practical.... You know, first it was that no masks were needed, and now, yes, masks are important. So it confuses people. That's one thing. The other one that I really miss is that they never talk about logical practical steps like keep your Vitamin D levels high, and Zinc and so on. So it's almost like there's only one solution; the vaccines. And we have to just stick it out and wait for them.

Jonathan Landsman: I agree with you. It seems.... You know again, with all due respect, it seems very much in the sort of mainstream

population, quite mindless. And I think I say that deliberately because without the mind, it's so easy to feel very fearful. So without going on too long about that Dr. Janossy, what would you say - in terms of strategies - to avoid the serious threat of COVID-19?

Dr. Thomas Janossy: I would break it down to these various segments. The first one is how to control the viral entry into your body, so obviously a mask. And the second one; if we got the virus, then how to control the replication. Now, if we move to the next phase, then we talk about the cytokine storm. And the question is, could we handle the cytokine storm that is actually the killer. The cytokine storm is the one that kills the people. And knowing that.... If you get into a hospital, it just came out of a Chinese studied that those who were on these ventilators, only 14% survived. And this is just the immediate survival. We know from previous studies that after getting the ventilator, it's typically within 6 months, only half of that survive. So I mean longer than 6 months, only 50% of people survive. So the outlook is very dark, at least in my mind. It seems to me that mainstream talks about these machines like candy or you know, not a big thing. So it's almost like oh, it's a bit of drug. No, it's much more serious. So my overall approach is.... Actually, I believe unusual, because I'm very much aware of viral replication that shoots up overnight.

There are 10 times more viral replication overnight than in the daytime. And actually nobody talks about it in the whole world, I've never heard about it from any author or voice. So even in the alternative medical community, even functional medical doctors. Now, it's true, it was recently discovered in 2016, University of Cambridge. And they demonstrated that the interaction between viral infection and the circadian clock is extremely strong. They actually measured viral replication that was 10 times higher in mice you know, obviously in research animals, when they infected these mice with viruses, and it went up overnight. So when they infected the mice in the evening, then they measured later in the evening and early morning, 10 times more viruses than the same mice being infected in the morning, and then they measure different amplification. I think it's quite, quite fundamental. What do you think Jonathan?

Jonathan Landsman: Well, I think it's interesting, but continue on with some of the things that you think people should focus on, because that's what I think, is that the root source of everybody's fear, they don't know what to do. And like you said, they're just waiting for a vaccine; 12 to 18 months from now. So let's continue on with this. Go ahead.

Dr. Thomas Janossy: Maybe I would share with you what I am doing, because then it's not providing "medical advice." I take my minimum 2,000 I.U Vitamin D3 and vitamin K2 - they go together. Obviously, I take a couple of grams of vitamin C, typically I put it into orange juice

in the morning in the form of ascorbic acid. They really go together well; the vitamin C and flavonoids. And then obviously magnesium, or I take sometimes stem detox, that is a product that has more than 50 ingredients, and then Omega-3. Now in the daytime, morning and afternoon, I typically drink herbal and, for me, that keeps the virus under control more or less.

Jonathan Landsman: You know Dr. Janossy, I think something again, of course everything we're talking about in the Immune Defense Summit and all of these interviews specifically about COVID-19 that we're focusing on here, most people are not hearing anything about the importance of living an anti-inflammatory lifestyle; everything that you just talked about. The elements that you're taking into your body to keep generally speaking, inflammation down.

Because if a virus does get introduced into us and it does get into a cell and it wants to replicate if you will, it's more difficult in the presence of so many antioxidants, so many good quality nutrients, a well-nourished body, compared to a body filled with medications, heavy metals, many other pesticides and chemicals, unwanted debris, the blood circulation is sluggish, the breathing rate is low, the lungs are already weak, the body is carrying around too much excessive amounts of body fat. So the bottom line is it's calcified the body, and very sluggish. And now that virus gets into our cells and wants to replicate, it's like they're going to have a field day, it is the perfect environment to take over. So, let's talk about some preventative strategies.

Dr. Thomas Janossy: I believe that there is an overabundance of information about Zinc, and not much about Selenium. Yet, if you compare the two, actually, there was a study in Thailand with HIV-AIDS patients, and it turned out that both of them are very important in a viral infection. So I really want to point out that Zinc comes together with Selenium. So, there's a lot of talk about hydroxychloroquine, and many of us believe that the main reason why it is so effective is because it is an ionophore – allowing Zinc to enter the cell – where it can really help. But a very interesting study came out that the flavins can do exactly the same thing. And it gives us a tremendous freedom that we might be able to manage the runoff of immune system whenever we deal with cytokine storms.

Jonathan Landsman: I think this is probably a good time Dr. Janossy, to talk about what exactly is sending people to the hospital. Because again, I think for a lot of people, they just think okay, this is what everybody is going to the hospital for. As soon as they catch the COVID-19, the coronavirus, as soon as it gets into the body, oh my God, everybody just has to run to the hospital. But that's not really the case, right? Talk about what's really sending people to the hospital.

Dr. Thomas Janossy: When the immune system gets out of control, it is called cytokine storm. And most viruses do not harm the body directly. Rather, the body mounts an inflammatory process to deal with the infection. And for those people whose immune system are weakened or not functioning correctly, the inflammatory process overreacts. And this overreaction is basically what sends people into the hospitals. Now that this functional immune response results in the release of chemicals, and these are called cytokines and chemokines, which attract microglial cells to the infection side. So to a certain degree, this is a normal logical process and it helps at the beginning, but the abnormal reaction, once the storm gets out of control, then it floods the whole body and creates all kinds of secondary signs and symptoms. For example, high body temperature. Later on, it can cause organ failure and death.

So clearly at the beginning, we want to control the virus duplication or run of a virus replication. But if you cannot do that, then everything switches over to this cytokine storms. Now, the interleukins are the proinflammatory cytokines. Probably that's one of the most important. And the tumor necrosis factor, this is how it is called, is quite well known among scientists, and it was intensely studied in the proinflammatory actions. It has a central role in the cytokine especially in acute viral diseases, including those caused by an influenza virus or dengue virus or Ebola virus or even Corona viruses.

I would mention something that is quite unusual, that the dengue virus for example in Africa, the mosquito arrives early evening I would say, and either the mosquito knows or the virus knows that the virus has to get into the host at that time, because then overnight, there is a peaceful replication. And that's again, I'm just referring back that overnight the viruses are multiplying 10 times more. So what we want to do is really to catch and to block as much as we can, the run of the cytokine storm, that in the evening we have to take certain herbs and certain minerals or micronutrients that can shut down the viral replication. That's the first phase.

And the second is that once the cytokines are in such a high number, then certain extra natural products should be taken. The key among them is charcoal. And that's again, nobody talks about it, but it has a tremendous impact on the cytokine storm. I was involved in Africa on this anti-malarial product development, I formulated a natural anti-malarial product. And I got to know more about how malaria kills people, and it is the same cytokine storm, and even a sepsis is the same cytokine storm. And in Africa, they did a fascinating study. They gave the anti-malaria drugs to those who were in hospital and who had cerebral malaria, and this is really what kills those patients. There were two groups.... And on top of the drug and they actually measured in both groups, the drugs, and the drug level was equally high, but in one group, they took orally, charcoal, just black charcoal, quite high amount. And

those put on the charcoal, they didn't go through the cytokine storm and their lives was saved. And those who didn't get the charcoal, they were killed. And you know, this is a big issue, because in in Africa, more than a half million people die even today, every year from malaria. And again, nobody talks about it unfortunately, yet it is so simple. The theory behind it is that the surface of the gut is.... Some people can compare it to the size of a tennis court, probably smaller, but still we talk about a huge surface area. And if you took orally the charcoal, then basically, there's only one layer of cells. And from the small capillaries that are around the gut, the cytokine storm, these cytokines actually, the small peptides are pulled into the lumen of the gut by the charcoal, and therefore the overall inflammation drops and the body can survive that viral infection.

Jonathan Landsman: Are there other elements that you can bring up that people should be taking especially at night? What else should they be consuming?

Dr. Thomas Janossy: Yes, definitely. Melatonin is huge. It was even used in Italy. High level of melatonin is very important against the development of the cytokine storm. Interestingly, the melatonin is linked to glutathione production. Those who have high melatonin levels, their glutathione level is much higher. And actually, the glutathione is the one that really helps in maintaining a healthy immune system, but also fighting against viruses.

If you do just casually a search on Google search, the keywords, "Glutathione, Selenium, Antiviral", maybe these are good words, then many studies would come up that show that the glutathione and selenium combination is extremely powerful. Historically, we know it that its extremely powerful against viruses and also against the cytokine storm. So again, there are certain ingredients that should be taken, maybe targeting the viral replication. And there are others. In the evening we have to switch over. And we really have to focus on the microminerals, the flavonoids; my favorite is Flavin7 Gold. It's a European product and it's quite fascinating. Actually, it's widely used in in Europe against cancer.

And I was thinking about why is that? What is the connection? And officially, Western medicine and scientists, they go up to 40%, they accept that cancer is caused by viruses ... I believe that probably up to 80%. And if this is true, then we see a link immediately that basically the flavonoids first of all act as ionophores, so they pull in the micronutrients. And again, we've both seen in the cases of Cancer, that Zinc and Selenium are beneficial for cancer patients, right? So here, there is a parallel that that the flavonoids, if they are properly used and intelligently used for pulling in the micronutrients, then it's a tremendous aid against all kinds of viral infection.

Of course, there are no scientific studies, so we cannot talk specifically about Coronavirus, but we can presume that it has a good effect. Now, melatonin was again, it was clinically tested and used in Italy with great success. What is interesting is ... the elevation of glutathione. There was a study in July 2000, that pointed out that Vitamin C and vitamin E are not able to elevate the level of glutathione, but the melatonin, it can do that. So melatonin plays a very important role. And you know, I was thinking about that one theory at least at the moment. One theory why older people are fearing virus than younger people, that maybe their melatonin levels are lower, because really this is the case, that over 60, 65, 70, melatonin levels are going down pretty fast. And consequently, this protection mostly against viruses and against the cytokine storm is weakened.

Jonathan Landsman: A very simple question Dr. Janossy, why is it that you feel that the viruses are replicating so much at night?

Dr. Thomas Janossy: Well, in one sentence, the immune system “goes to sleep” as well. From an evolutionary standpoint, the daytime is the time when we run around, if you get that cut, you’re infected, you pick up some through some contaminated water or eating some food. The daytime is the time when you really have to fight against all kinds of potential infections. And overnight, the immune system quiets down and simply is not active. So the viruses just love it and they just multiply like crazy.

Jonathan Landsman: So when it comes to any of the supplements that you’ve mentioned and the nutrients in general, are there anything else that people should keep in mind that they should have? You mentioned minerals. So we’ve mentioned a couple, of course Zinc being a biggie in terms of being antiviral, and how important it is to get into the cell, which is why personally I’m taking a liposomal form of the Zinc, and I’m taking vitamin C, and I am taking quercetin combined with it, and I’m taking glutathione. All of this is in a liposomal form. So for me, I feel like this is my advantage to try to keep myself well protected. But are we missing anything else? Would you like to mention something else for people?

Dr. Thomas Janossy: I think there is a point, and usually the patients know the point. When the temperature gets higher, and then the really the situation switches over in a way from basic viral replication phase to the cytokine storm, then we have to be very on the top of it, very fast. So one friend of mine who is in Thailand, who is overweight, who has heart issues, and you know, he has great difficulties in other areas of life, simply he’s not really healthy. And he caught the COVID-19, and it seems to me what saved is that I immediately taught him that you should take charcoal every hour, like 1 gram of charcoal every hour.

And then the melatonin, high amounts, the flavonoids, Zinc, Selenium, Vitamin C. So it's like we have to separate it that okay, if we are targeting the glutathione storm, then we really have to push back because that is a critical timeframe. Because the overnight is so important. I would take immediately the overnight glutathione rectal suppositories. I know most people in North America are not familiar with that, but it's a tremendous aid in terms of fighting against the run of the immune system as well.

Jonathan Landsman: So as we wrap up here Dr. Janossy, I have a very important question to ask you soon enough about this idea that the COVID-19 Coronavirus is going to return again in a season not too far from now, perhaps in the fall or the winter ahead of us. But before we get there, let's talk a little bit more about since we are really featuring the idea of staying away, avoiding this cytokine storm. Let's say we've switched over now, we feel like we've been infected but now you know, things are getting a little out of control between the throat and the nose and fever and feeling exhausted and really starting to get a hit, and perhaps somewhat overcome by any virus for that matter. What would be your action plan? Like just break it down really quick, some of the best things that people ought to start, at least looking into drinking more water, more vitamin C, how much? You know, these kind of things. Just break it down for us, okay?

Dr. Thomas Janossy: All right. So I'm taking at least 2,000 I.U of Vitamin D, I'm taking a couple of grams of Vitamin C between the morning, a few grams in the afternoon and a few grams in the evening. And then Zinc and Selenium in the evening together with Flavins or flavonoids. I mentioned that Flavin7 Gold, that is my favorite product. And then in the evening, I take a bit of melatonin. Again, I would take much more if I fear that the cytokine storm starts on again and you know the hurricane is there. And the charcoal, I take every night the charcoal, because the.... I also look at this time as a tremendous blessing because now we can control our environment, we don't have to run into the workplace, office, travel and meet with clients. So we can actually turn it around and look at this time as an extremely valuable time. For example, one thing, what I'm doing, I'm doing this detoxification, I'm doing the overnight detoxification every second night with this EDT and glutathione rectal suppositories. Because my theory behind, and this is funded or backed by science, is that the less toxins we carry, obviously the average adult has 700 toxins and the children are being born today with more than 200 toxins. So the idea is that the less toxins we carry, because the toxins get into the immune cells, and they become sluggish or they become... they're misfiring. So in other words, I believe that those who have high levels of toxins, the cytokine storm is much likely to happen. So as a preventative step, I lower my toxic load now also in a way to be more prepared for the second wave that is coming in the fall, I believe.

Jonathan Landsman: Yeah, I want to finish up with that Dr. Janossy,

but you just brought up another interesting point because I hear a lot of talk out there about "Jonathan, it's 5G. That's what's going on. It's not so much the coronavirus, it's 5G." But it's very interesting for me, again, just my personal opinion, that with people walking around with so many metals from the dental amalgams, from the aluminum that is way up in so many vaccines that people are taking, that's a soft metal, not a heavy metal. But the mercury, the lead, all these metals that are in people's bodies, which is already depleting the immune system, depriving the body of nutrition on a daily basis, stressing the heck out of the human body. We all get that. And then on top of that, on the outside, we're walking around like walking antennas, and then we've got all of this electromagnetic frequencies, this nasty vibrations being put out by cell phones and cell towers, and now from satellites all over in space with the 5G, all of this pulse intense vibrational energy from smart meters, the smart homes, the smart appliances, that these people like in Wuhan in China, and in New York City where they're getting clobbered, you could easily see where, okay, you've got a lot of people with toxicity. And you have a tremendous amount of this nasty EMF field that's bombarding the human body. Not a good combination when you get introduced into the body of bacterial or viral infection. I say that human being is in big trouble. What's your take?

Dr. Thomas Janossy: Jonathan, it's wonderful how you explained it, it's right on. Actually over the last 19 years, I'm in the field of detoxification, I encountered many individuals who had chemical sensitivities, obviously a high level of toxic load, and even electromagnetic sensitivities. And let's imagine a circle, then we put 100 people around the cellphone tower. And let's imagine that this is a study, and they are living there you know, the same distance. The question is, who would get sick first? And absolutely, I'm convinced that those who have higher level of toxic load and especially metals you know, these metalloproteins are induced quicker than the receptor sites that normally are being utilized by Zinc or Selenium, they are now occupied by Lead or Mercury or Cadmium or Aluminum. And really, electromagnetic fields strengthen this bond. That's one thing. And the second is that it's much more difficult to detoxify than to live in an electromagnetic field. So first thing is you have to switch off the Wi-Fi overnight; that's one thing for all of us. Also the melatonin levels will be higher. And I'm just mentioning it in brackets, and the glutathione levels will be higher, so it's a benefit. But more importantly, a good detoxification especially today in 2020, when we gear up for the 5G, really this is a wonderful preparatory strategy that we do at toxic heavy metal focused detoxification now before the problem starts with the 5G. So yes, they play a role, I'm pretty sure, but I believe that that the cytokine storm is the one that really kills the people, so we have to focus on that.

Jonathan Landsman: So Dr. Janossy, as we finish up now, just let us spend another few minutes because we have talked quite a bit about all

of the ways that we can avoid the cytokine storm. This is the real biggie, but on people's minds, I'm sure.... You know, I don't personally think this is it, no way in the world. We're going to have other viruses named by other names as well, coming up soon. I agree with you, we need to do everything right now to clean up our bodies, clean up our axe so that we are stronger human beings, so that we can withstand all of these stresses. What's your take on this? Are we going to see COVID-19 come back again? Is it going to be stronger, is it going to be the same? When do you think it's going to happen? Talk to us about it as we close out.

Dr. Thomas Janossy: First of all, if you look historically, the Spanish flu, it wasn't the first wave that really killed so many people, it was the second wave in the fall. Actually in the US, it was in October. And the second issue especially now with this Coronavirus is that by the summer, by the end of the summer, we can stipulate that probably more than 100 million people will have the virus simply because it multiplies and because it spreads around the world. So out of those very very large numbers, we can safely predict that there will be some mutations. And of course, if the mutation is weak, we wouldn't notice it. But if it's a killer mutation, that would come back and maybe those individuals would be asymptomatic for longer, like just recently it was reported from China that one individual was asymptomatic for 49 days; not 5 days or 2 weeks, but 49 days. So easily, I believe that based on historical patterns, actually I'm convinced personally that it will come back you know, 10 times, 50 times stronger, and it will be a much more killer virus that will come back in the fall. So we have to use the next couple of months and especially the summer, probably we will have a 3-month peaceful period relatively speaking, that we can stock up, we can think over, which one is a location where we would like to slow down and if you're locked into a house again or into any kind of location. So we have to use it in a strategic manner, the time that we have. I wouldn't worry too much, of course it's very painful for those who go through it right now, but I rather look at it as a wakeup call. And I believe that the big storm is coming in the fall and over the winter.

Jonathan Landsman: I agree with you 100% Dr. Janossy, this is just the beginning. I do think this is a new norm. And I do see a light in all of this as well. I agree with you.

This is an opportunity for all of us to focus so much of our attention on our immune system, do everything we can to clear out those metals. I love your message about detoxification, I love your message about clearing out at night and having the body clear away that debris. It is the perfect time to do detoxification, to nourish your body in a smart, intelligent way during the day, try not to get too stressed out over anything. That's a whole other conversation. And again, thank you very much Dr. Janossy, a very important message.

And I hope people get a chance to listen to this again, and all the presentations of the Immune Defense Summit which I've put together. Thank you Dr. Janossy for being with us.

Dr. Thomas Janossy: Thank you Jonathan.

The Master Key to Immune Health

Guest: Dr. Raphael Kellman

Jonathan: Welcome to the Immune Defense Summit. I'm your host, Jonathan Landsman, creator of naturalhealth365.com. Did you know that every year drug-resistant bacteria or super bugs kill 700,000 people worldwide and is projected to be more lethal than cancer by 2050, and infectious diseases still remain one of the leading causes of death? Cancer, cardiovascular problems, and diabetes are, by far, the leading cause of premature death in the world. But in reality, all of this is avoidable with a strong immune system. That's why I created this event: to help you understand the roots of disease and how to prevent and reverse life-threatening illnesses by re-empowering your immune system. Our show today: The Master Key to Immune Health.

Our guest, Dr. Raphael Kellman, is a respected author and physician. A graduate of Albert Einstein School of Medicine, he has, over the past two decades, treated more than 40,000 patients developing a global reputation for investigating the root causes of disease and pioneering the use of functional and microbiome medicine. His patient-centered holistic practice focuses on the complex interaction of each patient's systems not only on the disease but on the entire individual who is greater than sum of his or her parts.

Informed by his background in the philosophy of science, Dr. Kellman's treatments are administered with compassion and kindness. He draws on the latest research to address patient's biochemistry, metabolism, hormones, genetics, environment, emotions, and life circumstances to help them achieve optimal health.

Please join me in welcoming Dr. Raphael Kellman to our program. Dr. Kellman, welcome.

Dr. Kellman: Thank you so much, Jonathan. It really is a pleasure to be here. And thanks for inviting me to participate.

Jonathan: It's a pleasure to have you, Dr. Kellman. So why don't we start off first by talking about how is the microbiome connected to immune health?

Dr. Kellman: Yes, Jonathan. It's not only that they're connected, they're really part of a whole. They're like opposite sides of the same coin. They're so interwoven that it's almost difficult to separate them in the sense that when one changes, if the immune system changes, your microbiome changes. If the microbiome changes in any way, concomitantly, the immune system will change. And frequently, the trigger of immunological change is the microbiome, this collection, vast ecology of bacteria that really are our control center of our overall health. They're like the grand orchestrator of our physiology even like—I look at it as the software. So this is the intelligence. And they are really not only just interacting with the immune system, they actually are involved in educating the immune system. In other words, the immune system needs to know what is it going to send an inflammatory response against and what it's going to incorporate into its own ecosystem, into its whole.

So the immune system needs education, right? It needs to know who is part of our ecology and who needs to be pushed aside. Guess what? It's the microbiome that educates the immune system. It's the microbiome that plays such a significant role in maintaining the health of the immune system. It connects the immune system to the brain. And without the microbiome, the immune system would just go out of control and we would have autoimmune diseases in everyone or everyone would develop cancer. So it's really the microbiome—again, in the end, it's all about bacteria. And it's the bacteria, our lifeline, our greatest ally, that really is the foundation of immunological health.

So if this incredible summit that you're doing, if it's—and it is, of course—about how to improve our immune system or why is our immune system deteriorating? Why are we seeing a skyrocketing incidence of autoimmune diseases like Hashimoto's or rheumatoid arthritis? Why are we seeing skyrocketing incidence of chronic diseases? Well, it's because the microbiome, to a great degree, is not as healthy as it used to be. It's really taking a great assault. And if the microbiome is restored and it becomes healthy again, then again, our software is upgraded. It becomes the software that we really need so that everything is in balance. So the immune system then regains its incredible ability to keep the body healthy.

Jonathan: I like what you said about the why. That's exactly why I do this kind of an event is because I think, Dr. Kellman, that as we get to understand, appreciate, and respect more what's happening inside our body. And I don't know anybody knows the microbiome like you. So that's why I really appreciate you spending some time with us here at this event. But especially the healthcare providers out there, I know they're going to be very interested in hearing just a little bit more about how do we actually know that the microbiome is talking to the immune system, if you will, or working with it because, I mean, in my opinion, I wouldn't think that this is widely accepted in conventional medicine. So where did you get this from? How do we know that this is true? And really make this point, especially to the healthcare providers listening.

Dr. Kellman: Yes, Jonathan, it's a good question. I think what's actually happening is that this revolution in microbiome medicine, all the studies and the research which—there's no field in medicine or science where as much research is going on as in the microbiome. And with this research is really coming with it a revolution in the way we understand health, in the way we understand origins of disease, the origins of health, and even how we heal. Now, it's going to take a number of years until we all get the people get it. The revolution is happening but we're so stuck in a little corner, we don't have the ability to see the big picture yet. But it's going to come out. And I think the great value of a summit like this is like let's get this information to people quicker. So we don't have to wait such a long period of time.

Now, this new model that's actually coming along is being piggybacked with all this new science is this, that there's no system in the body or organ that's not interconnected with every other organ. It's impossible that everything is interconnected and this is incredible flow of inflammation that breaks down barriers that we once constructed between one system of the body and the other. And it breaks down barriers between one organ and the other. And it breaks down the walls between the brain and the immune system and the rest of the body.

Now, why do we not know this? Because what is the research showing? The essence of the research about the microbiome is that these trillions of bacteria, which they outnumber us. They're at least—some people say it's one to one, in other words, we're 50% bacteria. Some people say where they outnumber us 10 to 1. It doesn't make a difference. This is just mind-boggling. In other words, you're talking right now to 50% of me that's bacteria. I always joke with my patient, I say, "You think you're talking to me but you're really talking to bacteria dressed up in a suit."

Bacteria are within us and they're part of us, just like they're in the outside world. And they're really the bedrock of life. What the research is showing is that this incredible ecology of bacteria, the microbiome, is sending messages all over the body in different ways concomitantly.

So in other words, it's producing, the microbiome, the bacteria, they're producing some of the same biochemicals that the brain produces. Meaning, the brain we know produces different neurotransmitters. These are molecules like serotonin. There are some people who are familiar with dopamine. The communication between neurons and they then send dopamine out or serotonin that is a signal between one neuron and another, we know, is related to brain function: how we think, how we feel, motivation, everything.

But what's amazing is now we know that bacteria are producing serotonin as well, bacteria-producing dopamine. And we now know that these messages, the dopamine in the gut from the microbiome, the bacteria, and the serotonin and other compounds that's producing, many other compounds, are then getting signals and traveling up to the brain. There are messages. It's like a vast communication system. The research is showing this. So for example, there are number of pathways that the bacteria—bacteria, the bacteria that we think is stupid—when they come together as a whole, they have an intelligence beyond—well, listen, they won the war against us, right? So in other words, we lost the war against trying to kill off bacteria because of, as you mentioned, all the antibiotic resistance.

We're talking about intelligence that's mind-boggling. And what they do is they make these neurotransmitters, they make other biochemicals, and then they send these messages to a nerve, the vagus nerve, which comes from the brain. It goes into the gastrointestinal system. And here, the bacteria, are sending messages. They're speaking via this vagus nerve up to the brain and they're communicating something.

And then there are some neurons in the gut wall called the, it's called the ENS, and it's also communicating to those neurons in the gut wall. And then there are cells in the gut wall that are sort of like gut wall cells but sort of, they call it enterochromaffin cell. It's just mind boggling. And they're also communicating with them and then they're communicating to the neurons in the gut wall. And then those neurons are communicating to the brain. And then there's another pathway that the research is showing that the bacteria, the bacterial cells, send their messages to the immune system. And then the immune system communicates to the brain. So there's multiple languages of communication. And then the brain communicates back.

So the research is there. Now, that means that no organ is in isolation. No system is in isolation. And there's communication going on that really orchestrates our health. Because we know that if the gut is not healthy and the microbiome doesn't have its power like it should have, well then what happens is that the communications that come to the brain are the communications of inflammation, of like alarm, so to speak. And the brain hears that. They hear a very distressed call from the gut,

from the microbiome, almost like crying. But we need help. We have to send messages to the brain accordingly. And then the brain gets it. Yes, there's a problem here. It heard the message from the bacteria of the microbiome. And now the brain responds accordingly.

But unfortunately, those responses are just survival, more inflammation. Yeah, that's good to get us going. But the problem is, it's not going to lead us to good health. In the end, we're going to succumb. So what we can do now is we can change those messages because we can get the microbiome healthier by numerous protocols like I've delineated in my book, *The Microbiome Diet*. But in my next book there will be even more information about how to improve that dialogue, how to improve the microbiome. So now this incredible—I look at it as a loving ecology, really, our greatest friend, will now begin to send the type of messages to the brain that will help the brain to grow and expand and develop so a truer part of who we are will finally be expressed.

And what that translates into is not only that we think better, we feel happier, we feel more vitality, but our immune system gets healthier. It's incredible. It will become more balanced. Because the real problem with the immune system is either it's too strong or—I mean, this is a very simplistic version, but nevertheless it's true—either it's hyperactive and there's an inflammatory response to its own tissue, to the very tissue it's charged to safeguard. It's sending inflammation. It's creating inflammation on your thyroid or on your joints or really any part of your body. It's like collateral damage.

It doesn't mean to do it. But it's so stressed out, it's so dysfunctional, the messages that are coming from the brain and from the gut are really, let's say, stress signals or the signals are becoming discombobulated. The immune system is overworked. And then it leads to a collateral damage. It begins to fire against a part of it, part of ourselves, when it's not really meant to do that or the immune system could be too weak. Again, coming from an unhealthy microbiome as its origin and then we're more susceptible to cancer.

But the truth is, even when you have a hyperactive immune system, it's also weak. So the bottom line is, we need balance. And the balance will come when the microbiome is healthy, because research is showing that its ability to communicate to every part of the body is just mind-boggling. It can speak to the genes in the brain. It can speak to the immune cells in the brain. It can speak to the neurons. And it does multiple things simultaneously and concomitantly as like in broad strokes; it could create a grand healing. No drug could ever do that. It's a software that we will never be able to develop or match. We'll attempt but we'll never be able to because it's really the bedrock of life itself. But what we could do is we could strengthen the microbiome and then it will have an exquisite ability to balance the immune system and to keep it

healthy beyond any drug that we'll ever be able to develop.

Jonathan: So, Dr. Kellman, how does the microbiome then actually help us to overcome chronic inflammation and autoimmune disease? Because you have mentioned to us before, I think this is going to be very important to hear.

Dr. Kellman: Well, again, if the microbiome is healthy, it sends various messenger molecules. It could send, for example, short-chain fatty acids like butyrate or acetate as signals to the immune system, signals to the cells, the receptors. And it can also send out various neurotransmitters themselves. And then that sends messages to the immune system to be in a state of calm or it could rev it up as well. It, actually, the microbiome, through these different messenger molecules that it produces, can actually turn genes on and turn certain genes off. So it can actually tell the immune system, "Okay, let's turn off the inflammatory genes right now and let's turn up the anti-inflammatory genes." So there's multiple ways that the microbiome could control, balance, in a very dynamic way, that it could do this to the immune system to really keep it healthy and completely balanced.

Jonathan: It's interesting as you were talking, Dr. Kellman. I just had this visual and you can correct me if you think I'm way off. But this idea that the way we think, for example, if we're angry or really depressed or sad and then we're shoveling food into our mouth, I mean, talk about this communication between our brain and our digestive system. One of the biggest reasons, everything that you talked about, one of the greatest reasons to really not eat when you're in that state of being so angry and depressed, that would be a perfect reason, the signaling is so off. And the other way around, that if our microbiome is so sick, how that could actually be controlling our thoughts. And I just think that everything you talked about really motivates us to just live a much healthier lifestyle.

Dr. Kellman: Absolutely. It's incredible. Again, the research is showing this is that our emotions and our experiences, past experiences and the emotions that we had in the past and certainly the emotions we have in the present, they absolutely affect the bacteria and their profile in the way they're interacting together. And really in the fingerprint of the microbiome, it changes with our emotional state.

So we know, for example, there's a lot of research that with adverse childhood experiences and emotional trauma and physical trauma that their microbiome changes. In other words, you could look at the bacteria of the microbiome almost like a recorder. It's recording and it has recorded our emotions of the past. And it is also recording our emotions in the present. I look at the microbiome as the great filtering system, this great super computer. And that everything, whether it's the food we eat or the emotions that we experience or the thoughts that we have or the

toxins in the environment, everything is ultimately filtered through the microbiome and is retained, that final byproduct is retained there.

And so absolutely, as you said, the emotions of the present and also the emotions of the past, they're affecting how the microbiome is functioning at the moment that you're eating. And when the microbiome is affected, it's also affecting the brain because there is a bidirectional highway. They're constantly communicating back and forth. And it's also concomitantly affecting the gut wall and the immune system. So exactly as you said, Jonathan, is that, okay, we can't completely correct the past at this moment. But what we could do is, at least in the moment that we're in, to let go of hostile thoughts, of angry thoughts, to be less focused on the pain of the past, even just for a moment. And to focus on, instead of ourselves that are so beaten and shattered, for a moment to try to get out of it and be in the present with the experience of eating slowly.

Because new emotions will come up if we eat extremely slowly. Those emotions—it's a whole conversation. But new emotions will come up. And they will begin to help change our mindset. It will dissipate some of the anger and the hostility and the frustration and focus on the past. And yes, it will improve the experience of the present, of your eating, and it will change even the way the gut, temporarily of course, is functioning and you'll absorb nutrients better. I call this experience that you're saying, like wouldn't it be better, wouldn't it help us physiologically, biochemically if mentally we would be in a different state? I'm saying absolutely 100%, mentally, emotionally, the state of being even if we can't do it all day. But if we can do it for five minutes when we're eating, we're changing everything. We're changing our biochemistry. We're changing the nutrients. We're absorbing. We're improving how the gut is functioning. And we're improving the microbiome.

Jonathan: That is so important what you just said. We have so much information still to cover. Dr. Kellman, I know you've created microbiome medicine as a whole new field. It's going to be very interesting for everyone to hear about this, especially the healthcare providers out there. Can you talk about what this field of medicine is that you've developed and also getting into some of the testing that you've created that you use to determine the health of the microbiome.

Dr. Kellman: Sure, Jonathan. I mean, it's a vast field, the Microbiome Medicine. But I think one of the foundational principles is that it has a very different foundation in a sense that we don't live in this hostile world where bacteria are trying to invade us. And in fact, it's the opposite that bacteria really set the stage for life. And within us, the bacteria, as a whole ecology, can really—is our greatest ally or really the best technology, so to speak, modality of treatment that can help us

get better. So right off the bat, this whole science is rooted in optimism, number one. And therefore, we could convey that optimism to our patient. Without that optimism, how are patients going to get help, people going to get better? So right off the bat, it's a field that's rooted in optimism and hope and a different outlook of the way we see things.

The bacteria, however, are working as a whole. We have to understand what could cause the bacteria, the microbiome, to become less healthy. What is toxic to the microbiome? What do we need to use to help heal the microbiome? And it's not just the different nutrients and foods—of course, that's critical—and the foods that you need to feed the microbiome, the vegetables, and certain types of vegetables that are even healthier, like foods that have a lot of inulin or arabinogalactan, whether it's radishes or Jerusalem artichoke or kiwi. But the truth is all salads and all vegetables are very healthy for the microbiome.

So there are a number of, of course, the foods that we're eating. But in addition to that, we have to remove the toxins. And of course we have to remove the refined carbs and all these artificial foods we see all over the place. But in addition, we have to understand the emotional component. I mean, it's really beyond emotional. It's really a state of being that's beneath our conscious experience that I think plays the biggest role in the health of our microbiome and keeping what the bacteria is really so sensitive to. So all of these are factors that lead to a healthy microbiome or sometimes, unfortunately, to a less healthy microbiome.

So number one, we have to know all of these variables that contribute. And for example, this inflammation is constantly growing. We now know and I'm making this point over and over again, that I believe the number one culprit in terms of drugs out there, I don't think it's antibiotics. I think it's the proton pump inhibitors that is the biggest demon. I mean, of course the antibiotics is—there's so much more of that problem. So therefore, yes, maybe that's the biggest problem. But I think the most potent problem is the proton pump inhibitors like Prilosec, Pepcid, and people are not seeing that. That's the big demon. Anyway, these are the things that we have to know that hurt the microbiome.

But then we also need to know that not all probiotics are the same. There are different types of probiotics that help heal cancer. They help heal cancer. They are a critical adjunctive therapy. And then there are certain bacteria that help with autoimmune diseases. And then there are certain bacteria that help with certain types of inflammation like certain types of inflammation meaning the immune system produces all kinds of messenger molecules. Well, one of those messenger molecules that it's producing to ignite more inflammation is something called TNF-alpha. And lo and behold, there are certain probiotics that seem to address that.

So this new field of microbiome medicine is to understand what's influencing it. Number two is to know which probiotics to use for different conditions and to know how to use them in combination, synergistically. And of course on top of that, is, as I said, the foods that we're eating like the prebiotics, because you can actually take supplements that are prebiotics. Of course, they come from food that help the bacteria proliferate. So it's really about using all of these modalities but using it in a very personalized way, in a very specific way, based on a specific problem that the patient has.

And to use them creatively, it really is as much of an art as it is a science. But most important is that we need to learn to befriend. I mean, it sounds so poetic but I have to say what I know to be true. We have to learn to befriend bacteria. Almost to know them like in an intimate way and to know what the language that they're speaking, because we now can eavesdrop on their conversations and to participate and to help modulate that conversation. And that will make the big changes to improve the microbiome and thereby to improve the immune system.

Jonathan: So, Dr. Kellman, what tests are you using to determine the health of the microbiome?

Dr. Kellman: Okay. So number one, it's so important to look at how the body is responding. And there are a number of companies out there and they're all really participating in the growth of this new field called the microbiome medicine. You send some stool to them and they analyze your whole microbiome. Through genetics, they can map out your whole bacteria and the percentages of different bacteria and that's great.

But it has to be done—first of all, that's not the first thing that I would do for patients. This is the reason, because there's no one healthy microbiome and there's no one unhealthy microbiome. There are multiple healthy microbiomes and there are multiple unhealthy microbiomes. We all have a different microbiome. Sure, there's some similarity and that's the value of getting your stool test and sending it to different companies that would give you the whole microbiome snapshot. Okay, they'll tell you, "Well, you have more Firmicutes than Bacteroidetes." And then therefore, you have more susceptible based on grand research. But that's not really telling you all that much in terms of what's really practical. Because what we really want to do here in microbiome medicine is make the information practical and then to say, "Well, this is what we can do with this information, to make you feel better."

So the better way of doing it is to let's look at different biomarkers in the body. Let's look at how the body is responding. How healthy is the body? Is the body producing markers of inflammation, for example, CRP; or interleukin-6, IL-6; TNF-alpha; or IL-8? These are different messenger

molecules that an immune system that's in an overactive state will start pumping out. Now, if the immune system is doing that, well, your microbiome is not healthy because it's the microbiome that balances the immune system. Remember I said before, the microbiome and the immune system are opposite sides of the same coin. They work in tandem.

So what you got to do is look at the body. And then you know, you can even detect, based on certain immune markers, which aspects of the immune system needs strengthening or needs to calm down. Additionally, you can measure certain compounds like butyrate, various short-chain fatty acids. These are actual products that the bacteria or the microbiome make as they metabolize and digest foods and these are also very important messenger molecules. If they're not making enough of these messenger molecules then they're not going to have a strong ability to reduce inflammation. They're not going to have the ability to turn the right genes on and turn certain genes off.

We can also do different types of stool tests and we can see, in general, if there are certain bacteria that we know play a big role in our microbiome so we can see different types of Lactobacilli that are deficient or Bifidobacterium because these, we know, are part of our ecosystem of the microbiome. And if we see deficiencies here or deficiencies there then we can then—that we may supplement more with those types of bacteria. But you have to put all the pieces together and, of course, know the primary problems that the patient is experiencing. And when you put it all together, that's how you know the state of health of one's microbiome and then what to do to make it better.

Jonathan: So when it comes to the actual test that you're using, are there medical tests that you go through or are there certain biomarkers that you see absolutely most of the time with people who have chronic fatigue, autoimmune disorders, this kind of thing?

Dr. Kellman: Yes, absolutely. So number one, in the blood test, we would do ESR, which is a very nonspecific marker for inflammation; CRP, more and more people are getting familiar with that. That's a marker that could be a risk factor for heart disease or neurodegeneration. But the less known markers are, as I've said before, interleukin-8, interleukin-6, TNF-alpha, something called T reg cells. Now, it's not always easy to get these tests but this is, in an ideal situation, we do them frequently. Hopefully, it will be easier and easier as time goes by for physicians to do these tests. And there are different companies that you can't do that through.

So these are what we call different cytokines. Plus, you can measure a compound called LPS. LPS is a marker of certain bacteria that are kind of

rouge. They're not part of the healthy ecology. They're not incorporated into our healthy ecology. And they're producing this compound called LPS, which could of course break down in the gut wall. It can cause inflammation. So we can measure compounds like that. This is all in the blood.

We can measure insulin levels. If the insulin levels are very, very high, well, guess what, what could be causing that? We call insulin resistance. Well, an unhealthy microbiome. We can measure B vitamins: B1, B2, B6, B12. If we're deficient in some of these vitamins then it's a sign that the microbiome is not healthy because the bacteria produce a lot of vitamins. We don't have to go buy all these vitamins. We can get our microbiome healthy and they'll produce a lot of these B vitamins for us. There's a compound called CLA or conjugated linoleic acid. People go to health food stores to buy it to help with metabolism and weight loss. But, believe it or not, our best friends, the microbiome, they produce CLA. And we can measure all these markers.

And then there are stool tests. In the stool test, we can measure different markers for inflammation. We can measure, again, the short-chain fatty acids. We can measure something called secretory IgA, which is also an immune defense molecule. And then we can measure overgrowths, bacteria that you see. Let's say bacteria X is supposed to be in the microbiome only 10%. But when we do the stool test, we say, "Oh my God, they're overgrowing their percentage." And that means the ecology of the microbiome is not healthy. So then we know there's a problem here. Or if there's, let's say, a deficiency of certain Bifidobacterium or Lactobacilli that we know play a very important role in everyone's microbiome, then we know, okay, for this patient, we need more Lactobacillus because they're very low. But they're okay in the Bifidobacterium category.

So you put all this information together and then these are the baseline tests. Now, you could go further and you could test for bacterial markers, markers that the bacteria are making. Unless you can do a test called the ion test. And you can see if a certain bacteria, again, they're growing beyond their percentage that they should have in the microbiome. And they're producing an excessive amount of other kind of "toxic chemicals." And you can pick that up on a test too. But most of the time, you don't even need that. You can do that in a test called the ion test from companies like Genova, Metametrix, and others.

So that's basically the testing that we do to determine the health of the microbiome and to give us the path to treatment.

Jonathan: Okay. So as we close out the program, this is probably one of the most important sections of our entire conversation, Dr. Kellman. No doubt somebody with cancer, cardiovascular problems, arthritis,

systemic pain, they're chronically fatigued, any of those conditions, I think people intuitively would understand that something is wrong with their immune system. And certainly, improving the health of the microbiome wouldn't hurt at all, of course.

So when I ask you, you're looking at these people, what kind of diet, lifestyle changes, generally speaking—I know you can't treat every person in this program like this—but diet, lifestyle, some pre and probiotics, other compounds that you might use in your treatment. Because obviously this is where it all begins, some physical changes that will really literally affect not only reducing inflammation but just help the person on a mental and an emotional level as well. I mean, just bottom line is their microbiome is better. Their immune system is functioning in a healthy way. They're going to feel better. So talk to us about some of your recommendations.

Dr. Kellman: Well, right across the board, to introduce fermented foods. And for some people, you have to do it very gradually whether it's kimchi, sauerkraut, to get more familiar with the idea of fermented foods. And what's amazing about it is that even after a few days of introducing gradually a little bit of kimchi or sauerkraut or other types of fermented foods, our appetite changes. The types of foods we crave are different. There's a mental change. And that is, like you said, what could spark optimism or something positive in people who unfortunately have a disease or tremendous challenge, health challenge. And well, if you want also a mental change that's quick, you start with the fermented foods.

I mean, I was so surprised like when I read the reviews on my book, that's what people are saying. I mean, I don't treat those people. They're just following the diet. But it's a common denominator. They talk about a mental change that they're no longer kind of enslaved to the cravings of the foods that are not healthy. And concomitantly, there's a positive outlook that comes with it. It's more centered. It's more whole. There's a sense of wholeness that people feel, interconnected. It's quite amazing.

And then to start introducing the right foods, for example, more vegetables, but chew your food so slowly, 100 times slower. Vegetables, vegetables, vegetables, salads, slowly, slowly. Organic is better. But if you can't afford it, eat less but have a little bit of organic vegetables but chew it until it almost becomes a liquid. It changes your state of mind. It changes your digestion. It awakens the bacteria.

And then my opinion is keep the meat down, don't cut it out, keep it down. Healthy fats. I mean this is a big discussion but it is a general overview. Then there are some basic probiotics that people should take whether you have an autoimmune disease, whether you have cancer. So for example, *Lactobacillus reuteri*. So I'm saying this across

the board. Remember I said before, in Microbiome Medicine, there are certain probiotics that you want to use for someone with cancer and then there are certain probiotics you want to use for someone who has inflammation, but I could tell you right off the bat that everyone could go get, today, is *Lactobacillus reuteri*, R-E-U-T-E-R-I. Why? It has just an immune balancing effect and it heals the gut wall. There's another one called *Saccharomyces boulardii*, B-O-U-L-A-R-D-I-I. Again, it's one that I could now recommend to everyone who's listening. You're not going to go wrong and it will begin to help you.

Again, it's balancing the immune system. It's healing the gut wall. And a very general probiotic but there's different ways of determining is it a good one or not. You should try to go find a reputable company, that's a whole conversation. But look for the diversity. How many strains do you see? Do they actually tell you the strain number? Then it's even better. They'll say like *Lactobacillus X, Y, and Z* and number 12374GL, for example. Ah, that's a good one because they're telling you now strains.

And the more you see of that then you know that's a good one. The more bacteria you see. And the next thing is, yes, the total number. Start with that. That's whether you have cancer or whether you have an autoimmune, you all could do that, okay? And if you're not feeling bloating then you could start even getting some prebiotics, the right types of fiber or inulin, slowly. And then that's going to provide the food for the microbiome.

And then just think about the good that you're doing for bacteria on Earth and in you. That's going to set the cycle of healing. It's an incredible road that people get on. And from there, the next door will open up and then the next door. But this is the beginning of the healing experience.

Jonathan: It really is—and I'm not trying to make light of what you're talking about or joke around about this—but it can be funny sometimes. If you overdo those probiotics—I love the way you're underlining slowly—it can really accelerate the elimination process. I mean, on one hand, it's great to clear out the bowels and to be going to the bathroom, which I see is deeply being connected to being depressed, being anxious, fearful, having brain fog. Literally, if you're constipated and backed up, that's not a good thing. But I'm sure you also warn people not to overdo it or else they could be at the toilet bowl a lot, right?

Dr. Kellman: Right, right. Listen, look, I wish we could talk to every single person listening, individually. And then there will be even better outcome. But since we can't do this, the best advice is go so slow and relinquish. Let things open up. Let doors open up for you. But at those moments like we were saying before, the emotional state will change. You try to find the inner part of you. The inner part of you that the bacteria speak to. They don't speak to our rational brain, right. They're

speaking to something deeper. I call it the will within us. And that is like the will to meaning, the will to helping, the will to live, that's what the bacteria is speaking to. So at the moment that we're eating, when we go really slow, we'll give that deeper part of us a chance to get up and to be part of the conversation, then the next door will open up for you. I'm talking you, I'm saying for everyone who's listening. And this is the best personal advice I could give to every single person that's listening.

Jonathan: And, Dr. Kellman, we only have another minute to go here. But I think you and I share in something that I think is deeply profound. What does this got to do with the microbiome and immune health? But I think it has everything to do with it. And I'll be very open and personal with you right now by saying that, in the past year, I have made it a concerted effort, right, in all my 50-plus years here on Earth, to just thank God for the food that I'm eating before I eat every single time. Now, again, not to be religious, just to be grateful, to have gratitude, when we talk about this whole mental, emotional thing before eating. And then, of course, eating organic food, eat the best that you can, chewing your food really well. What a powerful combination?

Dr. Kellman: Absolutely. You're right. There's nothing to do be religious at all. It's just when you're in that state, like I would say, if you're in a state of awe and wonder—well, if you look at the way when some of the images that the astronauts had of Earth. And there was a spontaneous moment that of incredible gratitude and love and interconnectedness that really was a common denominator behind all of these astronauts' experience, whether they came from China, Japan, America, Russia, Israel, it didn't make a difference. That's the experience that goes so much beyond whether you say you're religious, whether you say you're not, whether you say you believe in this or believe in that.

It goes beyond all of that. That's the inner experience we're speaking about here that you're just going to feel gratitude. And that inner experience is really what the microbiome—and I know it sounds unscientific but it's not. It is exactly what begins to heal the microbiome, of course, in addition to the foods and the supplements, etcetera. But the emotional, mental, inner state of being is primary and that's what's going to really make big changes to people.

Jonathan: I agree 1000%. All of this is about improving our microbiome. And all the other presentations that we're going to have in this event are about identifying the threats to our immune system and those things that can activate it in a positive way, that's what this event is all about.

Dr. Kellman, I want to thank you for your time.

Dr. Kellman: Thank you, Jonathan.

Jonathan: And I want to thank our listeners for joining us today. If you would like a copy of this program plus all the other presentations inside the Immune Defense Summit, simply click the banner you see on this page.

Thanks again for attending the Immune Defense Summit. Talk to you soon. Take care.

How to Naturally Boost Immunity

Guest: Eric Zielinski

Jonathan: Welcome to the Immune Defense Summit. I'm your host, Jonathan Landsman, creator of NaturalHealth365.com. And today we're going to be talking about immune health, of course, again, with a very special guest, Dr. Eric Zielinski. Dr. Z, welcome.

Dr. Z: Jonathan, thank you much for having me. You know what; I've got to tell you something. I've been following your work for several years now. And dare I say, you're like an icon in this space. And I really appreciate what you do. And I look up to you, really, as a mentor in many ways. So the privilege is all mine. And I'm really, really excited to talk about this topic, because I haven't really covered it too much in this depth before. So I can't wait to get right to it.

Jonathan: Yea, so, I mean, I know you like to talk about leaky skin. Maybe it's easy to figure out what you mean. But I think it's probably better to just ask you, what is that all about? And most importantly, how does that actually affect our immune system? Talk to us about that.

Dr. Z: Yea, I believe we're going to be hearing a lot more about leaky skin, as we have heard a lot about leaky gut, which is also known as intestinal permeability. So let's go to the gut first, just to get the concept, and then see how easily and quickly we can visualize the same thing happening to our skin.

So when someone eats inflammatory foods, when someone is taking medication, when someone is on a high acidic diet, what ends up happening is it ends up these chemicals create micro tears in your

intestine. And essentially the microvilli start to separate.

And how we were designed is that our intestines have a wall. They're called tight junctions that are very tight, like this. And after years and years of eating the wrong foods, chronic stress inflammation, those tight junctions start to open a little bit, just like my hand is. That's leaky gut.

And so when you're eating foods that contain certain proteins, other chemicals, they seep through the gut into your bloodstream. And what we want to do, obviously, is we want to repair the leaky gut. So essentially think of it as a force field. It's a very simple concept that has revolutionized the health space really within the last decade.

Well the same exact thing happens to our skin. And people need to realize it. And just look at your hand for a second. I mean just think about your skin. And think about animals out in nature. Think about plants. Think about how really all living human organisms and all non-living human organisms have protection. And this protection starts on our skin. It starts with the immune system. So essentially what the immune system is, it's a variety of barriers. There are internal and there are external.

People don't realize that your skin is the first barrier of your immune system. So when you encounter pathogens, bacteria, fungi; when you encounter viruses; if these micro-organisms cannot penetrate the skin, they have to come in through another way, through food or through breathing or through eating or through whatever it might be, different orifices in your body, your ears, your nose. So one thing that people need to recognize is, that if you want a robust immune system, your skin integrity has to be a hundred percent intact.

And what happens is, if it's not, it's just like leaky gut, which allows again those tight junctions to open up. That allows proteins and toxins, pesticide chemicals, non-organic pesticides when we're consuming foods to get into our bloodstream. The same thing can happen to our skin. And there's a lot to talk about how to reinstitute the integrity of the skin through body care products and other things that we can do.

Jonathan: Yea, it seems so obvious when you're talking about it, Dr. Z. But I would still jump in and say that most of conventional medicine is not there at all when it comes to this. Here it is, people are struggling with health issues. They're tired. Their brain is upset in one way or another. They have anxiety. They're run down. They're stressed out. And nobody in Western medicine yet is still talking about the fact that all of this really matters, the integrity of our tissues.

So you mentioned skin care. You're talking about leaky skin. But there are products, millions and millions of products that are being sold every

single day. What do you want to tell us about that in terms of what's healthy and what's not healthy?

Dr. Z: Well Jonathan, you know it's important to realize that research has not officially given us a number. But we're looking at anywhere between fifty to seventy-five percent of the chemicals that you put on your skin are penetrating into your blood stream. They seep. Now when you have leaky skin, when you have micro-tears of your skin because of certain products that we'll talk about in just a minute, that number increases.

And what we have found is that these chemicals are literally getting through the placenta to babies in utero. So many moms are trying their best, putting on body care lotion and using perfumes to smell nice, just what normal women try to do, make-up and other things. And they don't realize that these chemicals are getting into their blood stream.

And they're not only permeating through the body, but this is a huge cause for moms, huge cause for pregnant women. And the number one cause of leaky skin and lack of skin integrity is anti-bacterial products, one-hundred percent. Just like leaky gut can be caused by essentially an outburst of pathogenic bacteria. We know we need good bacteria, the probiotics. It's the same thing on our skin. And we have trillions of micro-organisms on our skin.

And you know the human microbiome project has suggested that we are ten to one, ten micro-bacterial cells to one human cell. So you aren't even looking at a one-hundred percent person. You're looking at a bunch of things. You're looking at a bunch of micro-organisms. You're looking at an individual that lives in symbiosis and harmony with nature.

And when you realize that your skin is just filled with good healthy bacteria and you're using anti-bacterial products, because you're trying to do something good for your body, what ends up happening is it dries your skin. It creates little micro-tears in your skin, and now it allows whenever you put on a chemical.

If you're going to clean your counters with bleach or some sort of conventional cleaner, if you're going to wash your clothes with the normal detergents you get at the super market store, what's encountering that all day long? Your skin is. And people do not even think twice about how the chemicals in the laundry detergent don't wash out, by the way; and they're just in contact with your skin all day long. And your skin is seeping little doses of these things.

And see, this is very similar to the whole organic/non-organic, GMO/non-GMO discussion. It's like well, it's not going to kill you. Literally, it's not going to kill you to go to Wal-Mart and eat a conventional apple today. But it will kill you if you eat those every day for your whole life. It's like

little micro-poison. And that's the same thing that we're seeing with our skin integrity, and the clothes that we wear and the products that we put on. But it really all stems from anti-bacterial products which annihilate the microbiome on the skin.

Jonathan: You know, Dr. Z, we're going to talk about environmental toxins now as well and how that stresses out the immune system. But I can't help but think that everything you're talking about in terms of personal care products, skin care products, again, conventional wisdom, if you will, is that, oh, it's a little bit of this, a little bit of that. Just like you said, no need to worry. Just go back to sleep. Everything is fine.

And it's that mentality of conventional science says we see a problem. Let's try to kill it with a chemical. Conventional farming, let's try to kill something with chemicals. And then when someone like you and I and the people listening to this event, they kind of question maybe this thing or that thing with a conventionally trained doctor or a conventionally trained scientist, now they'll say, well those chemicals in the personal care products and in and around your home and your lawn, that's no big deal at all.

In fact, it's the complete opposite. This is stressing out our immune system. Talk about the environmental toxins that we should be aware of that are really hurting our immune system.

Dr. Z: You know, Jonathan, when I was in chiropractic college, we learned that the most detrimental traumas that happen to the body aren't the car accidents, aren't the falls, aren't the slips. It's the micro trauma, the day to day hunching over where your spine just isn't in proper alignment. It's the day to day constantly sitting down, or the aches and the pains in the things that you do.

And we have this mentality where cancer is just like a bomb that just drops on you. Cancer doesn't develop overnight. And diabetes doesn't develop overnight. Leaky gut, heart disease, leaky skin, these are chronic diseases.

And so when you think of the danger of these micro traumas, like we think about degenerative disk disease with so many people. So many elderly people are just riddled with pain and aches and arthritis when they're older. It's not because of a fall typically. Some people, yea.

But I want to use that analogy because you are, me, we, all of us are exposed to little micro-traumas that are environmental toxins in the air, and environmental toxins in our water, and environmental toxins that are literally everywhere. And here's the thing, we could go two routes on this. We could literally freak ourselves out. We could just be like, whoa, what am I going to do? Buying a bubble, living in it, and trying to

separate yourself from people, you can't do that.

You can also look at this like okay, look, there's a lot of danger out there. Let me do what I know I can do. I can control certain things. But you can't control the air in the office that you work at, typically speaking, unless you own the company. You can't control the air outside. You can't control what's really being done to the food that you eat if you go out to eat. And just think about all these things that you can't control. Don't worry about that as much. Do your best.

What you can do is control your home. And if you're like most people, at least you sleep at your house. You should be in your home for at least half the amount of time that you live. You sleep eight to ten hours, whatever it might be. You eat there. You get ready there. Make sure you have an awesome air purifier. And I don't know if you want to recommend one on air. It's up to you. But there are a couple that I recommend. But you need to have pure air.

I recommend using like, I have behind me, a nice ultrasonic essential oil diffuser, which will permeate good, healthy, volatile organic compounds, which have been shown to literally kill flu virus out in the air, literally. It's like Star Wars, and we don't even see it. So permeate your house with good healthy antioxidant, powered antimicrobial, bad antimicrobial essential oils.

And know that it really is about the little micro-doses that are in your food, that are in your supplements, that really aren't really good supplements. They are in the things that we don't even know that we're doing.

And my heart goes out to people, especially people that are trying to go gluten free, especially people that are trying to eat a certain diet. They just go to the store. And they go to Wal-Mart. And Wal-Mart is selling gluten-free bread. Well, that must be good for me. Look at it. It's sugar, maltodextrin, preservatives. You don't realize the health foods at most health food stores are trash, absolutely trash.

And what this is, it's a lifestyle. And for me, I've been living this way for fifteen years. And I got to tell you, it's been a journey. That's one reason why I appreciate what you've done, Jonathan. And what my wife and I have done through our website, our master classes, our little toxic free healthy home makeover tour that we did, we're trying to help you watching right now streamline your process so you don't have to hit your head against a wall.

You don't have to be like me, spending thousands of dollars in trying to figure out air purification, because I had toxic mold in my home. Well, we got the solution. We banged our head against the walls. We contacted

people like Jonathan and other experts and we got that.

So my suggestion, folks, is while you're watching this summit, and this is really important, by the way. If you don't have it, have a paper and pencil ready right now. You should be writing notes. Of course, you want to buy the summit. You want to get the transcripts.

But what you really want to do is while you're watching all these interviews, while you hear Jonathan, who is brilliant, who is going to be dropping little golden nuggets in every interview. But what you want to do is you want to write some low-hanging fruit to do's for yourself. Like what can you do now? What is really cost effective? What is simple? What is quick? What is easy? What can you do? And for me, the first thing I want you to do is literally throw away your antibacterial products, just one hundred percent.

What do you? Well, you could DIY. Or if you're busy like me with four kids and you don't have time, you could go simply to your natural health food store and get an unscented, whatever chemical free product, and that's a great place to start. And that could be a cleaner. And that could be a body care lotion. That could be hand soap. That could be shampoo.

And if you want to enhance it, well I love my essential oils. That's where you have your essential oil bottle next to you, so you have your unscented, chemical free product. Add a few essential oils to it. Now you have your own make-shift DIY hack. That's the first start. It's so simple to do. It's relatively cheap and cost effective.

And then you start other areas. Kick out the microwave. You start to get a good air purifier. You start to get a diffuser. You start to really focus on local organic food. And then you really go back to the summit. And you find your favorite speakers. Listen to the interview again. And you're like, okay, Dr. so and so said that. That's great. She said this. I'm going to do that.

And the next thing you know, two, three, four years down the line, you turn back and you look behind you. And you're like, where did that come from? You become like the natural living guru in your tribe, where people are going to look at you as a pillar, as an example. And I know we're preaching to the choir. People watching right now, you're not the average consumer. You're actively seeking out health information. And kudos to you. This is the first step. Now it's about implementation.

Jonathan: And it's very important what you said, Dr. Z, about in terms of the environmental toxins. Get rid of them. That's step one. Get away from the threats as much as you can. But then you also talked about how you can't always get away from all those things. They're going to be surrounding us. They're going to go inside our body.

And that's when we bring in things like essential oils, vitamin C, vitamin D. There are a lot of substances throughout this summit that we talk about that you should be bringing into your life, as well as avoiding those things that are threatening your health. And when you do those two things, it's very, very powerful. Absolutely the first step is to get away from those things that threaten you.

We talked about environmental toxins. What else do you want to say about that at all, Dr. Z, before we move on to the next topic? And maybe it's related. Maybe you want to extend this a little bit more about these toxins. I'm going to preface this by saying most doctors are not saying this. But most toxins are actually the cause of people gaining weight.

The mentality out there is, oh hey, somebody is heavy. Just eat less, move more, and everything will be great. Well, you could be eating less, and it's still toxic, and you still have metabolic issues, metabolism problems. So talk about this connection then between environment toxins and people having trouble losing weight.

Dr. Z: You know, Jonathan, it all really stems from inflammation. And I think it's really important. I've been around this block now for a little bit. And inflammation has become like a catch-all term. It's actually the number one cause of everything now. And I'm telling you something. Inflammation is very much misunderstood.

First, folks, we've got to realize, inflammation is a natural process. It's your immune defense process to a pathogen, to an assault to the body. So myself, I'm one of those people that sometimes I could be a little careless in the kitchen. I actually got two cuts on my skin. We just bought new Cutco knives. These things are something else. When you go from a dull knife to a sharp knife, be careful.

And so I have a cut on my finger. And what happened was, my finger immediately became inflamed. And what are the cardinal signs of inflammation? These are the defense mechanisms that God gave our body to defend our body from future insults.

So what happened was I cut myself. And then coagulation immediately started to happen. There was pain, which let my body know, hey, there's something wrong here. I'm telling you, pain is a good thing. Pain is the warning light on your engine basically saying something's wrong. If you don't have pain, then you won't recognize that you could have serious damage. So pain is a good thing to warn us. It's an immune defense.

I started having pain, swelling, redness, heat, loss of function. These are the five cardinal signs of inflammation. And all of these signs, all of these symptoms, were isolated just to my little area of my finger to help bring healing, to help tell my brain, you've got to protect yourself.

Now here's what's happening, Jonathan. Through our lifestyle, through the toxins in the air, the environmental toxins in the water and the food, all the things, cleaning products, body care products, here's what's happening in the body. Just think of it. Just again, think in terms of cutting your finger and what happens. That's happening throughout your entire system.

These chemicals get into your bloodstream. When you breathe them, every cell in your body is affected. Every cell in your body basically becomes on high alert. And what happens is, instead of using the metabolism--we actually have got to debunk what metabolism is, too. Instead of using your metabolism to burn fat and reach a healthy weight, your metabolism is now being monopolized to rid your body of toxins.

And what is metabolism? I'm not making this up, y'all. Go to your Merck Manual. Go to your medicaldictionary.com. Metabolism is essentially the energy required for you to live. That's what metabolism is. There's no such thing as like a fast or a slow metabolism. That's a misnomer.

Metabolism is again, the amount of calories that your body needs for mitochondrial repair, DNA, for all the different cellular functions, for breathing, for heart rate, for things that we take for granted, blinking, all the things, hair growth. Our body requires an extreme amount of energy.

And if the energy in your body is being monopolized by ridding toxins that we are infiltrating because of what's on our skin, what we're eating, what we're breathing, that's when your metabolism becomes slow. But it's not really slow. It essentially just gets diverted.

And research has shown this, too. Literally, it's like drinking a soda, a pop, wherever you're from. I'm from Michigan. We call it pop. When you drink a soda, when you have sugar, like a tablespoon of sugar, it literally shuts down, dampens your white blood cell function, your immune system, for three, four, up to five hours.

You wonder why you're gaining weight when you have a spot on diet. You wonder why you're sick all the time. You wonder, I wonder. I wondered, and that's where I did my research. And it dawned on me. I'm like, whoa, this is serious.

So the key to losing weight, or I would say finding your ideal weight, is the same thing that we need to do for maintaining a good robust immune system. Like you said, do our best to minimize the toxins in the air. Replace that with good healthy nutrition that we know is effective.

I like to use essential oils to even enhance more, because they're rich

in antioxidants. They're rich in just super potent chemicals, plant-based chemicals, that give our body what it needs to heal itself. And the next thing you know, weight starts to shed away.

And literally, people get an air purifier in their home and they start consuming better water; I'm not even talking about food. They start taking, like you said, Lypo-Spheric vitamin C or other supplements. And the next thing you know, their pants get loose. Like how does that happen? Well, it really is about reducing the metabolic burden on the body because of reducing toxins.

Jonathan: I want to talk a little bit more about foods, probably quite a bit more, because I think it's very important. This is one of the key things that is actually triggering somebody into that constant state of inflammation.

Dr. Z: Yea.

Jonathan: But before we get there, I definitely want to point out this for those who are concerned about their immune system and not feeling well, and looking to get out of the woods, if you will. If you're tired all the time, that was another big sign, Dr. Z, of what you just explained right there, all of those things

If you've been in bed for six, seven, eight hours, you feel like you've dedicated enough time to sleeping. You didn't sleep that well and you get up the next day. Not resting well enough and being exhausted during the day absolutely is a sign of chronic inflammation in many places throughout the body.

Dr. Z: Yea.

Jonathan: It's your body telling you, red alert. There's an alarm going off. You've got to make changes. And without a doubt, the first place, yes, air purifiers, essential oils are nice. You know, we can talk about glyphosate and all these things. But that's actually related to what I would say is the number one thing we should be looking at. And even if we feel like we've looked at it enough, we already know about food, we've to look at food.

We've got to look at something in our diet that could be enhanced to take away the burdens that are happening to our body, the triggers, if you will, that cause this inflammation. And all of sudden, we feel that little bit more energy. That is absolutely a sign that you're heading in the right direction. So Dr. Z, just talk to us about some of the foods that are inflammatory, maybe some of the foods that you feel are better from all you research and personal experience.

Dr. Z: Yea. And Jonathan, I'm glad you asked that, because we have a

new book coming out. It's called *The Essential Oils Diet*. And I uncovered a concept that to me was revolutionary, because we only hear researchers talk about it. And I'm convinced it's going to be more of a household name. It's bioactive compounds, not bioavailability. It's bioactive compounds.

Researchers have actually suggested that if we do not consume a diet rich in bioactive compounds, we will never truly be healthy. Now here's something to remember about bioactive compounds. We've got to define what they are. But we're not discussing macronutrients. This has nothing to do with carbs, proteins, or fat. This really has nothing to do with vitamins or minerals.

Bioactive compounds are the polyphenols in your food. They're the plant-based chemicals. They're the antioxidants. You know what else bioactive compounds are? They're essential oils.

So here's the thing. You can live, literally you can exist and live without polyphenols. You can live and exist without antioxidants. You can live and exist without essential oils. But if you consume them regularly, that's where robust health and immune function just skyrocket.

And the problem, and then we'll go back to inflammatory foods. The problem that all diets that I know of that really focus on the numbers, it distracts us from what really matters. It's like what is in the food that makes the food healthy, irrespective of the amount of carbs and calories and fats and even vitamins.

And so what I want to remind people is we need to essentially just go back to nature. We need to go back to Eden. And we need to be eating a lot of good plant-based foods. And we cover all the details on that in the book.

But one thing I also uncovered was this concept of an inflammatory diet. And what concerns me is that there are a lot of arbitrary lists out there online that say, hey, these are like the "inflammatory foods." Stay away from them. Complete diets have been built around this concept.

Again, going back to what we just shared about what inflammation really is. Inflammation in an inflammatory diet is somewhat relative, meaning this, anything, anything that your body perceives as a threat, like me cutting myself. That's a threat to my body. If you consume any food that's perceived as a threat, that is an inflammatory food.

It's somewhat relative, because some people are at a position where they can't tolerate certain foods. Like for example, I can tolerate grains very well. Other people can't. So grains for me aren't inflammatory. But for someone else, they can be. Now there are debatable things like that,

disputable things even.

But what we do know, and this is, again, going back to the whole concept. Like anything toxic, anything foreign, anything that's considered a threat, that includes your sugars. That includes your processed food, your hydrogenated fats, essentially non-food items, like the glyphosates, the pesticides, the genetically modified organisms. Again, the body doesn't know what to do with those things.

And that is the concern that I have with artificial fragrances and aerosols. When you're inhaling these all day long, literally your body does not have neuro-receptors, your brain does not have neuro-receptors to interact with those synthetic chemicals. But your brain does have receptors to interact with these things, essential oils.

So think about that with food, artificial flavors, artificial sweeteners, artificial x-y-z, any preservative. So when you really get down to it, any processed, any chemical filled, any food that is not natural. And we can then go a little bit deeper now. Okay, that's pretty over-arching.

But what about dairy? Well, I would argue unless dairy is not pasteurized, unless it's raw, unless it's organic from a grass-fed cow that's treated humanely, and meat, of course, that is slaughtered humanely, you're going to process some toxins that are pasteurized. Lactose is just going to be annihilated, or lactase, or you're going to be lactose intolerant. If you consume milk that comes from a cow that's been fed antibiotic filled food and feed, you're getting all that.

It's the same thing with farm-raised fish. It's the same way with conventional chicken. So for us, we try to eat only clean meat. And we only consume raw clean dairy. That's tough in America, because several states make it illegal to consume raw dairy.

So these are just the concepts that I'm trying to share with people. Some people do very, very well with dairy. But at least make sure that it's organic and non-GMO, from a grass fed cow for sure. It's the same thing with your eggs. And with your meat, just be really, really careful. For sure, grass fed, wild caught fish, all these different concepts, they really make a difference.

Jonathan: Dr. Z, you just hit it right on the head in terms of everything being relative. Somebody who's very toxic and has unwanted excessive amounts of body weight, they're exhausted. They've been going like that for years. They've been eating really poorly, toxins around their work environment and their home. Then they go into a department store and they smell perfume. Or they go to a gas station and they smell gasoline fumes. Yes, that can push them over the edge for that given day.

Now, the person gets well hydrated. They start backing off from the junk food. They start bringing essential oils into the house. They start taking some of these nutraceuticals, high quality supplements. And they go for a few months, and then they go to the gas station and it doesn't bother them as much.

Dr. Z: Yes.

Jonathan: It doesn't mean that the gasoline, you want to smell that all the time.

Dr. Z: Exactly.

Jonathan: But if you say a prayer, which we're going to actually talk about, our thoughts and how that affects our immune system. But it's not like what we're saying is just say the right things, feel the right way, take some pills that are healthy for you, and you can just plow through your day and not worry about a thing. It's all relative.

But on a serious note, if you're suffering with serious health issues, one, get away from those toxins. Reduce the inflammation in your body. Work on building in healthy things that make you feel better.

And then, Dr. Z, I really want to spend a little time now as we're getting close to the end of this conversation here, about a really important topic. I love talking about it, but the floor is yours. So talking about how we think, how we feel, and how that affects our immune system, because I think that's really huge, our relationships. It goes on and on. Whatever you would like to say, go ahead.

Dr. Z: Yea. You know, I love your gas analogy. By the way, I was thinking of Joette Calabrese. Have you interviewed her before? Do you know Joette, our homeopathic friend?

Jonathan: No, not yet.

Dr. Z: She's in our space. I'll say this. Joette had four kids. They never saw a doctor ever. Like she never brought them to a pediatrician. She taught herself homeopathy. She's a foremost expert. I interviewed her for one of my summits, Jonathan.

You know what she said? She goes, you should be able to eat McDonalds and not feel bad. You should be so healthy, not that I'm saying we should, but you should be so healthy and your immune system so robust. Like you just mentioned that you should be able to expose yourself to gas and not get a headache. You should be able to go.

And that is a sign folks. And I love that. And I want to reinforce what you

just said. That is such a sign that if little things trigger you, then that's a sign that you need to detox, that you need to reduce inflammation. And in my opinion, it starts in the mind and in heart, your soul and your spirit.

One thing, Dr. Tony Jimenez, he runs the Hope4Cancer Clinic in Tijuana and Cancun. Dr. Tony and I have become close over the last few years. And he told me he is convinced. He said cancer is an emotional disorder.

He goes until we get somebody. We could do all the treatments in the world. People could take all the chemo they want, the radiation. They could do all the intravenous vitamin C, hyperbaric, and colonic therapy that they want. But if they have deep trauma, bitterness, unforgiveness, and anger and hatred in their heart, he goes they can't get well. It will come back. And that's the reason why he actually has emotional recall healing and a professional at his office helping people.

You know, scientifically, it makes a lot of sense to me now that I understand how the body works. And I think you will now that you've heard, for those of you watching and listening right now, you've heard this concept. We've talked about chronic inflammation, how things that are considered an assault to the body, toxins. We know, and we actually see this through animal studies.

Kind of to dovetail back to what we just said, if you're going to consume meat, make sure that the animal was slaughtered in a humane way. If an animal is slaughtered in fear, torment, and torture, like most are in conventional meat factories, they're emitting chemicals. They're emitting emotional hormones that are very not healthy for us, because they're in that state, that sympathetic fight of flight, that terror state. And we see that through animal studies.

We also can see that in humans. We are very robust. We are very dynamic people. I believe and we see we're supposed to have some ups and downs. You know, you're not going to enjoy sun unless you have a cloudy day once in a while. It really helps you. You're not going to really enjoy joy unless you get a little down once in a while.

But the problem is most people today are chronically down. They're chronically stressed. And it never stops. And so what we see neurologically is that we have this fight or flight mode, this sympathetic response. And we hear about it all the time.

And it really makes a difference as to why we're hearing it so much, because we should not be in this constant. Again, look at your posture. And as a chiropractor, we've been ingrained. You know, when you get like fight or flight, it's like you see that saber tooth tiger, and you're like this. You crowd up, you hunch over, your shoulders are up, and you're

ready to fight or you're ready to run. Are you like that all day long?

And you'll find yourself, and I find myself when I'm stressed, when I'm sitting down at my desk all day, whatever it is, I'm like my shoulders are up. I'm like this, I'm hunched over. What's wrong? Bring your shoulders back. Breathe. Are you deeply breathing? Are you shallow breathing? You will see your posture does not lie.

And I just saw it online. There are now posture apparatuses you put on your back to beep and vibrate when you go hunch over. Hunching over, shoulders up, crouched over, shallow breathing, that's a sign that you're stressed. And that's a sign that you're in a sympathetic state.

You can't digest your food properly, you can't rest properly, you can't think properly if you're in that state all day long. And people wake up in that state, because they're worried about their job. Their marriage is on the rocks. Their kids are in trouble. Their finances are through the roof. They go to work and they're stressed because of traffic or smog in the air. And they go to a job that they absolutely hate. And then they eat food that they shouldn't be eating. There's more stress.

And they come home and it's the same thing. It's never ending. And what's happening is instead of producing happy hormones, endorphins, serotonin, and dopamine, we end up becoming deficient in the hormones that we really need for proper cellular function. And what happens is we start emitting toxins through our emotions, through our thoughts. And people don't recognize.

And I'm trying my best to explain that your thought process can literally trigger a physical reaction. And one of the best analogies is nausea. Have you ever been nervous? Like maybe you get the sweaty palms. Or maybe some people have to go to the restroom a couple of times before they have a big test or before a big presentation. That's your body just cleansing itself. That's your body trying to rid itself of the toxins that the stress and anxiety are causing.

And just realize that what you think has a direct impact on your entire body. And what I have seen is that toxic thoughts and toxic emotions-- and again what are they? Negativity, self doubt, fear, disbelief, speaking down on yourself, looking at yourself in the mirror and look at that fat, ugly person. Like how many of us said that to ourselves once in a while? Or you don't want to look at yourself in the mirror.

Or you're that person who always shies away from the camera. There's a horrible self image aspect. There's like you don't love yourself. And a good friend of ours, Kim Morrison, just wrote a book called *The Art of Self Love*. You need to fall in love with yourself. You know the good book, love others as you love yourself. Well how can you love others when you

hate yourself, when you hate how you look, when you hate how you feel?

So one thing I had to do, Jonathan, in my road to healing. It really started in my heart first. I needed to recognize I was worth it. I was worth it. You are worth it. You're made in God's image. You're a lovely person. You have gifts and talents.

And I'm convinced, I really am, that the world cannot and will not be what it should be, a good happy, prosperous environment for all people, until you fulfill your call, your mission, and your purpose by letting your gifts and your beauty shine. And the world, in my opinion, is crippled; crippled because of us not rising up and being who we are.

So I want to encourage you to be who you are, to be true to yourself. And if you have been wronged, join the club. We all have. I've been abused, I've been traumatized, I've been betrayed. Some of you have had worse experiences.

You know, unforgiveness, Jonathan, is like drinking poison and expecting someone else to get hurt from it. You need to forgive. I'm not saying to forget. I'm not saying to give allowance for it. I'm not saying to break bread and have dinner with someone who might have hurt you, traumatized, or abused you.

But I'm telling you something, your life, your health, your immune function--I promise you, I literally can promise you this, guarantee it, we don't use those words very often--will automatically improve once you let go. Once you start to be able to breathe better. Once you can put your head down at night on your pillow and just think about the things that you're grateful for, having a gratitude journal, and letting go.

And we, in my world, in my circle, we say let go and let God. You know, just kind of give in. Let go. Cast your cares and anxieties upon Him. Have friends that support you and love you. And that's so key. Allowing yourself, dare I say the luxury or making sure that you only allow people that love and support you in your inner circle. You don't need to be a doormat for everybody.

Why are we talking about this in the immune summit? Because it affects your immune system. And you'll find this chronic inflammatory response throughout your body because of anxiety and stress and panic. And yes, essential oils help greatly. They really do. You know, inhaling neroli, orange bergamot, lime, lemon, these citrus oils have been shown to stop panic attacks.

If you're in a battle right now, and maybe you have to go to a holiday function or you got to go to work or someone just did something to you.

Maybe a coworker just backstabbed you and got that promotion that you were supposed to get. I don't know.

You inhale essential oils with an essential oil inhaler something like this, a simple cotton tube. You could put fifteen drops of neroli, ten drops of lime, a couple of drops of orange, you know, whatever. We've got all the recipes in my book and website. I'm just giving you some ideas. You inhale that. You start breathing it. Literally, it will help trigger, help produce dopamine and serotonin and help stop anxiety, like gone. Bergamot is a good one.

You put yourself in a situation where you can use outside technology to get peace. And that's where to me, now, your heart and your soul and your spirit can align. It's really hard to pray, it's really hard to meditate, and it's really hard to like be at one, at peace when your mind is going crazy, your body is in jitters. I get it. I used to battle with this stuff.

So follow the advice in the summit. Focus on your diet, the air, the food, all these different things. Use essential oils for those times that you really, really need it. And when you have that moment, that Zen moment so to speak, everything will just align. And you'll find yourself literally looking back, and you're like I don't deal with that anymore. And that's why journaling, in my opinion is so important. And as a medical practitioner, as a natural health practitioner, all these different folks, we've been trained to have a health profile, to have a health history of our patients, of our clients. Why? Because we have to document the history.

And one of the reasons why is because when someone comes in with ten out of ten worst stress and anxiety in the world, and five months later they're down to a two out of ten, and they're telling us they don't feel better. Well, yea, you do. It's a reminder. And it's very encouraging to look back and track your progress.

So if you haven't, get a health journal. Write down a list of all the symptoms and things that you're battling. Literally, put the date down. Then target a couple from the information that you're getting in this summit, low-hanging fruit. And like again, if anxiety or stress is one of them, get some bergamot, get some neroli, get some citrus oils and start to diffuse them. Apply some body oils on your body.

And then go back to that anxiety and stress and rate it, with zero being nothing at all, ten being the worst possible, rate it out of ten. And then go back in a few weeks or a month and rate it again. And put the date down. Document your progress. And then what you'll find out, symptom after symptom will go away. Cross it off and put the date down.

And here's the key, though. Write down your protocol. What worked

for you? Was it meditation? Was it prayer? Was it yoga? Was it high intensity interval training? Was it essential oils? Document it, because if something happens where you find you going back maybe on the bad behavior or bad habits or something triggers you to anxiety again, well you know what to do. You have your proven protocol.

So that's what I love about what you're doing, Jonathan. Essentially what we're doing is we're helping people practice natural health. And it is practice, just like any medical doctor practices medicine. It's trial and error.

Jonathan: And Dr. Z, a lot of great points you made. I would encourage all of you to please listen to as many of these presentations as you can. You're going to hear in these conversations I have many of the things that trigger your body in the wrong way, that stress your immune system.

And everything that Dr. Z just said, another thing you have to keep in mind is to have proper thoughts, to have better feelings, to be able to be heading in the right direction on a consistent basis, is going to require that you minimize these toxic threats, and that you eat better as well. Not only, as Dr. Z said, do these thoughts literally generate physical chemicals that can do harm to your body over time, not in just one day, but the other way around as well.

Too much toxicity in the body can literally be the trigger for all of these horrible thoughts and feelings that you have. And they keep going and going, even though another part of you says you want to be off this train tomorrow, it's not going to happen until you clean house just a little bit more. You don't have to be perfect.

But as the toxicity drops and as the nutrition goes up, and hopefully some of these conversations really spark you in the right direction, then you're going to notice thoughts are better, feelings are better, being to be able to forgive, as Dr. Z, definitely gets easier. Your whole life changes for the better.

Dr. Z, I want to thank you for your time. And I want to thank our listeners for joining us today. Again, if you would like a copy of this program, plus all the other presentations inside the Immune Defense Summit, simply click the banner you see on this page. Thanks again for attending the Immune Defense Summit. We'll talk to you soon. Take care.

Vital Tools to Correct Immune Problems

Guest: Dr. Peter Osborne

Jonathan: Welcome to the Immune Defense Summit. I'm your host, Jonathan Landsman, creator of NaturalHealth365.com.

Did you know that every year, drug-resistant bacteria or super bugs kill 700,000 people worldwide and is projected to be more lethal than cancer by 2050? And infectious diseases still remain one of the leading causes of death. Cancer, cardiovascular problems, and diabetes are by far the leading cause of premature death in the world. But in reality, all of this is avoidable with a strong immune system. That's why I created this event, to help you understand the roots of disease and how to prevent and reverse life-threatening illnesses by re-empowering your immune system.

Our show today: Vital Tools to Correct Immune Problems. Our guest, Dr. Peter Osborne, is a world-renowned expert in the field of gluten and gluten sensitivity, as well as orthomolecular functional pastoral medicine. As the author of a highly acclaimed book, *No Grain, No Pain*, Dr. Osborne is a doctor of chiropractic, board-certified clinical nutritionist, and adviser for the Functional Medicine University. He is the clinical director of Origins HealthCare in Texas. And is passionate about educating people and helping them heal through root cause resolution.

The first step towards solving any health crisis is to recognize that something needs to be done. When we don't feel well, it's easy to react by trying anything that comes our way. Whether it's from conventional medicine, such as prescription medication, or even a more natural approach

like taking a vitamin/mineral supplement. But once you've recognized that things don't feel right and something must change to avoid more serious health problems, it's my hope that your focused attention will go towards correcting immune system imbalances. Because, quite frankly, without a strong immune system, nothing else will matter. That's why I'm so pleased to introduce you to a healthcare provider that works on fixing immune dysfunction at the root cause.

Please join me in welcoming Dr. Peter Osborne to our program. Dr. Osborne, welcome.

Dr. Osborne: Thank you, Jonathan. It's a pleasure to be here.

Jonathan: Dr. Osborne, if you could only make one suggestion to our listeners, what would you have them do to improve their immune system?

Dr. Osborne: I'd say if we were limited to one thing, it would be look at your food. Make sure that what you're actually eating is food. So we live in this world—I call it frood, Jonathan, it's Frankenfood. You go and you pick up a hamburger or you pick up a package of any variety of different things.

But what most people don't realize is when you buy that hamburger, it's been injected with hormones. It's been cooked in genetically modified oils. And so you're not really eating food. You're eating frood. You're eating manipulated food with chemicals added. And so if you could make one improvement, one change, they could alter the state of your immune system towards a much, much more positive light. it would be eat real food.

Jonathan: It's funny, my wife and I joke around all the time when we go out, it should be—the language should change on the menus of a lot of places that people go to eat. "I'll have this genetically altered food product," not even mentioning food. We should probably take that word out. "Or this chemically processed, highly processed toxic poison on a stick. I'll take that as well." I mean, it's so true what you're saying that we use the word food and everything should just stay calm and everybody should relax and not think about it. But the point is, our food has changed so much since World War II, no?

Dr. Osborne: Absolutely. I mean we've given great trust to food manufacturers and companies that, farmers and companies, that help with the food supply in our country. And not even just in the United States, but even in Europe and other developed countries. And that trust that we've given them has, in my opinion, it's been greatly breached. I mean, you've got companies who have no ethical or moral standards in terms of what they're putting together and calling food and feeding us.

Even if you look at things like baby formula. I mean, the number one ingredient in most baby formulas is a genetically modified corn syrup. I mean, this is what we're saying is healthier than breast milk to feed babies? And they're starting life out and their immune systems are developing, right, and we're saying, 'feed them GMO corn syrup and that's okay'. So I think we really have to dial it back and look at what is it that we're actually putting in our bodies. People should be in tune with reading labels if the food even comes in a label. I say if you're buying food that's in packages, always read the label. But, ultimately, you should buy food that's fresh.

Jonathan: Dr. Osborne and I are going to be talking about food and vitamins and minerals and specific lab tests, a lot of interesting things to talk about in our conversation for sure. So I want you to hang in there all the way to the end because we're going to be even talking beyond diet about some of the things that people should be doing to maximize immune function.

But going back to food, Dr. Osborne, interesting. We hear a lot about the elimination diets and how that's designed to improve immunity. Do you recommend this practice?

Dr. Osborne: I do and I don't. And here's what I mean. I think any person should follow—I like to call them the three cardinal rules of eating. And rule number one is pretty simple. It's the common sense rule. You cannot get healthy—you cannot maintain health eating food that is not healthy, right? So we all have this kind of common sense radar or little person that's on our shoulder that's saying, "I probably shouldn't eat that ice cream. I probably shouldn't eat those sweets or that candy or that sugar or that processed garbage or whatever it is." We have kind of a litmus radar. It's the common sense radar.

But beyond the common sense radar, there's another rule. And that is if you feel bad when you eat it, stop eating it. Listen to your body. Your body has an innate intelligence. It has an innate wisdom. Then it can guide you, if you listen to it. Too many times, people will eat something. And right before they eat it, they'll say, "You know what? I'm going to pay for this tomorrow." And they do it anyway. They're completely ignoring their body's warning system. And going against what their body would have them do. And that's going to compromise their immune system. It's going to compromise their health.

So that's where I would recommend an elimination diet. It's listen to your body. You do an elimination and part of that is listening to your body. You avoid certain foods that make you feel bad, as you go through the process of eliminating and paying attention. So on that aspect, I always recommend an elimination diet just as a common courtesy to respecting who you are, respecting your body, and respecting yourself, and as a measure to be healthier.

But then, there's this conundrum that sometimes elimination diets can't help us with. And there's this, in science, there's what we call a delayed hypersensitivity response. It's where we eat a food and the food can create an inflammatory response that's non-obvious. And let me give you an example of what I mean. Somebody who developed high blood pressure. High blood pressure is an actual symptom of chronic inflammation.

And so, we know there are certain foods that will trigger chronic inflammation that will lead to a hypertensive state. But we don't feel high blood pressure. We generally go to the doctor and we get our blood pressure taken. And the doctor says your blood pressure is high. And we're like, 'Oh, I didn't even know my blood pressure was high'. Right? Because it's relatively, unless you're having a stroke or unless your blood pressure is so high, it's creating headaches, it's non-symptomatic so we don't really feel it happening.

Well, some foods create a chronic low-grade inflammation that can lead to these types of symptoms of chronic inflammation that over time weakens the immune system, detracts or distracts the immune system. Remember, the job of the immune system is not to attack your food. The job of the immune system is to allow your body to survive the environment with adaptability and resiliency.

And so if your immune system is so busy attacking food, chronic food allergies in a low-grade way, you're going to dwindle away your immune resources so that when cancers or other diseases like infections try to pop up, they're going to win the war. And we don't want them to win the war.

So where food elimination diet won't work is if we're having delayed hypersensitivity food reactions. And this is where I recommend testing. There are actually several, but there are different types of laboratory technologies that are now available and doctors can order them. Where we can isolate and identify what are called delayed food responses. And so understand that a delayed food response has a window of inflammation that a person can respond within three hours, all the way out to three weeks. So there's this three-hour to three-week window where a person can have an inflammatory response to foods that is largely asymptomatic.

So if they're eating foods that cause inflammation all the time, they end up with chronic inflammation that causes immune suppression and immune weakening. And then they end up in this very bad place. And in some cases, they actually end up with autoimmune diseases, meaning the immune system becomes so reactive to food, it goes on hyper alert, meaning the immune system is so used to attacking that it starts to attack the human body too. It gets confused. And so we end up with the

state of an autoimmune reaction, which is the exact opposite of what we want our immune systems to be doing.

Jonathan: Dr. Osborne, as you've been talking the last few minutes, I can really pull out in my mind that one of the biggest tools that we have in our toolbox, if you will, for improving immune function is increasing our awareness. That's what this is all about. I'm picturing the person out there who's suffering with a whole bunch of different things, different disease symptoms, different conditions, different medications they're on, their diet they're not quite sure what it is they're really eating, they haven't even thought about it at all.

So increasing that awareness through what you were just talking about already, the elimination diet, if you will or going through that process the way I think about it of simplifying things, calming things down. I'll go all the way over to the other extreme. I'm sure I can get your comments on this, Dr. Osborne. But like a water fast of three days or seven days. I mean, sure, it has to be under medical supervision especially if you're talking about someone who's really sick.

But just the fact that someone's going to put in clean, fresh water into their bodies and nothing else or just dropping away medications sometimes because there's no more need for it or sometimes doctors even say, 'stop taking these drugs that are hurting you so much'. And all of a sudden, the person feels better. Why? Because the body has cleaned house, right? Things have simplified about what's going in and hurting it. And now the body's awareness level is going so high that it can now protect itself from harm. And generally speaking, the person tends to feel so much better, right?

Dr. Osborne: Yeah. I mean, you're absolutely right, Jonathan, fasting. It's even spoken about in the Bible. But it's one of the best tools being aware and just not putting pressure and stress on our gut. The immune system itself, as we're talking about immunity, remember that 75%, someone argue as much as 80% of our entire immune systems are concentrated in our gut. That's called the gastro-associated lymphoid tissue. And so it's like tonsils that are wrapped around your small intestines.

And if you're eating all the time things that aren't good for you, things that are generally not healthy, foods that you're potentially allergic to, your immune system 80% of it is right there. It's right there attacking all of those things you're putting in your body. So just the act of fasting alone shuts down a hyperreactive immune system because even though you're no longer putting in potential nourishment, you're no longer putting in detriment and you're giving the gut a break.

You're giving the immune system a break. You're allowing the body to mount the liver's response for better detoxification. If you're staying

hydrated with that water, you're telling the kidneys to help push toxins out of the body. And so all of that that fasting can do is such a powerful, powerful thing for people to attempt.

Jonathan: No doubt about it. It is a common theme throughout this entire event. The Immune Defense Summit is talking about things that threaten immune health. And it's so important to be aware of those threats. And even in military language, they will say with all the macho stuff they have, the weapons, the pure muscle power and strength that each of these soldiers have, the most intelligent military people will tell you, the best way to protect yourself from any kind of threat is just to simply avoid them. Not to engage in them and start fighting them. But to just simply avoid threats. And that's a big part of this event, is making people aware of them.

So, having said that, Dr. Osborne, this is an important part. Getting together with a physician that really appreciates all of this. Like someone like you. Are there specific lab tests that are beneficial in helping a person to identify these immune weaknesses? Because for me, with my athletic background, I really have grown to appreciate how getting this feedback and becoming more aware is really the first step.

Dr. Osborne: No doubt about it. First thing is self-feedback right? Listening to your body. And that's the best doctor, right? To be your own doctor in that sense, is just to listen to what your body is telling you. But when you reach a point where you are listening...And maybe you're still struggling. Maybe you've been diagnosed with cancer or autoimmune disease. Maybe you've been diagnosed with a chronic infection and you just can't seem to beat it. This is where lab technologies can identify these potential weaknesses in the immune system. It can give you insight into how to fix them.

One of my favorite types of testing to do, Jonathan, is to look at the nutritional status. There have been at least 200 studies published on how the nutritional status of the human affects the function of the immune system. Let me give you an example, vitamin D. Vitamin D, if we look at what it functions to do—Think of vitamin D as the parents. And think of the immune system as the child. Vitamin D helps to mold and shape the behavior of the immune system like a child as the parent, right? So vitamin D is kind of regulating and guiding the immune system so that it doesn't overrespond. It doesn't underrespond. It has an appropriate response. So vitamin D is just one example.

Other nutritional deficiencies that I commonly see in immunocompromised patients, zinc deficiency, vitamin C deficiency, vitamin A deficiency, L-glutamine deficiency, B vitamin deficiencies. These things can all be measured. And so, if you've got a really good and astute doctor working on your team, one of the first things you should

have them do is measure for essential nutritional deficiencies. And when I say essential, I mean you cannot get essential nutrients by making them inside of your body. You have to eat them.

So if you're not eating them or if your gut is compromised and you're not absorbing nutrients properly, we want to know what you're lacking, what you're missing so we can put that in so that your immune system can get the balance and the support that it needs to function appropriately.

One of my other favorite tests is measuring the function of the gut itself. So much of our immune system is dependent on our nutrition. So if our guts are broken down—for example, there are a lot of people out there taking antacid medications or taking antibiotics because their immune systems are compromised and they're getting recurring infections.

There are a lot of people with autoimmune pain diseases that are taking immune-suppressing medications like the biological drugs like Enbrel or nonsteroidal anti-inflammatories or steroid-based medications. These medications damage the GI tract. And they can hinder your body's ability to absorb and digest. And so now what happens, if you're on these medications for long periods of time, you become malnourished. So if, one, we can measure your nutritional status. Two, we can measure the status of your gut. Is your gut inflamed? Do you have the right microbiome? Are you producing digestive enzymes? Is there some other kind of issue within your GI tract that is preventing absorption? Those things can be measured and then we can take action upon them, based on whatever we find.

So measuring gut status, measuring nutritional status, measuring for delayed food responses or for delayed chemical allergens so that we can address the person's behavior and lifestyle to accommodate their own uniquenesses. Everyone is unique in their own right. So lab testing can help identify what these uniquenesses and what these additional needs might be so that we can design a blueprint plan for an individual to follow beyond the very intelligent aspect of just listening to your body.

Jonathan: Just a very simple practical question for you, Dr. Osborne, before we get into—I know we want to address vitamins and minerals, specifically, and how they play a role in the immune system function. We're going to get there. But just, again, on a practical level, are people to be testing vitamin D, B vitamins, vitamin C, what are the names of these tests? Is there one comprehensive test for gut function? How do you help people understand, hey, if you go to a practitioner, this is what you got to ask for, you know what I mean?

Dr. Osborne: Oh, absolutely. Absolutely. So if we're talking about nutritional deficiencies, it's not one test. It's lots of different kinds of tests. So let me give you a few examples that are helpful. For vitamin

D, we can ask our doctors to run a test called 25-dihydroxyvitamin D. Otherwise, we can abbreviate that as 25-OHD. So 25-OHD would be one test you could ask for.

Another test that can be asked for is a test called homocysteine. H-O-M-O-C-Y-S-T-E-I-N-E. Homocysteine, it's an amino acid derivative but it's an indirect marker for vitamin B12, folate, and vitamin B6 deficiencies. Another test for vitamin B12 deficiency is called methylmalonic acid. We could test vitamin B2 by ordering or measuring something called erythrocyte glutathione reductase activity coefficient. Again, that's a big mouthful. But the erythrocyte glutathione levels will tell us a lot about vitamin B2.

Now, there is a group test. There's one really good test that you can also ask your doctor for. That test is called a SpectraCell, SpectraCell, S-P-E-C-T-R-A-C-E-L-L. And what SpectraCell measures is it measures about 35 different nutrients, Jonathan. So you can get the B vitamins measured. You can get zinc and magnesium and calcium and chromium and copper and selenium and vitamin A and vitamin E and vitamin K. All those things can be measured off of that one test. So if you are limited in what you're able to ask your doctor for, if you just had that information, that would go a really, really long way toward helping you identify your nutritional status.

Jonathan: And what about the gut function or other things that might be—I don't know, some key things for them to throw out. And say, hey, I want to take a look at it. Is there—I mean it's a lot of tests or what's the story?

Dr. Osborne: Yeah, the same thing there. There's multiple types of tests. So depending on the story behind the patient, if we want to know about gut function, we want to know about the liver. We want to know about the gallbladder. Because those are organs that help the gut do its job. Those are called accessory GI organs. They help the gut do its job. So we are going to want to measure the pancreatic output, which you can measure from a blood test that any doctor can order.

And there are a couple of blood tests that can be ordered. One's called lipase, L-I-P-A-S-E. Another is called amylase, A-M-Y-L-A-S-E. So lipase and amylase are pancreatic enzyme tests. These are enzymes your pancreas releases to help you digest your food. Then, you can also look at liver enzyme function tests. There is a test called ALT and another test called AST. There's another test called bilirubin, which will help us understand whether or not the liver is functioning appropriately.

There's a number of different types of gut tests where we take stool samples. And the stool samples can help us to identify bleeding within the GI tract, the occult blood. Or they can help us to identify different

types of bacteria or different types of infections that live inside your GI tract, like parasite infections or yeast overgrowths or bacterial imbalances.

But we can also measure chemicals for inflammation. There are a couple of different chemicals. And a lot of GI doctors are familiar with these types of tests. But one of them is called a calprotectin. Measuring calprotectin in the stool. Calprotectin is a marker of inflammation. So if you've got an inflammatory bowel problem, we can measure that through calprotectin. There's another marker we can look at. It's called lysozyme. And that marker can be looked at. It's also a measure of gastrointestinal inflammation.

There's another marker that can be measured. It's called secretory IgA, secretory IgA. IgA stands for Immunoglobulin A. Secretory IgA is the first line of defense. It is the very first antibody that your immune system produces in response to anything you put in your mouth. So understand you make secretory IgA. You make it in your saliva and you make it in your intestines. And if your IgA levels are low and you have that as a measurement, there are things that can be done. There are treatments, there are supplements that can be done to support that low IgA level so we can bring it back up to speed. So all those are just different examples of functional tests that can measure the function of the gut and the ability of the gut to properly do its job.

Now, there are a few others that can be done. You can do a fecal fat test that measures for fat malabsorption. There are tests that can measure carbohydrate and protein remnant fibers that are being found in high quantities in the GI tract. And so with these types of things, these are signs of malabsorption where a person is just not breaking their food down. Therefore, they're not getting the nutrition out of the food that they're eating.

So, I know it's a lot of different tests. So when you go to your doctor, just go back and make sure you—I would encourage anyone who's listening to purchase this event because I know the information is wonderful in this event. You've got so many great speakers. But I just said a lot of things. And so you want to go back and re-listen to that and write all those things down. So that when you go in to talk with your doctor, you have a list of things that you can approach that doctor with where he can say, "Yes, I'm familiar with all of these different tests and we can get these ordered for you."

Jonathan: Dr. Osborne, you just read my mind, 100%. That's exactly why I say to people throughout this event. The Immune Defense Summit is an entire tool for you. If you're suffering with any kind of serious ailments and even if you feel like you've tried everything before, I guarantee you. In my five plus years—I've been on the internet now and

producing almost 500 programs—I can tell you that each and every one of these conversations that I'm having with healthcare providers, if you listen to this two or three times, you're going to get a minimum of 50% more out of each and every conversation.

Just incredible, Dr. Osborne, what you just went over alone with the tests.

So now we've got a heightened sense of awareness. That's a powerful tool. The tests that we need to heighten our awareness, no doubt. Now, let's get into some of these other things like vitamins and minerals that play an important role in immune system function. Talk to us about it, please.

Dr. Osborne: Yeah, I mean, there's a whole battery. I mean if we look at where most of the research focuses on vitamins and minerals. If we would say, okay, what are—like what are some of the top ones that we absolutely need to have for a healthy functioning immune system? Bar none, hands down. I don't think anybody could argue this, Jonathan, that vitamin C is one of the most critical essential nutrients that we can use to strengthen immune system. And so vitamin C helps to detox. It helps to bind heavy metals. It serves as a fuel source for your white blood cells. Vitamin C acts as a natural anti-histamine for people suffering with chronic allergies. Vitamin C acts as a binding agent. It helps to produce bile so that we can digest fats like vitamin D, vitamin E, vitamin A, vitamin K, and omega-3 fatty acids.

Vitamin C plays a role in collagen formation, which is one of the structural integral proteins that our immune system needs to make antibodies and other things. So vitamin C, hands down, is—we could argue all day long. We could write text books about functions of vitamin C as it relates to the immune system.

One of the others, though, that is commonly found in immune-boosting formulas—you'll see it if you ever go to the market, you're looking for something to help your immune system—is zinc. Now, zinc plays a role in more than 200 chemical reactions inside the human body. And those are just the ones we know about, Jonathan. I mean, there's always that we don't know what we don't know.

So the more we learn, the more we realize we don't know. But zinc plays at least a role in 200 different chemical responses. Many of them are in immune-regulating components. Zinc regulates part of the thymus gland's job. The thymus helps to filter our white blood cells. The ones that are too strong or the ones that are too weak. The thymus' job is to prevent them from getting into the circulation.

And it does that under the direction of zinc. Zinc also plays a role in an enzyme system called superoxide dismutase or sometimes referred to

as SOD. This is an antioxidant system that helps strengthen the immune system. It helps our body to detoxify. It helps our liver to appropriately work. So SOD is very, very critical. There are actually studies now showing how it helps preserve the length of our DNA, our telomeres on our DNA, which is one of the factors in human longevity and human health.

So zinc plays a role in insulin production. So now think about this, this is a little bit different because it's not a direct role of immune function. But zinc regulates—if we look at what insulin is, insulin is a protein. And this really long chain of amino acids—we call the chains of amino acids, we call those proteins—but the centerpiece that holds insulin together is zinc. So we can't make insulin without zinc.

Now, what does insulin do? Why is insulin so important for immune function? Insulin regulates blood sugar. So the way our bodies generate energy is it converts glucose, which is blood sugar, into energy so that our immune cells have the energy that they need to do their job, right? So, if we don't have zinc to make insulin, we can't get the sugar out of our blood into our cells so that we can generate energy. And what happens is our blood sugar goes up.

Now, when our blood sugars get really high, what happens is there's this chemical reaction called glycation. And that's just a fancy word that means that sugar starts to thicken our blood. And sugar starts to bind to our proteins, into our hormones, into our immune factors. And it basically makes our blood stream really, really sticky.

And now, all those proteins that are in our bloodstream that are important for immune factors and important for immune function, they're gluey. They're sticky. They don't work as well. And so if we don't have adequate zinc, we can't prevent our blood from getting thick and sticky. Our immune system is going to naturally be suppressed as a result of that. That's just a by-product of elevations in blood sugar over time. So zinc is very critical.

Other one I want to mention, because a lot people haven't even heard of this nutrient. It's L-glutamine. L-glutamine is an amino acid. Now, we can get L-glutamine when we eat eggs and when we eat meats and certain vegetables do contain L-glutamine. However, L-glutamine, what you should know about it is that it serves two very big functions. One, our small intestine cells, the cells that line our small intestines—these are called enterocytes—they use L-glutamine as their fuel source. So they don't use glucose as a fuel source. They use L-glutamine.

So when people are L-glutamine deficient, their guts don't work as well. And now, they can't absorb and digest their nutrients as well. And so now, you remember all these nutrients that the immune system relies

on and depends on, right, goes back to L-glutamine because if we don't have L-glutamine, the gut cells can't absorb and can't digest food appropriately.

Now, the other function that L-glutamine has—I said that L-glutamine was the fuel source for the small intestinal cells—but it is also the fuel source for lymphocytes. Lymphocytes are the primary type of immune cells. If you've ever heard of a T-cell or a B-cell, these are types of lymphocytes. These are the types of white blood cells that help us battle infections. That help us fight cancers. That help us to regulate the debris that our body creates, the natural toxins that our body creates just on our day-to-day processes. And these lymphocytes help to, basically, they help to gobble up and eat up all these toxins. They help to build our immune system. And L-glutamine is the fuel source for these lymphocytes.

So I would say, for the sake of time, I know we could talk all day about this. But just those alone, vitamin C, zinc, and L-glutamine are very, very crucial to overall immune system health and function.

Jonathan: Dr. Osborne, I'm just having so much fun listening to you here. I think I probably just forget the rest of the questions and just have you continue to talk. But I tell you, I know anyone listening to your message is going to be completely blown away. And there's a reason for that, I'll tell you. Because Dr. Osborne is busy helping a lot of healthcare providers out there to be better practitioners.

I would strongly encourage anyone out there in the healthcare profession to go check out some of the events that Dr. Osborne is doing. Because it's going to give you this kind of detailed information so that you can be a better provider to people out there.

And for the regular person out there who's not a healthcare provider, this is just great to bring to your healthcare provider. And if they're looking at you with like a blank stare. Well, you know what I'm about to say. It's time to get another healthcare provider. So it's just extremely valuable on both ends that we understand where you're coming from.

Dr. Osborne, I don't know if there's anything else right now in terms of the most common nutritional deficiencies that you see in your clinical practice that lead to immune problems. You've covered so many different things already. But is there anything else you want to add before we move on to autoimmune disease in particular?

Dr. Osborne: I think absolutely, yes. I would be remiss if we didn't talk about anemia. Now, anemia means without oxygen, right? And the body needs oxygen. That's why we breathe air. We get the oxygen out of the air. But having oxygen is not the same thing as having oxygen delivered

to our cells. So anemias happen when we breathe in oxygen from the environment but our red blood cells are not capable of delivering that oxygen to our tissues to generate energy and normal function.

Well, certain nutrients that I see that are extremely common that cause anemia...Most people who think of anemia, they think of iron deficiency. And yes, you're absolutely right. Iron deficiency causes anemia. But there are nutrients—a lot of times the doctor will run a test. It will be what's called a complete blood count or CBC. And this test measures the red blood cells, the white blood cells, the hemoglobin, hematocrit, MCV something called mean corpuscular volume, which is the size and shape and color of your red blood cells.

So these tests can tell us a lot about whether or not a person might have anemia. But most of this type of information on these tests only tells about iron. But you can have—and this is the most common anemia I see. Vitamin B12 deficiency anemias cause a special kind of anemia called macrocytic anemia.

Now, vitamin B12 is responsible for helping red blood cells mature. Meaning, if they don't mature, they don't carry oxygen very well. They get really clumsy and they can't hold on to oxygen so we become anemic. What happens when we have B12 deficiency and then we become anemic is we're not generating or driving energy. So our immune cells can't produce the energy in order to properly function.

So what will happen to a lot of people, they become B12 deficient. They'll get short of breath. They'll develop fatigue. Many people will develop migraine headaches as a result of this kind of anemia. But what happens too with B12 deficiency is it damages the gut. It prevents the gut from making new gut cells. As your gut cells get old and die, it's harder for your gut to replace them with new gut cells. And so you become severely malnourished.

So again this is one of those that it creates an anemia while at the same time affecting the gut causing malabsorption and malnourishment of other nutrients. And it's so common. I see this in at least, at least 50% of the patients who come to see me in my clinic.

Jonathan: Dr. Osborne, when I'm listening to you talk about anemia in particular, it's a really strong message as far as I'm concerned. And don't get me wrong, I am all for a plant-based diet. I love all the vegetables, fruits. I see all of that. It's what I grew up on in terms of when I shifted to a more natural health and healing lifestyle through my macrobiotic days in the late '80s and early '90s. I love it all.

Except, B12 deficiency is rampant especially in the vegan communities. You've got to be careful if you're hooked on it for just philosophical

reasons, it's fine. I've got all the respect in the world for you. But you've got to be careful if you think just being vegan is great. And having all the pasta, flour products, cookies, bread, eating plant food, some veggies but you're really low on B12. And then you're getting that shortness of breath. And then on top of that, you think exercise is great. You're going to try to push yourself and exercise. But you're wondering why you're limited in reaching your goals. And why you don't feel stronger and stronger as you're exercising. A lot of this could be coming from being constantly in a state of anemia.

Dr. Osborne: Oh, no doubt about it. And I want to be clear on something too. Because you mentioned something and I think it's worth repeating. You said vegan diet. A lot of people don't know what a vegan diet really is. A vegan diet means no animal products whatsoever. And I get this in the vegetarian communities all the time because there's vegan diet, which is no animal product. Meaning no meat, no butter, no cheese, no fish, no dairy. No animal by-product at all, purely vegetables.

But then there's vegetarian diet. Vegetarian diets, there are different kinds of vegetarian diets. There's lacto-vegetarian, meaning that somebody doesn't eat meat but they do consume dairy. There is ovo-vegetarian, which is they will consume eggs. And then there's pesco-vegetarian, which is the only meat will be fish. So there are different ways to be vegetarian. I want to be clear on these different definitions.

But when we say vegan, we're talking about somebody who eats no meat at all. And some people are not genetically designed for that. Some people are. And that's part of what I like to differentiate within my clinic because there are people that are better served on a vegan diet. And then there are people that are better served as eating meats.

And if you don't know who you are in that realm, you can actually hurt yourself even though you're trying to do things right philosophically. Maybe you are an animal rights advocate. Maybe you just feel like eating vegetables and eating plant-based product as a healthier thing to do. And it may be for some people, but it may not be right for you.

And I would just encourage you to get with somebody who knows how to do the right kinds of tests to help you to discern that. Because not everybody is cracked out for a vegan-based diet. And many people will become very ill. And it will take a couple of years. A vegan diet will—it'll take a couple of years for that B12 and zinc deficiency and B6 deficiency and methionine deficiency to start really, really showing up. But those deficiencies, we mentioned several of those nutrients as they're related to the immune system, right? That's part of how a vegan diet in the wrong person can really, really cause a lot of immune problems.

Jonathan: And of course, I do hope that people really listening carefully

to all of these conversations really get where I'm coming from. This is about having a balanced approach. Everything I'm doing and all of these conversations—and, Dr. Osborne, you are not disappointing at all. All of this is about having a balanced, intelligent, good approach to what feels the best for somebody.

And we have to take everybody's individual situations into account. See what resonates best with you. And then take those actions. But don't ever get lost in all of this information. And the main point being, you are to have lots of great energy, not be getting sick every now and then throughout the entire year on a regular basis and just accept that as the way life is.

You should be flexible. You should be in a great mood. You should have a clarity of mind. You should be able to rest well at night, get a good quality sleep. And have great energy during the day. This ought to be normal. And that's why I created this event to try to get more and more people over to that kind of normal because that's what we're entitled to have. That's what we're born to be able to enjoy all the days of our life.

Dr. Osborne, autoimmune disease, it's a big deal. It's a major health crisis. A lot of people are suffering with it. And a whole lot of others don't even know they're walking around with it. They're completely undiagnosed. And again, back to that word, unaware of what's going on. What do you recommend for those who have overactive immune systems?

Dr. Osborne: Well, first of all, I'd say, if you've been diagnosed with any condition...Many conditions that people have, I'm going to give you a couple of examples. A lot of people walk around with hypothyroidism. Meaning they've been diagnosed and they're on a medication. And they've been told they need the medication for the rest of their life. But they've never been told that the condition itself is autoimmune. So they don't even know they have autoimmune disease. They've only been told they have a thyroid condition.

Some people walking around, for example, with ulcerative colitis or Crohn's disease. These are autoimmune conditions of the GI tract, of the large intestine. Some people are walking around with anemias. There are forms of autoimmune disease that cause anemia like pernicious anemia. So they don't even know. They've just been told they have anemia. They haven't been told that their condition is autoimmune. So all that being said, if you have an existing diagnosis, the first thing I would have or ask of you is to ask the question, "Is this diagnosis an autoimmune diagnosis?" There is an estimated 46 million Americans, just in America, that's just America, 46 million with an autoimmune diagnosis. And that's just what we suspect is known. That's not what we suspect is unknown.

And to give you an example of how prevalent autoimmune disease is becoming and how much more we're learning about it. We've now identified that osteoporosis is a form of autoimmune disease. We've identified that diabetes, and I'm talking about type 2 diabetes, can be a form of autoimmune disease. We've identified that certain forms of cardiovascular inflammation like high blood pressure, but more in particular, pericarditis, is an autoimmune disease.

So we have these conditions that people have been diagnosed with. They've never been told, "Hey, you have an autoimmune condition." They've just been told with the name of the diseases. And they've been given a medication to either suppress inflammation or to suppress the disease. But they've never really been told what the disease is or how it starts. And how they can be empowered to make changes in their life and their diet and their lifestyle. Potentially in supplementation, they can actually put the disease into remission.

Jonathan: So true, Dr. Osborne. Every single person who has any kind of health problem at all should listen to every presentation in this event because I couldn't agree with you more. Most people are being quickly diagnosed. And I underscore *quickly* in a very sad way: some sort of diagnosis based on symptoms that the person presents to the healthcare provider. Boom, they're given a label, the medication. And there's no richer understanding about what caused the problem, and even more, importantly, what ought to be done.

So that leads me to our last question, Dr. Osborne, to wrap things up here. Beyond diet, which we talked a lot about; food, vitamins, minerals, things like these; is there anything else that you feel people should do to maximize immune function.

Dr. Osborne: I am going to go through a few things here because one of the things that I did not mention. And I would feel bad if I walked away from this conversation and didn't say it. Gluten sensitivity is a major, major problem in this country. But it goes even deeper than that. A lot of it stems from grain, from the mass consumption of grain.

If we look at the staple foods in our diet, most things are either corn, rice, wheat, or oat-based. And people are being told to eat eight to ten servings a day. But what they don't realize is that the grain they're consuming: One, a lot of it is genetically modified. Two, a lot of it is sprayed with very toxic pesticides, especially something called Roundup or glyphosate.

This is a pesticide that all by itself can cause immune dysfunction and immune dysregulation. It's linked to cancer, among other diseases. And beyond that, grains can be heavy, heavy in mold toxins that can suppress the immune system. There's a family of proteins in grain called

ATIs, amylase trypsin inhibitors. They shut down the digestive tract and they also create digestive inflammation.

So we've all been told for years, "Eat whole grain. Eat whole grain. Eat whole grain." And we see this epidemic of autoimmune disease and immune suppression. And part of that problem is that grain is the major staple food that's being served up to the population. And I would say look at your grain. First of all, look at what you're buying. Is it GMO? Is it organic? Is it heirloom? Is it sprouted? There are all these important components about it. But many people are gluten sensitive. So it's not just gluten, but it's other things in grain. But many people with autoimmune disease are gluten sensitive.

So I'd encourage you to look at your diet. Beyond just eating healthy, it's potential that gluten sensitivity or grain sensitivity is playing a major role in your immune suppression. This is one of the most common things I see in the practice.

Okay, beyond the diet, let's go into a couple of different things. Number one, we live in a culture that is sunphobic. We've all been told by dermatologists for decades: Avoid the sun. You're going to get skin cancer. The sun is bad for your skin. It's bad for your health. Nothing could be further from the truth. We don't want to avoid sunshine. We want to avoid sunburning. And there's a very big difference between the two. Sunburning creates radiative damage that the body has to repair and heal from. And radiative damage can be cumulative over time, meaning radiation accumulates in the body and it can become very toxic.

So if you burn, you're going to get radiative damage. If you get regular sunshine, you're not getting radiative damage. And that's the distinction. Humans are designed to get sunshine. Our circadian rhythms, our hormones like cortisol and serotonin and melatonin all are under the influence of getting adequate sunlight. If you look at very perfect examples of cultures or people in the world that don't get sunshine, people from Alaska that live further north, people in Russia. What do they use? They use sun lamps. Why? Because if they didn't, they would get seasonal affective disorder. They would be depressed. Their immune systems would start shutting down on them. They would start developing diseases like rickets because they're not absorbing vitamin D or not getting the vitamin D from the sunshine. So, sunshine is such an important non-dietary factor. That people have been brainwashed to believe they absolutely need to avoid the sun. So, again, grains, sunshine avoidance.

One of the other components that I would say is a big miss, especially in the United States because of the way our culture is. It's go, go, go. It's fast-paced. People don't get enough sleep. They don't get adequate

rest. Remember rest is downtime. It's what our body needs to repair and recover. It's what our immune systems need to get a break.

And if you're getting six hours a night, okay, but your hours of sleep are uninterrupted or you're going to bed beyond what are called reasonable sleep hours. The reasonable sleep hours, like the key sleep hours that we really want to have, and write this down, 10 p.m. to 2 a.m. That four-hour window is the optimal time that you need to be asleep. Not getting in bed at 10. Not falling asleep at 11 or 12, but sleeping between the hours of 10 p.m. and 2 a.m., preferably longer on both ends of that, right? Going to bed at a decent time and sleeping through the night.

But 10 p.m. to 2 a.m. is the time—the scientists have really studied this timeframe. It's the time where we heal and repair the most. It's a time where our circadian rhythms are reset. And so a lot of people chronically go to bed at 11 or midnight. And they're missing 50% of that window of healing. And so they're just becoming chronically deprived of the healing process. So their body is in chronic breakdown, in chronic catabolic breakdown. And that can be a major, major problem in helping the immune system recover and helping the body heal and repair itself.

Now, the last thing, so far I've said grain. I've said sunshine., I've said sleep. The last thing that is largely overlooked, in my opinion, that I see very frequently is a lack of mobility and movement. Again, we're a go-go society. But most of our go-going is getting in a car and driving. And then getting to a desk or an office and sitting. So there's very little physical acumen or physical behavior that people have. Remember, our bodies are 70% water. When water is stagnant, that breeds problems. That breeds infection. It breeds bad bacteria. Our body is 70% water. We need motion and movement or our water in our bodies become stagnant.

But the other reason why we need movement is because our lymphatic glands, our lymphatic vessels, which are just like blood vessels. The big difference between your lymphatic system and your blood cardiovascular systems is that your cardiovascular system has a pump that is always on. That pump is called your heart. So your heart is always beating, pushing blood through your body, pushing oxygen and nutrients through your body. But your lymphatic system doesn't have that pump that's always on. The pump for the lymphatic system is movement. It's motion. It's exercise.

And so if you're in a sedentary job, if when you get home you're tired because you've been sitting all day and then you just go to lay down or sit on the couch or watch TV and you're sedentary for the vast majority of the waking day, you're not circulating your water fluids and your lymphatic fluids and you're weakening your immune system. You're weakening your body's ability to detoxify through the lymphatic system.

And you're hindering the way your white blood cells are capable of traveling to different tissues throughout your body.

So in summary, look at grain. Look at sunshine. Look at exercise. And look at sleep as fundamental things beyond the diet that if you're not doing, you need to be doing if you want your immune system to be happy and healthy and protective of your body.

Jonathan: Wow. That's all I can say. Dr. Osborne, you talk about us being light creatures. We're also dark creatures as well. We need that darkness. I strongly recommend for anyone listening to this message, make sure you tune in to the wireless devices conversation I've had with Dr. Dietrich Klinghardt, where we talk about the impact of wireless technology on our physiology, on our immune system, and most importantly how it's affecting our sleep. Believe me, after listening to that conversation, you'll see how intimately tied together wireless devices and understanding that is connected to so much that Dr. Osborne talked about.

And also another one that I strongly recommend, you look at is poor oral health, the dental dangers. We'll be talking to Dr. Stuart Nunnally, who is the past president of the International Academy of Oral Medicine and Toxicology. Very important overview about anything to do with poor oral health issues, which have a lot to do with immune function as well. Dr. Osborne, I want to thank you so much for your time. And I want to thank our listeners for joining us today. If you would like a copy of this program plus all the other presentations inside the Immune Defense Summit, simply click the banner you see on this page.

Thanks again for attending the Immune Defense Summit. Talk to you soon. Take care.

Testing Immune Strength: A Functional Approach

Guest: Dr. John Dempster

Jonathan Landsman: Welcome to the Immune Defense Summit. I'm your host, Jonathan Landsman, creator of naturalhealth365.com.

Did you know that every year, drug-resistant bacteria or super bugs kill 700,000 people worldwide and is projected to be more lethal than cancer by 2050; and infectious diseases still remain one of the leading causes of death? Cancer, cardiovascular problems, and diabetes are by far the leading cause of premature death in the world. But in reality, all of this is avoidable with a strong immune system. That's why I created this event, to help you understand the roots of disease and how to prevent and reverse life-threatening illnesses by re-empowering your immune system.

Our show today: Testing Immune Strength – A Functional Approach. Our guest, Dr. John Dempster, is a licensed naturopathic doctor and is the medical director of the Dempster Clinic, Center for Functional Medicine.

His clinic in Toronto, Canada focuses on a functional medicine model to treat a variety of patients ranging from high-performance individuals to those with or wanting to prevent chronic illness such as cancer, diabetes, heart disease, and even autoimmune disorders.

Dr. Dempster has a strong passion for helping patients embrace an optimal aging philosophy to help them achieve a long, healthy, vibrant, and fulfilling life. In addition to his busy practice, he writes for a number of publications, speaking to corporations on a variety of health topics, and is frequently featured on national television, radio, and magazines.

I've often said throughout this event that testing is essential when trying to uncover the source of any major health problem, especially immune-related issues. Today, we will review many of the most important issues related to immune health including the best tests to use and why.

Please join me in welcoming Dr. John Dempster to our program. Dr. Dempster, welcome.

Dr. John Dempster: Thanks, Jonathan. It's great to be back on the program with you. How are you doing?

Jonathan: Just doing great. And it's a pleasure to have you, Dr. Dempster. Why don't we first start off—because this is really important to have a good understanding about this, especially if people are looking for a functional medicine physician, what is functional medicine and how can this be applied to improve our overall health?

Dr. Dempster: So yeah, great question. Functional medicine is becoming more and more popular today. And it is something that I really, truly believe is going to be an integral part of the medicine of the future.

And really when it comes down to it, it is a very customized medicine that is looking at establishing and understanding the root cause of illness.

And for many people, this could be many different things. We always tell each person that walks into our clinic, it's not about treating your disease. It's about treating you that may have X illness or Y health goal.

And really what I'm so passionate about doing is getting up every day and really learning about what is going to be the obstacles behind each person's optimal level of health. And to me, functional medicine has a set of tools that allows me to get there.

Jonathan: So why don't we talk a little bit more about what makes up the human immune system. Because I think it's very important for people to have this clarity. As I've often said throughout this event, Dr. Dempster, without the immune system being strong, all bets are off. So let's talk about this a little bit more.

Dr. Dempster: Yeah, for sure. So our immune system is a very complex system overall in our body. And it's developed by a number of different factors. And a number of different organs are contributing to the immune system of our body. We have for example our thymus, okay. We have our tonsils and our adenoids. We have our spleen. We have our lymph system, our lymphatics. And then we have our bone marrow. And then a big area that we dive into a lot as functional medicine doctors is the gut. And we'll talk a lot more about that specifically later.

But those, collectively, are a major part of what constitutes our immune system. And one of the most important things to consider actually in the sort of development of the immune system—and I don't want to get too boring here in the details.

But something that is not boring at all and it's fascinating what's going on in our society is how we're born. And that is people are born obviously through natural and vaginal birth. And then some people are actually born through C-section. And there's a lot of research right now that are saying that this is where our immune system actually gets its launch pad right from the beginning. And we should be, as much as possible, encouraging natural vaginal deliveries to really kickstart that immune system from literally day 1.

Jonathan: Dr. Dempster, you just reminded of something that I often say I feel is a real issue in terms of people trying to figure out. They know they're suffering. They know they don't feel well. But in terms of trying to figure out, what do I need to feel better? And I use this term often, "disconnected," right? And I'm sure you can appreciate what I'm about to say already.

Based on what you just said—and I say this with a bit of sadness in my heart—is that when people are born not vaginally, right, like you said. They don't get that critical first information. And then we can just go down the line constantly with the kind of, really, sickening information, if you will, that babies will get when they're injected with all kinds of toxins and vaccinations, which we talk about in this event, and alternatives that would protect our families.

So it's a combination of not getting the right nutrients, not being breastfed. And then instead of that, getting soy formula and processed foods and injecting chemicals.

All of this information, the signaling if you will, is so sickening that it's no wonder that our immune system doesn't have the ability to protect us from harm. Does all this make sense to you?

Dr. Dempster: Absolutely. And we see it every day, Jonathan. And to speak and to come at this from a personal level, I want to make sure that everyone knows that there is a time and a place for a C-section delivery—to come back to this for the moment. A lot of people are actually opting for C-sections, which is something that I would strongly encourage against unless it's absolutely necessary.

For me, personally, the birth of our daughter recently. We absolutely had to have that via C-section. And of course, me being a naturopathic doctor, I'm being very pro-active since her delivery to make sure that we're supporting her immune system.

But my message to start off our talk is try not to elect for this, if you don't have to. I know there are pros and cons to both. But it really is the microbial baptism to start this baby's life. And it's critical on many ways.

Jonathan: And it's also, again, beyond the scope of this conversation. But really quickly, Dr. Dempster. I'm sure you see this all the time in terms of the influence that people have had in terms of listening to the message that breastfeeding is demonized. Or even eating healthy food is some sort of mental illness. And it just goes on and on that all these basic natural things to support immune function are somehow put out there in the mainstream media as if they are inconvenient, not necessary, because we are in a modern world. I mean, it's really not getting it, right?

Dr. Dempster: No. And that's absolutely fundamental for optimal health. We've got to let the mother nurse. And again, we're not going to go into this in too much detail today. But that is paramount to, again, kick starting that immune system and the health for that child and that baby.

At the end of the day, and we can go down another tangent here, Jonathan, but there's a big industry there. And there's a big industry promoting formula products and all sorts of things. And again, a time and a place for formula, don't get me wrong. There are certain women that cannot breastfeed, and that's a lifesaver for that child. But when you can breastfeed, do it. And it's so important to pass those antibodies in. And start to create that immune system from a very early age.

Jonathan: So if this interests you, this is not what we're going to focus on today. I strongly encourage you to listen to Dr. Heather Wolfson. I promise you, you will not be disappointed in her conversation with me about family health where immunity begins. It is absolutely off the chart. Dr. Dempster, let's get right into it. What role does the gut play in improving immune function?

Dr. Dempster: This is a tremendous area for functional medicine doctors to focus on. And in my opinion, if we're not talking about the gut, we're missing a major piece of the puzzle in here for optimal health and especially immunity.

What we're seeing in the research right now is that there are patches of cells in your gut tissue, specifically the small intestine, that compromise a huge amount of our immune system. And some researches are suggesting this is as high as 80% of our immune system is actually in our gut tissue.

And so when I have a patient that will come to see me who has a compromised immune system, this is where I start. This is absolutely the

foundation of any program that I work on with a patient. And we start to do some investigation into how their gut is working.

And there is a word that we're going to talk about probably in detail today. But the microbiome is a term that a lot of people are starting to hear more and more. And this is basically a collection of all of our bacteria. And we have different microbiomes in our body.

But there's a big microbiome in our gut that is really important to nurture many of our systems. Not just our immune system. But this is how we start to build up somebody's immune system and immunity, when we're doing a workup with them.

Jonathan: I want people to pay close attention to the end of this program. And get ready to take a whole bunch of notes. I'm sure you won't be sorry about that because we are going to be covering all the functional medicine tests that are used to reveal immune system problems because again, Dr. Dempster, it's like what I always say in so many other programs that I've created, you need that feedback.

Some people need it so much more than others. I would say most people do because it's just a natural human thing. It's sort of like we want to physically see it. Give me some numbers. Let me know where I'm at. And then let me go and do something specifically that'll help improve my immune system and get rid of these disease symptoms I have. And then let me re-test and see that things are going in the right direction.

Of course, we go by the way we feel, and we want to feel excited about heading in the right direction. But it sure is great to get these test results and we are going to dive deep into that towards the end.

But, Dr. Dempster, we really need to talk about this one. How does stress—and I would gather you want to talk a bit more about mental, emotional stress versus, say, the obvious very physical stress that people may be under, but how does stress affect the immune system? Talk to us about it.

Dr. Dempster: Well, first of all, I wish I could tell you that I could take away everybody's stress. That's not going to happen. And in fact, we actually need certain amounts of stress to perform and to actually achieve optimal health.

But the problem is what we're seeing is that we are being inundated with different stressors in many different areas and walks of life right now. There's a very interesting book written called *Why Zebras Don't Get Ulcers*. Have you ever read that?

Jonathan: No, I haven't.

Dr. Dempster: Put that on your to-do list in terms—or your book list. It is a fascinating read. And I'll summarize it very quickly here. Basically, what's fascinating about zebras is they'll be walking, doing their thing, eating grass out in the plains. And a lion will appear. And within seconds, that zebra is either lunch for the lion. And they show that within about 60 seconds, this is the window.

And if it hasn't been caught in 60 seconds that zebra will literally start and kind of shake itself off and start eating the grass again. It's not thinking about what did that person mean by that. It's not screaming at the traffic jam that's in front of him. It's not worried about their finances or a fight that they've had with a loved one or anything like this.

What's happening is we as humans are very advanced so that we start worrying about everything. And we have more stressors on our plate now even despite all the technology and all the beautiful things that are supposed to make our lives easier. We are under more stress now than we ever have been in the history of mankind.

And so this is a huge role to play on our endocrine system, which is our hormone system. And we will start talking a bit about hormones such as cortisol and adrenaline.

But cortisol specifically is our stress hormone that is secreted when we see a stressor. And, like I said earlier, we're supposed to have a little bit of stress to thrive and to be optimally healthy. But if that stressor is happening all the time, 24 hours a day, we are not having that rest period that is required after that cortisol secretion. And our immune system will suffer. And it suffers in a big way.

Jonathan: It's interesting, Dr. Dempster, as I was listening to you talk. It's like when we're talking about testing our immune system, I think life is a real test as well. And I would imagine you just on an intuitive level when you're working with patients. Of course, you could correct me if I'm wrong. But a really good physician I would think just wants to sort of listen to the patient. When they're coming on, 'Oh, I can't believe what happened to me yesterday or what somebody's done to me my whole life'. It's this idea that we often hear about how it's important to let go.

And my own background in athletic training, over 30 years in the health and fitness industry, and mostly at the beginning for sure, working with high-performance athletes, they were under a tremendous amount of physical stress. No doubt about it. But they're able to perform at such a high level for such a long period of time.

The analogy I use is like a 2, 3-hour plus tennis match. But if you

noticed their demeanor, every time they're "tested" with a very stressful situation, like a critical point in a match and losing the point, they just brush off, like what you say. Turn their body around. Body language is good. Let go. Think about what they'd want to do on the next one. And it's even true if they win a point.

The mentality that goes into it to handle stress is really, 'whatever's happened to me, okay. I observe it. But it's time to move on, to focus on the next thing that I would like to do'.

And it's a great way to go through life especially when things are very stressful like putting together an event like this. A lot of stress behind it, but I take it one day at a time. I can only have one conversation with you at a time. And I think you know what I mean.

Dr. Dempster: Well, I do. And, Jonathan, just to add to that, I've been the host of the Mental Wellness Summit for the last two years. And I always joke with my listeners. I've never been more stressed in my life than I have been hosting a summit on mental health. And so, we all have our moments of stress.

But we need that clarity, and we need that rest period afterwards to recharge. It's not about avoiding stress. It's about going through it. And then taking that time to recover and repair. And that's really how we're going to withstand that.

Jonathan: And I do feel like in a very functional, real way, to kind of take a word from the medicine that you practice, Dr. Dempster, is that, people need to really test themselves. Like I say, just check in with yourself. How are you responding to situations? How are you perceiving it? What are you looking at it as? Is it something that you're learning from? Or you're just kind of stuck in the way that you're perceiving that stress and just wishing it would just go away. And it never does.

It's sort of like I remind myself of that movie *Groundhog Day* with Bill Murray. If you don't get your stress right, every single day, that stress is going to keep coming up day after day. The same thing until you get things right.

Dr. Dempster, let's talk a bit more now about how diet affects our immune system. Because this is important. It can either help nurture it, keep it really strong, or it could be a constant assault on the immune system, no?

Dr. Dempster: Jonathan, Hippocrates, the father of medicine—and this is a quote you've probably heard many times. But he said, "Let food be thy medicine and medicine be thy food." And we do start there. This has a tremendous impact on every aspect of our well-being and our health

going forward. And it's so critical today more than ever. Because food is not the same as it was 100 years ago. It's not the same as it was 20 years ago.

So we have a big challenge ahead of us. And there's many degrees of diet and nutrition that I love to touch on with my patients. And again, the beauty of functional medicine allows me to almost do like a health audit, so to speak, on each patient to find out what systems potentially are stressed or even broken in some regard that we start to work on. And at every program that I start a patient on, it begins with food.

And so for example, some of the foods we're eating are actually detrimental to our immune system. Some of these again might not be of surprise to your listeners. Things such as refined sugars. One teaspoon of refined sugar—and again, I'm not going to tell you how much the average American has in a day right now. But one teaspoon of refined sugar suppresses your immune system for up to 12 hours. That's a big number.

We're considering how many teaspoons are in a can of coke? There's more than one. I'll just say that. And how many people are having soda every day? How many people are having candy and potentially dessert at virtually every meal? This is where we begin to strengthen somebody's immune system.

There are other areas of the diet that are critical. We are eating certain foods that have been fed antibiotics for example such as animal products. And back to the whole gut for a moment and the microbiome, if you're eating foods that have been fed antibiotics, that's going to have an impact on your microbiome. And that potentially could start to create an imbalance that is going to be detrimental to your immune system.

So it is important to be looking, if you are consuming animal products, for meats that are not antibiotic-fed. For dairy, if you are consuming dairy, that is not fed antibiotics, et cetera, et cetera. That's very, very important.

One other big area from a detrimental standpoint is the topic of gluten. And I'm sure you have some other speakers, Jonathan, discussing the impact of gluten on your health and your immune system.

But very quickly, I've been very fortunate to do some work at Harvard University, where some tremendous research is being done right now, showing that, back up for a moment, it's not all about celiac. Most people when they hear about celiac and gluten, they think that's the only area that we need to worry about. If I'm celiac-free, I can go ahead and eat gluten.

Well, the problem with that is that there's a whole area called non-celiac gluten sensitivity. And this has been shown in the research and the data right now to have a tremendous impact on your gut and potentially creating all sorts of detriment to your immune systems.

So those are some three big watch out areas for food. And there are many more. And we won't get into it all right now. But the good news is there are a lot of foods that are tremendous for boosting your immune system and supporting your immune system. And so it's very important to work with the doctor or a practitioner that is going to look at nutrition first.

Jonathan: Sure. And, Dr. Dempster, many of our programs throughout the Immune Defense Summit, many of the conversations I've had with other experts we do dive deep in towards food. But you said it very well in a nutshell.

We're looking at, since World War II, the factory-farmed foods, the over-commercialization. Corporations are now delivering most of the foods to most of the people. And we really need to be mindful of this. The chemicals that are being introduced.

The lack of nutrition in the soil. The soil is such poor quality and it's raising the kind of monocrops out there on most of the farms—at least here, certainly, in the United States—where the nutritional level of these foods is very low. That alone is stressing the immune system just by having less nutrition in the food.

Then on top of that, all the other things you mentioned. The antibiotics pumped into the animals if we're buying the wrong kind of animal products that are not grass-fed. All the chemicals that are sprayed all over the food. And then, we're ingesting that as well.

So there's a tremendous amount of stress on our immune system that then we're asking it to do too much for too long. And then we wonder why we can't get rid of cancer cells that develop inside of our body, you know?

Dr. Dempster: Absolutely. Yeah. There are so many areas to look at. And you touched on it. But the genetically modified organisms that are a common place now on the shelves, we're just starting to see the impact that those have to play on our genetics and, ultimately, our physiology and biochemistry.

So we really got to go back to the basics and really pay attention to the quality of food. And I always tell my patients, I say, 'Look, if the food you're eating has a label, you've already got one strike against you'. Try to avoid foods that are packaged and processed.

Really try to get foods that are—you can pick right off the produce section or out of a bin such as nuts and legumes and things and such. And really start to go back to that basic food that we can literally grow in our garden or go to a farm and get. And obviously, not everybody has access to that directly. But this is the type of shift that we're starting to see a bit more and more when it comes to health.

Jonathan: And, Dr. Dempster, we're going to step into now this world of functional medicine tests. And I want to pay a lot of respect to everybody who's listening to this program. Not everybody can afford all the tests that might be mentioned.

So maybe at the beginning, just as a general overview, Dr. Dempster. I was thinking as you were talking about all these things, how we could sort of self-test ourselves, if you will? Are we functionally working right? Or are we setting ourselves up for some really serious illnesses in our future? Or perhaps if somebody's going through something right now, how can we sort of take a look at ourselves and say, 'Wow, this is revealing to me that I'm not doing well on an immune system level'?

And just as an example, Dr. Dempster, I'm just thinking of one thing of asking every person out there an honest question for an honest answer. Do you have a very long, large bowel movement every single morning? Does it come out easily? Not to be too graphic, but there's a test right there. If you're failing that test and not evacuating like that every single day, if there's some constipation and your conventionally trained medical doctor is saying, 'Oh, you know, you're going a few times a week. That's fine. Nothing really to worry about'. That's incorrect, no?

Dr. Dempster: I love where you're going with that. These are things—functional medicine is not just about fancy tests. It's about understanding your whole system and your way of being. It's a very integrated approach to healthcare.

And yes, certain tests can be very, very beneficial, and they're worth every penny. And some of these tests are not cheap, as you've alluded to. But there are things you can do every day. And absolutely, if you can have at least one bowel movement, ideally two or three, and I know that sounds absurd to some people. But that's a very good check considering 80% of your immune system is in your gut. We want to make sure that we're evacuating properly.

Another one of these self-tests that I love to ask patients right away is how much sleep do you get? Okay. Now, there's a range there depending on each person's genetic, unique bioavailability. But what we're looking for is are you getting that seven to eight hours? That's a good solid amount of sleep that, on average, helps the masses. Are you active? Are you doing your exercise? Are you getting eight servings of

vegetables every day?

Actually, before we do any fancy “tests” with our patients, we actually have them submit a very detailed questionnaire. And it takes them about an hour to fill out. And these are things that just get them thinking and starting to do that self-analysis in all sorts of various systems. So absolutely, that is such a powerful way to start a workup with somebody.

Jonathan: And it certainly, as you go through that, gives the physician such an incredible opportunity to go into so much. I mean, just the few things you mentioned alone about sleep quality. No, I go to sleep late. I’ve got to check my email. And I’m watching the late night news. And I’ve got my cell phone next to me that sometimes wakes me up. Like whoa, wait a minute. What did you just say? You’re looking at artificial light late at night, which is affecting your hormonal balance? Like on and on, you know where I’m going with this. It’s just without even a medical test, you could say, ‘Okay, this is a walking train wreck and the EMF pollution’. And it just goes on and on, right?

Dr. Dempster: Antibiotics, medications, pharmaceuticals—and again, a time and a place for these. But those have a tremendous impact on your microbiome. So this is the data that we can collect very simply and, obviously, in a very inexpensive manner that can really set the stage for a treatment program.

Jonathan: Okay. So take us through it a little bit more, Dr. Dempster, in terms of some very useful functional medicine tests that people should know the actual name if they were going to go talk to a physician. This is going to be invaluable. Maybe you want to touch on cost a little bit. But I know it can vary depending on what labs and where somebody’s going. And also, of course, more importantly, why should someone care about these tests? What do they reveal?

Dr. Dempster: I like to tell my patients when they come in that we are going to start a whole new build for a home, so to speak. This is the analogy I like to lay down to them. And what’s the first thing—if you were to build a home, what’s the first thing you do? While most of us would actually envision a big hole in the ground where the foundation gets laid, where they pour the cement and let it dry so that it becomes nice and strong.

This is what I do at the very beginning. As I start to cast the net quite wide on a number of different systems with some broad-reaching blood work and testing that just gives me a little touch point on a number of different areas to kind of understand where we need to go from there. And this is really what I call the foundation and the beginning of our functional medicine workup. And that involves some very detailed serum blood work.

We are going to look at all the major organs: Your liver. Your spleen. Your pancreas. Your kidneys. Your immune system. And your red cells, your white cells. We're starting to talk about heart health, inflammatory markers. This is actually all done in one test. And that is one of the first tests that we tend to do with most people.

I also do, in that first appointment, if I have somebody who has never been in for functional medicine before, we start talking about nutrition. And again, I know we talked about it all begins in the gut. But what I want to do is I want to make sure there are no roadblocks that are in our way coming out of the gates that are big red flags that we need to address right away.

For example, a lot of people are walking around with different thyroid issues that they're unaware of. Their doctor may have only done one or two thyroid tests on them. And there's actually six. And so, again, we make sure that we're looking at this because the thyroid has such a huge role to play on your metabolism and the rest of systems in your body.

So we cast that net wide. We see what comes back. We sit down, and we review with them. We get their nutrients back. We find out where they're deficient.

If I see a lot of deficiencies, I'm already starting to think about things such as intestinal permeability. This is a very specific test that we would use. It's a urine test that would let me know what is the status of our absorption going on in our gut. Are there some signs of inflammation in our gut that we also measure as well?

And when we're using the gut health, this is sort of what I call the first floor of our home rebuild, so to speak. We are looking at that intestinal permeability. We are starting to do some stool analysis, which really starts to cast some information back to me on microbes such as yeast, bacteria. And not all bacteria are bad, by the way. We want to make sure that we're measuring your good bacteria levels. Looking for any sort of parasites, any cryptosporidiums, any other ovas. We are measuring absorption. We're measuring digestive markers. And we're also measuring inflammation.

And again, I know this is probably going to sound a little overwhelming for somebody who's new to functional medicine, but all of those markers are done in one test. And it can be just invaluable for getting information that they would never have known all the while.

So that's a good starting point. And basically what we see there, Jonathan, is that starts to give us the 'choose your own adventure' mindset. We start to see what's been flagged, and then we will start to pursue those areas.

For example, if I do see that somebody has inflammatory markers in their bowel or something called lactoferrin or calprotectin, for example, that to me is something that needs to be resolved in order to help somebody absorb things better and, again, prevent further detriment to their gut. We will start to potentially investigate foods. And there's different ways of measuring how food impacts in your body. Everything that comes into your body is assessed.

And our body immediately- our immune system looks at something that's coming in. For example, let's say a piece of celery comes in. Your body immediately says is that friend or foe. And it tags it. And we want to start to understand how is your body perceiving foods as they come into our body.

And there are different antibodies such as IgG, IgM, and IgA. And again, not to get too complicated, but there's tools out there for patients who are struggling with their health that can get these measured to identify how your body responds to foods.

And many people equate food allergies to what I'm talking about right now. But it's actually different than an allergy. An allergy is a very immediate reaction. And this is something that's usually pretty self-evident to most people. But it's food sensitivities that can be very tough to figure out on your own. And again, to test something is to look for something that we don't know.

And so those are the types of things that we start with, Jonathan. And there's obviously some more that we can get into. Did that give you a good idea just coming out of the gates?

Jonathan: Oh, it really does. And you said a few interesting things, again, going back to these very practical things that people need to keep in mind. If they want to really protect their immune system, essentially, to protect their life, and that is this idea that if you sense or you're angry or you're upset and you start eating, those signals about how you are mentally or emotionally will affect the way you digest food. If you actually mentally think to yourself, this stuff is really toxic. It's not good for me. I'm going to take this alcoholic drink anyway. Or I'm going to eat this dessert. I mean you know where I'm going with this.

Just, literally, thinking like that on top of putting the food into you, boy, are you setting yourself up for having all kinds of immune problems, maybe not after one meal. Sometimes it does affect you like that.

But over time, it's this kind of stuff I think that people should be asking themselves more. Be more aware of what they're saying to themselves. And literally, again, test yourself, right? Are you okay with what you're eating? And are you okay when you eat? What a big boost for the

immune system that alone, if you just get it right. Right?

Dr. Dempster: Absolutely. One of my mottos is when you test, you don't guess. And again, I like to use that analogy of a health audit or almost like a GPS of your body and how it's responding to these various areas such as foods as we're talking about.

And other areas that we start to look into are toxins and hormones and certain genomics. These are how your genetics are programmed. These are the other things that most functional medicine doctors have at their fingertips that can really start to get more and more specific, as we've got that foundation laid. And we've built on that. Then, we can start to get into these other areas that, again, attract a lot of attention out there.

So, for example, looking for toxic metals such as lead or mercury or arsenic. These are ubiquitous metals that are in a lot of our bodies that we do not know. And for many people, this is a big obstacle for them in terms of getting to that next level of an optimized immune system. And potentially, it's even triggering this whole autoimmune pandemic that we're seeing right now. So these are some of the other areas that we really focus on and can be really life-changing for people.

There's a very detailed hormone test out there right now called the Dutch test. And it literally is my favorite hormone test on the planet because it's looking at not only all of your sex hormones and your stress hormones. It's looking at all your metabolites as well.

And there are going to be six pages of data that helps the doctor pour through to get a very specific treatment program once we run that panel and get it back. Because traditionally, we use blood, and we use some saliva. And that's been very helpful to date. But it's not always giving us the full picture. So that's really what I love about functional medicine is the detail that we can gather from these tests.

Jonathan: In the Immune Defense Summit, Dr. Chris Shade is one of our featured speakers. Please make sure you check out his presentation about talking about how to get rid of toxins.

He also happens to be part of Quicksilver Scientific. You've got to check out that company. You can ask, of course, your physician to look into this as well. They are great with blood, urine, and hair samples to test all kinds of heavy metals.

This is a wonderful overview to see where it is that you might be weak at getting rid of these heavy metals and where they literally could be just lodging themselves in the body. And at the current time, your body is having a hard time getting them out. And then what needs to be done to sort of literally mobilize them safely.

And I underline the word SAFELY. And eliminate them from the body because detoxification can be, if you're not careful, a very dangerous thing. It can cause more problems than good, right?

Dr. Dempster: I'm really glad you said that, Jonathan. Yes. Detox has become a very big fad word in the healthcare arenas right now. And it's not great for everybody. And it's certainly not a one size fits all approach. We have to assess everybody to understand, first of all, what needs to be detoxified? And do the other detox organs have the wherewithal to support them when they're picking up the slack, when we're actually putting more toxic debris into the system to clear out eventually?

So it's so key is not to be jumping on a lot of these one-size-fits-all detox programs without working with a functional medicine doctor that can give you at least that insight as to what areas should be supported and what areas should be actually detoxed as much as possible.

Jonathan: And, Dr. Dempster, I'm sure you're seeing this with the people that come into your office. I just want to throw out something else. Again, we're not getting too technical, and it is on purpose. Sure, you can check with a functional medicine physician about the actual names and to actually read them and interpret them. Let's face it. Most people listening to this program are not going to go bother and do those kind of things. They can look into it a little bit more on their own like you said about the Dutch test for hormones.

But just generally speaking, Dr. Dempster, if we're looking at someone that's got brain fog and they're feeling depressed and especially if they can't tie it to something specific like, God forbid, somebody died in the family. I mean, we get it. That's not necessarily a gut problem. But that's where I was going with this.

Here's a way that we can again self-test. If I'm dealing with depression on some level and I don't always even necessarily understand where it's all coming from. And it's a chronic thing or I'm having trouble with the clarity of my mind and my brain function, that definitely is something going on in the gut that we need to look at.

I would say two other things that I've learned in natural health, the natural living, and in this world of studying, anger issues, which was a huge deal for me connected to the liver and looking at the liver. And you see, when people go through really great detoxification or maybe change in lifestyles, right. And their liver gets healthier, wow, they're a different person. They let go of that anger. What happened? This person's totally different.

And then the third element of emotions that if somebody is dealing with being generally afraid so much, so much fear in their life, there's a lot

going on there with kidney function. And we may want to look at that. And the idea is test and get these areas feeling healthier. And then the person's mental and emotional framework, if you will, just completely changes. Right?

Dr. Dempster: Absolutely. I love that you've touched on those. And those organs are classically linked to those emotions. So listen to your body. And that's really key.

I tell my patients when they come in, I mean, I tell them I'm learning every day from them. But ultimately, they know their body by and large and the most part better than anyone else. And they just have to listen to it. And our body speaks many languages. And sometimes it will speak a very loud language. And many of us have chosen to ignore that. But just pay attention. Just listen. And I think that's a fantastic thing you said.

Jonathan: That's very important too. We can close out the program, Dr. Dempster, with you having the final word. But I've often said in different programs, kind of thinking a little bit in the back of my mind. Oh, somebody's going to think there I go again being so unscientific.

But the idea that everybody knows, right? Here it is. I am going to make an appointment with you, Dr. Dempster. And I'd like you to be my physician. I'd like you to be a part of my team. I'm suffering with some sort of illness, right? And I go in there and I kind of say, what do you think's wrong with me? And it's like I'm testing you.

And what I'm suggesting is that we find a physician who of course is capable of doing the testing like a functional medicine physician like you. You can go out there, get the test done to kind of integrate into this whole thing, having a plan of action of what we should do.

But my point is, I feel like people intuitively really know, I've been eating and drinking horribly. My lifestyle emotionally and mentally is a real train wreck. The way I perceive things is just so off. I feel jittery. I've got to calm down. There's too much stress. Or I'm up too late at night with electronics. You know what I mean. All these things, you go on and on.

I think, intuitively, people ought to just be okay with really understanding you know the answer and find a good healthcare provider that can work with you to discover and work through those things. What do you think about what I'm saying?

Dr. Dempster: Well, it's funny you say that. And I actually joke with my patients, especially my new patients. I say, "Look, if I was to lock this door and I wasn't allowed to let you out until you told me what you really think are your true obstacles, what would they be?" And they kind of look at me strange. And I crack a smile. But the point gets across to them.

And they start talking. And they go down all sorts of different areas. And it's really them telling me what's going on. And all I have to do is coach them through this and potentially look at some ways to support them in those systems.

But that is such an important part of being a healer and being a doctor is to listen to your patients. And I love that you brought that up. That's one of my favorite questions to ask my patients. And it's been invaluable in helping them achieve their health goals.

Jonathan: Right on. And, Dr. Dempster, I would say to anyone listening to this program, if you don't feel that way about your healthcare provider—and I'll go a step further, of course, and I think anyone would know where I'm about to go. If you feel like when you even perhaps think about mentioning something, you get that sense that you're just going to feel like, 'Oh, I'm such an idiot. I'm so uncomfortable. Why would I even say anything? That healthcare provider is going to make fun of me or something.' You know what? It's time to find another healthcare provider.

Because I got to tell you, Dr. Dempster, I have someone like you, a naturopathic doctor, a doctor of osteopathic medicine. He is licensed in acupuncture as well. He's getting into herbs. He loves Ayurvedic medicine. He's board certified in integrative medicine. I mean, this guy is passionate about getting the certifications, being tested, studying, going away to the Himalayan Institute. Going away to conferences.

And it's this kind of person that I can just sit down with over a meal or just sit down on the couch and talk about things. And it's just amazing how we go back and forth and really figure things out. You know what I mean.

Dr. Dempster: Absolutely.

Jonathan: Dr. Dempster. I want to thank you so much for your time. And I want to thank our listeners for joining us today. If you would like a copy of this program plus all the other presentations inside the Immune Defense Summit, simply click the banner you see on this page.

Thanks again for attending the Immune Defense Summit. Talk to you soon. Take care.

Energy Medicine: Miracle Cures Exposed

Guest: Dr. Gerald Smith

Jonathan Landsman: Welcome to the Immune Defense Summit. I'm your host, Jonathan Landsman, creator of NaturalHealth365.com. Did you know that every year, drug resistant bacteria or super bugs kill 700,000 people worldwide, and is projected to be more lethal than cancer by 2050, and infectious diseases still remain one of the leading causes of death? Cancer, cardiovascular problems, and diabetes are by far the leading cause of premature death in the world. But in reality, all of this is avoidable with a strong immune system.

That's why I created this event, to help you understand the roots of disease and how to prevent and reverse life-threatening illnesses by re-empowering your immune system.

Our show today, Energy Medicine: Miracle Cures Exposed. Our guest, Dr. Gerald Smith, is a recognized international authority on craniomandibular somatic disorders with a focus on resolving chronic pain and dental medical issues.

He is the author of a landmark textbook, *Cranial-Dental-Sacral Complex* and the first researcher in the world to do radiographically document cranial bone movement. Dr. Smith also contributed his expertise to several books including *Reversing Cancer*, *Headaches Aren't Forever*, and *Alternative Treatments for Conquering Chronic Pain*.

The field of energy medicine is growing in popularity and respect from many, including conventionally trained healthcare providers. As we search for better solutions for seemingly incurable diseases, one thing

remains clear. Although difficult to see or comprehend in many cases, the quality of our energy has everything to do with the quality of our life. For example, we know that if the energy of the cell goes down too low, this increases our cancer risk.

So what exactly is energy medicine? And how can it help us in our life? Let's talk about this right now. Please join me in welcoming Dr. Gerald Smith to our program. Dr. Smith, welcome.

Dr. Gerald Smith: Thank you, Jonathan. It's a pleasure to be on your program.

Jonathan: Dr. Smith, why is energy medicine so much more effective than conventional allopathic medicine?

Dr. Smith: Well, energy medicine's diagnostic systems are much more comprehensive than allopathic medicine. Energy medicine also evaluates the underlying causes of the illness rather than focus on the blood test, which just show abnormal values but not the real underlying cause.

And there is a second part to the component, and that is energy medicine's based on quantum physics. It provides the platform for the assessment and resolution of the primary stressors. So this very sophisticated computer system uses scalar energy to capture the patient's holographic energy pattern in ten seconds. And it has a database of approximately 122,000. That's 122,000 electromagnetic signatures to compare the patient's energy pattern.

So you're getting a comprehensive evaluation that there is no blood test in the world can come even close to this. And that the system that I use is called CyberScan system, and we use it on a routine basis. And it will pick up such stressors as heavy metals, pathogens like mold, fungus, viruses, bacteria, and chemicals, including pesticides, food additives, preservatives, herbicides, fungicides and EMFs.

So this is what healing is all about. Like you said, when the energy is reduced, cancer comes on. And these chemicals and viruses and heavy metals are what are reducing the energy of the cell membrane.

Jonathan: Dr. Smith, not to get too off into left field about this, but I think it is interesting that everything you just mentioned seems to be still a huge disconnect for conventional medical doctors and even for conventional science for that matter.

And what I'm referring to is everything you just mentioned. The toxins, the heavy metals, all of this, they keep saying that these things are very toxic. If you are exposed to mercury, a thermometer breaks in a

hospital, my goodness. What would they do? They would evacuate the hospital floor if something like that happened.

But yet they'll say a little mercury in vaccines, no big deal. Little heavy metals, no problem in our food or our supplements, there's no problem with that either. Toxins in our food, it's just such a small amount. Don't worry about it.

They just go on and on recognizing things as being dangerous for our health, really bad for our energy levels, and yet when it comes to specifically outing where these things might be in our environment, in our food, in our water, then they tell us, "Don't worry about it." It's crazy isn't it?

Dr. Smith: Well, the reason's real simple, Jonathan. You can't use drug therapy to treat these issues.

Jonathan: That's a great point, exactly. They seem to also be very fixated on just drugs or surgery. And what I also find interesting, Dr. Smith, is this idea that energy medicine though is actually in conventional medicine. And yet I say it's more popular, but there's a long way for us to go.

I think more and more doctors need to realize how a lot of this invisible energy, if you will, has a huge impact on the body. And I don't mean just to be able to see through the skin and be able to see bones like with an X-ray. There is some energy medicine at work. Wow! We can see inside the body. But what kind of impact radiation would have on our body if we were exposed to it too much. You know what I'm saying, right?

Dr. Smith: Oh, absolutely. We are getting irradiated everyday from Fukushima, and that's going to create many problems down the road.

Jonathan: So why are there so few physicians, would you say, that are using this type of medicine that I know you are so passionate about? What's going on here?

Dr. Smith: Well, the answer is multi-factorial. Many physicians are not aware of the existence of this sophisticated technology. And furthermore, it requires hundreds of hours of post-graduate seminars and extensive learning curve to understand the concepts.

It also requires a financial investment, to purchase the equipment plus the time to clinically become proficient at using the technology. So most of these doctors they can't afford, with their high price of overhead and everything like that, to take all this time off to learn this technology.

Jonathan: Dr. Smith, just for a moment. Something else has just popped

into my head that I think is so important for everyone to be aware of. And maybe it's a tricky concept to bring up, but I'm going to give it a shot and get your feedback as well.

This idea that when a doctor says to a patient, "Oh, I don't think that stuff works." Or maybe they flat out say, "Energy medicine doesn't work." Or, "Don't waste your time with that. Just stick to the pharmaceutical drugs." And the things that I'm talking to you about. Maybe you have to go see a specialist to do some surgery.

A lot of times, all of this is on false beliefs. It goes back to what you just mentioned, Dr. Smith. None of them actually really know the machine that you use, the testing, the science behind it, your results, which we are going to be talking about, Dr. Smith, the things that you've actually experienced in your own life in working with real people. They don't know, is my point.

They are just believing something that they got from a journal or maybe another person who only believes something. And then they have the audacity to tell 1000, 2000, 3000 patients in their panel, "Hey, this is what they think." But most people don't realize that it's all based on a belief and not a real knowing. Do you know what I'm saying?

Dr. Smith: Well, yeah. It's dogma. And a perfect example, my own daughter, about ten years ago, came down with Hashimoto's which conventional medicine says is autoimmune disease. And the endocrinologist that she was seeing wanted to put her on Tapazole to literally suppress her overactive thyroid.

And she asked me, "What should I do, Dad?" And I said, "Lori," I said, "Don't go that route." And so she told the doctor, "My dad's going to treat me alternatively." And right off the bat, he said, "It doesn't work." So anyway, she went my route, and I diagnosed with energy medicine, Epstein-Barr virus in her thyroid. Put her on two nutrients that tested very positive against her Epstein-Barr. And loaned my Rife machine, which is again energy medicine.

In 3 months, Jonathan, her thyroid was 100% normal. And the doctor, when he saw all the blood results and everything, you would think he'd say, "Jeez, this guy disproved me. I'd like to learn." Not a word.

Jonathan: Yeah, it's really sad what we are talking about, but I feel it's equally so important that we bring this out because the whole Immune Defense Summit is about raising awareness. What are the real threats to our immune system? And what are the things that can really help us?

And I think a large part of this, Dr. Smith, is about understanding and appreciating attitudes. And I'm not trying to pick on physicians. A lot of

doctors want to help their patients. But I want them to be more open-minded. I see this as an amazing opportunity, and I know there are a lot of healthcare providers that are listening to this program. So please don't misunderstand my message today.

Dr. Smith, talk about it. Are there any instances where there are physicians that are using both forms of medicine? How does this all work? Conventional medicine and medical testing that we've mentioned already, blended with these energy medicine tools.

Dr. Smith: Well, the answer is a resounding yes. There are no magic bullets in diagnostics and treatment in each field, but a good physician will integrate the best of both paradigms. A perfect example is the use of 3D tomography to achieve a comprehensive view of bony defects surrounding, let's say, the roots of a tooth that's creating problems. Energy medicine can then determine the specific pathogens in a defective area, which the nutrients can be effective in resolving the problem.

So in this case, you have mechanical radiographic analysis showing you the defect. However, energy medicine is the one that's going to determine specifically what the pathogens are and which nutrients will be effective. So this is the best of both worlds.

Jonathan: Just to clarify, Dr. Smith, because I know you said it very quickly and you, and I share a passion in alerting people to the serious health threats that poor oral health has on the rest on the body. You mentioned cone beam. Is it a cone beam X-ray or scan? Maybe you should just clarify that because not all dentists have this ability to look at the mouth this way.

And I say this, Dr. Smith, with all due respect to all the conventionally trained dentists out there, but a regular X-ray, they are not really showing the whole picture. Can you explain this a little bit better than I'm doing?

Dr. Smith: Yeah, surely. Cone beam is literally giving you a three-dimensional coverage of that structure. So you are seeing...a regular X-ray or so-called bite wing that you described is two-dimensional. With the 3D cone beam, you are seeing literally virtually around the entire tooth in the bone. So you are going to see areas that are not visible through a two-dimensional, conventional X-ray.

Jonathan: And then what happens from there is, like you said, just to clarify, people could be walking around with all kinds of infections from these normal X-rays, thinking they are totally fine. Yet still at the same time frustrated with their health, not feeling well and not realizing that they actually have infections that could be uncovered with a cone beam

scan. Is that correct?

Dr. Smith: Well, that will definitely be one step in the right direction. The other component, again, is energy medicine. Radiographs, whether it be cone beam or conventional, literally capture the signature energy of the pathogen. So you literally can test off an X-ray and get an answer. So meaning, I could take an X-ray of a patient that I never even have seen and test it energetically and pick up what pathogens are present in that tumor or broken bone or root canal tooth just from the X-ray.

Jonathan: Oh, wow. So you see that's very important as well for people to know that, "Oh my goodness. I'm not close to Dr. Smith." Or, "How do I find someone?" And then there's so much stress mentally and emotionally over these issues of wanting to know an answer. What you again said so quickly is, if they just simply get the test done, it can actually be emailed basically to someone like you. Is that correct?

Dr. Smith: Absolutely. We do consults from patients all around the world for that same reason that they can't get to us. But the important thing is getting a proper diagnosis, because without a proper diagnosis, whatever treatment is provided is incorrect. You got to have the correct diagnosis to get the proper treatment.

Jonathan: Obviously we could talk for probably two, three hours, Dr. Smith, about probably every ailment under the sun and probably still not get to all of them, not even close.

But I know we're going to talk now about how energy medicine can be effective against cancer. Because again, if you can take care of cancerous conditions, I guess you could really take care of just about anything right?

Dr. Smith: Absolutely. No, cancer represents the ultimate breakdown of the immune system. It's years of exposure to toxins like heavy metals, chemicals, vaccines, and their fillers, genetically modified foods, unsaturated fats like canola oil, and radiation from Chernobyl or Fukushima coupled with nutritionally deficient foods and a poor lifestyle.

It all coalesces to establish a polluted, acidic body terrain and a depressed immune system, which then allows opportunistic organisms to flourish and cause cell mutations.

A perfect example, we had a patient referred to us about 9 months ago with lung cancer. They cut the tip of the lung off where the cancer was and then used conventional chemo. And I don't have to tell you, Jonathan, but 6 months later the cancer came back in the upper part of the lung.

So the patient was referred to me. I had her pathologic slide from the hospital that she brought in, and I literally energetically tested what was in the pathology slide of her cancer. She had a pesticide, a virus, and mercury in her tissue. And the patient couldn't afford a lot of vitamins, so I put her on a bare bone regimen to take care of those 3 items. Well, in 6 months, Jonathan, her cancer totally disappeared.

Jonathan: It's incredible, Dr. Smith. Maybe for a moment, I think we should probably and explain a little bit more about this energy testing. This is a tough one for a lot of people because I happen to personally be familiar with the machine that you're using. It's quite extensive in terms of the software that's used to look at so many things on a physical level, a mental level, an emotional level, a spiritual level.

It goes very deep in analyzing and evaluating priority-wise where someone is being threatened in their own life. So can you explain a little bit more how this actually gets done?

Dr. Smith: Well, it's the groundwork of how the body is functioning. If someone is fear based, and unfortunately, most people when they get the big C diagnosis, are in total fear, which really shuts down your immune system or adversely affects how it can operate.

The key in the equation is that conventional medicine is looking at culprits, cancer cells. When, in fact, energy medicine is surveying the whole terrain. It's looking at the whole forest not just one or two trees. And this forest is represented by all these variables like heavy metals, pesticides, poor quality nutrients or lack of nutrients. And this sets off our toxic terrain as I said previously.

That's the stage. The cancer is not the disease the cancer is like acne on the skin. It's just a symptom. The key is it's a polluted environment because, just like a splinter, it causes pain and inflammation. You could put all the Mercurochrome or Iodine or whatever you want on there, and unless you get that splinter out, that tissue can't heal properly.

And it's the same thing with cancer. You remove the offending stressors, the metals, the polluted foods. Put in good nutrients. Then the body can heal. It's that simple.

Jonathan: But then what I mean is when someone is fortunate enough to actually have this energy test done with the machine right there in the medical office, how does that get done versus say somebody who is at a distance? They can't actually be there.

First, explain the person that actually goes and gets tested because I think most people, Dr. Smith, think of it as, well, is it a blood test? Is it a urine test? Does this test hurt? Is there any risk to my body? Things like

that. So just explain that for a moment.

Dr. Smith: Yeah, it's totally noninvasive. You can literally take a sample of blood, urine, saliva, or hair. And it has a Tesla coil, which then captures the holographic energy pattern.

In other words, the blood of your body or the urine or saliva or the hair all has a holographic energy pattern of your whole body. This is sophisticated concepts of quantum medicine, quantum physics.

And this coil that Tesla developed back in the 30s can capture this energy pattern. It's then analyzed. If you're in Australia, for example, and I'm here on the East Coast, we just test them, your hairs or saliva, and we capture that pattern of what the stressors are in your body. And then from there, the system imprints 2 to 3% of the main stressors that are affecting your immune system.

And by taking the liquid, it's an impregnated solution, it wakes up your immune system to deal with these 2 to 3% primary stressors that are causing your medical problem.

It's a beautiful concept. And we used this extensively with the woman with the lung cancer and the results speak for themselves. It's not a "maybe, if" type of situation. It's concrete.

Jonathan: Dr. Smith, another thing I want to add to really help people with the visual about this. And I guess what I'm really trying to get at is the appreciation of what we are talking about with energy medicine is, my good friend Mike Adams over at Natural News, he actually was able to show people, on stage at a conference, the frequency vibration of vitamin C or a heavy metal like mercury.

It was really quite extraordinary. And what I'm getting at is, most people obviously day-to-day would not know looking at, say, vitamin C powder on a kitchen counter, you wouldn't know that that has a frequency vibration to it. But he actually put that to music so that people could hear the sound that is generated by these frequencies.

And in vitamin C, it was a beautiful sound. And in mercury, for example, it was like you thought you were in a devil's dungeon or something. And I'm not exaggerating. It was a horrific low sounding vibration that you didn't want to get near.

And then we look at things like the Rife machine, which I'd love to get your feedback on, where they are identifying the frequency vibrations that are going on within our body. Those vibrations may be primarily that are making us literally so sick because of our thoughts, our emotions, the food, the toxins, everything built up in our body.

But yet we could bring a machine in there really quick to maybe vibrate a different kind of frequency that could literally go after those threats, if you will, make the person feel better. And then of course, they have to go about making changes in their life as well. You want to talk about what I just mentioned to you?

Dr. Smith: Yes, Jonathan. You actually just defined how homeopathics works. It's all based on frequency. Because after a dilution of 5x, there's absolutely no molecular structure of the original substance. So the human body works on frequencies. The universe works on frequencies.

So when a toxic material, like mercury, which gives off between 13 and 20 different frequencies, it disrupts the physiology of the cell whereas the frequency of vitamin C enhances the healing process. And the food that we eat or the vitamins that we take, they are nothing more than a matrix, in other words, the carrier of the actual frequency. It's the frequency that's doing the healing.

And this is why when you take synthetic vitamins, unfortunately, they don't have the biophotons or the energy packets in there to really get a good healing.

The synthetic vitamins are chemicals. You are getting a pharmaceutical or a pharmacologic reaction but not a real healing action with synthetic vitamins. But in the totality of things, the higher the energy or frequency that you bring that body to, the faster that it's going to heal.

Jonathan: I think it's so important what we're talking about right now, Dr. Smith. I think this is the essence of where people are heading, whether they are going to be sick or not. And it's not like we can pick out one thing. "Oh, you had a fast food meal last week on Monday. Oh boy, are you in trouble!" But it's about really connecting all the things that we do in our life.

We are talking about energy medicine here, an appreciation of it. And it's the air that we breathe. Who could argue that the frequency vibrations of air in a forest, which the Japanese certainly know about when they talk about forest bathing, forest walking, and getting those frequencies into our body as we walk through a forest, compared to walking through a polluted big city. Obviously, the air quality is different. Its effect on us is different.

But the sounds, what we listen to, heavy metal, bashing music, or rap with all kinds of cursing and disrespect of women and on and on and on with that kind of music versus classical music going on into our body.

What we speak every day. How we feel every day. The food that we eat. The beverages that we have. What companies are giving us our

products? How are those people bringing those products to market?

It just goes on and on. It's accumulation of all of this energy around us and within us that creates our health. And the longer we do something a certain way, that's where we're going to end up. Is that a fair assessment? I'd love to get your feedback on what I'm saying.

Dr. Smith: Yeah, Jonathan. The other factor that you didn't allude to was the EMFs, the electromagnetic frequencies, and these are silent killers. You hold ear buds or hold a telephone to your head, you're frying your neurons in your brain. There was a guy Barrie Trower, he was a retired physicist from the UK. He has governmental documentation and scientific proof that the Wi-Fi in the elementary schools is literally sterilizing the little kids.

These things are so well documented. It's just that the eleven o'clock news is not going to carry this type of information because it offends the advertisers. But you're absolutely right.

It's the whole global environmental impact of the radiation, the chemtrails that are being sprayed on us, the poor quality food, the electromagnetic distortions in our home with the 60-hertz frequencies. It all piles up. And like a sponge, it can only hold so much water. A cell in the body can only hold so much toxicity, and then all chaos breaks loose.

Jonathan: Yeah, Dr. Smith. We're speaking to people who have concerns about cancer, heart disease. My goodness, the heart itself has an energy center of our body. If people are concerned about these things, you've got building biologists out there, things you can do inside your home in terms of checking your electrical wiring. Are you using wireless?

It just goes on and on. You could talk about those things maybe for a moment or so. What we should do to our water. The kind of food we should be buying. What kind of general advice you're giving to people so that again, they get away from the really threatening energy and they bring into their life a better quality of energy.

Just speak to that for a few minutes, what you would give to someone maybe first day in their office with you.

Dr. Smith: Well, I recommend lifestyle changes. A simple little thing of jumping on a trampoline for ten minutes a day gets your lymphatics pumping and gets the toxins out.

But from a physical standpoint, I recommend, what's your water source? For about \$1,800 you can get a really good quality of water filtration system for your entire house. I put it into my house. And what a difference, just the quality of the water.

The other thing is there is meters that you can buy to literally test the electrical wiring that may be by your head while you're sleeping, or running through different rooms that you're watching TV.

So these all factors impact on your health. The quality of the food. You know people, "Oh, it's too expensive to buy organic." And I said, "Well, what's the course of an antibiotic today? About \$125. You could buy a decent amount of fresh foods."

Or with the summer the way it is. I have a garden. I have cilantro. I have oregano. I got all these fresh vegetables that I'm growing. It's relatively inexpensive and it doesn't get any healthier because I'm cutting it and eating it. So it's not dying on the vine and being shipped from South America to the East Coast.

So simple little things of good quality foods, good quality water, reducing the EMFs. Go hardwire with your Wi-Fi, or if you can't, then turn off your Wi-Fi when you're sleeping at night to at least protect your body for an 8-hour period. Simple little things like that.

Good ventilation, sleep with the windows open. Don't get that stuffy building syndrome where all the vapors are coming off the plastic and stuff getting to you. So basic common sense type little things will go a long way.

Jonathan: It really does. And spending time not in front of the television, but getting more plants into the home. Spend that hour or 2, go to a park. Take a walk barefoot. Get to the beach. Get closer to water. Take that forest walk. If you can, go for a hike. Things like this. It's about, like you say, right, Dr. Smith? Every single day bringing this high quality energy. Good vibrations, as the song says. Get those good vibrations into you because it really does have an effect.

Can you address that Rife machine that I brought up before? Because it really is a matter of those frequencies. That vibration can literally get in there and in a certain sense break up something that's toxic and literally make you feel so much better. Am I off on this?

Dr. Smith: No, you're 100% correct. This technology was developed in the 30s by Royal Raymond Rife, and it's been well documented. The key here is that you have other carriers like essential oils, for example. Just breathing in the essential oils, the vapors is carrying in the frequency. Rose oil, for example, has a frequency of 320 hertz. It's the highest, I think, of the essential oils.

But the machine, the Rife device, literally has preprogrammed frequencies in there for all these different medical maladies. So you can go after arthritis or migraines or toxicity or digestion problems and

resolve it with frequencies. Even a sense of well-being, it's, I think, 1565 hertz, will actually make you happier just from the vibrational frequency that you put into your body. So it's really unique and very beneficial.

And the other interesting thing is, if there's any pathogens in your body that you're treating with the frequencies, they do not become resistant to the frequencies as opposed to taking an antibiotic, for example. After a few doses, those bugs develop smarts, and it's not effective again. But with frequency, you could use the same frequency over and over again, and it will keep killing the bugs.

Jonathan: Dr. Smith, for the skeptics out there who are just slightly curious, which I think is great, another thing is just to see how sound vibrations really work. All these chanting that we often hear about while making these sounds over and over again. Whatever it is that you like to do, whether it's "om" or "shalom" or whatever it is that you want to say over and over again, but really pronounce them for a long time, which I won't do now.

But the point is these sounds over and over again, you do that for 3, 6, 9 minutes something like this and you stop, you're going to feel like a completely different person. And not in a negative way, you're going to feel much calmer, clearer. It's going to help you with your creativity, your thinking, your productivity for the day. It's these vibrations that we really need more in our life. No?

Dr. Smith: Absolutely. Just saying a prayer over the food that you eat changes the energy pattern of the food. If you're preparing food, keeping a positive attitude or listening to good classical music, that all changes the taste of the food. Again it's all about vibration. So you're absolutely right. And you're in control of what your mind is thinking or what you want to listen to. And you can control that environment very easily.

Jonathan: And without a doubt, I know people appreciate what they are hearing from the two of us, Dr. Smith, but no doubt the biggest message is identify the threat. So obviously, we're not going to just do some chanting if someone is screaming and yelling in our face all day long.

Obviously, the better thing to do would be to remove yourself from that situation. Put yourself into better and better situations with more and more people that really resonate with you. And there's no pun intended. And then of course, if you want to do a little chanting in the morning to get started with your day, hey, that's double the pleasure.

So, Dr. Smith, let's talk about some of these more elusive medical issues. We're going to dive into some specifics here and specifically vertigo. Now, I don't have it personally, but I do know people who suffer

from this. Talk about a really disturbing thing that they can't get their finger on, just feeling so like not stable. How do you help people with something like this?

Dr. Smith: Well, as with most medical afflictions there's many potential causes, especially for vertigo. The key to resolving vertigo is to define the underlying cause or causes.

So a skilled practitioner must determine if hypothyroidism exists, if cranial bone distortions are present, if there is an unstable upper cervical vertebrae that is present, intestinal toxicity. Whether it's cytomegalovirus or other viruses that are present in the middle ear. Infections from root canal teeth or bone cavitations, that's areas of bone where teeth have been previously removed. And the presence of an unstable sacroiliac joint.

So you have to have a broad knowledge of information from chiropractic, from osteopathic, from all these dentistry, craniopathy in order to make evaluation of a patient. I just had a patient in from Texas with severe vertigo problems and she had an underactive thyroid. And that in itself can cause ringing in the ears and dizziness disequilibrium.

The key is, you could throw all the best medications in the world at the patient, but if you don't get the offending substances out of the thyroid, and she had like about four or five different heavy metals in her thyroid, a couple viruses, if you don't remove the offending substances from that organ, the organ can't function properly. So just trying to manage the symptom to me is a Neanderthal type of mentality.

Jonathan: For those who really want to dive pretty deep into the whole thyroid topic, make sure you check out Isabella Wentz and I talking about this issue. Well worth your time, and it's part of the Immune Defense Summit.

Dr. Smith, also another biggie for a lot of people is head pain. I know you really are an expert when it comes to this. What about chronic migraine headaches? What do you tell people?

Dr. Smith: Well, the key with headaches, there's only about four hundred different causes for migraine, ranging from hormonal imbalances to iatrogenic causes from dental work. A good practitioner has diagnostic skills and he can narrow down the underlying course relatively quickly.

In my experience, I find a very high percentage of cranial distortions from traumas, from whiplash injuries, from faulty orthodontics. And what it does is it literally distorts the cranial bones and the dural membranes within the skull.

Perfect example, I had a young woman who flew in from Tobago two and a half years ago. She had 20 years of migraine headaches. And she gave a history of two concussions and three whiplash injuries. And all the doctors over the twenty-year period were doing nothing but throwing drug darts basically at the patient, treating the symptom. And in one cranial adjustment, it totally resolved her twenty years of migraine headaches.

And what was also interesting she had an alcohol trigger, so if she drank socially, that would trigger off a migraine. So I put her on just a handful of nutrients to clean out her liver. And interestingly, when she drank socially, there was not more trigger for her migraines.

Jonathan: The whole thing is that we're finding these ways of aligning ourselves in a better way so that all of our cells can communicate better. I think that's the message of what you're talking about here today. Everything we've mentioned about getting better vibrations in our body, whether it's from better food, better water quality, all of these things in our environment, getting away from threats, that's what this is all about.

Dr. Smith, to close out the program I just want to address one more thing, which I know a lot of people are dealing with physical pain in their body in terms of autoimmune conditions or arthritis. And they try to eat healthy and they do all of these things. And I've mentioned it in many different presentations we've had here in the Immune Defense Summit. Of course, I have Dr. Stuart Nunnally, who is a past president of the International Academy of Oral Medicine and Toxicology. He is one of the speakers in this event. And we go really deep into the mouth issues. But I wanted you to address them a little bit as well at the end of this conversation because infections, toxic materials in our mouth and how they leak into the rest of our body.

Talk about that being a really negative vibration that makes so many systems in our body not work well. It's no wonder the body is hurting even though the person feels like they are seemingly doing everything. They are taking pills for the pain. They are trying to eat healthy and meditate and exercise. Whatever it is that they are throwing at themselves, it doesn't work yet unless they clean up issues in the mouth.

So I'll give you the last word for a few minutes just to really take us through that whole journey of what people need to keep in mind.

Dr. Smith: A big offender is of course, the mercury fillings. I had a patient who had twenty-five years of migraine headaches. And 1 month after I had removed all the mercury fillings, a number of years ago, his migraines totally disappeared.

Mercury is ubiquitous in our environment. Unfortunately, when the coal

that's burned for power plants, for example, spews out over forty tons of mercury into the atmosphere.

And mercury is a major contributing factor to toxicity of the body. And it can mimic any disease process. I'm talking central nervous system problems; gastrointestinal; cardiovascular; immunologic; head, neck, and oral dysfunctions in the body. And it just goes on and on and on.

So you can have mercury fillings in your mouth. It leaks out 24/7. The lymphatic system takes it from your mouth drains it through the thyroid. If your thyroid is weak, your immune system is weak. And when your metabolism is low in all the cells of your body, then toxins build up.

And this is where fibromyalgia comes in, because the higher the toxicity within the cells, the greater the pain. Lethargy, insomnia, mental depression, despondency, anxiety, panic attacks, suicidal tendencies, just muscle weakness. And these are all related to mercury and all related to the organs that it's adversely affecting.

So in the totality of things, you have to define what is in that organ? What's in the cells? What's in that part of the body that's causing you a problem? Just throwing a drug dart or a surgical dart is just circumventing the underlying resolution.

But unfortunately, the doctors don't have the training or the skill to determine what the underlying cause is. Is it structural? Is it emotional? Is it biochemical? Is it heavy metal? Is it pesticide? This is where true medicine has to focus its energy on. And to me, the rest becomes very easy once you define the problem.

Jonathan: That is so well said, Dr. Smith. That's what this is all about. This program is about raising our energy anyway we can. And as you listen to the Immune Defense Summit, as I've often said already, please listen to as many of the presentation says you can. And see what literally resonates with you.

Is it a toxic load? Do you have something really going on with your mouth? Make sure you hone in on those topics. Is it an emotional issue? Is it mental? Make sure you check out the presentation, a conversation I had with Niki Gratrix, very important.

But where is it that you think you're being threatened the most? What has to be taken care of? And take care of that first big priority so that you can then go on to the other things. And as you do that, your energy goes up, and you tend to feel better in all these aspects that we're talking about, physically, mentally, emotionally, even spiritually. Isn't that fair to say, Dr. Smith?

Dr. Smith: Yeah, you are right on the money. And that's the excitement about this type of medicine, is that you're really helping people get over their health issues and not just a 3-minute office visit and treat the symptom.

Jonathan: Dr. Smith, I want to thank you so much for your time. And I want to thank our listeners for joining us today. If you would like a copy of this program plus all the other presentations inside the Immune Defense Summit, simply click the banner you see on this page.

Thanks again for attending the Immune Defense Summit. Talk to you soon. Take care.

Toxic Metals That Damage Immunity

Guest: Wendy Myers

Jonathan Landsman: Welcome to the Immune Defense Summit. I'm your host, Jonathan Landsman, creator of NaturalHealth365.com. Did you know that every year drug resistant bacteria, or super bugs, kill seven hundred thousand people worldwide? And is projected to be more lethal than cancer by 2050? And infectious diseases still remain one of the leading causes of death?

Cancer, cardiovascular problems, and diabetes are by far the leading causes of premature death in the world. But in reality, all of this is avoidable with a strong immune system. That's why I created this event. To help you understand the roots of disease, and how to prevent and reverse life-threatening illnesses by re-empowering your immune system.

Our show today; Toxic Metals That Damage Immunity. Our guest; Wendy Meyers, is an expert in detoxification and minerals. She is passionate about educating the public on the importance of long-term detoxing, considering our toxic world. She healed her own health issues through careful analysis and developed a unique detox and supplement program. As a functional diagnostic nutritionist, and certified holistic health coach, Wendy has one goal: To help as many people as possible to realize their own self-healing capabilities.

Simply put; if you're frustrated with the level of health care you have received, and are looking for a healthy, safe, way to detoxify the body and improve immune function, this program will be perfect for you. Please join me in welcoming Wendy Meyers to our program. Wendy, welcome.

Wendy Myers: Thank you so much for having me.

Jonathan Landsman: Wendy, a lot of people are experiencing immune system problems. Like if we're talking about autoimmune disorders. Even allergies, asthma, and things like all types of cancer, right? So what do you think are some of the underlying causes of all this that is going on today?

Wendy Myers: Well, there's a lot of different things negatively impacting our immune system function. And one of those are toxic metals. Everyone has toxic metals. We acquire these metals in our bodies via the air, food, and water. So, there is really no avoiding them. There's no one that's an exception to the rule. Everyone has toxic metals in their body. The question is just, what metals do you have and how much of them do you have?

There are several metals that are involved in immune system malfunction. The main ones are mercury; which everyone has. Arsenic, lead; which everyone has, as well, and cadmium, which I find most of my clients have some level of.

Jonathan Landsman: Isn't it amazing how people will go and maybe get these tests, or they won't really feel any symptoms at all, and probably just not think that they are toxic at all with them. But, I guess it's all degrees, right? Like you say, we all have heavy metals in us. But to what extent is it really limiting our life, right? I am sure you're talking to your clients about this.

Wendy Myers: Yeah, absolutely. Because I deal with a lot of clients that have autoimmune diseases, or have serious infections. Viral infections. Epstein Barr, Lyme. You name it. Adrenal fatigue. They've got allergies, and they've got asthma and other things that are clear signs that they have immune system dysregulation. And these toxic metals affect our immunity, and three different components of our immune system.

First, the metals inhibit functions of our macrophages. So our macrophages are important cells of the immune system that are formed in response to an infection, or accumulating damaged or dead cells. And they are very large, specialized cells that recognized, engulf, and destroy target cells. And these are inhibited by toxic metals. The toxic metals with either inhibit their function, or reduce the numbers of these important aspects of our immune system.

And then there's also neutrophils. These are kind of like our first responders, when the body is invaded by bacteria, or viruses, or organisms. And they are guided by chemical signaling. So they'll travel to the area of infection or attack. And they have these tiny little compartments called granules, and they store toxic chemicals. They're

little weapons against microorganisms. And if you have a really low neutrophil count on your CBC panel, you have increased risk of serious infection. And when you look at live blood cell analysis of people who are sick with infections and metals, you'll see that their neutrophils are really sluggish. Like, they don't want to find a meal. The same happens in cancer patients that are taking chemo or cancer drugs. And toxic metals devastate the numbers of neutrophils that people have, and inhibit their function as well. They just can't function as well.

And then there are also natural killer cells. These are most of what our white blood cells are, natural killer cells. They're specialized cells that kill certain types of disease cells, especially cells that have become infected with a virus, or cells that have become cancerous. And it's bad if they're too high or too low.

So cadmium is really interesting; it's been shown to increase the number of natural killer immune cells, and natural killer cells need to be low during pregnancy to allow for a baby to grow in the mother's body. And if they're high, this can cause recurrent miscarriages. So anyone that's having that problem, you really want to be looking at your cadmium levels.

Jonathan Landsman: You know, it's amazing, Wendy, as you're talking, I've realized more and more why these kinds of events are so important to alert people to our lifestyle, right? I'm sure, you know as we get into the metals that actually reduce our body's energy production, that's what I'm sure this discussion is all about. Is taking a more careful look at heavy metals now before it becomes more of a serious problem.

What I'm getting at, Wendy, is a lot of people will say, I'm fine. Maybe I'm a little tired at the end of the day, or something. I'm a little sluggish, or mild case of depression. Or minor health ailments, or seasonal type allergy that might last a little longer than a season. And what I'm saying is, people kind of downplay that and think it's no big deal in their twenties or their thirties or even in their forties, or whatever age. And then, as this goes on for years and years, and heavy metal exposures not really looked at, like mercury-based silver fillings, or toxic nutritional supplements that someone might be taking, that are laced with heavy metals. Over time, this is what eventually wears us out on a cellular level, and that's when people get really sick. And then all of a sudden, we want to pay attention to these things. But, a lot of times it's so much harder to fix these problems.

So, I mean I'd love for you to comment on what I just said, Wendy. But also, of course get into now what metals we're talking about that reduce our bodies energy production. Because I think that's what we've got to be very concerned about.

Wendy Myers: Yes. I'm glad you brought that up, because that's a big area of my research. Because you have to have energy to power your immune system. And many people that are chronically fatigued, their immune system isn't working. They don't have enough energy to power it. And there are certain metals in our environment; arsenic, aluminum, tin, thallium, and cesium, that actually poison enzymes that transport nutrients into our mitochondria, which are little cells powerhouses. They make our energy and our ATP. And when you have these metals that are preventing nutrients from getting into the mitochondria, you're going to have reduced ability to produce energy.

And, it actually takes energy to sleep. People don't realize it; they think they have to sleep to get more energy. It's actually the opposite. Which is why a lot of people that are chronically fatigued tend to not sleep very well. And when you lose out on sleep, maybe you're getting 5 or 6 hours per night, over time, that energy is stolen from your immune system. I had a really interesting interview with a doctor who talked about this, and he theorized that losing sleep over a number of years, that over time your immune system malfunctions as a result of that. So you've got to try to clear away everything that you can that impairs mitochondrial dysfunction and production of energy, and getting rid of metals like arsenic, aluminum, tin, thallium, and cesium, is a big step in that direction.

Jonathan Landsman: Wow. Wendy, that was amazing what you just said. After all the programs I've done, almost 500 now over years, you just said something so significant. That when we go to sleep, we think that our body is somehow resting and shoring up that energy that we can enjoy the rest of the day when we wake up. But, all along I did know that it's a regenerative phase of our life. How important is to get good quality restful sleep.

Now of course; a dark bedroom, don't have wireless technology on around you. Make sure it's dark in your room so you get that good quality sleep. But how interesting is that, is if we're toxic with heavy metals, or even pesticides. I know our focus is on heavy metals, but chemicals in all kinds of horrible things in our body, all of that is interfering with our ability to focus our energy on regenerating ourselves, right? And it takes a tremendous amount of energy to do that. And if we're all toxic inside, we miss that opportunity, and that's what could just be tremendous wearing out effect on our body over decades, right?

Wendy Myers: Absolutely. You put that so well. Because our bodies do regenerate at night. That takes energy. It also takes energy to detox. So it's kind of like a Catch-22. You have to get these toxic metals out of your body, and it can be a little bit draining while you're doing it. But you walk through that fire, at the other end of that is you start being able to finally

produce more energy or maximize the amount of energy that your body is capable of producing through detoxification.

I want to give the listeners a couple of really simple tips that they can do today to start detoxing at home.

Jonathan Landsman: That would be great. We're going to get into how we can best evaluate our toxic burden, which is really important. And how to remove these metals safely. And I underline the word safely, but Wendy I couldn't agree with you more.

I love our conversation so far, because what this is doing is placing a very strong emphasis on clearing away debris, literally. So that our immune system; or I should say, our inner terrain, is as calm as possible so that our immune system can function the way it's supposed to, to be able to pick up things that are really serious, right? Like cancer cell growth. Be able to get those cancer cells and usher them out of the body. Or maybe some more acute type poisoning, if we're around gasoline stations, or some sort of pollution in a big city for a day. That we're really able to protect ourselves day to day, that we've got to get this burden down. So Wendy, please, how do we best evaluate our toxic burden, and get these metals out of our body safely?

Wendy Myers: Well, I wanted to elaborate on one point you made before I answer that question. You talked about cancer. Cancer is a big concern for a lot of people. My father died of esophageal cancer because of the cadmium toxicity he self-induced from smoking for 40 years. And cadmium is a big problem in our environment. You don't have to be a smoker to be cadmium toxic. Cadmium causes more cancers than all of the other toxic metals combined. And the mechanism in which it does that; it interferes when our DNA copies. So when it doesn't copy properly, you get this mutant cell that, if the immune system is too fatigued or otherwise occupied with all the other infections that you have, that tumor cell can then be allowed to grow and multiply into a tumor. Be it malignant or benign.

Jonathan Landsman: It makes a lot of sense. And also, it's important for people to realize that even that cancer cell growth, in a certain sense. Of course, it's not everything. Is really trying to encapsulate this kind of trouble that's going on in the body, so that it doesn't leak out into our bloodstream and literally kill us on the spot. So, we've got all these warning signs coming up. Being agitated emotionally, mentally having brain fog, being exhausted, as you said, even after six or seven or eight hours of sleep. Wendy, this is so important what you are about to talk to us about. Evaluating our toxic burden and removing these metals safely. Take it away.

Wendy Myers: Yeah. So, we know that everyone has metals, but you

want to find out which ones that you have. Because that is the basis for treatment, where you find out which supplements or substances are going to remove the particular metals that you have So, I like to begin everyone with a hair mineral analysis. Unfortunately, there's no test that's going to show you all the metals that you have in your body. But if you do a series of tests, like you do a hair mineral analysis, and a urine DMSA challenge test for metals. And a stool test for metals. That will give you a very good idea of the metals that you have. Because different metals come out in different routes in the body. Some come out in the hair, some in the urine, some in the stool. So there's no one single test that tells you everything.

We know statistically everyone has mercury. Everyone has lead. Everyone has aluminum. So given that, and looking at someone's health history and hair mineral analysis, I have a very good idea of developing a customized protocol for them and what they need. And then I'll recommend other testing if they need that.

Jonathan Landsman: Just as a side note for those who are interested; Dr. Chris Shade is one of our speakers in this event. I strongly recommend you listen to him in terms of detoxification as well. We're going to have several presentations in this summit to talk about that. And also, as far as testing, I am aware of Quicksilver Scientific. It does blood, hair, and urine. You can check that out, as well. And of course, what Wendy is speaking about, she's very experienced at all the testing that she uses, as well.

But the bottom line is to really get tested, and know where you're at. But also removing the metals carefully, so important, right Wendy? If you're dealing with someone who is really obviously exhausted and dealing with, god forbid, other real serious health issues as well at the same time. Whether it's cardiovascular, or cancer, or autoimmune disorders, and they're constipated. They're not having that really; not to be too graphic. They're not having that really long, whole, complete bowel movement every single day. They're not getting rid of stuff on a daily basis. This is really something of a warning for people who go to try to detox heavy metals. You mobilize this, and you don't get them out, you could cause a lot more serious problems. Am I right about that?

Wendy Myers: Yeah, absolutely. I tend to bypass that problem. I mean, we definitely want to get the bowels moving. But I give people a binder called PectaSol C. And that's actually a blood cleanser. So it will cleanse all the toxins out of your blood that you then urinate out. But so important to mobilize the stool and get the bowels moving.

I also recommend coffee enemas. That could be a great way to get people's bowels moving until we can address the root cause or gut dysbiosis that maybe contributing to the constipation.

Jonathan Landsman: Are there any other warnings, before we get to some of the simple detox tips that you feel are going to increase somebody's energy level? Are there any other kind of warnings about removing metals that we should cover? Or do you want to just move right to simple detox tips?

Wendy Myers: Well, I had one comment about testing. Cancer is a big concern for a lot of people. And if you're looking at toxic metals, and you're concerned about cancer, you're a cancer risk, you want to be looking at cadmium and your cadmium levels. Because, like I mentioned, they cause more cancer than all toxic metals combined. You only see those levels in the stool. You don't see them in blood. You don't see them in hair, typically. You don't see them in urine. I've done thousands of tests. I've seen over and over and over people that are incredibly cadmium toxic, and we're not seeing it in hair or urine. So that's the way to go for cadmium.

Jonathan Landsman: So if we see it in the stool; I mean, see if I'm saying this correctly or not, Wendy. We're moving it out of the body, but I guess it's still evidence that we've got a lot in us. Is that kind of the way to put it?

Wendy Myers: Exactly. Yeah. I've seen people with shockingly, shockingly high levels of cadmium. And there was little to none coming in on the hair, and there was just normal levels in the urine. So, unfortunately that's the only test for cadmium that's accurate.

Jonathan Landsman: And so, let's move, I guess, towards the simple detox tips that I'm sure you're giving out to a lot of people that are really going to increase our energy levels. And I'm sure you mean, not for us to be hyper and jumping all over the place. But we're talking about a really strong, healthy quality cellular energy, right? Isn't that what this is all about?

Wendy Myers: Yes. Absolutely. And that's the goal. The goal is to remove the barriers for you to be able to produce the energy that your body and cells are capable of producing. And there are two simple supplements that I give to all my clients that I recommend everyone try. One is that PectaSol C, modified citrus pectin that I talked about. It's completely natural. It's made from citrus peel that have very, very powerful substances in them to bind to metals and chemicals in your blood sugar, so that you urinate them out. It's such an unbelievable substance. I mean, it gets almost all the metals and a lot of chemicals.

You know, we have about 700 chemicals on average, as stated by the Centers for Disease Control and some research they've done. Dr. Dietrich Klinghardt, who is a very famous detox doctor, thinks that we have tens of thousands of chemicals in our body. And the PectaSol C is a

great way to bind to those metals to remove them. And you want to be taking a binder like this any time you're doing any kind of detox program or protocol. And I recommend taking about 5 grams of that per day. So it's like one scoop, or 6 capsules, of the PectaSol C. And you can even take 10 or 15 grams if you're just really having a bad day, you just don't feel good. You can increase the dosage. Not at one time. I'd take those in only 5 mg doses at a time. And that can really dramatically reduce detox symptoms, if not completely eliminate them.

And the next supplement I really love is called BioSil. And this is marketed as a hair, skin, and nail product. It's kind of funny. My clients turn into a little fluffy chia pet, because their hair and nails start growing really well. It just contains silica, but it's a specific type of silica attached to a choline molecule. And that gives it a particular affinity for detoxing metals that cause fatigue. So it grabs onto that arsenic, aluminum, tin, thallium, and cesium that I talked about before, and removes them from the body. So it mobilizes them. But you need to take the binder, the PectaSol C, to bind them and remove them from the body. You don't want to take them apart.

So, the BioSil, you want to take about 6 to 10 drops per day. If you're very chronically fatigued or sensitive to supplements, you may only be able to handle one to two drops. You need to listen to your body and find out what works for you. I can handle 20 drops a day, but I've been doing it for a long time. So that's going to grab onto all those metals. But they can cause a little bit of fatigue while these metals are exiting your body. It takes energy to detox. But you just want to push the envelope to whatever level is comfortable for you. And over time, those will remove the metals that cause fatigue. It generally takes about two years. So this is not an overnight process. People listening, it took them 30, 40, 50, 60 years of metal accumulation. That's not going to turn around in 6 months. That would be too fast. You'd be miserable. You want a slow and safe detox, so the BioSil does take time to do its magic, but it does do it and you start feeling better and better and better over time.

Jonathan Landsman: I like, Wendy, the way you're saying this as a truthful thing. Look at it as lifestyle shift, instead of, "Let me just take the pill and take care of it right away." Sort of that Western mentality, and that can be quite dangerous, like you say. So slow and steady wins the race.

I know we're going back a little bit, but I think it's over something that is pretty important before we perhaps cover your favorite and most effective detox protocol of all. But for those clients of yours that are coming to you; I suppose you're also talking to them about where their exposure is coming from? For people who are new to this information, I think it's probably important to cover that for a couple of minutes. I know I mentioned mercury-based silver fillings, and the food. We can't

avoid the air, but maybe the water. Can you touch upon some of these things, what you tell people in terms of, "Hey, you need to be careful because you're exposing yourself to too many heavy metals by doing XYZ." What would those things be?

Wendy Myers: Yes. So, metals are in our air, food, and water. And water is a big one. You really want to make sure you're drinking properly filtered water. That's huge. But even showering in water. You can absorb about a gallon of water in a 10-minute shower. So you have to make sure that your water is ok. And I lead clients towards water testing, metal testing in their shower water, and fixtures that can help with that. Filtering out the metals that they have.

And our food is a source. Fish, unfortunately, are a big source of lead, cadmium, mercury, and cesium, especially in the pacific. Cesium is a big cause of fatigue, which can lead to poor immune system function. So you can still eat fish, but you want to eat the little ones. The little ones that don't have much time to accumulate mercury and other metals. And save the big fish for just on occasion. And you can have a sensible detox plan.

You cannot avoid all the toxic metals in our environment, it's impossible. Even if you're being very diligent. So you really need to be thinking, if you want to live a long, healthy, disease-free life, to be thinking about a daily detoxification strategy. Like you said, detox as a lifestyle. And I try to give my readers, and listeners, and clients the tools and the education to be able to do that on their own. It's incredibly important.

Jonathan Landsman: And Wendy, of course, one of the other speakers, Dr. Stuart Nunnally, who is a past president of the International Academy of Oral Medicine and Toxicology. I can't urge people enough to please make sure you make the time to listen to Dr. Stuart Nunnally in this event. We will be talking about the mercury-based silver fillings, and all the toxins and metals that are in the mouth, and how that impacts the rest of the body. And most certainly stresses out the immune system.

And yeah, when you mentioned water, Wendy; we're talking about, I can't imagine how anyone in their right mind, after listening to this event, would be looking at tap water the same again. Because the lead pipes; I mean, in Flint, Michigan, here in the United States. All of those people that were affected by lead; it was just toxic water pouring into their home from these very old pipes. I mean, if they purified their water; if we had purification systems in all of those homes, none of this would have happened to them, you know?

Wendy Myers: Oh, absolutely. You know, a lot of municipal water sources do to purify their water? They add metals to the water. So they

add aluminum; because it causes sediment to sink to the bottom. And they add copper to kill microorganisms and fungus and things like that. And it's unfortunate. And what they're doing now is, instead of chlorine, which is what they use to kill bacteria in pools and things, they're adding chloramine, because it's much cheaper. And that actually is what caused the Flint disaster, because that causes lead to get into the water much easier than if they had used chlorine. So it's just; these cities are trying to save money at the expense of their citizens.

Jonathan Landsman: I know I mentioned Flint, Michigan as an extreme example, granted. But Wendy, I'm sure you'd agree with me. So many people are in such a subtle way, day to day, being hurt by heavy metals gradually over time until they become so filled with symptoms, that's when they come to see you and say, "Wendy! I need your help!" How often do you see that scenario?

Wendy Myers: Absolutely. And, you know, I don't want people to wait until they are so ill they can barely function or work. And you want to start listening to your body early on. If you are tired or brain fogged, the time to do something about it is right now. Not before you get a diagnosis. You want to be proactive; not reactive.

My father died of cancer, and I watched that whole process. I watched the 10 years of medications, and the revolving door at the doctor's office, and I said hell no, that is not going to be me. Because it was horrible. Two years, three years of just agony and fatigue and not being able to work. And just medications, and then 6 months of chemo and radiation, and then he died from his cancer treatments. And I just made a decision that was not going to be me.

And I know all the listeners are watching family members, or friends, or loved ones go through that process. And the time is now to do something about that and prevent that. I know prevention is not very sexy, but that's really what it takes. And you really have to think about adding a detox regimen and strategy to your health plan. Because that's what's missing with a lot of people. A lot of people, like myself, were eating an amazing diet. Taking all these amazing supplements. And exercising, and trying to sleep. And they still don't feel good.

And like myself, I was wondering, why is that? What is it going to take for me to feel good with all this stuff that I'm doing? And finally, in my research in trying to figure out what was wrong with myself, I discovered that detoxification was that missing piece of the puzzle in my health regime.

Jonathan Landsman: I love what you said, Wendy. I say that so often. We are so much on the same page; that prevention is not sexy. I couldn't agree with you more. But also, I think a lot of what you and I are talking

about as well as helping people as often as we can to have a higher level of awareness. And my background, as I'm sure you know already, was in high performance athletics. Personally and working with people at a high-performance level in terms of their sports performance. And I would always say to these people; Are you concentrating well? How is your emotional state, as well?

And I think it's a matter of all of us being more honest. Are we emotionally feeling ok through all the stressful things that we go to every day? Are we mentally able to concentrate at a really decent level, at what people are saying to us? can we concentrate on that? Because that has a lot to do with our brain function. And physically, how we feel, I think that's obvious as well. We just need to become more aware of that, And it's difficult when we're tired; but are we getting sluggish during the day? We need to ask ourselves, Wendy; does this make sense? I've been in bed for 5, 6, 7, 8 hours. I'm up during the day a few hours doing a few things, and now I'm physically nodding off. And I'm getting tired. That's wrong. This is something wrong with that. And you have to immediately take that as a red flag, and do something about it.

So Wendy; I'm sure you would agree. But talk to us about your favorite and most affective detox protocol? I would warn people probably ahead of time, or prompt them. Make sure you've got a pen and paper. You'll probably want to start taking some notes.

Wendy Myers: Yes! Absolutely. So, I love infrared saunas. And I really think that the people that are going to be living a very long time are going to be sitting in sauna, sweating like a pig. Sweating out all their metals and chemicals, and all the other many, many benefits of an infrared sauna.

So with an infrared sauna; I'll just explain what those are exactly. So, if you go to your gym. Many people have a sauna at their gym. That's kind of like a Swedish or Finnish sauna. It gives you heat; it's really, really hot. I can't stay in there very long; maybe 10 minutes. And then I'm done; it's too much. Those are beneficial. But they don't give you that productive sweat that has a lot of metals and chemicals in it. There's a little bit, but not enough to what we're looking for.

Then there are far infrared saunas. These can be found at certain franchise places that have 10 saunas with a shower in the same room. Or, you can find them at acupuncturist office. Or natural healing places. They've got a black fabric panel in them, and they have this far infrared emitters. And that far infrared ray is what penetrates you a few inches inside your body, and heats you up from the inside out. And that heat shock is what gets the toxins in your body, releasing them from cells and mobilizing them.

And then there are near infrared saunas. These are the ones that I prefer, because they're these red incandescent bulbs that emit near infrared rays. And it gives you light and heat. It's unnatural for us to get the heat without the light. Like the sun. A lot of the sun's rays are near infrared rays. So it gives you a lot of the benefits of going in the sun, because the near infrared rays activate your mitochondria. They help you to produce energy better. Near infrared rays also improve immune system function. They activate heat shock proteins, which there are about 90 that comprise part of our immune system. So they start activating your immune system and getting that functioning better. Not to mention sweating out all these metals and chemicals.

And really, a tremendous number of benefits. A lot of sport athletes, professional athletes, use infrared saunas for sports and injury recovery. And just recovering faster from their workouts and things like that. So I like the near infrared bulbs. You can build one at home; the bulbs are \$10. You can get them at Home Depot. They're called heat lamps. They're red bulbs, and they're \$10. You just need four of them. And you can just build, if you're handy, you can just build one in your home.

I really like Sauna Space saunas. That's one I use, and have in my living room. And that has the four bulbs in a really nice tent to keep the heat in. That's key; you have to be sweating. If you're not sweating, it's not going to be as effective, but it will give you some benefit.

Jonathan Landsman: So, the bottom line is also the temperature, compared to a sauna in a fitness center. The temperature is way down though, right? It's a lot less that you can really stay in there? What's the time frame that you feel is pretty good? I know everybody is different, and probably you want to have some water with you. Talk about that a little bit.

Wendy Myers: Yeah. So, the temperature is a lot lower. It can be maybe 110 degrees Fahrenheit in a near infrared sauna, so the ambient temperature can be a lot lower. So you can stay in 45 minutes or longer, if you want. When people are first starting out, I recommend 10, maybe 15 minutes. And then you can build yourself up. Build up the time. If you're really, really ill, you might only be able to do 5 or 10 minutes. But you can do what you can, and build your way up.

Most people I have them do 20 to 30 minutes three to five times a week. And I think that's a really good pace. And it's also very, very enjoyable. It's very pleasurable to sit in a sauna. I get there, sometimes I'll meditate. Sometimes I'll be reading. Sometimes I'll be talking on the phone or doing social media, or whatever. It's not wasted time. Because I know a lot of people think, "I don't have time to do all the sauna sessions." But you can make it productive.

Jonathan Landsman: I love that. And also, just to touch on the exercise aspect. Sure, it's nice to exercise and heat up. But it's such a different element energetically, right? To sit and relax and sort of let that heat buildup and the sweat pour out of you without all the muscle tension, right? I would imagine on an energetic level, somehow that kind of sweat is very different than, you know, say going out and running for 45 minutes or an hour. I mean, how many people can do that? Especially when they have issues going on, right?

Wendy Myers: Yeah, absolutely. And a lot of people think; "Oh, sweating. That's going to help me detox." And it does a little bit, when you exercise and sweat, or do yoga or what have you. Yeah, it is productive. But it's not nearly as productive. It's like 10 times more productive to remove toxins via sweat by sitting in an infrared sauna. Be it a near or a far infrared sauna. Far infrared saunas are great, too. I just like the added light component in the near infrared sauna.

But the saunas have shown a lot of research to improve heart patients and heart functioning. Because you are sitting in a sauna. And say if you're running; it's very, very stressful on the heart. But in a sauna, you're heating up and improving circulation flow. So it improves; if you can kind of get a workout without doing a workout. So you burn a lot of calories. You have a tremendous increase in circulation. And that's shown to lower blood pressure and improve heart functioning and strength over time. There are lots of very large research studies that show improvement in heart functioning and lower blood pressure after regular sauna use.

Jonathan Landsman: You know, I think the traditional Indians, they had it right with those sweat lodges and such a spiritual thing as well. I'll give you a little confession, Wendy. I definitely am looking forward, in my middle to later years, moving towards happiness in my home. So after talking to you, I'm just super excited about putting one of these saunas in my home and doing this on a regular basis. Because when I was in my twenties, I worked out like an animal. And I still enjoy exercise; not nearly like I used to train when I was younger as an athlete. But moving into my older years, I could see where it's more of a comfortable level of exercise for all the exercise benefits. But to be able to generate sweat. I mean, Wendy, I don't know how much more to put it like this, how important it is. So many people have lost that function of their body, to sweat on a regular basis. So many people aren't at all. Wouldn't you say that's true?

Wendy Myers: No, absolutely. A lot of us aren't sweating at all. Our skin is all clogged up, and we're putting all these chemicals and lotions with all these clogging chemicals and substances in them. A lot of us have scaly bumps on our skin. Our skin is all clogged up, and we're not sweating. And a lot of people find, when they start an infrared sauna,

they won't sweat. It will take them a couple of weeks to finally start sweating, because their skin has to unclog.

Jonathan Landsman: That's really interesting, Wendy. I see the same thing with exercise. That is so fascinating, what you just said. That a lot of times, when someone is doing a certain level of exercise at the beginning; It's like, "Hey I'm not sweating, what's wrong with that?" But then, what happens, Wendy, they the buildup more muscle tone, muscle integrity. Their body composition, their structure is changing a little bit. And then they spend the same time and the same intensity, but with a little bit more muscle within their body, and they start generating that heat. And that's when I say to them, "Hey, everything's ok. Just relax and get used to it, because this is a sign that you're actually getting healthier." It kind of blows their mind.

But anyone. With the last few minutes that we have, Wendy, talk about your unique way that you're helping out your clients to strengthen their immune function. Because that is what every one of these presentations is all about. Talk to us.

Wendy Myers: Yes. Well I have a couple of pretty unique ways that I help people improve immune system function. So number one is detoxification, and the second way is with a bioenergetic program that I do with clients. Especially ones that are too sick, they can't take supplements and whatnot.

So the first way is detoxification. I have a program called Mineral Power, where we do a hair mineral analysis and other metals test, and design a custom supplement protocol for them based on the metal toxicities that they have. And it's a very complete program, with a diet and detox protocol, and monthly support webinars and unlimited email support. They get a lot of hand holding and education, because that's what's needed. It's not about doing a program. I really want to teach people what they need to know to detox on their own for life.

And, the next way is with our bioenergetic program. There's a problem. There are a lot of people coming to me; they're too sick to begin a detox. We know they need to. We know the metals are in their body. But they're too ill. They've kind of reached the point where even functional medicine can't help them. They can't take supplements, or they're too sensitive to supplements, or they have food allergies to everything. You know, they've gone to doctor after doctor. Functional practitioner after functional practitioner. How do you help them?

So I finally found this program called NES Health. And it builds up the energy in the body, and it does it quickly. It's like nothing I've ever seen before. I've been doing it for about 8 months. I'm just completely blown away. Anthony Robbins does this program. I've got a lot of big people in

health that are also on this program. People that can do anything are on this. It builds up your energy levels. And that's what's needed for your immune system to function. But it also helps to correct immune system function, because your energetic immune system controls your physical immune system.

So it sounds a little bit woo-woo. But there's 30 years of research behind it. There's tremendous amount of clinical trials that have been done by various doctors with NES health. And a lot of anecdotal evidence. There's about 4500 practitioners around the world, including many medical doctors, that are trained in this protocol. And it's very simple. And it's very inexpensive to do. And very effective; it works very quickly.

Jonathan Landsman: Well, Wendy I think all of this is great. And I so believe that if we're taking care of our cells physically, that that's exactly what's going to help us mentally, emotionally, and even spiritually. But I also see it the other way around. As we start turning things around, and feeling better, and our immune system is functioning well. And then we're mentally and emotionally and spiritually feeling, I don't know, just more at ease, and charged up, and feeling like we're going in the right direction. That also in turn changes us physically, as well. I mean, I'm sure you see it as a two-way street, no?

Wendy Myers: Yeah, absolutely. How you think about your health mentally plays a big role in your healing. I know, for me, I had lower back pain for a long time. And it kept me from exercising, and doing all this stuff I wanted to do. And I would just be; ugh, I'm so mad. My lower back is hurting. Why me. I have to do all this stuff, and the therapy, it's so expensive. And just have a really negative attitude about it.

And I made a change. I decided every night when I went to bed, I was going to imagine my lower back healing. And I was going to imagine healing anti-inflammatory components going to that area, and really trying to visualize my body healing itself. And that's really, you know, how I turned that pain around for me. And I don't have back pain anymore. I did a number of things, but that really; changing my mindset really helped a lot.

Jonathan Landsman: Wendy, I want to thank you so much for your time. And I want to thank our listeners for joining us today.

If you would like a copy of this program, plus all the other presentations inside the Immune Defense Summit, simply click the banner you see on this page. Thanks again for attending the Immune Defense Summit. Talk to you soon. Take care.

Major Immunity Threats

Guest: Ronnie Cummins

Jonathan: Welcome to the Immune Defense Summit! I'm your host, Jonathan Landsman, creator of NaturalHealth365.com. Did you know that every year drug-resistant bacteria or superbugs kill 700,000 people worldwide and is projected to be more lethal than cancer by 2050? And infectious diseases still remain one of the leading causes of death.

Cancer, cardiovascular problems, and diabetes are by far the leading cause of premature death in the world, but, in reality, all of this is avoidable with a strong immune system. That's why I created this event: to help you understand the roots of disease and how to prevent and reverse life-threatening illnesses by re-empowering your immune system. Our show today: Major Immunity Threats.

Our guest, Ronnie Cummings, is co-founder and international director of the Organic Consumers Association. Organic Consumers Association is a non-profit, U.S.-based network of two million consumers dedicated to safeguarding organic standards and promoting a healthy, just, and sustainable system of agriculture and commerce.

Ronnie has been a writer and activist since the 1960s with extensive experience in public education, grassroots mobilization, and marketplace pressure campaigns. Over the past two decades, he has served as director of U.S. and international programs dealing with sustainable agriculture issues, including food safety, genetic-engineering, and factory farming, to name a few of his many projects.

Today, obesity and chronic disease are out of control around the world,

especially in the United States with no end in sight. Food allergies, chronic fatigue, heart disease, and cancer have many people concerned about their future. Could our current food production system and conventional farming techniques be causing all of this pain? Sadly, the information you're about to receive has been largely ignored by the mainstream media, which is controlled by the pharmaceutical industry.

Simply put, their agenda is to keep food consumers in the dark about what threatens human health. And allow me to make one point very clear. We know, scientifically speaking, why human disease is at epidemic levels with much of the problem being poor quality food. The public is waking up. And the truth must be told. Please join me in welcoming Ronnie Cummins to our program. Ronnie, welcome!

Ronnie: Good to be with you today!

Jonathan: Oh, it's great to have you, Ronnie. Obviously, there's no debate, right, Ronnie, nutrition has everything to do with a healthy or sick immune system. But lately, modern farming techniques have seriously threatened our food supply. Can you please talk about this?

Ronnie: Yes. Well, right up until the second World War, people had been cultivating crops for 7,000 years and raising animals for 12,000 years or more. And the way they raised the animals, the way they grew their food, was basically organic without a bunch of toxic chemicals, or chemical fertilizers, or factory farms, or whatever.

So unfortunately, at the end of the second World War, we had a change in the farming system, at least the farming system that governments in the industrialized world wanted to promote. And they basically said, "Hey, we can grow a lot more food if we used these nerve poisons and chemical warfare agents that we learned how to use in the first and second World War. We can raise more meat in the animal products if we do these animal factories. And we can drug up the animals with hormones and antibiotics in order to keep them alive long enough to get them to the slaughter houses. And the end result is that we can have cheap food."

So that in the 1950s, when I was a child, the average household in America spent about 22% of our household income for food. When we went to the grocery store, most of the food in the grocery stores was produced within 100-mile radius of that store. And we actually, we had evening meals with the family, home cooked from scratch. We had relatives still on the farm, many of us. And it was a whole different situation.

Since then, since the second World War, we've seen this chemical genetically- engineered, factory-farm process sweep the food system, to

where nowadays, organic, natural food is a niche market, 5% to 10% of food purchased. And the other 90% is chemical intensive and GMO and factory farm.

So if you look at the graphs of chronic disease, and damage to immune systems, and damage to the environment, and the disruption of normal rainfall, and climate patterns, well, it all started about then, too. And it's gotten to a total crisis point right now, which is why so many Americans are turning toward organic food and natural health.

Jonathan: Ronnie, I'm sure you would agree, technology has a lot of benefits, a lot of conveniences. I'm all for technological advances. But as I listen to you speak about the big picture, just real quick before we get into antibiotics and antibiotic resistance, which is extremely important—and people talk about that all the time, but not much about what you're going to bring up—what I'm trying to get at though, before we get there, is that it seems like when you say World War II and beyond, it's generally speaking like we've lost the connection to nature.

And, also, this demonizing of the idea of being old fashioned or connected to nature, respecting nature about the way we raise our food for humans to eat, it's seems like that's all just like really looked upon as being old fashioned in a negative way, when it's really the opposite. And I've had other conversations with other experts like you who say the same pattern has existed where modern medicine has told women that breastfeeding is just so inconvenient. "Why don't you just use formulas, you know, out of bottles that you can buy from the store that are created by these large corporations?"

It just goes on and on that this mentality is so twisted. It has brainwashed so many people. You must shake your head at this all the time. No?

Ronnie: Yes, indeed. But the good news is that people, all over the United States and really all over the world, are starting to look back at the traditions that our parents and grandparents had, especially our grandparents, and realizing that, yeah, we can change some things. But basically, there's a lot of good stuff that's been carried on through the ages. And let's recover that knowledge, as we move forward.

Jonathan: Ronnie, I'm sure after listening to this conversation, a lot of people are going to be highly motivated to make many significant really pleasurable changes in their life. We hear so much about the dangers of antibiotics and antibiotic resistance, what I just mentioned before. But we're rarely hearing anything about the amount of antibiotics used in crop and livestock production. This is important. In fact, I've even heard that glyphosate is patented as an antibiotic, yet, it's marketed in the world as a weed killer. Can you talk about these issues, please?

Ronnie: Yes, most consumers need to understand that every time you take a bite of meat, or an animal product, or a sip of milk from a factory farm that you're getting a dose of antibiotics when you do so. And the reason for that is that these animals cannot survive in these hellish conditions that they live in unless they're drugged up all the time. So you need to be aware of the fact that antibiotics, which have been a marvelous invention in practice and medicine earlier in the century, are now not going to work anymore or not going to work very well, in many cases, if we keep animals in factory farms and keep drugging them up.

And then, when you look at crops, you typically don't think of antibiotics on crops. But when you have the most heavily-used herbicide in the world, Monsanto's Roundup, and this has the effect of a biocide or an antibiotic, not just on the plant that they're sprayed on, and the environment that they pollute, and the water they pollute, but when you ingest a food—the government recently announced that 85% of all fruits and vegetables in the U.S. have herbicide or pesticide or fungicide residues on them—when you imbibe these non-organic foods on a regular basis, you're getting a dose of antibiotics that are disrupting your digestive system, disrupting your immune system. And no wonder we have chronic diseases at epidemic levels in the U.S. And spending 3.5 trillion dollars a year on healthcare doesn't seem to be slowing it down at all.

What the important thing is that if you look at the polls, most Americans now understand that the difference between chemical food and organic food, and they say they know—it's over 50% say they know that organic food is superior—they are not buying it exclusively. But at least, they know the difference.

And that's why organic is growing 12% a year, whereas chemical food is growing 2% a year. And you've got these new things on the market like grass-fed beef growing 100% a year, whereas the factory-farm beef market is growing just a couple of percentage points. So people are waking up. But we got a long way to go. And we need to speed up this process, as well.

Jonathan: I couldn't agree with you more, Ronnie. So many other issues overlap what you've also already brought up in terms of all of this change, the way we chemicalize the soil, the way we have factory-farmed our food. And major corporations are taking over and trying to convince or are successfully convincing so many farmers to go this way because they talk about yield production, "You're going to make more food, more, more, more." But the quality is so low.

Since World War II, isn't it true that the nutritional value of all these foods is going down? And I'm specifically talking about, most recently, some really hardcore scientists that I've interviewed in the past are

talking about how they can actually see how the use of glyphosate on plants, on the soil, it's actually preventing these plants from being more nutrient-rich. We're really killing our nutrition within the food that we actually eat.

Ronnie: We are. And you could see the health statistics for increasing chronic human disease. But very interestingly, if you look at graphs of animal disease, animals on the farm, it's really very closely resembles the same graph. Our farm animals are sicker. Our soil is depleted. Our waterways are polluted. And our human health shows this. Whereas, when you look at the people who are eating organically and naturally, there's a real difference in what's going on in their digestive system, their immune system, their statistics on health and chronic disease.

Jonathan: And, of course, the scientists might roll their eyes at what I'm about to say. But, Ronnie, I'm sure you would back me up by saying if someone's saying, "Well, what's the alternative?" Of course, we'll talk about more of this later on in our conversation. But quite simply, there is nothing like going locally trying to locate a farmer that's raising eggs in a natural way with those hens running around. Everything is without chemicals. Looking for a local farmer that's growing greens and vegetables without all these chemicals. The food is delicious. The energy feel's great. The people you meet are amazing. You know what I'm saying, right?

Ronnie: Oh, exactly, the massive increase in farmers markets across the United States in the last 15 years, this is not because they're using our tax money to really promote these farmers markets. It's because the public wants and so do the local farmers. This is one of the real positive developments, I believe in the United States—and it's spreading across other industrialized countries—are the growth of farmers markets and this stronger relationship between the people growing our food, and the people buying it and cooking it, consuming it. And, of course, gardening, home gardening is the number one hobby in the United States. So people are getting back their instincts for the earth, for fresh food, for local community. And we just need to speed up this process.

Jonathan: And my two cents, also, about this—before we get into something rather shocking about biosludge in just a moment—is that there's actually good science behind getting our hands in the dirt. There's also this idea that I keep talking about throughout the Immune Defense Summit about re-empowering the immune system. Well, I couldn't find anything more empowering than to do what you just said, Ronnie, which is to connect with local people that are growing food. Getting your food from a more local, clean source. Doing it yourself. What an amazingly empowering feeling. It just feels awesome.

So let's move on to something, Ronnie, that is really, I think, very

shocking for a lot of people. And that is to learn about biosludge. And I got to ask you, are we actually putting sewage waste in to our food supply?

Ronnie: Yes, indeed. Toxic sewage sludge is regularly applied to millions of acres of USA farmland and pasture land every year. It's not allowed... You can't do this on an organic farm. It's against organic standards. And you'd be subject to legal penalties if you did. But it's being done on chemical farms all across the United States.

And this is not like your old-fashioned outhouse. This is like the sewage treatment plants in urban areas and towns in the U.S. You've got industrial waste going into that. You've got low level nuclear waste. You've got household waste. But really, it's a toxic stew. And the sewage treatment plants, they try to remove as much of the poison, as they can, from the sewage before they re-release it back into the rivers. And it goes downstream to the next town or city.

But what they have left over is this sewage sludge, which actually can have up to more than 50,000 toxic chemicals in them. And so this sludge, it would be expensive to treat it for what it really is, which is hazardous waste, and get it away from all contact with humans. So instead, they've said, "Oh, well, this isn't toxic sewage sludge. These are biosolids. Let's rename them biosolids. Let's say that they're safe, even though, they're not. And then, let's either give them away to farmers and gardeners, or sell them at a very low price, or package them up. And call it compost."

And even in some cases, they call it organic compost. And then, presto, it's disappeared. But, in fact, it has not disappeared. And it's making its way every day into the water, into the food. And people are eating it. And that's one of the reasons they're so sick.

Jonathan: Ronnie, just to be clear about what you just said at the end is very important for the individual to realize if they go to some of these lawn and garden stores, you're saying that it's actually bagged up for people to buy. And they're sprinkling it on their own food that they want to grow?

Ronnie: Yes, you've got to be very careful about, if you're a home gardener, and you go to buy some garden fertilizer or garden input, make sure you find something that says OMRI approved, Organic Materials Research Institute, because if it doesn't have an OMRI seal on it, you're very likely getting sewage sludge. Or they may call it biosolids or something like that. But yeah, you have to beware. There are no laws cracking down on garden stores for doing this. And they make money off of it. It reduces the cost of municipalities for sewage treatments. And they're doing it.

We tried to blow the whistle on cities giving away this compost to school gardens and urban gardeners and inner-city gardeners. But the practice is still going on because we've got a system that is dysfunctional. You can't put industrial waste and home sewage together. You can't have pharmaceutical drugs. They're finding levels of pharmaceutical drugs in our water right now that can cause sex changes in frogs and fish. And this is what people are drinking. The sewage treatment plants do not get out a lot of the heavy metals. They don't get out the pharmaceutical drugs. So you're drinking that tap water, you're drinking your neighbors' pills that they flush down the toilet upstream.

And a lot of these chemicals, these toxins are what scientists have pointed out to us, they call them hormone disrupters or endocrine system disrupters. And what's so alarming about hormone disrupting chemicals or endocrine disrupting chemicals is that there is no safe level of ingestion. In fact, smaller doses of things like atrazine, which is the world's largest herbicide sprayed on corn, the smaller the dose, the more dangerous it is.

So we've got a crazed system that makes us realize we better pay attention to the water we're drinking, the water we're bathing with, as well as the food that we're putting in to our bodies because our sewage system basically allows industrial corporations, and factory farms, and chemical farmers to use our common environment as their toilet, so to speak. And we're all living downstream.

Jonathan: Yeah, and this is an exact example of profits over people's health. You know, public health concerns. There's no doubt about it. You've got politicians that are following the lead of these corporations that are giving them money so that they can get reelected. They don't want to mess up anything. You're looking at all of these other corporations that are just continually doing things like you say downstream. School systems even that are just following along. They don't want to mess up the pot, if you will. Everybody's making some money on this.

And there's a lack of public awareness that's large enough to change this around. If we want to protect ourselves, there's capturing rain water. There's the reverse osmosis, these RO systems to clean out the water on a home level. We can't wait for government officials to change their policy. Although, I know you're busy doing things on all these fronts. But on an individual level, we've got to do everything we can to stay away from these toxins if we're serious about protecting our immune health.

Ronnie, one of the biggest issues that's talked about over the last many years—and again, we've got to keep waking up the whole of society about this—is the problem of GMOs, genetically modified organisms. I often go back and forth. I like to say genetically manipulated, genetically

altered organisms, especially as it relates to human health. Can you talk to us about what we need to know?

Ronnie: Yes. Genetically engineered or modified crops have been on the market in a serious way just since 1996. Although, Monsanto put out a genetically engineered hormone for cows, bovine growth hormone came on the market in 1994. So people didn't know that much about genetic engineering before that time. They certainly didn't realize it was starting to be in their food. But there has been a giant increase in awareness over the last 20 years.

But I'd say one of the most important things that we need to stress is that these GMO crops, these are just pesticide delivery systems. What do I mean by that? Well, most of the genetically engineered crops around the world, 90% of them are actually sprayed with Monsanto's Roundup or one of the other big chemical company's comparable biocide to Roundup. And it's a patented process.

So the reason they force farmers to buy the kind of seeds that are genetically engineered, because the farmers are then going to have to buy their patented herbicide or their commercial herbicide to go along with it, so really, they claim that they've designed genetically engineered crops to give greater yields and to use less chemicals and to adapt to a changing climate and make them more nutritious.

But the bottom line is that's a lie. They have developed genetically engineered crops up until this point so that they can sell more of their chemical pesticides so that they can sell more of their patented seeds so that they can control the world's food supply, which is what they're trying to do.

But basically, a reason you want to stay away from GMOs is not just that the unknown consequences of ingesting these genetically altered substances on your digestive system and your body, it's because they're loaded with pesticides or insecticides, each and every bite of these. And most GMOs don't go into human food. Most of them go into animal feed for factory farms. But you're still, you end up eating that with the milk or the meat from these animals.

So pesticide residues, and GMOs, and hormones, they all go together. And that's why people, if you want to get away from GMOs, and pesticides, and artificial hormones, and antibiotics, that's the reason you have to go for organic. And it doesn't have to be necessarily certified. If you know the local farmer yourself, and they're farming organically, but it does need to be organic.

Jonathan: Yeah, and that's an important point you brought out just at the end, Ronnie, in terms of people looking to keep their immune

system less challenged so it'd be free to do the kind of things on an individual level that we would love the immune system to do. And that is the idea of these chemicals. It's bad enough to eat vegetables, plant food with chemicals in them. That's one thing.

But when these animals keep eating this over their lifetime, a year or two years, they're building up this buildup of these pesticides, these chemicals, antibiotics. And then, humans are eating those animals. They're even getting more of a dose. So it's important to understand, when we say get away from these toxins, this is a really big issue when it comes to food.

I wanted to just bring up one point now about you talking about the pesticides on the food, as it relates to GMOs. And you're right, the corporations, they're saying—companies like Monsanto—"Hey, use our system. You won't have to use as many pesticides." But you said very quickly we're actually using more pesticides on food now, and herbicides, because of this newfound system and technology thanks to companies like Monsanto. Is that true?

Ronnie: Yes. Yes, the statistics show that we're using more chemical pesticides and more chemical fertilizers than we've ever used before. And the genetic engineering companies keep saying the opposite. The USDA keeps saying the opposite. The Farm Bureau keeps saying the opposite. But the government's own statistics show there's been a sharp increase in the use of these chemicals. So it's time that we move back to where we were before the second World War. Back to natural farming methods and natural methods of animal husbandry.

And yeah, our government is still taking our tax money and subsidizing bad farming practices. So we've got to change our elected public officials all the way from Main Street to the White House. And we're not just talking about the 435 people in the House of Representatives at the federal level or 100 senators and President, Vice President, we're talking about 500,000 people, across the United States, hold elected positions or else appointed positions from elected officials.

And these people need to hear from consumers. The school board needs to hear about the school food. The park board needs to hear about the herbicides that most of them are still spraying on parks. The city government is spraying these herbicides on roadways.

State officials are subsidizing this factory farm, and the federal officials, as well. It's like everything from crop insurance to our food stamp program is geared not to enhance the health and nutrition of our food, but to guarantee the profits of the big corporations that line the pockets of the political officials.

Jonathan: Wow, you just said something really big. You clearly, obviously painted a picture about how these corporations are being supported by all of these policies around the world. But what a big one right, when people are looking to get out in to nature, to relax, to improve their health, to reduce their stress levels, to get away from the toxins, it sounds like a joke what I'm saying. But it's not funny at all.

They want to get away from the big city, they go to the park. They take their children. And they lay out on these lawns or these grasses right in the park. And like what you just said, they're spraying these areas. It's just so important to really get in touch with what's really going on in our world, right?

Ronnie: Exactly. Yeah, I live part of the time in Minneapolis. And we, over the last 20 years, a lot of activists, consumer activists have realized that we've got to elect people to office who represent our viewpoints if we're going to stay healthy. And like in our park board, we elected people from the Green Party and people who have green values.

And the first thing they did was said, "We got to stop using Roundup on the park. Look at the lake. The lake doesn't have any fish in it anymore. And you can't swim in the lake. And it's directly related to these chemicals that we've been spraying to have a uniformed green lawn-type look to the park."

So what happened was they stopped using Roundup in the park near my house about 10 years ago. And what they did was they replanted the natural plants that grow along the edge of the fields, the edge of the lakes. And these plants, the natural wetland, actually clean the rainwater before it gets into the lake. So now, we've got fish again. Now, we've got lakes that you can swim in. And we have a park that doesn't look like a golf course. It looks like nature again. So that's the level. But you cannot change these kinds of policies by making a few phone calls to your park board. If they don't listen, you've got to run for office or you've got to find someone to run for office. And then, you've got to get them elected.

The same thing with, I think, a lot of us became disgusted by the food that was being fed to our children in the schools across the United States. We've got 80,000 different school districts in the U.S. And somehow, all 80,000 of them nearly had adopted this chemical food paradigm, where the same Sysco truck or U.S. Food supply truck pulls up in the middle of the night through the alleys of every restaurant, and every school cafeteria, and corporate cafeteria in the United States. And our kids were suffering.

But we realized, you can't just complain a little bit. You got to elect new school boards. And on up the thing: city council, county board, state legislators. And then, of course, it's more difficult for Congress. But you

ask most people how many elected political officials there are in the country? Most people would say, "Oh, I don't know. Maybe there's 10,000 or maybe 20,000." There's 500,000. And I would venture that about 90% of those 500,000 elected political officials are not representing the interest of us, the 99%, and our children, and our health, and the soil, and the biodiversity, and the future of a stable climate. These people have been corrupted by the system. And we need to, either get them to change their behavior or vote them out of office.

Jonathan: Ronnie, I know you've touched on a lot of different things already that make it very clear about the value of organic food. But I want to just give you another couple of minutes or so. Just talk to anyone out there, Ronnie, who's a little bit on the fence. Let's be honest, they're thinking about the money part on an individual level, as well. "Come on, Ronnie, come on, Jonathan, it's so expensive. You don't understand." Talk about how organic food is really so important for our health.

Ronnie: Okay. Yeah, it relates to this concept of the true cost of food. You can go to your Walmart or your supermarkets and buy the cheapest food that you can find. And it's only going to amount to about 10% of your household income. And so you think, "Oh, I got a good deal on this. I only spend X-amount per month on food." And then, unfortunately, Americans, it's not just 10% that we spend on food. But half of that, we're spending at fast-food restaurants and eating out. So we're spending about 5% on the average of our household income at grocery stores, or farmers markets, or everything retail, and then another 5% eating out.

And our excuses for this are, well, for 20% of the population who have the lowest incomes, well, they're spending, they're spending 30% to 50% of their income on food. So if you're underpaid, or unemployed, or disadvantaged economically, it is expensive. Food is expensive, even fast food. And the cheapest food in the grocery store, if it's eating up 30% to 50% of your total income, that's a situation where you can hardly blame people because they're just trying to survive, right.

But for the rest of us, how much are we spending on healthcare a month? We spend twice as much money on healthcare in the United States than any other industrialized country. And we have the worst index of chronic disease and illness of any industrialized country. So you got your food cheap if you didn't buy organic at the checkout counter. But you paid for it later with your health insurance. Okay.

And then, on April 15th, which just passed by, we pay our taxes. Well, did you know that a good part of your tax money went to subsidize these industries that make up this chemical, industrial food complex. We're subsidizing, to the tune of billions of dollars a year, chemical agriculture.

We're subsidizing, of course, fossil fuel production, ethanol at the pump. We're subsidizing Monsanto's GMO corn to make ethanol, using the lie that this is good for the climate because it reduces fossil fuel emissions and so on and so forth. So you're paying at tax day. You're paying for your health bills.

Well, yeah, these factory farms... We got 10,000 lakes in Minnesota, for example, which we pride ourselves on being a beautiful state with a lot of nature, and the Boundary Waters Canoe Area, and all this. Unfortunately, what you don't hear is, well, the lakes, the 5,000 lakes in the Southern part of the state, you don't want to swim in those, you know. You don't want to eat any fish out of those. They're like the lakes in just south of the border here in Iowa or southeast in Wisconsin, Illinois.

Environmental cleanup - someone's got to pay for this. We're not making the polluters pay for it. You're paying for this, also, in your taxes. So you're paying at the counter, checkout counter. You're paying for your health, increased health cost. You're paying for these at tax time. And you're paying, part of your government services are all this.

And then, you start looking at the damage, the long-term damage that we've done to normal rainfall and normal climate. And you look at the disasters that 97% of the scientists in the world are telling us are coming like rising oceans, more and more violent weather, either droughts, or floods, or super hurricanes, tornadoes, and so on and so forth, we're looking at trillions of dollars that haven't even come due yet. And you look at this on a global scale, as well, all these wars and terrorism conflicts, the bottom line is that poverty and soil degradation lie at the bottom. Water scarcity lie at the bottom of a lot of these conflicts.

So if we're going to solve the problems with our own health, with our not having enough money in our wallets being able to afford what our country pays for, we need to start looking at the true cost of food, the true cost of fiber that go into our clothing and so on, and compute it. And what you realize is that, if you learn how to cook like your grandmother and grandfather knew how to cook, and you prepare organic, whole foods at home, you are not going to be spending too much more than you're already spending. But you're going to be a lot healthier. And you're not going to end up with an astronomical medical bill at the end of your life that's going to not only bankrupt you but everyone in your immediate family.

Jonathan: Ronnie, so well said, the whole mental emotional aspect, as well. Eating cleaner, we say organic over and over again in this conversation. But it's more like what you said at the beginning. More of these natural foods that we never thought about before World War II. It's just the natural right thing to do. Eating these kinds of clean foods

make us healthier, stronger individuals. Those kinds of people in political power is what we need more because like you said already, in all this conversation so far, everything is so flipped around backwards, inside out. It's so twisted, it's ridiculous. We have to unwind ourselves out of this whole mess.

But sticking with the organic concept, Ronnie. A lot of people question this idea, "Can we actually trust the organic label that we see on foods today?" What do you tell people?

Ronnie: Well, my organization, Organic Consumers Association, we've fought very hard the last 20 years to maintain strict organic standards and to actually try to raise them. And we've had pretty good results. We still have some problems with organic standards. But if you see a USDA-organic label on a product, you can trust that it actually is. Now, we are telling people that when you're buying meat and animal products, that there is a higher stage of organic that people are realizing now, which we call regenerative. But look for that 100% grass-fed label on beef. Or try to find eggs and dairy that are grass-fed or that are truly pastured.

And so how do you know that? Because most of the organic farmers in the world are not certified organic. But there is a huge number farming organically. And get to know your farmer. You go to a farmer's market. Talk to them. Look up on the Internet. Most organic farmers, whether they're certified or not, will be happy to have you come out and visit their farm.

And so get to know your food. And the more you can get away from processed foods and cooking from scratch, the healthier you're going to be, the more money you're going to save. And hey, if you're going to go through all of the trouble to cook a fine meal, do what our parents and grandparents did, which was invite over the extended family, invite over the neighbors. Let's make shared meals and shared cooking a part of our culture again like it used to be.

Let's get home economics, by the way, back in to our schools. I'm happy to say that my teenage son, really, he likes to cook. He works in a community restaurant part of the time. And he and a lot of other kids his age are starting to see that you know what? Being a good cook, working in the food system, being a farmer, being a gardener, these are very important professions. And they're also a lot more fun than sitting at a desk in an office 9 to 5.

Jonathan: Ah, no doubt about it. Finally, Ronnie, as we're wrapping up this conversation, why would you say it's so important for the organic consumer and the natural health movements to unite for change in the marketplace? And how can we help to ensure a better tomorrow for all of us? I think this would be a great way to finish off.

Ronnie: Yeah, well, even if you eat 100% organic, which is very hard to do, the environment is so stressful, the environment is so polluted, the toxic intrusions on your body that you've had to undergo—the vaccines and so on—most of us need, as we get older especially, to take nutritional supplements. And what we're seeing is that a lot of people take nutritional supplements, but don't buy organic food. And then, there's a lot of people who eat organic, but who still use conventional Big Pharma-type medicine. And haven't opened their minds to that.

Now, we've got 100 million in the country who occasionally or regularly buy organic food. We got another 100 million people who take nutritional supplements or visit complementary medicine practitioners—chiropractors, acupuncture, homeopaths, naturopaths, and so on. These two groups together, in synergy, constitutes the majority of the population. But we need to get united.

Big Pharma is going after the natural health movement, while big Ag is going after the organic movement telling people, "Oh, it's not worth your money to buy organic." Big Pharma says, "Oh, these people are all quacks, you know. These nutritional supplements don't do you any good, and so on and so forth." They're actually trying to ban alternative medicine practitioners and take supplements off the shelves where all we have are the supplements produced by Big Pharma.

So we got to resist this takeover by big corporations of the organic and the natural health marketplace. But we need to come together to have, not only changes in the marketplace, but we need politicians who will stand up for our health freedom. Who will stand up for small farmers, and ranchers, and healthy food, and healthy children. And we can do it if we work together.

Jonathan: I couldn't agree with you more, Ronnie, it's all about an attitude. I could look at this, being in the industry over 30 years, Ronnie, and say, "You know, what's the use? There is no point. Look at all these major corporations, and everything you talked about today. And not even create the Immune Defense Summit." I did this because I feel like it matters. And I hope people get motivated by these conversations to share this information with, at least, one other person.

Get this word out to more people because the more people will lead to even more people hearing this message and to affect all kinds of change that quite honestly, Ronnie, right, I'm sure you're aware of this now being in the industry so long, for decades, you don't even know how much you affect people as you have this conversation with me. You don't know where this is going to go out and touch somebody's life and how they're going to take it and then touch so many lives after that. So it's really all about what you're saying, "Together we are going to make a difference."

Ronnie, I want to thank you so much for your time. And I want to thank our listeners for joining us today. If you would like a copy of this program, plus all the other presentations inside the Immune Defense Summit, simply click the banner you see on this page. Thanks again for attending the Immune Defense Summit. Talk to you soon! Take care.

The Toxin Solution: Avoiding Disease

Guest: Dr. Joseph Pizzorno

Jonathan Landsman: Welcome to the Immune Defense Summit. I'm your host, Jonathan Landsman, creator of naturalhealth365.com. Did you know that every year drug-resistant bacteria or super bugs kill 700,000 people worldwide and infectious diseases kill more people than any other health problem known to men?

Chronic diseases like cancer, cardiovascular problems, and diabetes are, by far, the leading causes of premature death in the world. But in reality, all of this is avoidable with a strong immune system.

That's why I created this event. To help you understand the roots of disease and how to prevent and reverse life-threatening illnesses by re-empowering your immune system. Our show today, *The Toxin Solution: Avoiding Disease*.

Our guest, Dr. Joseph Pizzorno, is one of the world's leading authorities on science-based natural medicine, a naturopathic physician, educator, researcher, and expert spokesperson, the founding president of Bastyr University, and a recipient of many awards and honors including being named one of the 25 pioneers in holistic medicine and one of the leading health educators in the past 30 years.

To this day, our guest continues to travel worldwide, consulting, lecturing, and promoting science-based natural medicine and collaborative healthcare. The author or co-author of 10 books including the internationally acclaimed *Textbook of Natural Medicine* and the bestselling *Encyclopedia of Natural Medicine*, he is currently working on a

new book for consumers and three textbooks for doctors.

Today, you're about to understand the threat posed by environmental toxins like you've never heard before. In addition and more importantly, we'll reveal a serious warning about detoxification and how to safely and effectively remove unwanted poisons from the body in order to reduce the risk of disease.

Please join me in welcoming, Dr. Joseph Pizzorno, to our program. Dr. Pizzorno, welcome.

Dr. Joseph Pizzorno: Well, thank you for that kind introduction, and I'm delighted to join you today.

Jonathan: It's great to have you. Dr. Pizzorno, why don't we start off first with what I think is the most important thing, which is, what diseases are mostly caused by toxins? What do you tell people?

Dr. Pizzorno: So, I think that's the key question here. And my interest in this area was quite emphasized much more deeply as I started looking what's happened with diabetes.

So as you probably know, the incidence of diabetes over the last 50 years has increased by a factor of 10 to 15. So it's much, much more common now. And so the question is why?

And of course, most of us think, well, it's because people are obese. And indeed, when people are obese, they have more diabetes. And I saw a study that really caught my attention, and it showed that obese people, in the bottom 10% of toxin exposure or those with the least total toxins in their bodies, had no increased risk for diabetes. I thought, well, that's interesting. It must be something else, not just the diabetes.

So as I dove into the research, I started to find study after study showing that the more toxins to build up in the person's body, the more their risk of diabetes. And so I would say, number one, right now diabetes is the worst disease being caused by these toxins. However, that may just be because it's had the most research because as I looked into research I started seeing other diseases that are being caused toxins, and the numbers are just staggering.

Jonathan: Well, I'm sure in a moment or so, we're going to really touch on how toxins damage the immune system the most. This is very important part of the program.

But before we get there, Dr. Pizzorno, you mentioned obesity as well. And a big theme in this entire event is not to try to pigeonhole anything we're talking about into just one answer for everybody. Obviously, I'm

sure you can appreciate that. But when you mentioned obesity, I would think that in many cases, not all of them, that someone who's very, very overweight, we can certainly say that toxins are in play with that individual as well, no?

Dr. Pizzorno: I think the effect of toxins on body weight and diabetes are well demonstrated by the fact that researchers are now calling these toxins diabetogens and obesigens. So they induce these diseases on our bodies.

Jonathan: Yeah, I mean, when I mentioned it that way, and I'm sure you've seen this in many patients over the many, many years you've been in practice, Dr. Pizzorno. When we're looking at someone who is very, very heavy, they may not necessarily be eating this tremendous amount of calories, like professional basketball player eating thousands and thousands of calories a day.

But the quality of the food they're eating, just this one little example, could be so extremely toxic that it's doing so much damage to the body. So in your medical opinion, which toxins would you say are damaging the immune system the most? This is really important.

Dr. Pizzorno: Yes. So when we think about the immune system, you might say that there are several aspects. But the most critical are, we have to develop antibodies to the bacteria and viruses and such that we're exposed to, so that's important. And when people are exposed to pesticides, they actually are less able to produce antibodies.

The other factor, of course, is that the antibody is—one of the key roles they play is to call and activate the white cells to help kill off these toxins or kill off these invaders. But unfortunately, when people are exposed to things like solvents, for example, it impairs the white cell's ability to function properly.

As I started looking into the research, I found toxin after toxin either impaired the ability to produce antibodies or impair the white cell's ability to work. And that shows up in a lot of ways.

But what a lot of people don't realize is that a key factor in why the white cells aren't functioning properly is not only do the toxins damage the white cell's function, but they also damage the DNA in the white cells. So then I started looking at various kinds of cancers. And it turns out that a lot of the cancers of the blood, of the immune system, actually, are initiated by the environmental toxins people are exposed to. So it's not just the weak immune system, it's also immune system that becomes cancerous.

Jonathan: I can only imagine what most people would think, Dr.

Pizzorno, if they could see, say, under a microscope, when you were talking about cellular damage, it's such minute level that most people don't think about day-to-day.

Could you imagine if we could show a picture every time somebody was exposed to something in the air or they were putting something in their mouth that was toxic and say, 'Oh, it's just a little bit. Like they tell us on TV, it's not that much at all'. If we could actually illustrate the kind of damage that you're referring to, it would be probably blow a lot of people's minds, no?

Dr. Pizzorno: That's a very good point. Unfortunately, the advertising kind of only shows us the upside on everything: The pretty food and the ease of use and all these reasons to use these products. So for example, health and beauty aids, everybody wants to look as pretty as they can. They want to smell nice.

Well, the health and beauty aids are full of chemicals called phthalates. And these phthalates, which are used to solublize and to stabilize the fragrances—well, the phthalates when they get into our bodies, they bind to the insulin receptor sites on our cells. And what happens is when sugar is supposed to be getting into the cells, they can't get into the cells because the cells don't recognize the insulin stimulation.

This results in the pancreas having to overproduce insulin to get sugar into the cells and that's fine because our bodies adapt as best as they can. But you do that to the pancreas for 20, 30 years and eventually you burn out the pancreas. And you can't produce insulin anymore. And now also you got diabetes. Who's thinking that every time they put these lotions and potions on their body, they're taking the cells a step closer to diabetes?

Jonathan: It's interesting the way you're saying it too. I mean, I know people have kind of heard this before. But again, imagine having this really, really strong sense that anything that touches your skin is like eating food, right? It actually gets absorbed right into our body.

But actually in a certain sense—and I just caught myself, Dr. Pizzorno—maybe in a certain way, it's a little bit more dangerous in a sense, eating food, if you will, through the skin or toxins because we don't have the same kind of protective mechanisms that we have in place when we go to try to digest food that might be a little toxic. Is that a fair statement, what I just said?

Dr. Pizzorno: Well, I never thought of it that way. That's an extremely good observation. Yeah, what most people don't realize is that everything that comes from the gut has to go through what's called the portal vein. It goes through the liver first. So whatever we eat, the liver

looks at it first and tries to detoxify it.

But when you put something on the skin, it immediately goes in the general circulation and then—well, eventually, it'll get to the liver. And it goes through the whole circulation first. But that's funny, as long as I've been studying this, I hadn't thought of that. That's a great observation.

Jonathan: Wow, you just surprised me too. I think maybe we should end the interview right here. No, I'm just kidding. For all those people listening, we're having a good time here, but it's a very serious topic, right?

And so, Dr. Pizzorno, you're talking about personal care products. There's an obvious thing. And that does disturb me a lot. When I go to the beach, let's say, or the park, and I see people outside who—with all due respect, they love their family. Parents, I'm talking about in particular, spraying their children like insecticides. It's like this fume, this cloud of like sun protection that they don't want these kids to get hurt by the sun.

But they're not thinking about all these toxins that are in the spray that they're spraying on them and rubbing all this lotion on. What other areas would you say there are these toxins that are coming to us and damaging the immune system? Where are the other sources that we should keep in mind?

Dr. Pizzorno: So as near as I can tell, their primary source of toxins is the foods that we eat and the packaging materials that they're stored in.

If you look at the food, let's say, it's grown with artificial fertilizers, like high phosphate fertilizers. Well, these high phosphate fertilizers are high in cadmium. So if you grow food with these high phosphate fertilizers, you increase the amount of cadmium in the food that you're eating. Okay, that's problematic.

But then you spray these foods with these pesticides, let's say, organophosphate pesticides to kill the insects. Okay, well, that does the job. They get rid of insects.

But now you've got a food which has high levels of cadmium, which impair the immune system. You've got food with high levels of organophosphate pesticides, which impair the immune system. Then you put it into a package. Now that package, it can be a plastic package, then that'll leak bisphenol-A and phthalates into the food or it can be put into can. Well, the cans are lined with plastic, and their plastic leeches bisphenol-A into the food.

Now, you eat this food that's got bisphenol-A. It's got phthalates. It's

organophosphate pesticides. It's got cadmium. And since it's been grown in soil that's been depleted because of the use of synthetic fertilizers rather than natural fertilizers, it's also now low in trace minerals. So we put this into our bodies, and now we get all this disease.

You kind of look at the whole cycle and in some areas where I've been looking at, the nutrient content of a food and the toxin content of the food, in terms of trace minerals, and sometimes you get more of the toxin than we do get the trace mineral.

And that's important because we need trace minerals to make our enzymes work. And one of the key ways in which toxins damage our bodies is by poisoning the enzyme system. So sometimes we're even taking more of the poison than we are of the nutrient for the enzyme system to work. We're in this kind of vicious cycle right now where it's not surprising, we have so much ill health.

Jonathan: And, Dr. Pizzorno, I know you've been in this business—and I say it that way on purpose—for a very long time. I know you care about people in wanting them to feel good. But you've also been really seeing things sort of behind the scenes for quite some time.

So where I'm going with this is I wanted you to talk a little bit about this perspective out there that, in my personal opinion, I say is a dangerous one. And it's this idea that all of these toxins we're talking about—I mean, my own father was injured by, I think, spraying all these chemicals, if you will, on woodworking and his woodworking shop.

And all the chemicals that he was exposed to for over 40 years I think literally were the biggest contributor to his Alzheimer's disease that he has now. Just a horrific thing to watch him literally fade away as the man that I've known and the father that I knew.

So going back to these toxins, this perspective that you must've heard for decades now from whether it's doctors or government health officials, so-called experts that say, 'Just calm down. There's such little amount of toxins in that lotion you're putting on your child's skin to protect them from the sun and the little bit of fluoride that's in mouthwashes. And the chemicals in paints, it's such a small amount that might be out-gassing. It's really not that much to cause harm'. So they make all of this legal. All of us are exposed to it. But what do you say to people who say, 'Oh, it's just a little bit. Don't worry about it so much'?

Dr. Pizzorno: Well, that's a good observation. And that's why the research has been so slow to catch up because when look at a particular toxin—now, there are actually some exceptions. I'll talk about those later.

But when we look at each toxin, what the researchers tend to do is they look at the toxin. They look at it, kind of look at all by itself. They look at it at the typical doses people tend to be exposed to. And when you look at a single toxin for a short period of time, isolate it from everything else, and research shows, yeah, there are some toxins. It's not too bad.

But the problem is, we're not exposed to just a single toxin for a short period of time. We're exposed to many toxins for our entire lifetime including in utero when we're in our mother's womb.

So when you then start looking at the total effects of these toxins, now, the data is really strong. And surprisingly, it wasn't up until about 10 years ago when researchers started looking at total bioload of toxins rather than individual toxins.

So we have to get a researcher by the name of Duk-Hee Lee, actually in South Korea, who is the first person who started seeing these correlations and showing really strong research support for it. And now her works have been duplicated by many others.

But you're exactly right, 'Oh, it's one toxin. Oh, we just put the sunscreen on today. It's not too bad'. But what did you feed your child for breakfast? What's in their water supply? Did you look at the clothing? And you noticed you're putting this clothing on your children that has these what are called PBDE's, or polybrominated diphenyl ethers, and they're fire retardants?

So okay, while you put these fire retardants on your child, and that's leaking in. And oh, did you spray your furniture with Scotchgard so that it would be stain-free. Or you realized you're putting perfluorinated hydrocarbons into your child.

And oh, by the way, when you cooked the eggs this morning, did you use one of these nonstick pans? And did the nonstick pan just get little warmer than you intended? You didn't burn anything, but it got kind of hot. Well, it now leaks these perfluorinated hydrocarbons into the food.

So you look at the child, the air, the water, the food, the clothing, the sunscreen put on the child's body, all of these things are taking toxins into the children.

And we start looking at the numbers of what they do to the children. So many of these toxins they decrease our IQ. They increase the risk of ADHD. They increase the risk of childhood leukemia. I mean, just look at the list of all these diseases and we're causing them ourselves.

Most people don't realize that only 20% of disease is due to genetics. All the rest is due to toxins and nutritional deficiencies or excess as the case

may be. So it's under our control. We can fix this if we want to. But we've got to choose to fix it.

Jonathan: And I know that we don't have to spend a lot of time on it, but I know you've seen, at a government level, how these things work. I couldn't agree with you more, Dr. Pizzorno.

It seems like there's no sensitivity—and I'm using that on purpose, that word—because we hear so much about autoimmune disease these days. People are so sensitive to everything it seems, right? Everybody's got their issues. They can't eat tomatoes. They can't get close to a gasoline station without violently reacting. Or it might be even cell phone toxins, right, like the microwave radiation that's really setting them off and having these horrible pains throughout their whole body.

I mean, it seems like people are just building up more and more of this debris that you're discussing that gets embedded into our bodies. It is building up over time. Actually, getting stored in our tissues. You could talk about that a little bit as well.

But talk to us about this connection between toxins and what we see. Now, it seems to be like an epidemic rise in the rate of all these autoimmune disorders. What's going on here?

Dr. Pizzorno: Well, that's a great question. And the research is pretty scary and is just starting to evolve. So two good friends of mine, Datis Kharrazian and Aristo Vojdani, work in a laboratory that's been actually looking at this and taking a different perspective. So it's been taking a moment to lay this out but it's pretty important to understand.

So when we're in utero, in our moms, we develop our various proteins and enzymes and things like this. And the immune system is programmed to say, "Okay, these are normal body tissues. Don't become allergic to them, or don't develop antibodies to them." So it's fine.

But you progress through life and if we're exposed to certain classes of toxins, some of those toxins bind to our normal body proteins and enzymes and now they went from normal to abnormal. And the immune system says, "Oh, this is an abnormal protein. That's typically what happens when you see bacteria, so now we'll develop antibodies to that."

So we're now developing antibodies to our normal tissues because our normal tissues aren't normal anymore. They've been modified and distorted by these toxins, chemical toxins we're being exposed to.

So I believe that the majority of this autoimmune epidemic we're seeing

is simply toxins damaging our cells and our proteins and our enzymes and causing the immune system to react to them as abnormal now.

Jonathan: Dr. Pizzorno, I don't pretend to be an expert like you at all on these topics. But something just happened with my mind as I was listening to you speak. And I was thinking of areas in our body, right, like the thyroid or just simply our large and small intestines, maybe even our appendix, because I'm thinking of my daughter's college mate when she was in college who ate an extremely toxic diet for a long time when she went to college, when she was normally eating very clean the rest of her life.

And then with her being very athletic, she ate really terrible while in college for many months in a row. And all of a sudden her appendix is just swollen, inflamed, and they had to rush her in for surgery and all of this stuff. And even she felt, on a gut level, it was the horrible food she was eating.

I'm just wondering if there's certain centers in our body that are like magnets, and they collect all these toxins, in a certain sense, to try to protect us from not having this crap spread throughout the rest of our body. Am I way off here on this?

Dr. Pizzorno: Yeah, it's a good observation. And I think we should seriously consider it. One of the points I make to students when I teach is that our bodies have remarkable adaptive ability. We're able to stay functional and reasonably healthy in a wide range of challenging environments. But we do that by having a really smart immune system that's constantly sampling what's in our environment, what's in our gut, what do we have to react to. And as we add toxins, we distort those systems.

So, to me, appendicitis is quite possibly due to toxins now distorting the bacteria in our gut and distorting the immune system and resulted in the wrong messages being sent.

Jonathan: For those who are concerned about cancer, Dr. Pizzorno, I just wanted to throw this out really quick to you as well and see what you think about this.

Along the lines of what I just said, the whole point of really appreciating all the presentations that I'm going to be laying out here in the Immune Defense Summit is to really connect people to the threats that are going on inside the body to the immune system.

And what I mean by that is, the more that the immune system is just super stressed out, like it's the middle of the day on a stock exchange floor. And it's got to handle all of these things all at once. It's so easy to

not detect cancer cells growing in the body.

So the way I kind of picture it is, really appreciate all the information that you're putting out and all the speakers here. Try to get as much of this into your own life. Fix some things that you think are major problems. Because I would think we want our immune system to really be kind of very focused on the big problems and not worried every day with all these little crises that come up with all the toxins that are in our environment. The more we can quiet that down, the more we allow our immune system to really do what it ought to do, which is protect us from lethal problems, right, potentially lethal problems.

Dr. Pizzorno: Right, right. Stop wasting time on what's not necessary and focus on what is necessary, which is keep us alive and protected from the environment.

Jonathan: So, Dr. Pizzorno, I know you mentioned diabetes before. But maybe we could just bring it in a little bit more because it sure as heck affecting millions and millions of people, blood sugar issues, prediabetes, diabetes. How are these toxins, again, related to that, certain ones in particular? Whatever you've seen in your professional history, talk to us about the connection.

Dr. Pizzorno: Sure. So when we're looking at how these toxins cause diabetes, there are essentially two primary mechanisms. One is toxins that damage the pancreas so that the pancreas can't produce enough insulin.

And the other is the ones that damage these cells' ability to respond to the insulin so these are what we call the insulin receptor site blockers.

So everybody knows that you will have something called metabolic syndrome, which is kind of the mid-step on the way to diabetes. Now what is metabolic syndrome? It is insulin insensitivity. So the cells are not responding to insulin properly. Why is that happening? Well, this turns out to be a major mechanism by which these toxins cause trouble.

So I mentioned before the phthalates. So the phthalates block the insulin receptor sites so you get insulin resistance. So bisphenol-A, when it comes from like a food from that's been stored in cans, that bisphenol-A will also block the insulin receptor sites.

Now, one of which was a big surprise to me and I don't know why it wasn't on my radar screen, but when I was looking at what damages the pancreas so it can't produce insulin as well as it should, it turns out it's arsenic. Now, when I say arsenic, most people think, "Well, I don't think my spouse is trying to kill me, so I don't think I've got high arsenic levels."

Well, it turns out that the major source of arsenic for most people is the water supply, and I was stunned to see that, in the US, 10% of the water supplies have levels of arsenic that are high enough to be known to increase disease risk.

So one of the ways to measure a person's average or history levels of arsenic is to look at the amount of arsenic in their toenails. So arsenic is an interesting toxin and that our body is actually pretty good at getting rid of it. We can get rid of half the arsenic that's in our body in about two to four days. So we're pretty good at getting rid of arsenic. The problem is we keep putting arsenic back in again. And the primary way that happens is through our water supply.

So it turns out that when you look at the toenails, you get kind of the average the amount of arsenic over several months' period of time. As the arsenic level in the toenails goes up so does the incidence of diabetes.

And it turns out that people with the top 10% of arsenic in the toenails have 10 times as much diabetes as those with no arsenic in their toenails. So this is significant factor. And so at least 10% of the US population is being affected by the amount of arsenic in the water supply. But it's worse than that.

So there's what they called longitudinal study done in Italy where they followed 20,000 Italians over 20 years in a province in Italy. And they picked this province because it happens to have widely varying levels of arsenic in the water supply.

So they looked at the amount of arsenic in the water supply, and they looked at the amount in people. And they looked at people with the most arsenic exposure versus those with the least arsenic exposure and looked at their increased risk for the disease. And what they found was cardiovascular disease. They found stroke. They found diabetes. They found a bunch of cancers. I mean, arsenic's role in cancer, particularly prostate cancer, is just stunning.

Anyway, so they found all these disease associations and came to a conclusion that arsenic was a major cause of disease in Italy, and those people who are unfortunate to have levels of arsenic in their water supply that were high.

So they didn't measure the amount of arsenic in people. So first is they did a correlation with the amount of arsenic in the water supply. Then they looked at and measured the amount of arsenic in the people. And of course, it correlated very well with the toxicity and with the increased risk of diabetes.

So then I looked at the number where they saw the threshold for at what point you start getting really great increases of disease in people and at what level arsenic in the body this happened at. Then I looked at the same data in the US. So the CDC, the Centers for Disease Control, looks at the amount of toxic ailments in people's bodies. Well, it turns out according to the CDC, 25% of people in the US have arsenic levels above the threshold found in Italy to significantly increase a wide range of diseases.

So the point I want to make here is this is not a rare or unusual problem. We have a huge challenge here because we're exposing ourselves to these toxins that are known to cause disease. It's just incredible.

Jonathan: Boy, it really is. And as you were speaking, I was just thinking what a simple, powerful gesture for a government to say that cares about its citizens that would actually give to anyone that applied a water purification system for where they are. I mean, could you imagine? I know people listening to this outside the United States. But Flint, Michigan here in the United States with that lead poisoning situation. The arsenic you were just talking about, what a powerful thing. And I don't think, realistically, it's going to happen tomorrow. But how important it is for people to literally invest in their own health and get that purification system.

I mean, I personally enjoy the difference of water most of the time for me of reverse osmosis in the home and also a tested, really clean spring water, and I'm mixing those two as the vast majority of the water that I use for any of our cooking or any of the water that I drink. And after listening to you, wow, I'm going to lean that way 90-plus percent of the time. It just makes so much sense to do it, right?

Dr. Pizzorno: Absolutely. And picking reverse osmosis was a good one because this is one of the few methods that will get arsenic out of the water. So one of the best ways to get chemicals out of the water is with carbon block filters, and that's great. But unfortunately, carbon block filters don't block arsenic. So the reverse osmosis is a good way to get arsenic out of the water.

Jonathan: Wow, that's good to hear. So another simple question, Dr. Pizzorno, because, again, it's in the category of millions of people suffering. And probably, with all due respect to any of the healthcare providers that are listening—I'm so appreciative of their support—but most conventionally-trained physicians are not exactly saying to their patients when they come in suffering with allergy symptoms, 'Hey, you know what, you need to understand something. Your body is really toxic, why don't we take a look at this. How can we reduce your toxic burden? And maybe that will alleviate your allergy symptoms'. I mean, I know I'm sounding like it's a fantasy world what I'm describing but, Dr. Pizzorno,

enlighten us a little bit. What are some of these toxins that actually are causing allergies, what's going on?

Dr. Pizzorno: Right. So you sound like a naturopathic doctor, okay. Because that's what we do. We help people understand why they're sick and how to become healthy. And we do that by saying, "Look at your nutritional status and look into your toxin status. Let's get your nutrients optimized. Let's get the toxins out of your body." And it's amazing how much these go away. So when we're looking at the worst of the toxins, I was able to convince the publisher at HarperCollins to give me a nice royalty to write my new book, *The Toxin Solution*.

And the reason I did that is because I follow a lot of research. So I used that money, perhaps foolishly, but I spent all the money on hiring two really smart graduates from Bastyr University to help me answer the question, what percent of each chronic disease is due to specific toxins?

So we looked at 26 toxins or toxin classes. So like mercury or arsenic is the toxin, whereas PCBs or phthalates are toxin classes because there are lots of chemicals in them. We then looked at 18 cancers and 24 diseases, and we have this huge spreadsheet we do on Google docs and that we shared together, and we just keep on adding data.

So after we'd put in a fair amount of data—by the way, we're still working on this, still a lot of work to be done. But as we started looking at data, I then started to say, 'Well, how do I communicate this to people?'

And I went through and looked at the spreadsheet and said, 'Okay, which diseases are most commonly due to toxins? And which toxins are causing the most disease? So I then went through and made a kind of a ranked order list and say, 'Okay, which toxin has the most disease correlations and causations?' And worked my way down the list' And it turns out that number one was indeed arsenic. It just kept popping up again and again and again.

The next one I looked at with really high probability and this is going to surprise a lot of people was DDT. Now, DDT was banned 45 years ago. But DDT is in a class of toxins called persistent organic pollutants. And what that means is that they were designed by the scientists to be difficult to break down so they basically say, 'Okay, here's how biological systems break down certain kinds of chemicals. Well, let's sabotage that system so it doesn't work'.

So these things, once again, to the environment are almost impossible to break down. And once again, to our bodies, they're almost impossible to get out. So I looked at DDT and the half-life of DDT in the body is three to 10 years. So in other words, once it gets into our body, it's

almost impossible to get it out, and it keeps causing damage. So DDT ended up high up on the list. Another one that's high on the list—and by the way, and we're talking about DDT, well, how about causing things like ADHD in children? How about increasing risk of Alzheimer disease? It's a huge challenge.

Then the other one is PCB. PCBs are like DDT in that they're persistent organic pollutants. They were banned 40 years ago, but it turns out they are a major cause of breast cancer in women. And then we have the phthalates, we have the bisphenol-A, we've got mercury.

There is some good news and that is lead's not as big an issue as it used to be. Because 40 years ago, when we banned lead in gasoline and lead in paint and things like that, the good news is that we decreased the amount of lead in the environment and human levels of lead have gone down over the last 40 years.

So the reason I bring that up is that we can do something about it. We can decrease our exposure to toxins, and we will get healthier. But we have to work at it. We have to work with industry to stop putting so many toxins into our environment. And we have to work with our, I'm going to say, our more naturally oriented doctors, integrative medicine doctors, holistic doctors to work with them to help get these toxins out of our bodies.

Jonathan: Dr. Pizzorno, this is so well-said, everything. You really are a fine example of what I want this summit to be. Not only enlightening to some of the threats but also to have it empowering. And I'm not just using that as a cliché.

So as you just spoke, I thought of three big things that people need to take away. There's toxic water, when you mentioned the arsenic. You talked about all these other things that are in our environment. And that comes down to the use of plastic. People need to be careful how much of their life is consumed with using plastic especially in and around their food and mercury-based silver fillings, my God.

So as we transition now towards the end of this program, Dr. Pizzorno, talk about your best advice for living a low-toxin lifestyle. Because like cancer cells, we can avoid them, we all have them. Toxins, they're everywhere around. The government health officials, they're not going to change things on that level by tomorrow. So what do we do to reduce our burden?

Dr. Pizzorno: Excellent question. So there are basically three strategies I recommend to people. Number one is don't let them in. Just really clearly don't let the toxins in. Second strategy is to prepare your body to get rid of toxins. And the third strategy is to get the toxins out.

So we start with avoiding the toxins. And so in the book is I have actually two chapters devoted to this and in many ways I kind of described what I and my wife, Laura, do in our home. So let's start, let's go to the process.

Number one is everybody takes off their shoes when they come in our house. Okay, you might say, 'well, it's kind of trivial'. Well, no. If you look at a lot of all these toxins, they end up in dust, and they end up on the ground. And if you're walking on the ground and walk into your house, you're bringing the toxins in. So nobody wears shoes in our house.

Number two, we have air filters in our house. As a matter of fact, we have a special air filter on our forced air heating so that all the air in our house gets constantly circulated to get rid of the toxins in the air. Because if you're living in the city like we live in Seattle, even though we got lots of rain, which is nice and keeps us green, and when the rains come in, it helps get rid of the toxins.

But the rest of the time, when you're living in the city, you're getting benzene. You're getting particulate matter. You're getting what are called PAHS, poly-aromatic hydrocarbons from diesel fumes. There are all these toxins in the air. Get rid of the toxins.

Next, we look at the food we eat. We only buy organically grown foods. And if we're buying foods that are prepared, we try to only get foods that are prepared and stored in glass. And if we can't get that, we only buy prepared foods that are frozen because that decreases the leakage of toxins.

Then we get the food home. We've thrown out every plastic container in our house. We only have glass containers. And indeed we also have glass containers with glass lids, so we're not adding toxins to the food. Then when we prepare our foods, there's no Teflon-coated pans in our house. We only have stainless steel or glass. And so we make sure that when we do prepare our foods, we're not adding toxins to the foods.

Next, we look at health and beauty aids. There's a cute app called Think Dirty, and what you can do is put it on your cellphone and take little picture of the barcode on the side of the container with the health and beauty aids you use. And it'll tell you how toxic they are. When we discovered this app, we went through our house. And as careful as we are, we still ended up throwing out half of the health and beauty aids in our house because they had toxins in them that we weren't aware of.

So as you see, step by step by step we've done everything we can think of to decrease the presence of toxins in our environment and in our bodies.

Jonathan: Yeah, my wife and I, it took months for us to save money and

to convert over our bedroom. You know where I'm going with this. I'm talking about the pillowcases, the fitted sheets, the comforter. I mean, all of the bedding itself, which was the biggest expense.

But, Dr. Pizzorno, now, every single day, year after year after year, what piece of mind! I mean, talk about reducing mental and emotional stress, which I consider a toxin, to make this change and physically cleaning up our bedroom, what a great feeling mentally and emotionally! I'm sure you can appreciate.

Dr. Pizzorno: I don't want people listening to this to get too discouraged because we can fix this. We can produce an environment, which is much healthier for us. And if we do have toxins, we can get rid of them.

So in my book, I wrote 35 case histories. These are real people I've seen over the years. And I think about 15 of them ended up in the book, and the rest are on my website, thetoxinsolution.com. And so I just show people how we have this, that, and the other disease: Cancer, multiple sclerosis, rheumatoid arthritis, asthma, eczema, all these common conditions. And so, you don't have to suffer them. We can get these things out of your body. You just have to pay attention.

Jonathan: Yeah. And just as I said earlier, at the beginning of the show, big warning about detoxification. For wherever you are, if you're really exhausted, you have systemic, I mean, chronic pain throughout your body, you just know you are off. And now, you're going to get really motivated after listening to some of these presentations, and you're going to detoxify your body.

Please be careful because there's one thing, mobilizing toxins, getting them loose inside the body. And it's a whole other thing to make sure that you properly, safely, and effectively eliminate this debris. Because if it just gets mobilized then it's dancing around in your body, it can cause massive amounts of more pain. God knows what it could do to your heart. It could really cause you much more fatigue.

So Dr. Pizzorno, I'm sure you could appreciate this. We want to end this program on a high note. Talk about what happened to some of your patients that you just mentioned after they went through a really good process of detoxification?

Dr. Pizzorno: So I think you're asking me for case history, okay. So let me describe to you a woman. I don't know if it's still relevant for you to add, but just something to consider.

A 67-year-old woman was having early-stage dementia, memory loss, brain fog, hair problems, skin problems. She was extremely worried that she was going through dementia. So I did an analysis of her and checked

her body and found she had high levels of mercury.

Now, it's unclear where the mercury was coming from. But what I've noticed a lot of men and women, when they get into that 50 to 60s and they start losing bone, most people don't realize that the bone is a primary area where we store lead and mercury. So I'm seeing a bunch of people in that age group with high levels of lead and mercury.

So we identified she had that. I put her on a mercury detoxification program, which is basically three factors. It's fiber. It's N-acetylcysteine. And it's a gentle drug called DMSA. And we put her on this program. Now, I'm not one of those people who likes doing intense detox programs because, like you said, you have to be really careful because if you stir up the toxins more than your body can get rid of them, you can actually make the person worse.

So anyway, we put her on the program. It took us a year and a half, but she went from high levels of mercury to no levels of mercury. And every symptom she had cleared up. So she said she felt like a new woman. And obviously, she was very, very happy and said I can show her case results, of course, not her name. But I show her case results in some of my lectures because we can do something about it. And just because a person's in their 60s or 70s, don't think detoxification won't help you. Don't think it's too late because the toxins continue to hurt you until you get rid of them.

So get the toxins out at whatever age. Avoid them if you can, but I can go through case history after case history of relatively simple procedures to get toxins out have incredible clinical results.

Jonathan: And that's our final point, right, Dr. Pizzorno, that, again, don't be overwhelmed. I love your message because I say that all the time. I know I'm putting out a lot of information. But I know what it's like for me personally, Dr. Pizzorno, when I hear someone like you speak or somebody else and something just hits my heart or my mind, however you want to put it. It really resonates with me. That's what I'm going to tackle for the next two, four weeks, eight weeks, as long as it takes. If it's a really big issue, just take that one issue, clean it up, and what a difference it can make in your life, right?

Dr. Pizzorno: Yes. Yes. Yes. Big difference. I've had the great fortune of knowing my great grandfather as well as my grandfather and father. And I've seen generation after generation as the nutritional status went down and the toxin level went up, that we went from my great grandfather who died at age 95 with no apparent disease, never saw a doctor in his life. He used to play strategy games with me. I was a precocious 10-year-old. I played strategy games with him, and the guy would beat me all the time. His brain was working just fine, lived independently until he

decided he was done with life.

Well, but now looking at my grandfather and my father, and they have much, much more disease than my great grandfather did. And with my poor father developing dementia by age 83 and dying by age 88 with all this disease he had, osteoporosis, osteoarthritis, heart disease. I mean, you name it, he had it.

And so on one hand, I say to conventional medicine, 'well, thanks for keeping my dad alive as long as he did. But why aren't you working on the real cause why people are sick?' You got to get nutrients in, you got to get toxins out and we're poisoning our society, and it's not necessary. We can do something—we can do this better.

Jonathan: Dr. Pizzorno, I want to thank you so much for your time. And I want to thank our listeners for joining us today. If you would like a copy of this program plus all the other presentations inside the Immune Defense Summit, simply click the banner you see on this page.

Thanks again for attending the Immune Defense Summit. Talk to you soon. Take care.

Liver Health: Your Guide to Super Immunity

Guest: Dr. Ellen Tart-Jensen

Jonathan: Welcome to the Immune Defense Summit. I'm your host, Jonathan Landsman, creator of NaturalHealth365.com. Did you know that every year drug-resistant bacteria or super bugs kill seven hundred thousand people worldwide and is projected to be more lethal than cancer by 2050? And infectious diseases still remain one of the leading causes of death. Cancer, cardiovascular problems, and diabetes are by far the leading cause of premature death in the world. But in reality, all of this is avoidable with a strong immune system.

That's why I created this event, to help you understand the roots of disease and how to prevent and reverse life-threatening illnesses by re-empowering your immune system.

Our show today Liver Health: Your Guide to Super Immunity. Our guest, Dr. Ellen Jensen, studied for several years with the legendary natural healer, Dr. Bernard Jensen, and became his protégé, learning all he had to teach in the field of iridology, nutrition, cleansing supplements, and many other healing methods.

For over thirty years, Dr. Jensen has studied and worked in the field of iridology and natural healing, and now is an internationally recognized authority in iridology, nutrition, and cleansing. Her books and educational courses are used by natural healing schools and students around the world.

Generally speaking, chronic disease is triggered when the body gets overwhelmed with toxins and nutritional deficiencies go on too long. The

early warning signs of poor health include fatigue and brain fog. Today, we'll talk about the best ways to take better care of one of the most important organs in our body, the liver.

Bottom line, if you have any immune-related health issues, then improving the health of your liver is a must. Please join me in welcoming Dr. Ellen Jensen to our program.

Dr. Jensen, welcome.

Dr. Jensen: Oh, I'm so happy to be here. Thank you, Jonathan.

Jonathan: It's so great to have you. Dr. Jensen, why don't we start off first by explaining, especially for those people who are new, what exactly is the immune system and what does it do?

Dr. Jensen: Well, the immune system is one of our body's most complex and fascinating mechanisms. It's made up of an entire network of cells, tissues, and organs that work together to protect our entire body. The immune system is the body's natural defense system that fights all the infections. It's made of antibodies, proteins, and white blood cells that attack and destroy bacteria, fungi, and viruses. And even our skin, tears, earwax, and mucus provide a protective barrier to help prevent bacteria and viruses from entering the body.

Jonathan: So why don't we talk a little bit about something which I think most people find interesting and it is important, Dr. Jensen. We often hear about how the heart is located here and the liver is over there. We get all of that, but where exactly is the immune system located in the human body?

Dr. Jensen: Yes, that is an interesting topic because it can be elusive to some people. But actually, every inch of the body is protected by our immune system. Even the skin produces immune fighter cells. The tonsils and adenoids that so many people have removed when they are children are very important part of the immune system. They trap bacteria and produce antibodies that kill germs, protecting the throat and the lungs.

The bone marrow inside the bones provide some very important fighter cells called B cells and T cells. And the T cells mature in the thymus gland, which is just directly underneath our breastbone. And that's a very important little house for fighter cells called T cells. And the B cells and T cells also live in our lymph nodes, our spleen, all tissues of the body are filled with them. If an infection develops, lymphocytes attack and destroy the bacteria, virus or any organism causing it.

The lymphatic system, which is a very important part of our immune system, is the clear fluid that flows throughout our bodies underneath

our skin. It bathes our eyes. It lines our joints and our entire intestinal tract. And the lymph fluid is moved by lymph nodes, and those lymph nodes are near our joints. We must exercise in order to move those lymph nodes. And those lymph nodes filter lymph fluid, and the lymph fluid carries lymphocytes that are fighter cells. And the lymph nodes trap the bacteria and viruses in the lymph nodes and all kinds of foreign substances, where they are destroyed by the lymphocytes.

The spleen, which is on the left side of our body, filters the blood by removing older damaged blood cells and platelets. And it helps the immune system by destroying bacteria and other foreign substances. The blood carries lots of immune fighter cells that are produced in the bone marrow. And those, if you get your blood work back, are called eosinophils, neutrophils, basophils. Those are all a very important part of our immune system. If the eosinophils are high and fighting, we could have parasites in the body. Neutrophils and basophils, if those are high in our blood test, we would know that we have some sort of bacteria, virus, or fungus that they are fighting. And a huge part of our immunity, Jonathan, is in our gastrointestinal tract and liver.

Jonathan: You know, Dr. Jensen, I know we are going to go on now and talk quite a bit about the colon and what that has to do with immunity. But before we get there, and I know it's probably going to sound a little strange. I just feel like talking about it for a moment or so and get your comments on it.

But another part of the immune system... Even though we are going to stay grounded in all the things you talked about, the organ systems, the blood, the lymphatics, all of this that we understand on a biochemical level, but the mind and the spirit as well. And I'm bringing that up because so many people, they suffer with all kinds of certain physical ailments. Or they may not be perfect with their diet, or taking the best quality supplements for financial reasons or just because they are just not aware that there are these things that are available to them. But yet, you'll still find that group of people with the very poor mindset and spirit, if you will, that tend to get sick all the time. And then the other way around, someone that may not be doing all the most perfect things, but their mindset is so extraordinary, their spirit is so beautiful, that they tend to go through even very stressful situations in their life and they seem to be going through it really well. You know what I mean?

Dr. Jensen: Oh, I was just thinking about that this morning, Jonathan. The mind is central control station for the entire body. And if we are thinking unhappy thoughts, if we are belittling ourselves, criticizing ourselves, we are angry all the time. Also, if we are under a lot of stress all the time, pushing ourselves, hurrying, worrying, we are actually telling every cell of the body to shut down and not work.

The cells are like little children in our bodies, and they actually feel and listen to, if you will, what that mind is saying. And in addition, when we are saying, "Go, hurry," our adrenal glands are then producing too much adrenaline, too much cortisol. And we have seen reactions from that that produce tons of acidity in the body, which then causes all kinds of inflammation and very weakened immune system.

Jonathan: See, that's beautiful, Dr. Jensen. That's exactly my point. Here it is. By no means am I going to discredit anything that we are going to be spending the vast amount of the time talking about between you and me. But I'm so glad you're with me on this in terms of the mindset.

Because the mindset, that sounds so vague, has a real impact on these physical things, these biochemical things. And even though a biochemist may not exactly agree with all of this, it is so intimately connected. So anyway, enough of that. Why don't we talk a little bit, Dr. Jensen, about what does the colon have to do directly with the immune system?

Dr. Jensen: Okay. The colon, which we have 5 feet of colon and twenty-five feet of large intestine. And that entire intestinal tract harbors potentially toxic pathogenic microorganisms. They just tend to live in there. And because of this, it's very important that the immune system establishes and maintains a strong presence between the mucosal tissue or the colon wall, between the gut and the rest of the body.

And the inside of the colon, or the digestive tube, is loaded with lymphocytes which gobble up bacteria, macrophages gobble up bacteria, and other cells that produce and participate in immune response and they fight for us. Aside from all of its other functions, the entire gastrointestinal tract is actually a lymph organ. And the lymph tissue within it is collectively referred to as the gut-associated lymphoid tissue or the GALT, for short.

The number of lymphocytes or fighter cells in the gut is roughly equivalent to those that are in the spleen. And those fighter cells live in important areas in the intestinal tract. And one of the most important areas is in the Peyer's patches.

And I used to hear Dr. Bernard Jensen talk about those all the time. Because if we have had high fevers as a child, it can destroy those Peyer's patches. And these are very similar to lymph nodes. And they are located in the small intestine, in the ileum, where the small intestine joins with the large intestine.

And in adults, the B lymphocytes predominate in those Peyer's patches. And smaller lymph nodes or fighter cells live all along the entire intestinal tract fighting for us.

And most of the lymphocytes in the gut mucosa are called IgA secreting B cells. And those are very important for the invasion of bacteria. And the lymphocytes that fight for us inside the epithelium wall of the intestines are very powerful as well. So we have T cells and B cells lymphocytes inside of our intestinal tract.

But I want to talk about something that is often forgotten in our immune system, and these are our forgotten soldiers, is what I call them. Because in addition to the lymphocyte T cells and B cells, 75-80% of the friendly bacteria in our bodies live in and around our gut. And these are the forgotten soldiers. These are the friendly bacteria or probiotics that fight bacteria, viruses, and funguses.

Now, I want to put this into perspective, because 90% of our bodies are made of bacteria. And the other 10% are genes. A lot of people don't have a clue about this. And 75-80% of that bacteria live in and around our intestinal tract to fight for us.

So the health of our gut bacteria and the health of our immune system are vitally linked. When our gut bacteria is balanced, our immune system is also balanced. But when it's out of balance, our whole immune system goes out of balance.

The signs that your immune system are out of balance, a lot of people cannot realize how much food and allergies have to do with what's going on in the gut. Food allergies, seasonal allergies, coughing, wheezing, blowing your nose, chronic inflammation, chronic sinusitis, colds, and flus that linger for weeks. When I was a child I was sick all the time with sore throats, kidney infections, ear infections. I was severely constipated. And it was not until I was an adult and I found the work of Dr. Bernard Jensen and did colon cleansing that I got well.

So I'm going to talk about that a little bit more and how to heal the immune system later. But food sensitivities are a major sign and cause of an immune system imbalance. Food, specifically undigested protein, may look like a virus or bacteria to our immune system when it seeps out of the gut.

And we see this in life-threatening reactions to peanuts and shellfish. Children and adults can have severe reactions to peanuts and shellfish. But we can also have nonlife-threatening reactions to foods that are undigested proteins that can over-stimulate our immune system and cause inflammation, allergies, eczema, all kinds of inflammatory conditions.

And many times, chemists refer to these as food sensitivities. But the problem is undigested protein gets into our bloodstream through small holes in the intestinal wall called leaky gut. And these are caused when

unfriendly bacteria begin to bore holes in the lining of the intestinal tract and protein molecules seep out. These undigested particles are then absorbed in the bloodstream.

And these proteins can stimulate and then irritate our entire immune system for up to 5 days. And sometimes it is extremely difficult to find out what food sensitivities are. Because a person could be eating small amounts of foods that cause food sensitivities like gluten, dairy, corn, soy, on a regular basis. And these are common food triggers. Gluten, which is in wheat, rye and barley. Dairy products especially processed cow's milk. Corn, which has been genetically modified. And soy, which is... Most corn and soy are genetically modified. You have to look really hard to find organic soy and corn. But these are food triggers that over-stimulate and they seep through those holes and the body starts attacking.

So the best way to balance our immune system, sometimes we can leave off those main foods, but sometimes it's other foods. But the best way to balance the immune system of the gut and the rest of the body is to make sure we are getting plenty of probiotics and to work to get our gut bacteria in balance. Because if we get plenty of friendly bacteria, they are going to fight the bad bacteria and stop the holes from being bored in the colon wall.

And our American way of eating, Jonathan, hasn't helped to keep our gut bacteria balanced. Most traditional cultures in our world regularly consume fermented foods like natural goat yogurts, sauerkraut, kimchi, which feed the beneficial bacteria in our gut.

Here, in our area, in our culture, we consume a lot of refined sugar, which feeds the bad bacteria. We consume chlorine in our water, which actually kills all our friendly bacteria. We consume a lot of heavy metals through our air, through our foods. Antibiotics, people are going all the time to get an antibiotic for a small sore throat or an ear infection, which kill all of our friendly bacteria. And processed foods that have lots of preservatives and chemicals in them, which also wear out all of our friendly bacteria.

So these are some of the major causes of gut bacteria imbalance. And when our gut is hosting 75% beneficial bacteria, our body is then able to create balance on its own. So that should be a target and a goal that we work for. But when the prevalent bacteria in our gut is unfriendly bacteria, they can cause an overgrowth of yeast, mold, and fungus, creating leaky gut and many digestive symptoms such as constipation, diarrhea, bloating, foul smelling gas, sneezing, coughing, ear infections, sore throat, skin rashes, and pain.

Now, I remember working with Bernard Jensen to create a colon chart.

And what we did was we showed that there are connections from every part of the colon through reflex response, much like acupuncture, to all parts of the body.

And when certain parts of our colon become congested with bad bacteria or old undigested food matter, amazingly, that part of the body is going to start having a problem. So when I started cleaning my colon and my ear infections went away, that part of my colon that actually connects directly through response to the ears, I'm sure was getting more cleansed. But this, Jonathan, is a large part of our immune system right there in the digestive tract.

Jonathan: Dr. Jensen has so beautifully described, and I think it's so important based on what I was saying earlier on about why most of the programs here on the Immune Defense Summit, sure, we are going to over the details in many of the presentations. Please listen to as many as possible about the best foods to have, the best supplementation, the best herbs, herbal remedies. So that we don't have to depend on things that are so harsh, like you say, like antibiotics.

But the bottom line in this conversation, a great takeaway, is for people to really appreciate that there is no time to wait any more. If your mood is down when it comes to the colon, this is actually directly intimately involved in having a very low mood. We are talking about anxiety and depression strongly connected to problems in the gut.

We're also talking about energy levels. If you are energy is just down because you've slept all night in bed or you've tried to at least, but then your energy is just really low the whole day and even just on a cellular level, how is it ever going to get revved up to a healthy level again unless the gut is healthy?

And of course, mental clarity, you're reading a book for one page or you're listening to this conversation. And I'm going to be blunt because I care about everybody who is listening to this message. If you're having a hard time tracking what's being said here now and thinking about what's being said, this is about mental clarity or an inability to be mentally clear. And this is extremely connected, strong association to gut health.

So it's important to get busy with this. Enough with that, Dr. Jensen. I also want to talk about now how we can keep the liver healthy, which is going to boost immunity and prevent disease. And I want to add one other thing. I'm sure you'll be addressing it though, Dr. Jensen. When it comes to liver health, and I know all too well what this was like when I was a young man, way too angry. The anger issues connected to liver health are there.

And when you take care of your liver and the liver is getting healthier,

you hear this idea of letting go of anger, boy, is it possible to let go of garbage anger stuff that only just makes your life miserable. So, Dr. Jensen, I'll let you take it away. Talk about how we can keep the liver healthy, because this extremely important.

Dr. Jensen: Yes, it is very important, Jonathan. The liver is the largest glandular organ in the body. And it is housed right on our right-hand side underneath the ribcage. And it's like about the size of a small football. And it weighs almost 4 pounds. And it performs multiple critical functions to keep the body protected from toxins and harmful substances.

In addition to the fighter cells of the gut that protect the body, the liver protects us with what we call Kupffer cells, which are star-shaped fighter cells. And I just love the fact that they are little star-shaped cells. And they destroy viruses and funguses that come through the liver.

All the blood of the body filters through the liver. And these little Kupffer cells play an important role in protecting the liver against invasion from all kinds of bacteria. And if the Kupffer cells are required to attack infected liver cells or cancer cells, they function as specialized macrophages. So if the problem gets more serious, then the Kupffer cells are able to change in a way so that they function in a stronger way to fight infected liver cells or cancer cells.

And the liver will also recruit other immune fighting cells from the blood, which we've just talked about, the eosinophils, the neutrophils, also lymphocytes and macrophages, to help fight bacteria and viruses that come into the liver.

The liver is...I can't even tell you. The liver has like five hundred jobs that it does for you every day. It processes cholesterol and fats. And so many people talk about cholesterol as being bad for you. But there is good cholesterol and it's an essential building material of organ cells. We could not have our cells without good cholesterol. Good cholesterol is what makes up a large part of our brain and how we think. And good cholesterol has to do with how strong our hormones are.

And the liver processes the hormones. It processes bile, and the bile affects the body, all the body functions. And the bile is produced in the liver. It's a kind of a greenish color. And it's stored about a couple of ounces in the gallbladder. And we need that bile to be injected from the gallbladder into the small intestines to help the small intestines stay alkaline, to fight bacteria, to help it to process fats. We really need that bile so that our intestinal tract can stay healthy.

If the stool, when you're having a bowel movement, is not a good brown to brownish-green color if you're eating a lot of greens, if it's a light soft

brown, then you're not producing enough bile. And there are reasons for that, which I'll talk about in a moment.

But the liver makes new amino acids. And it converts existing amino acids to proteins that are in the main building blocks of cell, hormones, neurotransmitters, and genes. So if any of that becomes blocked, especially neurotransmitters that help us to think, help us to react, then we are going to become very depressed.

And if the liver is not processing hormones properly, women are going to get menstrual cramping, hot flashes, all kinds of problems when that liver is not functioning properly. They will not be able to lose weight, if they are overweight, because liver is not going to be able to process the fats properly. And they can even start having a lot of pain in that right-hand side when the liver becomes really polluted and congested.

So the liver breaks down old worn-out cells. It processes hormones. And it also processes iron. So if people become really anemic and really exhausted, the liver is not processing iron properly. And a very simple way that you can tell if you are anemic or have low iron is to pull your eyelids down and look in the mirror and look inside your lower eyelids. And if it's really white inside those lower eyelids, you're definitely anemic. They need to be a nice red color from the blood traveling through the vessels there.

So the liver works hard every day, Jonathan, to detoxify the body of bacteria, detoxify parasites, alcohol, drugs, nicotine, heavy metals, pollution, chemicals. Whatever we put through the body, our faithful liver is there to help detoxify us and keep our immune system strong. It filters one quart of blood every single minute.

Jonathan: You know, Dr. Jensen, as you were talking I was just thinking of this incredible invention. Wouldn't it be amazing, probably change the world for a lot of people, if they actually were wearing some sort of glasses, lenses they could put on their eyes? Every time they are walking through their day in a city or somewhere, eating food, drinking something, making a decision to do things and consume something, they could actually see what that liver physically is going through to try to deal with what everybody is doing. That would be one heck of a visual.

All kidding aside, I think that's largely the problem we're having with literally millions of people. There's not enough people yet talking about this. Friends and family reminding each other, health care providers, truly living this way, a healthy, natural lifestyle with pictures on the wall and videos in their offices. And having really great clear conversations with their patients. That's why I created this event, really, to try to spark that conversation and just initiate things in a really positive way on an individual level.

Why don't we talk a little bit for a couple of minutes, Dr. Jensen, about what can actually go wrong with the colon and liver that would weaken our immune system? And then we're going to get to the really best part at the end of this program, about how to have a healthy colon and liver to keep our immune system strong. But talk to us first about, what could really go wrong?

Dr. Jensen: Okay, so back to my case when I had sore throats as a child, chronic tonsillitis, chronic ear infections, and kidney infections. In my case, and in the case of thousands of others, when mothers do not or cannot nurse their babies in the very beginning, in the very get-go, to bathe their babies with that first colostrum or immunoglobulin that come in that colostrum. Those are powerful fighter cells that fight for us throughout our lives. And we receive that friendly bacteria from the mother's milk that comes into our bodies and sets us up to have a really healthy immune system from the get-go, or, as a little child to be sickly all the time when you don't get that.

And then what happens is the mothers take the children, because they have ear infections, fevers, sore throats, stomachaches, every problem. And the doctors, all they know to do is give them an antibiotic. Even I recently worked with a mother whose baby had thrush, which is actually not bacteria; it's a fungus in the mouth. And the doctor had given the mother antibiotics to give the baby.

And antibiotics kill all our friendly bacteria. They don't kill the fungus in the mouth. They don't kill fungus in the body. They kill the bad bacteria but also the good bacteria. So I was able to help that mother quite a bit by just giving her some powdered probiotics to rub the gums with that helped the thrush to go away.

So from the very beginning is a very important thing that can go wrong with the colon and the immune system and the liver. So in the beginning, if they are getting lots of antibiotics and they don't have that good colostrum or that friendly bacteria, that just sets children up for being sick over and over again.

And then, we have to look at what the families are eating. Are they then feeding the child lots of sugar? Is the mother who is nursing eating lots of sugar? Is she eating lots of fried foods and white flour with gluten in it, which then affects the baby in a very negative way as well? Are we getting lots of dairy products with antibiotics in it? Or, lots of beef and chicken today are filled with antibiotics and hormones that we don't need.

So all of these things, coupled with a weakened immune system and eating these foods like sugar that actually feed bacteria, viruses, fungi, and parasites, in addition, white flour and white rice, those

very starchy things just turn to sugar that feed bacteria, viruses, and funguses.

And that's when we start getting that leaky gut and food starts seeping through those holes. I see teenagers coming in with severe acne, severe bloating, dandruff, all kinds of problems. I just worked with a lady with severe dandruff. And when we took her off gluten completely, it went away.

So the body wasn't attacking those things anymore creating inflammation in other parts of the body. So inflammation, allergies, skin conditions, bloating, all of these things can go wrong and can be symptoms when the colon is not having enough friendly bacteria, when the liver is all congested.

And I want to talk about how that liver can become congested. Because when people are constipated throughout life, then it actually starts backing up and creating congestion in the liver and gallbladder. And in addition, if people are eating lots of sugar, all of the blood from the body that's carrying sugar or high fructose corn syrup, which is worse than sugar, refined carbohydrates, drugs, alcohol, nicotine, all of these things start filtering and going into that liver. And eventually, that liver starts breaking down. It cannot fight for so long and so hard.

And sticky things like high fructose corn syrup and sugar and white flour and even too much processed fruit juice—a lot of fruit juice has high fructose corn syrup in it—go through the liver and start making that bile become very sticky. And that bile starts hardening.

And then what happens is people start having gallstones. And many people are not aware of it, but they can have start having liver stones as well that totally congest and block the Kupffer cells and keep the friendly bacteria from working properly.

People that drink too much, we are all aware of cirrhosis of the liver, which the liver is becoming hard. Well, alcohol is pure sugar. And so it starts hardening in the liver. That bile can only take so much. So it starts hardening and becomes like a plaque in the liver and all kinds of infections ensue. Sometimes people can get infections from food that has bacteria from feces on it, which is a type of hepatitis. Or they can get hepatitis from a needle in the hospital. So there's all kinds of liver infections and diseases and hardening of the liver.

But then there are the ones that people are not even aware of, that just daily eating sugar and white flour. And I have so many people that come to me and the crux of their problems is beginning in their liver. They're bloated. They have skin problems. That liver processes all the lymph of the body. And those are the clear fluids that line our throat, our sinuses,

and our ears.

And I talk with my clients and I say, "You have a little traffic jam in your liver. It's all congested." So therefore, they are chronically blowing their noses. They're coughing all the time. They have acid reflux, because everything gets backed up back through the digestive tract when the pathways of that liver are not flowing properly.

So some of the symptoms of a congested colon are bloating in the digestive tract, sore throats, fatigue. I give people what we call a Candida test. It's just a simple little test. Candida is a fungus that survives in the colon and is created from eating too much sugar that feeds the fungus, and killing all the friendly bacteria from antibiotics.

But you can do a simple little spit test in the mornings. And spit in a glass of purified water and check it every fifteen minutes for an hour. And if it starts forming thick legs or streamers or sinks to the bottom, it's full of fungus. And so, those are some of the symptoms. Symptoms of liver problems are yellowing in the eyes. The whites of the eyes, they start becoming yellow. It's jaundice. And yellowing in the skin or ridges on the fingernails, severe constipation because the gallbladder is not producing bile into the liver, a very light colored stool, a dry hard stool.

There are many, many symptoms... Pain on the right-hand side, even swollen lips, or dark patches on the skin or on the lips. A crusting around the outside of the mouth, cracks in the tongue or cracks on the lips. That's all related to liver congestion. And in my mind, the colon and the liver work hand-in-hand together. And if one's out of balance, the other is going to be out of balance. And that's going to affect our entire immune system, Jonathan.

Jonathan: Wow! Dr. Jensen, I can just visualize all the people that are checking their nails. They are looking in the mirror now. They are not even paying attention to what we are saying. They are checking their eyes. They are poking with their fingers underneath their ribcage on the right side and they are checking their liver. They are going through all these medical tests. They are not even listening to us anymore.

Anyway, all kidding aside, amazing information. Couple little quick notes, obviously, you know I want you to listen through all the presentations in the Immune Defense Summit. But for those really concerned about family health and raising healthy children, which is what Dr. Jensen was just talking about quite a bit, just please check out Dr. Heather Wolfson's presentation, her conversation with me. Really outstanding, and I'm not kidding.

Another one for those who want home remedies for infections so that you are now replacing out in your mind the need to even think about

antibiotics. Now, it's like, "Wait a minute. I've got these powerful tools right here at home that are perfectly safe and really effective against infections, little buggies, feeling run down. What do I do?" Marjory Wildcraft does a great conversation with me where she lays out home remedies for infections. Please check out that one.

And there is just so many others where we get into the supplements, how to clean out the colon, talking about foods that are good or bad for our immune system. We do this and we lace it into many of the conversations. And you know what? Somebody listens to one conversation. It really hits home. And another one just doesn't resonate with them. But you listen to all these and I promise you, you're going to love the totality of what we're offering in this event.

Dr. Jensen, one last thing as we wrap up. Please lay it out for us, how to have a healthy colon and liver for a strong immunity. You just do such a beautiful job with this. I've known you for years. And people better get ready. You're going to want to take some notes. So take it away, Dr. Jensen.

Dr. Jensen: Okay. Well, as I said, from the get-go, mothers need to nurse their babies no matter what. And as much as possible, avoid those antibiotics as much as possible, because they are going to kill the friendly bacteria in the body. And we want to reduce or eliminate processed foods. Because those packaged foods, full of preservatives and chemicals, are killing our friendly bacteria and clogging up our liver and digestive tract.

And please avoid gluten. Gluten in our country today—the wheat, rye, and barley is just not the same. It's not the ancient grain that our bodies utilized maybe well a long time ago. But the grains now are genetically modified in many ways. And the gluten is a large particle. And when it seeps through that intestinal wall, it causes huge inflammatory reactions that can lead to all kinds of skin rashes and dandruff and bloating and many other things.

Please avoid sugar. Sugar in most all ways, such as white sugar, brown sugar, processed sugar. It feeds the bad bacteria. If you want something sweet, try stevia. Stevia is a good sweetener and it's made from a plant. It has no calories. It fights fungus. It's very good for you.

And you might use a little Mānuka honey. Mānuka honey is actually a medicinal honey that's been shown to fight H. pylori, which is a very bad bacteria in the gut. And when you look at Mānuka honey, there's going to be a number on the honey of the strength of bacteria fighting properties it has. So you want to look to see if they are between twelve and twenty-five. That's a good, strong Mānuka honey. So use those in place of sugar.

And please, please avoid high fructose corn syrup. It's even worse than sugar. That is a syrup that comes from genetically modified corn. It's very, very sweet. It's very, very sticky. It totally clogs up the liver and causes that bile to become very hard and sticky. Also, avoid the corn syrup and the sugar because it feeds that bad bacteria that you don't want that causes all that bloating and sore throat.

And we want to avoid artificial sweeteners, please. They have done some research that artificial sweeteners are linked to problems such as multiple sclerosis. They can cause problems with the neuroreceptors making the connections like they should. So anything that says "aspartame" on it or all of those artificial sweeteners, please stay away from that.

Artificial colors and dyes, they might be pretty. Red dye number 7 or yellow dye number whatever. Those colors are having to be filtered through the liver. And they are toxic to us in so many ways.

So we want to start also looking at what type of cleaning products we're using because those chemical cleaning products are seeping into our skin. And those are causing problems with the liver, which then the liver is not processing hormones properly. We're getting hot flashes and menstrual cramps.

So we want to look at using organic products on our bodies such as natural lotions, natural creams. We also want to look at natural cleaning products for our homes. Look in your health food store. They have a world of natural things today. I even like to clean with raw apple cider vinegar, lemon juice, and baking soda. That cleans your oven beautifully.

So we also want to work on losing weight. If you're really overweight, that means your liver has too much fat in it. So you want to work on avoiding the foods that cause weight gain that we've just discussed. Do some exercise so that the liver can start functioning better.

Avoid alcohol, excessive alcohol, caffeine, and nicotine, all of those have to filter through the liver. And like I said, alcohol is pure sugar. Avoid unnecessary antibiotics and prescription medications. I can't say that enough. And eat whole foods, whole, pure, and natural foods as close to the earth as possible, and organic foods that are not genetically modified.

So the foods that really help the liver the most are your bitter greens, your cilantro, your parsley, your kale, your endive, collards. Dandelion greens are fantastic for keeping those liver channels open. And red beets are wonderful.

Eat naturally fermented foods to feed the friendly bacteria in your body such as sauerkraut and kimchi.

Also, lemon and lime help to dissolve the plaque in the liver and the intestinal tract. Apples are high in malic acid as well as raw apple cider vinegar. They are high in malic acid that can dissolve this sludge and the stones in the liver. A good organic cranberry juice mixed with some water can help dissolve that sludge as well.

Take good probiotics and herbs that help the liver. Bupleurum is a wonderful herb from China. It detoxifies the liver. And burdock is a wonderful liver detoxifier. And chicory helps the bile to flow. And milk thistle helps to repair the liver.

So these are the suggestions I would make, Jonathan, to help that liver and digestive tract to function well and make our immune system strong so that we can function with clear brains and happy smiles and be healthy and live long lives.

Jonathan: Well, I know what this is going to sound like to people who actually don't know how well I know you, but, Dr. Jensen, you truly are a gift to humanity. And I am not kidding. This is just a fantastic conversation I've had with you.

Obviously, I want people to take a deep breath. Listen to as many presentations as you can in the Immune Defense Summit. If you're purchasing the event, great! I strongly suggest you listen to this one. And so many others that resonate with you listen to them 2, 3 times in the car, when you're taking a walk and exercising. I promise you, you will get at least 50% more out of these conversations.

And, Dr. Jensen, I want to thank you so much for your time. And I want to thank our listeners for joining us today. If you would like a copy of this program plus all the other presentations inside the Immune Defense Summit, simply click the banner you see on this page. Thanks again for attending the Immune Defense Summit. Talk to you soon. Take care.

Protecting Immunity: Effective Herbal Remedies

Guest: David Christopher

Jonathan Landsman: Welcome to the Immune Defense Summit. I'm your host, Jonathan Landsman, creator of NaturalHealth365.com. Did you know that every year drug-resistant bacteria or superbugs kill 700,000 people worldwide and is projected to be more lethal than cancer by 2050? And infectious diseases still remain one of the leading causes of death.

Cancer, cardiovascular problems, and diabetes are by far the leading cause of premature death in the world, but, in reality, all of this is avoidable with a strong immune system. That's why I created this event: to help you understand the roots of disease and how to prevent and reverse life-threatening illnesses by re-empowering your immune system. Our show today - Protecting Immunity: Effective Herbal Remedies.

Our guest, David Christopher, was raised in the simple ways of natural health. His interest grew way beyond his university studies, and in 1974, he took his place by his father's side at the School of Natural Healing. Later, as a loving tribute to his father, he wrote a book entitled *An Herbal Legacy of Courage*. In 1979, he became a master herbalist and the director of the School of Natural Healing.

Thanks to David's work, thousands safely apply his methods for natural healing. In fact, as an international educator, he has been instrumental in influencing natural healing principles taught in several European herbal colleges. Conventionally speaking, we're all told that natural remedies are no match for immune system issues. But we must keep

in mind those in Western medicine that promote this idea have rarely, if ever, looked into the topic themselves, making them, in my mind, unqualified to make such a statement.

In reality, herbal remedies provide powerful, yet safe, support for the immune function and, in many cases, quickly help to resolve commonly known health problems like digestive issues, colds, flu, and even things like pneumonia. Today, we'll talk about how you can naturally feel so good using herbal remedies on a regular basis without the fear of unwanted side effects.

Please join me in welcoming David Christopher to our program. David, welcome.

David Christopher: Thank you.

Jonathan Landsman: David, what are your favorite herbs for protecting the immune system?

David Christopher: Well, I think hands down I'd have to look at astragalus. It is I think the number one herb for protecting the immune system. And the nice thing about astragalus is it's a tonic. And tonics are substances that will go either way if you've got over-functioning or if you've got under-functioning, that's a tonic, and it will go whatever the body needs. They call them adaptogens also.

Astragalus does a lot of things for the immune system. It actually increases the interferon which is the chemical message that the immune system uses to communicate between the cells and increases that. There've been studies where they showed that immune cells that have been damaged from chemotherapy, they'll go ahead and gather them and then they'll test them. And astragalus tends to bring them right back to activity. So weak and damaged cells, it improves them. It tends to increase the lifespan of these immune cells. And these are all studies that have been done.

One of the things that astragalus does is it stimulates the production of and activity of the macrophage, the part of the immune system that gobbles up impurities, so nonspecific. And it tends to last for a long, long period of time. They've done the studies showing that you take astragalus, and it immediately affects your immune system within six hours. And it'll last, as far as the studies are concerned, 72 hours. So it's fast-working and it'll last long.

I can't think of anything in the medical profession that has any benefits that astragalus has. Nothing. Nothing they have. Astragalus is my favorite herb for the immune system.

The other one that's the most popular one out there is also a favorite one of mine and that would be Echinacea. And Echinacea works in a number of different ways, but one of the things about Echinacea is that people recognize it as being effective. Even before they knew there was immune system, they knew that it was effective. Echinacea was used for everything. And how can something be used for everything unless it basically affects the immune system? That's exactly what Echinacea does.

Echinacea is an American herb. It was discovered by us basically in the early 1800s. And Indians were using Echinacea. One of the ways they used it was to just chew it which is the very best way to use Echinacea or any herb that would stimulate the immune system because your receptor cells are in your mouth. And so, when you chew on Echinacea, you immediately get that stimulation of your immune system. You swallow a capsule; you most likely have to wait for the Peyer's patches in the intestinal tract to get that immune effect. So, yeah, orally is the best way to use any herb that's for the immune system.

Echinacea was kind of an interesting one. There's this Dr. Myers who found out from the Indians or from a woman that was dealing with the Indians. At any rate, he found out about Echinacea, found out about how fantastic it was. And then he found out it was good for snake bites. And so, he went around the country, selling his snake remedy, snake [inaudible 06:06], if you would. And basically what it was was Echinacea. And what we found out is that the Echinacea blocks hyaluronidase. And snakes inject hyaluronidase into you so that their poison can spread through your system. It breaks down your hyaluronic acid which is what holds the cells together.

Snakes do that, but we've found now that bacteria also inject this hyaluronidase. And Echinacea tends to block hyaluronidase. And also promotes the production of hyaluronic acid, so it is actually one of the best things for wound healing. But it definitely stimulates the immune system, and that's why it worked. So they thought it was for everything, and they used it for everything. And it was one of the most popular herbs until the early 1900s. And then the medical profession took it, and they chemically extracted everything and broke it down and then used those substances and found out it had no effect whatsoever on anything.

And so, they said Echinacea was bogus. And even though people were getting good results with Echinacea, they stopped using it because doctors told them it wasn't any good. So here we have this American herb that fell out of favor with everybody, and people just stopped using it. And pretty soon, hardly anyone was ever using Echinacea.

But the Germans, they tended to use Echinacea. So they started growing

it over in Germany, and they were buying a lot of our Echinacea. The only one that was ever using Echinacea was foreign. It wasn't people in America. It wasn't until we really discovered the immune system and how it worked that we discovered exactly how Echinacea works. And it works by stimulating the immune system, specifically the non-specific part like the white blood cells that gobble up all the impurities, the macrophages if you would.

Echinacea is an interesting herb. We could just track it as far as its usage is concerned according to our knowledge. Once we found out that that's what it did, that it worked with the immune system, then people started using it again. And now, it is one of the most popular herbs out there, one of the highest-selling ones, Echinacea. So astragalus, Echinacea, those are, I think, my favorite, favorite herbs for protecting.

Now, other ones are really good. The mushrooms—almost any mushroom will be good for the immune system, but specifically reishi mushrooms are fantastic in strengthening and protecting the immune system. And so, we put together a formula that contains astragalus, Echinacea, reishi mushroom, and ginseng. Ginseng's another real good one for the immune system. So those are my favorites.

Jonathan Landsman: David, I know we can't do this in sort of a program like this for each and everybody's particular situation. But just generally speaking, what would be a good amount to take on a daily basis? Clarify, also, is it safe to use every single day or do we have to sometimes back off and then go back on for its effectiveness? But just kind of go down the line: astragalus, Echinacea, the reishi, and the ginseng that you mentioned just in terms of dosage. Can we use it every day? And also, perhaps, are there any contraindications for people out there on blood pressure medication, cholesterol, this kind of stuff?

David Christopher: Okay. As far as these herbs we've talked about are concerned, they could be used on a daily basis, and that would be no problem whatsoever. There certainly is no toxicity in these. And as far as their effectiveness is concerned, in smaller amounts, which would be if you're taking an extract, you should take 5-10 drops a day or maybe even three times a day would be sufficient for something to do on a daily basis.

The Echinacea has another way that it works. It has these very large polysaccharides that when you take them in the body doesn't recognize them as what they are. And the body is tricked into thinking that it's been poisoned. And so, it'll, again, react by stimulating the macrophages and stimulating a non-specific part of the immune system to take care of this poison that's in there. Well, you can only do that so long, and the body goes, "I'm not being poisoned." And so, then it becomes less effective or not effective at all in that particular instance. There's other

things that work with Echinacea, but, in that particular instance, it then becomes less effective or not effective at all.

And so, you just go off of it, and then just wait a week or so. And when you come back, there's no memory in that part of the immune system. And so, you take it again, and the body goes, "Oh! I've been poisoned." And all of a sudden, it starts making macrophages and stimulating their activity so that they'll become more aggressive. That's really nothing saying that Echinacea should be taken every day because it's toxic or anything, only because of the way it works. And that's in larger amounts.

So we have it in the formula to be taken on a daily basis. In small amounts, you get those other effects. You don't have to worry about the one effect of tricking the immune system into functioning.

Ginseng has been used for thousands of years, and, yes, it can be used on a daily basis also. Reishi mushroom definitely can be used every day. And no interference with drugs, no. Unless the drug relies on you not having an immune system, then there may be a problem because it's strengthening the immune system. Does that make sense?

Jonathan Landsman: Yeah, it does. And I do appreciate the clarification because a lot of people out there, of course, at least here in the United States and throughout the Western world, they have that Western mindset of how much, are there any contraindications because of conventional medicine. So I appreciate you going over all this.

But now that moves us to another element of all this in using herbal remedies. When we're traveling around or in a different spot or it's just not our home setting and it's not easy to have these things around us to protect ourselves, what do you do?

David Christopher: I don't go anywhere without my Echinacea. And if I start feeling a little punk or if I have heard that there's something going around, then I'll start dosing myself with large amounts of Echinacea. And then that'll fire up my immune system, and I can be ready for it. Also, if you're not taking your Echinacea with you and you haven't taken herbs, every place in the world sells garlic. I don't think I've been a place anywhere in the world where they don't have garlic available in grocery stores or down on the corner or something.

Garlic and onions are something we would rely on for not only stimulating the immune system, but, by themselves, those foods, those herbs, will destroy bacteria, viruses, parasites. So definitely, any place you go, get the garlic bread if you're in Italy. Get garlic in your meals and buy garlic. It's everywhere. It's ubiquitous, as are viruses and bacteria. So any place that you can pick up a virus or bacteria, you can get garlic.

How does that sound?

Jonathan Landsman: Yeah, it sounds really good. And it's interesting what you're saying though, too, about this whole idea of these capsules that are so popular out there, especially when we're not feeling well. This is a very important point you've already brought up, right, David, that the idea is that we mix, say, raw garlic, the cloves.

It may not be easy to eat for people, but what a wonderful therapy to be able to get used to, as often as possible, taking in some of those garlic pieces into the mouth, chewing them up, and also onion pieces, raw onions, and chewing them up and mixing it with the saliva and taking 30 seconds or a minute for your systems to recognize the properties that are inside these foods. It's a really powerful thing to appreciate, no?

David Christopher: Yes. Another thing that I just remembered off the top of my head was honey is antibacterial. Boy, if you can take and crush up your garlic and put it in honey, then it makes it a little more palatable. And you don't wash it down, so it's like in your system and doing the antibacterial job that it's supposed to do.

Jonathan Landsman: And, again, it's fair to say, right, David? I want to make this really clear so that people aren't taking garlic and onion or putting in some honey and overheating it and cooking it a lot. "Oh, this stuff doesn't work. What is David and Jonathan talking about?" Can you just make it really clear – is there a possibility that if they're just sort of throwing garlic in dishes that are cooked for a long time or onions cooked, over-cooked, or putting raw honey in hot tea and having it sit in something that's near boiling, does that change the effectiveness of the properties in those foods you just mentioned?

David Christopher: Well, the reason that honey is antibacterial and antimicrobial is the fact that it's in its entirety. When you add water to honey, then you lose a lot of that property. So cooking it and adding water to it, yeah, you lose that property. You still get the sweetness, but you don't get the antibacterial effect with the honey.

As far as the garlic is concerned, garlic has like 28 different sulfur compounds, and all of them work. And they're really not destroyed by heat, except for the allicin which is the strongest sulfur compound that's in garlic. That one shouldn't be cooked. In fact, that one's not even in garlic unless you crush garlic. So we advise that you put garlic to a garlic press, let it sit for five, 10 minutes, and then use it so that you get that full benefit of that particular sulfur compound.

Jonathan Landsman: And in terms of the onion, can you overcook that?

David Christopher: Onions can be cooked. They seem to retain their

value. And we also suggest that people make a nice onion soup, not with beef stock or chicken stock but just onion. You make a nice onion soup, and when it's down to the temperature that you want to eat it—that it's not too hot—that's the time when you'd add the garlic to it so that you're not cooking the garlic. And then you get the full benefit.

For free, if you go onto HerbalLegacy.com, there'll be a bar that says "Recipes." You click that and then you can find the onion soup. And that's a fantastic onion soup recipe and doesn't use beef stock or anything like that.

Jonathan Landsman: It's interesting. Back in my macrobiotic days, which really started my journey into natural health and natural healing, one of the biggest things they talked about in the macrobiotic community was a miso soup, a fermented paste, soy bean paste. And the miso paste was put into water, but they always put in pieces of onion and wakame and it's a very healing soup. I really got hooked on it. Quite delicious, easy to make, fast, simple. Something that people could definitely look into is trying some miso soup.

So that moves us, David, to the next part. Why don't we just talk a little bit more about how you feel diet plays a really important role in keeping our immune system strong? What do you tell people?

David Christopher: What I tell people when they ask me about having a strong immune system, I tell them that the same nutrients you need for your body you need for your immune system. They are cells of the body, and they do need the same nutrients. And what we've found is the very, very best foods that they can consume for the immune system would be foods high in vitamin C. Probably your best bet for getting vitamin C are bell peppers. There's nothing higher. They're double what oranges are and any other citrus. Bell peppers are your highest vitamin C food source. That's in a grocery store.

Now, of course, something like acerola cherries or something, but you don't find acerola cherries in your grocery store. You find bell peppers. It's the red ones, the orange ones, the yellow ones that have the most value. The green ones have good value but not as much as the colored ones. If I'm going to do vitamin C therapy—and that really helps. Anytime you have a cold or your immune system's down, vitamin C therapy works really well.

And so, two slices of bell peppers give you the amount of vitamin C you need for the day. But as far as vitamin C therapy is concerned, you do the whole bell pepper, then you're getting vitamin C therapy. And you do a half a dozen bell peppers a day, then you're getting mega doses of vitamin C. So that's the way we do mega dose therapy for different conditions.

And of course, you want to go back to the citrus because citrus is high in vitamin C. But one of the things about citrus that I really like is that there's a lot of flavonoids, and those flavonoids are in the white part rather than in the sweet part. And so, what we tend to tell people is take like a carrot peeler and peel the colored part off the citrus. Because a lot of that times that colored part, people painted it to make it look the way it's supposed to. You go to an orange tree, and they don't all look the same, those oranges. They're different shades of orange and partially green and stuff. But, boy, in the store, they're all the same color because they painted them. You don't want that paint.

So you take the carrot peeler or potato peeler and just peel off the colored part, and you've got this big white mass. You cut that up and eat it. Or what I like to do is take that and put it in a blender with some fresh-squeezed orange juice and blend that up. And, wow, that is good vitamin therapy right there. So citrus.

And then, of course, foods that strengthen your body and also are specifically strengthening for the immune system—I think one of the best ones out there is broccoli. All your green, leafy vegetables and foods in the cabbage family are good, but broccoli seems to be the king of foods. And that's the one that I think should be consumed. It's high in vitamin A, vitamin C, vitamin E. It's a very, very good food. Very strengthening for the immune system.

One of my favorite foods for keeping the immune system strong and healthy is ginger. Ginger, kind of like cayenne, has that hot feel to it. Cayenne does it with capsaicin, but the ginger does it with gingerol. However, they still kind of get the same effect. So those foods are very, very good for the immune system, for keeping it strong and active and stimulated.

Horse radish would be another one we'd want to do. Mustard. So those really hot ones. We call them pungent. I think pungents are good for strengthening and protecting the immune system. And I mentioned green, leafy vegetables. Nuts and seeds. Those are the ones that are really good for the immune system. Kiwis—another great one.

But I think one of the things that we really need to look at is just any food in its whole form. So what we're talking about are whole foods, as nature intended, in their fresh state. So fresh, whole foods. Any fresh, whole foods are going to be strengthening for your body and they're going to be strengthening for your immune system.

Jonathan Landsman: So interesting, David, because, back again, in my macrobiotic training, it really taught me to appreciate food in such a different way than this calories-in and calorie-out. My exercise physiology training, all my university training, for that matter, about

nutrition, fat, protein, and carbohydrates, it was so dumbed down compared to listening to the macrobiotic educators, talking about the value for our health that we eat foods that grow above the ground, just like what you just talked about with leafy, green vegetables.

Those foods that are on the ground, onions, your squashes, things like this, and eating foods that go in the ground like burdock root and carrots and parsnips. Just incredible how they would talk about how all of these foods had different energetic properties to them and actually enhanced our health in so many different ways, whether it was lung health, stomach, digestion, immune health like what you're talking about. It's just an amazing thing.

I'm sure you as an educator you must shake your head all the time. So little of this is taught to healthcare providers.

David Christopher: Yeah. You think?

Jonathan Landsman: So, why don't we talk a little bit now, David, about what suppresses our immune system? Because I think on the opposite end of the spectrum, the foods I'm sure that you're going to mention, they're so obvious. The dumbed down foods, if you will, like white sugar. My god, that's horrific. But talk to us about what you see really suppresses the immune system.

David Christopher: Yeah. Any highly processed foods are suppressing to the immune system. So we always tell people on almost anything as far as their health is concerned stay away from the three white angels of death: sugar, white flour, milk products. Those definitely raise havoc with your immune system and can suppress it. So even if you've got organic, whole, fresh milk, it's not natural. It may be organic. It may be whole. It may be fresh. Even if it's not pasteurized, it's still not natural because every animal on the face of the earth, once their child gets to a certain age, they kick them away. They don't let them nurse anymore, except us. And then our doctors tell us, "No, you're not a Jersey cow. You don't need to nurse your baby. We've got formula for that." You see?

When they don't need the formula anymore, when it's time to wean, then they go, "They need milk. But not your milk. They need some from another species. They need milk." So I find that milk and milk products are one of the worst things out there and one of the things that can damage your health the most and can suppress your immune system. It's not supposed to be there. It's designed for babies to consume and break down, and they can do it. We don't have those capabilities.

Now, like the Northern Europeans and the people in the Mideast where there's a lot of snow and where there's a lot of sand and nothing growing, well, people started using the milk from animals and it kept

them alive. It made them sick, but it kept them alive. And they kept using it and kept using it. And so, just about everybody in the world is lactose intolerant except for Scandinavians and people from the Middle East. They actually mutated and they can make lactase.

But nobody can break down galactose. It's always the disaccharides, and that galactose is impossible for anyone to break down except for babies. They have what it takes to do that. And the milk protein—again, nobody can break that down. It relies on rennin. Rennin is needed to break down milk protein. And the babies produce that. Once they've been weaned, they don't produce it anymore.

So when you take something in your body and it's accepted and then your body realizes it can't be used, it can't be broken down, it'll surround it with mucus to try to get it out. That's why you get so much mucus when you do dairy because non-food. It's something that is actually damaging to the system. That may be a shocker for a lot of people, but that's what we've found.

We didn't wake up one day and go, "We hate milk." We've found through all these years that if you take people off of milk and dairy products that asthma, allergies, so many different things just clear up on their own, just taking them off of that.

I had this older guy come see me, and he had glaucoma where he had these high-pressure readings in the 40s. So he asked me what to do, and so we gave him the typical herbs for the eyes and then the right diet. Well, he comes back a year later to me, and he goes, "Your herbs don't work." I said, "What?" He says, "Your herbs don't work. I've been taking them steadily for a year," and he had. And I said, "Well, let's talk about your diet." I said, "Are you getting plenty of milk to drink?" He said, "Yeah, I'm getting three, four glasses a day." I said, "I told you not one drop of milk." I said, "You're fired. Get out of my office." He goes, "You can't fire a customer." I said, "Get out of my office. You're making us look bad." He goes, "Okay, I'll get off the milk." Within 30 days, his readings dropped from the 40s to the teens, just getting off the milk.

So it's something I say that we've just had a lot of experience with. And it may go counter to what people think. People think that's the only place you can get calcium, etc., etc. But no. Sugar, white flour, milk products – no, no. We find that those are very damaging to the body and suppress the immune system.

Jonathan Landsman: David, great information. And this is a clear indication that the immune system is trying its darndest to get this garbage out of the body. But what an important point you just brought up that if someone closes their mouth and tries to take a deep breath—I want people to do it right now. Take a deep breath through their nose

and, better yet, even seal up one of their nostrils, try to breathe in through just one of the sections of your nose and then do it with the other side.

And if it is so uncomfortable to breathe, you can't even get the air in, isn't that alone a great indication there is so much mucus build-up. People don't even realize they breathe through their mouth. They think that this is just a normal part of living, but it's the immune system trying hard, like you say, to circle the wagons around these toxins and trying to get them out of the body.

But in so many cases, it doesn't get out. The mucus is stuck. People can't breathe well. They get clogged up. You've got mucus and plaque in the joints and in arteries, and all of this is from so much what you talked about, David, the wrong kind of foods and not focusing their attention on healthier foods.

David Christopher: Can I give you another shocker?

Jonathan Landsman: Please.

David Christopher: I talk and people go, "Well, what can I eat?" Well, let me tell you right now grains and legumes are a gift from God. They're highly storable. In fact, they've got grains that were a thousand years old and planted them and they grew. So here we have something that's a gift from God that's highly storable. And one of the things that makes them storable is they're highly acidic, specifically phytic acids. They're also called phytates. They're in these highly storable foods. And that's what makes them storable.

They also have enzyme blockers in them, and they're kept in a dry state. So that's what makes the preserve-able. They're foods that you can store for a long time, and then in case of a problem, you can get them out and use them. But they are very damaging for your system and suppress your immune system because of these acids. They actually suppress the immune system.

And so, I'm not saying don't eat beans, don't eat legumes, don't eat grains. What I'm saying is we need to fix them properly. And once we've done that, then these phytic acids are washed away. And what we do is we sprout them. So legumes, grains—they need to be sprouted. And in the sprouting stage, then these problems that make them highly storable are washed away. The enzyme blockers are gone. The acids. They're all washed away. And they sprout and they become a more pH neutral food for us, and they become very beneficial.

So I think the key here of what we're saying is eat fresh, living, raw food. So as far as grains are concerned, they're kind of in a storable stage,

and they're not really for our consumption. You grind them up in that storable stage, and you have all those acids and you have the enzyme blockers. They're causing havoc. And then you cook those things, and you always tend to cook these grains. And then you destroy any enzymes that are there, so you have no enzymes. You have enzyme blockers, and you have a very acidic product.

But if you just go ahead and sprout legumes and grains, then it becomes very beneficial. Now, they've run into some problems I understand commercially doing sprouts just because of the volume and not being able to take care of it and such. So that may be problematic, but if you sprout your own—and it's not that difficult to do—then that's your best food.

So what we're advocating is live, fresh food. This isn't in scriptures, but it's in the Dead Sea scrolls. They found that Christ visited a group of people that were into health. And I think the most poignant thing he was able to teach them—because they were already into health. One of the most poignant things he had to teach them was, he said, "Why do you eat dead food? You get death from death." He said, "Eat live food. You get life from life." Doesn't that make sense? So I think we can summarize this whole thing about good food/bad food is you eat live food and you stay away from dead, processed food.

My dad always talked about, "Well, you can take these grains and fix them the right way and take and plant them out in the garden, and they'll grow. You'll get plants from them." You take Wheaties or Corn Chex or something like that and plant them in the ground; they ain't going to grow. I think that's the key. You want to eat live, fresh food. We call it in its season, in its growing season when it's live and fresh. Does that make sense?

Jonathan Landsman: It does. David, we're closing out the program with two extremely important points that I want people to pay close attention to. Number one, talk to us a little bit about what we need to know about those people with hyperactive immune systems like so many people that are suffering right now from autoimmune disorders. What do you tell people?

David Christopher: I tell them autoimmune diseases did not exist until they had vaccines. Vaccines trigger autoimmune diseases. No ifs, ands, or buts about it. There are some other things that can trigger autoimmune disease, but that's the main thing that cause autoimmune disease, our vaccines. And so, the best thing is to avoid having an autoimmune disease, so you avoid having vaccines.

But another thing that tends to trigger a lot of allergies and some autoimmune disease is dairy products. And then foods that shouldn't

be consumed by babies. So babies are supposed to have mother's milk. It provides immunity. The milk itself is a passive way for the baby to have immunity from all the diseases out there by breastfeeding. Now, you give them a formula. Then you don't get that benefit. Cows have cow diseases. Humans have human diseases. You're not going to get immunity through cow's milk. You're only going to get it through human milk.

And as far as formula is concerned, what do we have in formula? We have pasteurized cow's milk. We have wheat, and we have soy. Guess what the three main allergens are in the United States. Cow's milk, wheat, and soy. Do you think there's a connection? Yeah. So those are foods that we absolutely want to stay away from.

We want to stay away from non-foods like olestra where they've just manufactured that. Boy, that's really devastating for the immune system. And these artificial sweeteners. You've got to stay away from them. And some things that are natural—we think—like coffee and tea. Well, those have tannins in them. And as a green tea—that doesn't seem to be a problem—but when you process those tannins, you change the tannins. And they become blockers for the immune system. They block enzyme action. So those are things we want to stay away from.

But as far as the immune system is concerned, once it's happened and once we've triggered an autoimmune disease, then I have found that even though astragalus is for strengthening the immune system, what we've done is we've taken astragalus and mixed with it marshmallow root in 50/50 parts. So it's a formula that you can do yourself. It's a 50/50 combination, astragalus and marshmallow. And when you put it in those proportions, then what you have is a formula that specifically calms down the immune system, so it doesn't attack you so violently. We call it Immune Calm formula. And it does exactly that.

I used to tell people, "If you've got an autoimmune disease, you've got an autoimmune disease. You've triggered the body against itself, and there's nothing you can do." But I had to eat my words, and I've found that by taking a formula like this—astragalus and marshmallow together—we can actually calm that immune system down. And all the damage that's been caused by the immune system we can repair with Dr. Christopher's Comfrey formula.

Jonathan Landsman: David, finally, probably in my mind one of the most important parts—and before we get there, I just want to mention that for all those people out there concerned about the vaccination issue. Should I vaccinate or not? Please, make sure in this summit, the Immune Defense Summit, that you're turning in to Dr. Judy Mikovits' conversation with me. I promise you it'll be well worth it. This woman comes out of the National Institute of Health, over 20 years of vaccine

research. And she's going to go public with information that you have never heard before.

And I also strongly encourage you to listen to Dr. Heather Wolfson who did a great interview with me in terms of family health and so many of the things that we need to do before even conceiving, before conception of a child, all throughout pregnancy, and even afterwards what parents can do to keep their kids healthy and safe. That's what this is all about.

So, David, I turn it over to you. What can parents do to help their children's immune system be really strong, especially if they choose not to vaccinate?

David Christopher: Well, feed them right and don't be so sterile. Let them go play in the dirt. And let them be exposed to bacteria and viruses that they might find in the dirt. That's going to stimulate their immune system to be strong.

One thing you don't want to do is when a baby doesn't have an immune system yet, you don't want to put bacteria into their blood stream, especially piggy-backing it with mercury and aluminum and formaldehyde. If you really want to have an autoimmune disease, do that. If you want to have brain damage, do that.

And they've found that there is definitely a link between taking multiple vaccines and all of the aluminum and mercury they're putting in the system and autism. You have a whistleblower in the CDC, Dr. Thompson, that has come forward, and the information's been entered into the congressional record. But Congress won't depose him. He wants to be deposed. He wants to blow the whistle. He wants to tell people that autism is caused from these vaccines.

They won't do it because every member of Congress gets \$250,000 from Big Pharma, basic, as long as they vote for their way. And so they're not deposing him. They need to depose him because there's 100,000 children coming down with autism every year. And they've got to stop it because if it keeps going—it's one in 40-something now. It's going to one in 25 pretty soon. And if it keeps going, it's going to be one in two. So we have got to do something about stopping these vaccines.

I'm the first person to say, "Yes, expose these immune systems on a healthy person to a small amount of disease. I believe in immunization. I do not believe in vaccination." They do it wrong. They bypass the macrophages and the T cells, bypassing the mucosa where that happens. Like the polio vaccine, with the sugar cube. That went right to your mucosa. Macrophages gobble up the polio virus, then took its particulates to the T killer cells, and then the T killer cells were able to make sure that that wasn't a big problem. And then the T memory cells

remembered what it was, and so now you're immune for life.

These guys, they bypass that part of the immune system that makes a memory, and they shoot that vaccine into the blood stream. And it bypasses the normal way, and it stimulates B cells. But B cells have no memory. That's why vaccines are not immunization. They may last for a short while, while those B cells are in there, but there's no memory in the B system. It's only in the T system. The T killer cells have memory cells, T memory cells, and that's how you get immunity for life. Not through vaccinations.

So they've got to rethink these things. And the reason they stopped the sugar cube thing is because there were so many children getting polio from the sugar cube. Well, those were immune-compromised children. They should've never had a vaccine in the first place, and they got the disease. And so they stopped the polio vaccine, the live one, not because it was not effective, because it caused polio. Does that make sense? I hate to get onto a big tangent here, and I know my time's probably almost up.

Jonathan Landsman: No, David. You didn't go off on a tangent at all, and I think you've made it perfectly clear how we need to reconnect ourselves to so many of the things that you've talked about today that really nourish and stimulate and encourage our immune system to behave the way it's beautifully designed to be. What we breathe in through our nose, what we take in in our mouth, what we absorb into our skin, all of these things and how they naturally go into our body, and our immune system is beautifully designed to respond to these things.

But injecting toxins right into the blood stream, into our lymphatics, it doesn't make any sense, this vaccination program. And putting in so many, like you say, into a child that has such an undeveloped immune system and in God knows what kind of way that that child was raised, by parents that may have been uninformed. It just goes on and on.

That's why I created the Immune Defense Summit. This is just such important information about herbs, what we talked about today, our diet, all the things that threaten immune function. It's very important to understand all of these things.

David Christopher: And don't forget, if you really do believe in the modern-day vaccinations, Robert Kennedy Jr. Has put out the challenge. He says he will give \$100,000 to anyone that can show through scientific studies that this mercury, this thimerosal in the vaccines is safe. There's not one study out there that shows it's safe. Not one. And he's offered \$100,000 for anyone to come up with a study that shows that. Mercury is a neurotoxin. It destroys brain cells. So it's not just a matter of autism. It's any damage to the brain, any slowing of the mental capacity.

You start looking at that, and then every child is damaged with these vaccines. Just some are more than others.

Jonathan Landsman: David, I want to thank you so much for your time. And I want to thank our listeners for joining us today. If you would like a copy of this program, plus all the other presentations inside the Immune Defense Summit, simply click the banner you see on this page. Thanks again for attending the Immune Defense Summit. Talk to you soon. Take care.

Science Behind Strong Immunity

Guest: Sayer Ji

Jonathan Landsman: Welcome to the Immune Defense Summit. I'm your host, Jonathan Landsman, creator of naturalhealth365.com. Did you know that every year, drug resistant bacteria or super bugs kill seven hundred thousand people worldwide, and is projected to be more lethal than cancer by 2050, and infectious diseases still remain one of the leading causes of death? Cancer, cardiovascular problems, and diabetes are by far the leading cause of premature death in the world. But in reality, all of this is avoidable with a strong immune system.

That's why I created this event, to help you understand the roots of disease and how to prevent and reverse life-threatening illnesses by re-empowering your immune system.

Our show today: The Science Behind Strong Immunity. Our guest, Sayer Ji, is the founder and director of greenmedinfo.com, the world's most widely referenced, evidence-based natural health resource. In addition, Sayer has a long list of affiliated responsibilities including Vice Chairman with the National Health Federation and cofounder of Alliance for Vaccine Awareness.

How important is our immune system? And does science really care about it? Just a quick search on PubMed, a free service of the United States National Library of Medicine, filled with scientific research, reveals well over one million citations or studies on the immune system.

As I've often said in the past, without a healthy immune system, nothing else matters that much in life. Simply put, a healthy immune system

is the foundation of a happy life. Western medicine does a great job at saving lives, especially in a crisis situation. But it's my hope that conventionally trained physicians will be exposed to the depth of knowledge found inside the Immune Defense Summit. And in turn, tell all of their patients the truth about disease prevention and natural cures that work.

Today, we'll dive a little deeper into that science that has the ability to literally transform the way we view health and disease with a well-known science researcher. Please join me in welcoming Sayer Ji to our program. Sayer, welcome.

Sayer Ji: Thank you so much for having me it's a great honor to be here.

Jonathan: It's a pleasure to have you. Sayer, how has the discovery of the microbiome changed our basic understanding of the immune system?

Sayer: It's a powerful question and it's, I think, one of the most important ones to ask today. Because really, what's happened is since year 2000, the literature on the microbiome pretty much went from almost nothing to exploded. So now we see several hundred studies published almost each month on the topic.

And what we basically found with the discovery of the microbiome is that there are literally trillions of what we formally identified as the primary cause of infectious disease, meaning bacteria, viruses, fungi, even worms or helminths. And they are essential for our immune health. So without these trillions of little germs, so to speak, we wouldn't be alive and well here today.

So what happened essentially is that all the previous literature that's been published, and we're talking about twenty-six million citations on pubmed.gov in total right now, was in a way non-validated. Because they didn't account for the role of what was, at the time, an invisible component of the human body in determining our health status.

So I feel this marks the Copernican-type transformation in science as a whole, but specifically in regard to the immune system. Because previously, the focus was on things like white blood cells and not really acknowledging that the primary locus of our immune system was actually in the alimentary canal, which, of course, is that tube from mouth to the end, which is where you consume the outside world in the form of food and other unintended things you might put down the hatch.

And that's, of course, where the immune system is best serving you because it has to figure out, what to let in, what to keep out, what

to attack. So really, the discovery of the microbiome I think really transformed entirely our view of the immune system almost overnight.

Jonathan: You know, I think also what you're referencing here is this whole idea of an attitude that I think was overly simplistic for way too long. And I think pervasively throughout conventionally trained physicians' upbringing and what they still talk about to this day, is that somehow we have to live in this very sterile environment.

We see the antimicrobials being advertized on TV for every household. We see it in hospitals. Everything has to be spick-and-span clean. We see pervasively this attitude, "Oh my God, somebody has a bug or a germ. We have to run for the hills because I don't want to have what he or she has. I know I'm clean, and they look dirty. Or they sound sick. I don't want to be close to them."

It's all these very strange notions that somehow all of this stuff should just be avoided or wiped out. We should carpet-bomb with drugs and kill all of this, no matter what, at all costs, as fast as possible. All of this is very twisted thinking, right?

Sayer: Absolutely, yes. And the simplistic concept of that, there was one germ for one disease or now one gene for one disease, has been completely destroyed in large part due to, again, the discovery that even in the case of the human genome, there aren't even enough protein coding genes to account for the hundreds of thousands of proteins that make up the human body. That was discovered in 2005 with the completion of the first draft of the Human Genome Project. So right there, everyone had to throw up their hands, "Well gosh, genes are not going to give us the Holy Grail for understanding everything about health and disease."

Well, the same thing happened now with the discovery of the microbiome, is that we have to now not only account for literally trillions of these bacteria that are in and on our body, even in our blood. There's even a connection now with the brain because the lymphatic system has literally been found in the brain. This happened only in 2015. So now we can't separate out what was once believed as the sterile environment of the brain from the rest of the body and all the bacteria in the body.

So, in other words, the compartmentalization that has been superimposed onto the body was really just projection. And now we have to account for really an understanding of the body and health that is really...that the environment and the body and the germs and the viruses, for example, we used to think were other, are all working together actually in sort of like an ecosystem.

Jonathan: You know, Sayer, I had very interesting conversations as part

of the Immune Defense Summit with James Colquhoun. We were talking about fermented foods and how that's related to the microbiome. And then there was microbiome medicine that we really dive deep into with Dr. Raphael Kellman. But wow! I mean, talking to both of them and having you bring it up right now, there seems to be this really strong connection between us.

And I know we're going to get into some immune suppressive foods very soon, but this idea that modern society has gotten away from fermented foods and how our microbiome has become so literally dumbed-down, if you will, not as strong and vibrant as it was before. And that we're really at a huge risk for getting more and more sick at earlier and earlier years with a wide variety of problems from like, what you said, the brain into the gut, autoimmune issues. I mean, the connection is pretty strong no?

Sayer: Yeah, I mean, it's fascinating because you may have heard of this discipline called psychoneuroimmunology. It is a way for accounting for the fact that there is sort of a gut-brain axis, but people didn't really fully understand the mechanisms until recently. Because we know for example, the colonies of bacteria in the gut and their collaborators, which include viruses and fungi, can communicate through the vagus nerve right to the brain.

But previous to 2015, we didn't even know that there was literally a way for the various microorganisms of the body to go into the brain through the lymphatic system.

Previous to this concept, it would have been considered some kind of a fatal infection for there to be that situation. But now we have to again acknowledge that the cells that are external, that aren't part of the human make up, viruses, bacteria, fungi, etcetera, are actually just as important. And technically together, there is a term that was introduced called the holobionts. And it basically indicates that you can't separate out a species from all the various microorganisms that it co-evolved with.

And so humans are in a unique position, right? Because when we're born, we're supposed to go through the birth canal, through a vaginal birth. And in that process, we're supposed to be implanted with the heritage of really just an inconceivable number of generations in the past carried down through the mother implanting our bodies, and then it goes on and on that way.

Well, because of C-sections and intrapartum antibiotic use and then vaccination on day 1, it's really become quite a nightmare. And so when you think about, if you get a C-section, your infant will have skin bacteria that are more prevalent in the gut. It's totally changed the composition of their microbiome. And so the very definition of what it means to

be human has been shifted from the perspective, again, of the hollow biome, which is the human species cannot be separated out from all those other microorganisms that it co-evolved with.

Jonathan: For all those who are looking for a little motivation about taking better care of your immune system, I guarantee you, you stick with us to the very end and you're going to be highly motivated to make really simple easy changes in your life in terms of the things that we can do to improve our immune system.

Sayer, let's talk about some of the most common immune suppressive foods in our diet that are really wreaking havoc on us.

Sayer: Yeah, absolutely. So in general, this is sort of common sense to many of the listeners, I'm sure, but we live in a fast-paced age. And it's easy to cheat, and you forget. But no one should be consuming food that isn't explicitly, ostensibly certified organic. And the reason is because invariably, those foods have been exposed to very dangerous agrochemicals, many of which are biocidal in nature meaning... Glyphosate, for example, is broad-spectrum, able to kill bacteria as well as plant and animal cells, so very bad concept.

Keep in mind too, those who are fixated on non-GMO often go to the extreme and think, *Oh, well, there's the Non-GMO Project certification on this food and it's safe to eat.* Well, they don't think that it hasn't been tested for Glyphosate or 2,4-D or any other powerful agrochemical.

So there's sort of like a superficial way of looking at healthy food, and there's a deeper one. And the deeper one by the way includes even USDA-certified organic food may be contaminated with things like antibiotic-resistant bacteria. Because you can take factory farmed animal waste from, say, Perdue, and you can grow USDA-certified organic food in this country.

So there are loopholes, unfortunately, that make it less likely you can support your microbiome in that healthy way through your foods unless you're actually talking to your local farmer or you're connected to the person growing it. You can trust them because it's not as easy any more to protect yourself from these sorts of exposures.

And keep in mind, raw food or food that you're getting from a local farmer that has the soil microbiome still on the food is actually one of the ways that we establish a healthy gut flora.

Jonathan: Yeah, that's interesting, that term dirty juicing. Everybody wants to clean everything off. They want to buy these liquid solutions to clean all their vegetables. You know, personally, I never got into any of that. I mean they want to peel the vegetables off the outside so it looks

all shiny and nice looking on the inside before throwing it through a juicer. I just don't get it. Am I doing something so wrong? For years I've been doing it this way, and I feel okay, you know what I mean?

Sayer: I hear you. You know, what's interesting is that there are researchers that are focusing on the value of things like tapeworms and hookworms in establishing a healthy microbiome. Now, I personally don't go so far as to implement this because you can actually supplement, even things like ground up earthworm, because I'm careful.

But there is very compelling research that even the dirt on vegetables, for example, that might have occasionally some worm eggs, are essential for establishing a microbiome consistent with what they call the paleomicrobiome or the one of our ancient ancestors. So dirt is actually potentially something that can have a lot of therapeutic properties.

Jonathan: And it's also very important what you said about somebody waltzing into a natural health food store and thinking, *Just because I walk through the door, now I'm safe.* It's so not true, right, Sayer? How many times have you walked through a store, and you're seeing, in all fairness, over the half the foods in there, in terms of wheat that they say is natural wheat or soy for the vegetarians out there. But my goodness, like what you said, they're not thinking about the glyphosate. They're not thinking about the genetic engineering that's going on.

All of these vegetable oils that are in all of these foods that are even when they say they're organic, and they're putting in lots of processed, heated up vegetable oils that people are eating, these cookies or these bagged or these boxed foods. And they think, *All of this must be healthy. I'm buying organic.* But they're having some issues with their immune system.

Sayer: Absolutely. I mean, it's very difficult. I feel it's almost like walking a landmine today of trying to figure out the best quality food to consume. I will say that in general, when you have packaged food or frozen foods, foods with a label, it's really not what you can call real food. Because, in all due fairness, these companies have to have a product that stays on the shelf a certain period of time before it expires otherwise it just won't be sold. And so when we're looking at real foods, you know their perishability is going to be lower, but the quality of your health is higher.

So for me, if one is trying to support a healthy immune system focusing on the microbiome, just at least try, throughout your day, to eat some organic raw foods. Like it has to be fruit or a vegetable, or it could even be like a seed, but make sure you're getting that daily. Because food is information as well as, of course, a source of calories and building blocks for your body, and we forget that.

That information, which is actually literally known as RNAs, because they're packaged in these little particles called exosomes. They modulate your gene expression and they help to coordinate your immune function. And so when we really look at food that way, it's like, "Oh my gosh, I need this. It's essential for the integrity of my body."

Jonathan: You know, not to go on too much longer, but I just think it's so worth it. I know where you're coming from, Sayer, and it's such an important message to give to people. But it's so hard to describe this, going to that local farmer, as you said before, what a great feeling it is to go and know, also on an intellectual level, what these farmers have done to raise high quality food to support them financially.

But it's the taste. It's the flavor. It's the energy component that, again, is so hard to describe in words. I mean, just baby lettuces, things like greens in my salad. When I'm getting them locally, it just blows my mind to this day how great it tastes compared to say, organic lettuce in the store, which really quite honestly is so bland compared to what I'm describing, you know what I mean?

Sayer: Yeah, no, I think you're absolutely right. If we focus on quality, it really makes a world of difference. You can feel it. If you feel really good after you eat something, that should be at least as important as whether it matches up with your latest theory on what's the best thing to consume. So I do really like that point.

Jonathan: Okay, so now we're shifting gears a little bit. I think it's equally important to the microbiome, to our immune system, even if we're trying to eat healthy, Sayer, when we're talking about stress here, mental and emotional stress, is so huge. Talk to us about this, please.

Sayer: Yeah, so as far as stress, we know for a fact that when we are in a sympathetic dominant state where we're fight-or-flight, you see an elevation in blood sugar. Of course, you see an elevation in cortisol, which is an anti-inflammatory, yes and it's also mildly euphoric. But what it does is it's known to suppress the immune system.

So it's really basic on some level that when you're trying to encourage your healthy immune state, you want to try to live as stress reduced as possible. But then there is something called eustress, which is a healthy type of stress. A good example would high intensity exercise, right? Everyone knows how you feel after you push yourself close to death in your mind while working out. And you don't die, and you feel like incredible.

So eustress is important. So I'm not saying all stress is bad. But keep in mind that if you are dealing with chronic low immune function and you're a very high stressed person, well there is your answer. You want

to focus on mind-body practices and things as simple as aromatherapy. Actually, in one study, just the administration of just a bit of patchouli within a matter of minutes showed significant reductions in blood cortisol.

So there are ways that you can almost hack your system and your mind to support a more even-keeled way of living, which is a very good way to support immunity.

Jonathan: And then, of course, the simple thing that I never stop bringing up, Sayer, because if it touches one more person's life, it's so worth it, about connecting food with our stress levels. Let me tell you, if you just stop for a moment, give some thanks to the food that you're about to eat. Take a deep breath. Say it in any way you want expressing gratitude, even if it's just to yourself, and you pause for a moment. And then on top of that, you're chewing twenty, thirty plus times more every mouthful of food. Let me tell how you're going to shift your nervous system into a whole other place that's going to feel really right to a person that's really stressed out. What do you think?

Sayer: I love it. You know, Gandhi said to chew your liquids and drink your foods, meaning like to really make sure you're chewing what you're consuming. That will, of course, almost by necessity, bring a certain mindfulness into the act. And keeping in mind, the stuff like so called headspace of nutrition is probably 50% of what determines proper simulation.

So I agree. In fact, even when it comes down to the amount of enzymes you secrete, there are proteases that are secreted in the gut and in the mouth when you chew properly that will break down even some of the harder gluten containing grain protein. So there are so many good reasons to do what you're saying.

Jonathan: Yeah, I mean, that's the bottom-line, is when you're chewing more you're making it easier on your digestive system. I can't imagine why anyone with a digestive problem wouldn't start doing this right away. Plus on top of that, it gives you that opportunity to think more. I guarantee you, the first time you try it, you will be thinking so much more about the quality of the food that's right in front of you.

And then perhaps also probably come up with some creative ideas as to how you could make some changes. Because quite frankly, you're taking a little bit more time to eat and giving yourself time to think about things that really matter the most to your health.

So, Sayer, people are very stressed out, right? We talked about the chewing, that's important, better quality food. But some other tips to relieve some of this unwanted emotional and mental stress that's in

people's lives. What do you tell people?

Sayer: Well, and it's a big problem because I feel like an aspect of that stress is just being aware of what's going on in the world. So sort of as an activist as well as educator, I feel like if I'm not a little bit anxious about what's going on, then maybe I'm not really aware. But on the other hand, I don't think it's healthy.

So I go out of my way to make sure I meditate daily. I do yoga. I try to get intense exercise. I thankfully live in Florida so I get sunlight, which is I think such an incredible mood enhancer. And so there are things you can do just within the environment supporting you.

I feel though, one of the best things for overall immunity and stress or connected concern is really good quality sleep. So I try my best to get 8 hours of good quality sleep a night. I try to go to bed before ten o'clock. And then it enables me to get up really early when I feel most productive. So I would definitely encourage people, if they have insomnia, to also realize when you're putting yourself to bed and getting into the deep regenerative cycles of sleep, that's also one of the best ways for your immune system to work things out and to heal your body on a deep level.

Jonathan: You know, Sayer, another thing I enjoy bringing up every chance I get is to draw upon my athletic background and teaching a lot of kids, even to this day as a break from all my computer work, I enjoy helping kids with their athletic goals, I should say.

And from that past where I was again, personally at a very high level athletically and also training a lot of athletes at a very high level, I remembered one thing that was always important in terms of dealing with stress. And all high performance athletes understand the level of stress is very high. But how can you tolerate that for a long time really comes down to an attitude. You don't know. Wait and see.

And you see that in all high performance athletes. Whether it's a great thing that just happened, it's super exciting. You're so happy, right? That something successful happened for the moment in competition.

Or a lot of times, something horrible is going on. These are not very good results at the moment. Either way it doesn't matter. Stay focused on the next thing that you would really like to do. And don't pay a lot of attention to what's just happened. It really does help keep a person's perspective very well balanced. You know what I'm trying to say?

Sayer: Yeah, absolutely. Any kind of competitive, intense sport like that, you really have to figure out your mindset. And it's just incredible the way you feel when you really push yourself. It's just a really important

part of health versus just figuring out what to eat.

Jonathan: So we've got 3 things that I know you want to bring out to everybody about how to improve the immune system. What are some of the things that you'd like to talk about?

Sayer: Well, we talked about the microbiome. And I think it's really important, again, for people to make sure they are consuming just a bit of that raw food a day just as a way of supplementing. I'm a big fan of cultured foods. I really enjoy kombucha and I think that if you're going to do yoghurt, go with goat's milk.

I think one of the more immunotoxic agents we are exposed to is cow's milk. And I know there are differences between beta casein 1 and 2 protein, the latter being better for our species. But for me personally, when I have removed cow's milk from my life, I saw a great improvement in immune-related disorders like asthma and atopy. I had some skin issues.

So I think that people really should focus on kind of plugging into an ancestral diet, whatever that means for them. Say they are Italian. We'll go back to the way that things were consumed in the old world and prepared, not Americanized Italian food. I'm half Korean, and the Korean diet was actually very ancestral, almost paleo in certain ways.

So a large part of it is identifying what's the best diet for yourself. Because consider that dietary antigens are one of the primary reasons why the immune system gets sort of whacked. The autoimmune epidemic today has a lot to do with the consumption of, what I think are biologically inappropriate foods, wheat being number 1, cow's milk probably number 2. Especially things like cheese, by the way.

So I would suggest people also look deeper into their own biological roots and cultural roots to try to optimize their diet based on what's best for their bodies.

Jonathan: And also, my goodness, it seems obvious to talk about, or maybe not even have to mention, but we do have to talk about it. And that is the amount of sugar. And I'm not talking about sugar from apples and oranges or carrot sugar. We're talking about that processed sugar. I think it's just too much in a lot of peoples' diets. Even the ones that are running to the health food store, again, getting more of these processed sweet things, you know?

Sayer: Absolutely. There's a lot of association with things like cancer and immune dysregulation. And one of the reasons I think too is that sugar is actually not just something that feeds cancer. We probably have heard at this point about the Warburg effect and how cancer cells, even in the

presence of oxygen, will prefer a glycolysis or fermentation with sugar as an energy source even though it's extremely inefficient.

Well, the reality is that sugar doesn't just feed cancer, but it's oncogenic, meaning it can convert healthy cells into cancer cells. So when it reaches a certain point of saturation, the cell says, "You know what? We're just going to go this route. We're going to become a cancer cell."

So I would highly suggest people look at sugar, like you're saying, as one of the culprits. One of the things that when you reduce the consumption, your immune system is going to do better. And of course, the risk for the most feared disease of all time, cancer, is dramatically reduced.

Jonathan: And also, Sayer, I think something else needs to be mentioned for those who are generally feeling very low in energy. And I don't want to be misunderstood. I'm sure you're going to help clarify things with the science as well.

But in terms of overeating, I'm not suggesting that people starve themselves. But here I am, hours and hours and hours, no exaggeration, from when I've woken up talking to you. But I've got myself a smoothie in me. I've got a greens drink that was about 16, 18 ounces with liposomal turmeric in it and different things. We're talking about 50 ounces of fluid relatively low in calories but very high in nutritional value. And that's the kind of stuff that I'm running my body on. And this is after hours of being in bed asleep and just waking up in the morning with lots of energy.

I think it's very important for people to appreciate that maybe they're stuffing themselves literally, which is draining themselves of energy. You want to speak to that?

Sayer: Yeah, actually, Arnold Ehret, who as you may know is one of the foremost raw foodist scholars, said that we dig our graves with our teeth. I always found that to be quite a powerful quote. Because I think you are right. We are often healthy or functional not because of what we eat, but despite what we eat.

And what you're doing is something I often do myself. I just bypass the conventional American diet. I will go right towards the smoothie with all these super foods and high quality ingredients. And I feel so nourished. I'm not craving the way I would otherwise if I'm consuming grain-based foods, even gluten-free, grain-based foods. There's a lot of ways that you can really fall on your own sword with this way of eating.

But as far as energy too, people don't realize that water actually operates like a molecular battery in the body. Anyone interested in this

topic should check out Gerald Pollack's amazing work. Because he's pretty much proven that we are not just ATP centered in our energy production, but water actually works like a molecular battery in our bodies and accounts for the tremendous amount of energy it takes. For example, your heart has to push fluid through thousands of miles of tubing.

Well, is it ATP that's doing that, the contraction of the heart muscle alone? Absolutely not. He's proven that water takes up infrared energy in the ambient environment. And it actually powers the flow of the water through our bodies. So hydration, in other words, is extremely important in getting your energy levels up.

And again, most of the food we are eating is really more like a challenge to the immune system than something we need to support it. So I think you are right on point with that.

Jonathan: Oh boy, that's a really big one for people who are immune issues in them. They just know it on an intuitive level. They are low in energy. That's just so big. We hear about detoxification. We hear about, "Oh, you got to get your energy up."

It's such a simple thing, as I said earlier on, to do. Look at your water intake. If you are 150 pounds, are you taking 60, 65, maybe closer to 75 ounces of pure water or very nutritious liquid into your body, at the very least, without all the toxins? Wow! That's a challenge for a lot of people.

But, Sayer, as we are closing out the program, this is another very important area. It's sensitive for a lot of people. I would just encourage everybody to have an open mind. Because when it comes to wanting to avoid disease and staying away from toxins, we have to bring up this whole idea of vaccines.

You've mentioned it already, Sayer. From hours after being born, every child, at least here in the United States, is being exposed to its first vaccination. It's crazy. Is it really necessary? What's its impact on immunity? How do you look at this whole issue? It's big.

Sayer: Yeah, it is really big. It's really fascinating on some level and disturbing that we are giving our infants, day 1, hepatitis B vaccine when the risk factors for hepatitis B are unprotected sex as well as intravenous drug use, the sharing of needles.

And so there isn't really a justification for this. And yet, it's happening every day, thousands of times, and no one is really asking the question, is this why we have the highest infant motility rate in the developed world?

As well as, that we have an epidemic of autism, which can't be genetic because epidemics aren't genetic. You don't get exponential increase over each generation of autism diagnosis without an environmental factor. But what would that be? Injecting aluminum directly into the bodies of infants, for example, because that's what they use as an adjuvant, makes it all the more likely that that's what going on.

And so I think people who have common sense, as well as those who've looked at the literature, know that this isn't an evidence-based practice. You can't be doing this to infants and say that it's justified when the risk factor that these vaccines are supposed to be preventing doesn't even exist for them in that context.

If a mother has it, that's the only other way it would be vertically transmitted if the mother has it. Then you can exclude them through testing. And then you could choose perhaps, as a prophylactic, and there's other ways other than vaccines to do that. But that not what's going on. There's no informed consent.

So yeah, I think there's a lot of problems today with the fact that also all the literature that exists supporting today's vaccination schedule, there's no placebo control that was used. They didn't use saline. They compared the active vaccine to a control vaccine. So all the side effects they saw from the treatment were balanced out by the fact that they used another toxic vaccine. So they never used a placebo because the placebo would probably show the non-vaccinated group would be healthier. That's another big issue with the way that we're doing the schedule.

Jonathan: And for those who are new to this information, you might be a little confused about what all the craziness is about. I mean, Sayer, we got to talk about one in particular, measles. I personally just don't get it. It's like, "Oh my God, there's a town with measles outbreak." Okay, I mean, it's terrible. I get it. Somebody has measles for 2 weeks, 3 weeks, whatever it is. It's rashes. They look terrible.

And then when it's all gone, nobody's died. They have lifelong immunity. And then instead of that, we're supposed to demonize these people who are somehow maybe the ones that weren't vaccinated. And somehow magically, if we just vaccinated all of them, everything would be all right. It's all this hysteria about measles. I mean, give me a break!

Sayer: You are so on point. In fact, that's the primary discovery of the virome within the human body, is that it contains viruses that we have formally believed were only bad for us. Herpes family viruses, for example, they are essential for creating healthy immunity. It's called the genotype-phenotype relationship. And these viruses actually help to mediate that relationship and make sure that your immune system can fend off, for example, bacterial infections as well as cancer. And that's

exactly what you'll find.

I encourage anyone who doubts this or who's been told by the pediatrician or the media that this is not true. Go to my site, GreenMedInfo, type in "health benefits of measles infection". And I have the 20 studies out there that show decreases in anything from cardiac mortality to Hodgkin's disease to rheumatoid arthritis to different cancers, for those who weren't infected with measles as children.

So it's essential that people start realizing, we need benign childhood infections to have healthy immune systems. And if the vaccines do work, they are not even helping in the long term because they don't confer lifetime immunity. So even if you take aside the obvious problem with vaccine-induced neurological damage, i.e. autism and associated disorders, it's still the fact that these childhood infections are essential for establishing a healthy immune system. They always have been.

So what happened when they introduced the vaccines? Why did it seem that all these mass outbreaks and relative occasional deaths here and there started to go down? It's because there had already been decades long decline from sanitation, from better hygiene, from things like refrigeration, better nutrition. So the vaccines came in last moment, took credit and now we think that's why we don't see outbreaks.

Well, again, if measles is healthy and good for us, which there is evidence on my site, which is all from Medline, well, then we need to have those infections. So again, the propaganda out there is absolutely absurd given the obvious problems we're pointing out.

Jonathan: And of course, let's not forget the obvious as well. As if that wasn't enough all ready what we've talked about, this warped perspective that vaccines are safe and effective. The science is settled, which I know you must laugh at every day.

We're talking about billions of dollars are paid out in injuries. And this is in a vaccine court where they try to dismiss as many cases as possible. And then you couple that with the CDC, Center for Disease Control and prevention. That organization is government sponsored by the United States, has a senior scientist, Dr. William Thompson. He's admitted that there is scientific fraud when it comes to the MMR vaccine. And nobody in congress is calling him to testify. Something's really wrong with this.

Sayer: Oh my gosh, absolutely. There is a very active cover up. But it's not being covered up effectively because Thompson's lawyer released a statement years ago where he confessed that they manipulated data covering up clearly that MMR vaccine was causing increased rates of autism in African American children, and they even destroyed documents. And this is well known.

And so anyone out there that now even questions the safety of vaccines, much less mentions this scandal, so basically there is an inquisition. They call you an anti-vaccer. Even recently someone suggested that people who question vaccine safety should be hanged. So this is the *Boston Herald* editor, Michelle Cowen, who wrote this in an Op-Ed just a few days ago. They are literally calling for the hanging of people that are questioning the safety of vaccines. This is what's happening.

Jonathan: Yeah, it is amazing. They are just definitely demonizing anyone who might want to look for a safer alternative. And what about the whole idea of the science behind breastfeeding? And all of these other natural things that are out there that would absolutely make the immune system stronger. And then also, of course, the idea, like you say, that even if we do get a little sick from time to time, we are stronger because of it. Wow! What a radical concept.

Sayer: Exactly. You wouldn't even have the concept of vaccination if it were not for the fact that in nature there is the observation. A group of people get measles, and thereafter they are immune. So that's how they got the very concept of vaccination with the co-opt this natural process.

But they didn't account for what happens when you avoid the natural route of exposure and inject directly into the body versus expose the mucosal lining, the actual co-pathogen is long with adjuvants that are composed of heavy metals that cause the immune system to get hyper-stimulated that blow back on the host's body. It's just such a deep layer of pseudoscientific quackery that the vaccine agenda has co-opted. And then they project the very thing on the people that are talking reasonably about the topic. So it's a difficult...I commend you for even bringing this up in your summit.

Jonathan: You know, also, Dr. Heather Wolfson, who is part of the Immune Defense Summit, she brought up something, Sayer, that I know you're going to love to hear. And it was an amazing appreciation for what a mother can do for a child in terms of literally, within seconds, changing the nature of the breast milk given to the child just as the child is breastfeeding. Because that act literally passes information back and forth from the child to the mother. Forget it. Western medicine could never replicate that. You know what I mean.

Sayer: Oh my Lord, thank you. It's infinitely complex. And it is just a sign of just the miracle of the human body. And that is exactly the problem with those who would believe that they have the religion of "Science" to promote their agendas. They are not even looking at the actual reality of what our body does. They can't co-opt and replace it. That's not the way things were designed.

Jonathan: Sayer, as we close out, the last final word I should say about

this for healthcare providers out there or even people who really want to dive into this even deeper. Because again, the science and what's done in medicine are 2 completely different things, and unfortunately, there is a huge gap still. The science is there. I know you know this.

But what would you suggest that those people do if they want to access this information and then be able to share it with so many other people in their communities?

Sayer: Well, that's a good question. Well, at GreenMedInfo, we actually put together a database of nothing but pure research on the topic. We've identified over 200 diseases linked to the vaccines in the CDC schedule. We have indexed their Cochran database review results, which show, for example, there is no safety or efficacy studies on influenza vaccine in children under 2 that are unequivocal. And yet, this is national policy in Canada and United States to get all infants to be vaccinated with a flu vaccine.

And so basically, go to a DTaP inserts and autism is listed as a potential side effect. Use common sense. Look at the research. Look at the actual product inserts, and you will find the exact same conclusion that I have, which is the entire vaccine agenda the CDC promotes as safe and effective is a horrible, horrible cause of disease and suffering, and needs to be stopped immediately.

This is what a rational person will inevitably be led to if they do the research themselves. And we've done a lot of that for you so go to GreenMedInfo. Take a look at the research abstract. And I promise you, you will get the answers that you are looking for.

Jonathan: Sayer, I want to thank you so much for your time. And I want to thank our listeners for joining us today. If you would like a copy of this program plus all the other presentations inside the Immune Defense Summit, simply click the banner you see on this page.

Thanks again for attending the Immune Defense Summit. Talk to you soon. Take care.

Recovery Story: Saved from Death

Guest: Jim Pilcher

Jonathan Landsman: Welcome to the Immune Defense Summit. I'm your host, Jonathan Landsman, creator of naturalhealth365.com. Did you know that every year, drug resistant bacteria or super bugs kills seven hundred thousand people worldwide, and is projected to be more lethal than cancer by 2050, and infectious diseases still remain one of the leading causes of death?

Cancer, cardiovascular problems, and diabetes are by far the leading cause of premature death in the world. But in reality, all of this is avoidable with a strong immune system.

That's why I created this event, to help you understand the roots of disease and how to prevent and reverse life-threatening illnesses by re-empowering your immune system.

Our show today, a very special one. A Recovery Story: Saved from Death. Let me ask you. What would you do in this situation? A family member is near death and about to be unplugged from life support. The result? Almost certain death within a very short period of time, fully infected with swine flu, severe pneumonia, and in a coma. Would you think that nothing else could be done, especially if the doctors were telling you this?

Today, I've invited Jim Pilcher to talk about how his knowledge of natural therapies and his loving devotion to his sister and her dying husband resulted in a remarkable story of recovery that everyone should hear.

In fact, it's my hope, after hearing this conversation, that you will forever understand the power of knowledge which enables to make fully informed decisions because in many cases, it could literally save your life.

Please join me in welcoming Jim Pilcher to our program. Jim, welcome.

Jim Pilcher: Hi, Jonathan.

Jonathan: It's great to have you, Jim. Why don't we start off first by talking about...I mean it's just an incredible story. We have so much to cover. And I hope people are ready to take some notes because they're going to want to, I'm sure. Give us an overview of what happened to your brother-in-law and talk about his health prior to ending up in the hospital.

Jim: Allan, yeah, he is a farmer from down, what we call the King Country area in New Zealand. And yeah, his health was great prior to this event happening and stuff. He went overseas to Fiji for a bit of a trip with a few friends fishing, and somehow, unfortunately, contracted the swine flu virus while over there. And then hence things started to go a little bit wrong from that point in time.

He got pretty sick over in Fiji and ended up flying back to New Zealand and stuff. And then my sister, Sonia, she picked him up from the airport, and then took him back to the abode which is at a place called Tauranga, where she was just sort of nursing him there because he wasn't too bad, but he certainly wasn't good.

And then after that he started to deteriorate a little bit, so decided that the hospital was definitely the place that he should be. So he ended up going to Tauranga Hospital where over the next couple of days his health started deteriorating to a point where they actually thought he was going to die there.

And Tauranga Hospital told my sister to get all the family members together and to say last things to him because his lungs were getting completely infected with the swine flu, and I guess the byproduct of that is pneumonia and lungs not functioning at all and getting what they call white-out pneumonia in the lungs.

So yeah, at that point in time, it wasn't looking great at all, which was quite crazy because, as I said before, prior to him going to Fiji and all this sort of thing, his health was fine. He could run around the paddocks carrying fence posts over both shoulders and stuff like that. And he could outwork a person sort of half his age. So it was quite a surprise for the whole family.

But fortunately, they cottoned on to Auckland Hospital. And they have a device called an ECMO machine, which is Extracorporeal Membrane Oxygenation Machine, which takes the blood out of the body from the lungs sort of thing and then puts it through an oxygenation membrane. So it re-oxygenates the blood then puts it back into the body. So it virtually does the job of what the lungs should be doing.

So he was very, very lucky for the doctors who cottoned on to the fact that this machine could actually do something for him because the guys that came down from Auckland and the doctors that flew down in the chopper, they said about another 30 more minutes and Allan probably wouldn't have survived anyway without this machine that he was going to be hooked up to.

So that's where it all started really, Jonathan. And from there he was flown to Auckland Base Hospital and put on a proper oxygenating machine or ECMO machine. I think the one he was put on prior to being put in a helicopter was just like a small portable thing. And then he was flown to Auckland Base hospital where he was in ICU. I think at the time, I remember the doctors telling me he was one of the sickest people between Australia and New Zealand.

But the family, very, very thankful that technology was there to be able to keep Allan alive. And at that point in time, we were hoping that he would be on the road to recovery.

Unfortunately, 3 weeks later, he was still on the ECMO machine with no sign of recovery at all. Lungs weren't changing at all. Every day they'd sort of do an x-ray and check his lungs for any sign of what they would call getting darkened areas in the lungs where it would show that the lungs were starting to actually work. But that wasn't happening.

It got to a point where the hospital doctors, they took blood sample from him, and they found out that he had hairy cell leukemia. And he was deemed that there was going to be no way that he was going to pull through the whole procedure, what he was going through, and that he was slowly dying. Albeit, he was given the utmost attention and the care that you could ever ask for in a hospital situation.

Jonathan: So just to be clear, Jim, about the treatment, I know you were very grateful for everything they tried. They were doing antibiotics. They were giving other medications. The doctors were doing everything, like you said, that they could. It wasn't just the machine that they were giving Allan, right?

Jim: No, not just the machine, as you say, antibiotics, a whole host of antivirals. They were throwing pretty much everything at him to try and stop this infection from carrying on to another round.

But the only thing they weren't doing at the time was a procedure called proning, which was actually turning him from his back onto his stomach and whatnot to allow, I guess, the fluid stop building up from when you are lying on your back and then you lie your stomach. So then it has the chance to drop from one side to the other.

At that point in time they weren't proning him. Why they weren't, I don't know. But one of the doctors that was looking after him, he'd gone away for a couple of weeks and when he came back, he got that established. Coincidentally, happened about the same time was we managed to get vitamin C into him and that as well.

So long story short, everything they were doing just wasn't working to the point where they were willing to, after 3 weeks being on the machine, to actually terminate his life.

Jonathan: So just to be clear, Jim, this is about 3 weeks that Allan is going through all of this, and the doctors are basically at that point telling you, "You might as well just get everything together and expect that he's going to die." Is that pretty much it?

Jim: Yeah, we had a meeting which was, I think, about July 21st because this all started on June about the 29th. So he'd been ECMO virtually from July the 1st and by July the 21st, we had a meeting with the doctors and nurse. Their recommendation was that Allan's life support should be turned off and let him go.

And they said that they had done everything they could possibly do to save his life and nothing was working. And since they found out about the hairy cell leukemia as well, they said, which under normal circumstances could have been well treated, but the circumstances that Allan obviously was under, well, then yeah, it was certainly a nonissue as far as our concern.

So as the doctors said they had tried everything they could possibly do, and I said, "Well, no you haven't." I said, "We would really like you to try intravenous vitamin C." And if we could try that and it doesn't work, then we'll say, "Okay, that's pretty much...we've tried everything we can do." But until we try the vitamin C, there was certainly no way we were wanting them to turn off life support.

Jonathan: So, Jim, this is the part that I think is really interesting. And I want to make it very clear for anyone listening to your story today. And that is that God forbid anyone ever goes through something so literally life-threatening as a situation like this. The individual, like Allan Smith, obviously, couldn't take care of things himself. He's in a coma, life-support. It's just impossible. His wife had no knowledge of this.

I know you're talking about being aware of IV vitamin C and pushing the medical doctors to give it a try. But I'd love for you to talk for a few minutes about your background because this is what I think all families need to appreciate is to understand the power of natural health, natural healing, supplementation, good food. To have this really embedded in the family before a health crisis like this.

So I want to just go back to you, Jim. How did you know to look for an alternative form of treatment? What was your background in all this?

Jim: My background, quite a few years prior, I'd always end up getting colds and flus quite bad through my younger years and stuff like that. And just happened to be one day, I was just cruising the internet, I suppose you could say, or surfing the internet. And there was a thing about the doctors, Fredrick Klenner and Robert Cathcart, Irwin Stone, guys like that who were treating people with all sorts of ailments with mega doses of vitamin C.

And I read that and thought, *Yeah, okay that sounds pretty feasible*. It got my interest, for whatever reason. Another one was about Linus Pauling treating heart disease with vitamin C. My dad he died at the age of 65 through a heart attack.

And so between the colds and the stuff that I'd always get every year and dad dying and reading a bit about how vitamin C can turn things around and whatnot, that really got my interest right up. And the more I read, the more I couldn't believe that, why doesn't everybody else know about this? Why isn't this sort of being told to the general public?

And when I read about things like goats, when they become under stress, they'll go from, for instance, a goat may make 10,000 mg of vitamin C in its body a day to be a healthy goat.

But, as soon as that goat becomes stressed, for whatever reason, whether it's fighting another goat or broken leg or something or other, they can make up to a 100 g of vitamin C a day. Now that's a hundred thousand mg, which when I read I just thought, *Wow! This is just crazy*. And when you read through it and understand that this is their body's way of dealing with this sort of thing. And for us humans, we don't have that ability to be able to do that.

So then I thought, *Okay, the next time I get a cold or flu I'll try this. I'll take 10 grams of vitamin C a day and see how it goes*. Because I always sort of knew that if you took too much, you'd end up with diarrhea. And so the next time I got a cold, I took about 10 grams and nothing happened. And thought, *Okay, I've read dose, dose, dose. If all else fails, you take more.*"

So for that flu or that cold I got, I took about a 100 grams through the

day. And before I reached an area, what they call bowel tolerances, when you might start to get diarrhea. But I couldn't believe the turnaround in my symptoms. And that never happened to me before when I'd been through colds conventionally.

So there and that self-experiment on myself years ago was the turning point for me. And then from there on then, I just started reading more and more about not only vitamin C but vitamin D and a whole host of other stuff and the power of getting the right nutrients in your body to be able to allow your body to work as it should and not work at only half speed sort of thing. So yeah, that's pretty much how I got into it, just self-experimentation.

Unfortunately, most doctors these days just seem to have this teaching that if they can't treat it with standard pharmaceutical drugs, then it can't be treated at all. And since my little experimentation way back, I've proved them wrong so many times. And in Allan's case, thankfully, we managed to prove them wrong again.

However, it was definitely at a point where it was very touch and go. I don't think...if it was left another couple of more days, vitamin C may not have been able to do the job because by the time that they did agree to administer the vitamin C in Allan, he was pretty sick.

Jonathan: You know, I can't imagine what the stress must have been like for you and your family in trying to help Allan out. Can you describe just a little bit for a couple of minutes what it was like to try to give vitamin C to Allan while he's in the hospital? How much did the doctors fight with you on this?

Jim: At the start, I had been suggesting it to my sister as well as to the doctors through this period that he was on ECMO, about the vitamin C to help out. I wasn't trying to push it too much. I was hoping that conventional methods would actually do the job sort of thing for him because I knew from the attitude or whatever I was getting back from the doctors, that they pretty much weren't interested in it.

So I knew there was going to be a battle, if push came to shove, to get it into him, and that's where I contacted Dr. Thomas Levy, actually. I didn't even know Dr. Levy at the time. I just happened to go through the internet and had his name come up about vitamin C.

So I contacted him, and he, unbelievably, responded within hours to my email, which was great. And he put me on to a guy, John Appleton, who's in Auckland, which is just across the harbor from where he was living to where Allan was in hospital.

And John Appleton, he was brilliant as well. What he doesn't know about

vitamins and nutrients isn't worth knowing. And he knew of the clinic that does the IV vitamin Cs in Auckland, which fortunately, was only about 3 or 4 kilometers down the road from the hospital that Allan was in.

So when it got to a point that the doctors said that they wanted to turn off life support, we'd already done a bit more homework. And I'd contacted, as I said, John Appleton, who put me on to a lady called Anne O'Reilly, Dr. O'Reilly, at this clinic. So I got talking to her.

So we were sort of already well, I suppose you could say, charged up in regards to knowing what we needed to do if we needed to try and get this sort of vitamin C thing happening. So when the doctors said that they wanted to turn him off and said that they'd done all they could do, I said, "Well, no."

And then he pretty much threw his arms up in air and says, "Well, I wouldn't even know where to get the stuff, and it won't work anyway." And I said, "Well, I know where to get stuff. I can be back here within 20 minutes with the stuff. I've already been talking to the doctors that administer vitamin C for other reasons. And I'm more than happy to come on board and help out for Allan."

With that, the doctor says, "Well, we'll go on recess for now. You go and get in contact with your doctors, and we'll have another meeting." This was on a Monday evening. "We'll have another meeting tomorrow night, Tuesday night, and I'll discuss it with the rest of his doctors. And then we'll come to some form of conclusion."

So fortunately, we had this meeting on a Tuesday afternoon, and the guy said, "As far we're concerned, the vitamin C probably won't do any harm in regards to Allan because they were going to turn him off anyway." And then he says, "We'll give you till Friday." That was all quite an amazing sort of scenario that unfolded right there and then, that they would agree to go ahead with it, but as the consultant pointed out, "By Friday afternoon, we'll be turning him off."

Jonathan: How much vitamin C did he get?

Jim: The first afternoon, that Tuesday afternoon, Tuesday night, he received 25 grams. The vitamin C was a product called L-Ascorbic 500, and they make them in 25 gram little bottles.

So he got one of those the first night, and then he got a 25 gram bottle intravenously Wednesday morning and another one Wednesday night. Then the next day was 75 grams. And by Friday he was on 100 grams. So by Friday afternoon, he was getting 100 grams a day. But the amazing thing was by Wednesday afternoon, they gave him another X-ray, and

his lungs were starting to actually work.

Jonathan: And, Jim, just for those people who are keeping count to please understand, we're talking about full-blown pneumonia, in a coma, life-threatening situation. You're talking at about 75,000 mg of vitamin C where things really started to kick in. Is that fair to say?

Jim: Yeah, definitely. By the second or third day, his lungs were working extremely well even though he was still one very, very sick person in a coma on massive amounts of machines. I've never seen a person like that, even on TV, being on so many different machines. Dialysis machines, the ECMO machine. It was just crazy.

But yeah, by the Friday when we had another meeting with the doctors because by then they would determine that they would be terminating his life or turning off life support. This oxygenating membrane machine that he was on, his lungs were functioning so well that they actually had to turn it down to about 25% of production because his lungs were working so well by that stage. So that to us was just brilliant.

Jonathan: So you're saying that on Friday they are going to turn off the life support machine and on that same day he is given 100,000 mg of vitamin C more?

Jim: Yeah, he was getting 100,000 mg per day by the Friday, yeah.

Jonathan: And so they turned off the machine on Friday?

Jim: No, no, they didn't turn it off. They kept him on it. He still needed to be on it because he was still very, very sick. And after that consultant sort of had his week on, a new consultant came on the following week and decided that he didn't believe in the vitamin C because they were proning him. They started proning him, which was turning on the stomach, turning him on his back sort of the thing. They believed that it was the proning that was actually turning him around and creating this remarkable recovery.

So this new consultant decided that he didn't believe in the vitamin C and he decided to stop it. But he didn't tell the family because as a family and also with the vitamin C doctors that helped us out, we'd all stated that once we go down this road, you can't stop the vitamin C because he will drop straight back into what we call an acute state of scurvy. It just means your blood levels of vitamin C are dropping out unbelievably quick because your body is using so much vitamin C to try and neutralize whatever is ailing it sort of thing. Same as, going back to the goats, making more vitamin C for what they need it for.

So when this new consultant stopped it, he didn't tell the family, but we

could see that things weren't working the way they should. Allan started to go back downhill again. And they were still proning him and doing what they thought was right. But that was making no success to Allan's recovery, and he started to die again.

I wasn't there at the time, but my nephew, Allan's son, he'd caught on to the fact that they'd stopped the vitamin C. And he had a good discussion with this new doctor and said, "Why did you stop that? What was happening?" Fortunately, this new doctor said, okay, he'll reinstate the vitamin C. But all he did was only give him 1 gram twice a day.

So he went from having 100,000 mg of vitamin C a day down to 2000 mg of IV vitamin C, which fortunately did seem to turn him around again, albeit extremely slow from what the recovery rate was before. But it did reverse the process of him dying and slowly helped him get to a point where—

It might have been later on in that week, it got to a point where they did manage to get him off the ECMO machine and put him onto sort of a ventilator for his lungs. And then they got him to a point where they wanted to get him out of Auckland Base Hospital and send him down to a hospital which was closer to his home, which was called Waikato hospital.

And then again we had a battle on our hands in regards to getting vitamin C put into him again because this new hospital didn't recognize vitamin C for anything apart from the vitamin. So they stopped the vitamin C as well. And again, he started to deteriorate.

So by this time we knew what was working pretty much from day one. So we got in what we call the big gun lawyers. There's a lady over here. She is a real good topnotch lawyer. We got her to write the hospital a letter to get the vitamin C reinstated. And fortunately, that did the trick. So again, he was put on intravenous vitamin C, albeit 1 gram twice a day.

Jonathan: So, Jim, all this time, is he in a coma that he is unable to take vitamin C orally?

Jim: Yeah, he was completely in a coma. I think he was in a coma for about, it might have been about 9 weeks.

Jonathan: So then take us through these many weeks he's taking about 1000 during the day, in the morning and 1000 later, 2000 a day. Eventually, how long does it take that he gets out of a coma? And then talk to us about what he did after that in terms of taking vitamin C?

Jim: The recovery process was getting better every day albeit he was still in a coma, but by having the vitamin C going into him, it was definitely

helping, a difference. Not a big difference compared to the recovery that he was getting when he was on 100,000 mg a day. At least he was going in the right direction.

And it got to a point where he got off out of ICU and became conscious. He recovered from that and he got off the ventilator, and he was doing well. He was doing good. And he had become conscious, talking, and stuff.

And once he started talking, my sister, she's quite funny in some aspects. He was never one for being into nutrients and stuff like that, even though he was pretty healthy, and he could run around paddocks and all that. But I always told him, "Mate, you should be taking vitamin C and stuff like that to help you out through your life." And he sort of always called me orange boy, I suppose you could say.

So my sister would tell him, as he started coming around, that, "You've got to tell the doctors that you take vitamin C all the time and that you have been for ages, and it's an important part of your health regime."

So when the doctors asked him about the vitamin C, and then he goes, "Yeah, I take it all the time." Because Sonia said, my sister, that the vitamin C was the reason why he was still alive today. She was telling him, "If it hadn't been for the vitamin C, we would have been going to a funeral."

And so he took that on board, and they got to a point where the doctors, they wanted to take all the IV lines out of him. Fortunately, I was down there at the time because they wanted to then just allow him to have the intravenous vitamin C orally.

And I said, "Well, no you can't do that." And they said, "Why not?" And I said, "Well, the guy hasn't eaten properly for...he's been in a coma. He's been fed through feeding tubes. And you want to give him vitamin C orally, you'll probably end up giving him a major diarrhea and all sorts will go wrong. You can't give him the vitamin C orally that way.

But I do know a product that we can give it to him orally, if you will just bear with me, and I'll go back 120 K's north and go and get this product called Lypo-Spheric vitamin C. And then yeah, we'll agree as a family. We'll take him off the I.V., and we'll start giving him, now that he's conscious and stuff, that Lypo-Spheric vitamin C."

So the next day, we had another meeting with him in the room. And I said, "Well, this is the product here." I'd gone and seen—John Appleton was the guy I got it from. "This is the product here. It's Lypo-Spheric vitamin C. It's like having an IV, but you're having it orally the way it goes through your digestive system and gets absorbed through the blood to

your liver.”

But anyway, they sort of weren't really interested in stuff like that. And so I just said, “Well, okay you can take the IV off him, but this is what he's going to be having.” And they weren't keen on it at all. They were just... and I said, “Well, it's not up to you guys.” I said, “It's up to Allan, whether or not he wants to take it or not.”

And they just looked at me disbelievingly while I was telling them. And I just said to Allan, “Listen mate, this stuff is going to be the next best thing to an IV.” I said, “This stuff is going to keep you getting healthier and healthier.” So in front of all the doctors and nurses, I squeezed a couple of packets straight into his mouth and gave him a little bit of water to sip on. I said, “Sorry about the taste, mate, but I know it's not going to taste very nice. But just bear with me.”

And then from that day forward, I think we were giving him about half a dozen sachets a day.

Jonathan: Absolutely incredible story. So basically, he's taking the liposomal version of vitamin C, which for those who are not familiar with it, sort of a fat encapsulated vitamin C that doesn't disturb the digestive system like other oral forms of vitamin C, like the vitamin C powders that people know or the capsules. So he was taking about 6000 mg of that, you would say, every single day for some time?

Jim: Yeah, from the start of then, and then I think he was sort of bedridden for a couple of weeks. And then the liposomal vitamin C started to work so well that once he managed to go and get rehab and start to get up out of bed. And they put him in a swimming pool and stuff and got him moving again, because he'd been lying in his coma for over twelve weeks, well, within the comma and then being out of a coma, but sort of bedridden.

As soon as he got to a point where he could actually move, he only stayed in that hospital for I think just on 2 weeks. After that, he decided he wanted to go home.

Jonathan: So, Jim, you know my background as an exercise physiology and working with high performance athletes, but also people who really needed rehabilitation. And it's just amazing. People really need to appreciate the speed that you are talking about where those 12 weeks that you described must have felt like forever.

When he's finally able to take the vitamin C liposomally, right inside his body, those 2 weeks that he recovers, most of the time conventional medicine would think that this would take months for someone to get their motor skills and their energy back. And he's walking out of the

hospital. It's just a great story.

Jim: Yeah. Up in Auckland Hospital on the ECMO, we were talking to the nurses there and they said, if he was to survive this, they reckon that he'd still be in hospital for probably up to 9 months to recover. He was that sick. Well, he walked out of hospital within 3 months of it all happening. Within the 9 months...well, put it this way. I think he was out of hospital in late September. This all started at the 1st of July.

By the following February, he'd driven his game boat up here to where we are, which is two hundred miles north of where he has his fishing boat. And he was catching marlin.

Now, I ask you, you'd tell me anybody else who's been through that sort of health scare that can recover so quickly and go game fishing within the next 6 months sort of thing. The recovery was just unbelievable.

And I think to be fair, the doctors that treated him, I think in their own minds they were all very much blown away by just how fast Allan recovered. It took him a while to get his strings up, probably a good year. Like there were things that he still couldn't do. Like if there was a heavy object, he'd normally try [inaudible] himself, because he was not small. He's always been about a 110 kilos. So he could definitely manhandle any weights or anything like that no problem.

So he did struggle with that sort of thing for about a year. But he went from, I think, about a 110 kilos down to maybe just on 80 while he was in hospital. So he lost so much muscle condition. So that took a little bit to get his strength back up, but that's to be understood. But health-wise, to get everything functioning and to be a healthy person again, to be able to get out and enjoy life with his family and—

Jonathan: Jim, I've been in the industry over 30 years, the health and fitness industry, and I only know a handful of cases that are this extreme, this remarkable in recovery. So no doubt what happened to Allan is just truly extraordinary.

And to go back just for a moment, this happened...I know your family a little bit. This happened when he was in his late fifties. Now he's in his sixties. We're talking years later now. Now we're looking at about 7, 8 years later now that this happened. How is Allan doing right now in his sixties?

Jim: Yeah, no, he's fine. He's out there on the farm working away. He is still fishing and got his pilot's license as well. And has to get medicals to pass flying. It's just a little home plane thing. So and not pretty stringent over here on getting medicals to be able to keep flying. He keeps passing those, no problem.

No sign of hairy cell leukemia at all. For a couple of 3 or 4 years afterwards, he was getting checked probably 2 or 3 or 4 times a year about it and there was no sign. And I think now he's still getting checked on it, but it might be once every 6 months or something like that. He might get blood tests done and stuff to make sure that that sort of thing hasn't reared its ugly head, I suppose you could say. But yeah, now he is back to his old self again and—

Jonathan: Jim, here in the United States there is the scare of the swine flu, and it seems like every season. And here we have a nutrient like vitamin C that would just obliterate it. People need to hear this message for sure.

In my mind, Jim, the value of a summit like this, the Immune Defense Summit, is to give you all the tools, things to be aware of that threaten your immune system. But also more importantly, all the things that you can do from homeopathy, herbal remedies, the vitamins, the supplements, the food, that really empower your immune system so that you can turn these kinds of situations around.

Just as we close out the program, do you have any final thoughts for people who are listening to your experience? What would you like them to keep in mind about this story of your brother-in-law?

Jim: The main thing is that it should, heaven forbid, happen to anybody else, you keep fighting. And it's now becoming more and more information out there in regards to the importance of vitamin C. For instance, with vitamin C in sepsis, now there are studies out there that show vitamin C can have a great turnaround for sepsis patients.

So there is more and more information out there now. So to me it makes it more, I guess, unforgivable for doctors not to look at it and go, "Okay, we're still going to... we don't believe in it. We're going to still turn somebody off life support." Because that's still happening here in New Zealand. Unfortunately people are coming down with pneumonia, and people are still dying.

The doctors here, unfortunately, just haven't learned anything from Allan's case. There are some good doctors here though, to be fair. There was a case a little while ago, which is a good friend of Allan's. His wife ended up with swine flu as well. And she ended up on ECMO. But prior to going and being put on ECMO, she was given intravenous vitamin C in one of the hospitals here in New Zealand by one of the doctors. So I congratulate him. I take my hat off to him because he did a great job.

But unfortunately, another doctor consultant came on, and he just took her off it straight away, rang up Auckland Hospital, and instantly got her put on an ECMO machine. But she was the last person then to go on an

ECMO machine, and she was the first person out. We just know it was the vitamin C that she had been given to her prior.

The unfortunate thing is they didn't leave her in the first hospital long enough to allow that vitamin C to actually like kick in properly. The guy just pretty much, within 2 days, just said, "No, she's going to Auckland and going on ECMOs." But I think she was only on ECMO for about a week, and then she was back off it again. And so this showed you again, like it was a case of she got some nutrients into her prior to going on ECMO, which might have been enough just to kick things around and get her recovering and that again.

But when it comes to dealing with hospitals and trying to get the right nutrients into the body, all we ask for doctors these days is to be a doctor, how doctors used to be. Like a doctor, years ago when I was growing up, if something wouldn't work, then try something else, which they do now.

But it seems to be more along the lines of pharmaceutical drugs that seem to hold preference to anything else whereas, years gone by, they didn't have so much to rely on. And they did have nutrients to rely on. And hence, doctors like Klenner and Cathcart and Stone, etcetera, they are onto it. Those guys were pioneers way before their time.

And if anybody does hear and listen to this and finds themselves in the same situation, then I just strongly suggest do some research. Find out about what the body needs, especially when it comes to vitamin C. And just get as much paperwork on it together as you can. And just try and convince the doctors that you guys are doing a great job on one aspect, but you're completely failing another. I don't mean to be harsh, but that seems to be the unfortunate truth, which is still happening today.

Jonathan: Jim, I want to thank you so much for your time. And I want to thank our listeners for joining us today. If you would like a copy of this program plus all the other presentations inside the Immune Defense Summit, simply click the banner you see on this page.

Thanks again for attending the Immune Defense Summit. Talk to you soon. Take care.

Autoimmune Disease Solutions Revealed

Guest: Dr. Tom O'Bryan

Jonathan Landsman: Welcome to the Immune Defense Summit. I'm your host, Jonathan Landsman, creator of NaturalHealth365.com.

Did you know that every year drug-resistant bacteria or super bugs kill 700,000 people worldwide and are projected to be more lethal than cancer by 2050? And infectious diseases still remain one of the leading causes of death.

Cancer, cardiovascular problems, and diabetes are by far the leading cause of premature death in the world. But in reality, all of this is avoidable with a strong immune system.

That's why I created this event. To help you understand the roots of disease and how to prevent and reverse life-threatening illnesses by re-empowering your immune system.

Our show today, Autoimmune Disease Solutions Revealed. Our guest, Dr. Tom O'Bryan, is considered the Sherlock Holmes for chronic disease and metabolic disorders. He is an internationally recognized and sought after speaker and workshop leader, specializing in the complications of non celiac gluten sensitivity, celiac disease, and the development of autoimmune diseases as they occur inside and outside of the intestines.

In addition, he is the founder of theDR.com and the visionary behind the Gluten Summit: A Grain of Truth, bringing together 29 of the world's top experts on the gluten connection to disease.

Holding teaching faculty positions with the Institute for Functional Medicine and the National University of Health Sciences, Dr. O'Bryan has trained thousands of practitioners around the world in advanced understandings of the link between our food choices and the development of immune-related disorders.

The author of a critically acclaimed, ground breaking book, *The Autoimmune Fix* and host of *Betrayal*, a docuseries which takes you behind the scenes of the autoimmune industry, Dr. O'Bryan is about to reveal why gut health is so important.

So whether you feel sick or not, this program will prove to be a valuable resource for protecting your health. Please join me in welcoming Dr. Tom O'Bryan to our program. Dr. O'Bryan, welcome.

Dr. Tom O'Bryan: Oh, Jonathan, thank you so much. And it's a real pleasure to be with you. And in the introduction, you said a statistic that just startled me. And that was over 700,000 will die from antibiotic-resistant bacteria.

And it just reminded me. In the early 90s when I was in Chicago, I read in the paper one day the first child in Chicago to die in the hospital of an antibiotic-resistant bacterial infection had just occurred—the first child! The next year, there were over 100 people in the hospitals in Chicago who had died from antibiotic-resistant bacteria. And the year after that, it was more.

So what you've just described is a new phenomenon since the early 90s to where it has become epidemic now. And that's going to fall right into what we're going to talk about today.

Jonathan: Yeah, I agree, Dr. O'Bryan. This is extremely important. We've got 1000 people a day—and this is going to be unbelievable for people to hear. They're dying every day in hospitals of sepsis infections. There are so many things going on every single day. And nobody is hearing about it in the news. That's why a summit like this is so important.

Dr. O'Bryan, I've got to turn it over to you. God forbid I had an autoimmune disease. Can it be treated?

Dr. O'Bryan: Oh, absolutely. And it's not my opinion. There are many, many articles in the medical literature. And the language they use is "arresting the development of autoimmune disease." That's the language they use. And there are many, many case studies in the medical literature which is different than research.

When a clinician writes up a paper and submits it to a medical journal, a case study, they talk about, "This patient came in. We did these tests.

We did this protocol. Here are the results.” That’s a case study. And there are thousands of case studies now on arresting the development of autoimmune diseases.

So we’ve got the scientists talking about the mechanisms. And then we’ve got the clinicians saying, “Here’s the result when I apply these principles.”

Jonathan: So let’s get into it. What are the environmental factors that contribute to autoimmune disease because it’s important to recognize these things?

Dr. O’Bryan: Yes, every disease—as far as I know, every single disease is a disease of inflammation at the cellular level—every disease! And so the first thing you want to do is stop throwing gasoline on the fire. It just depends on whether it’s a brain cell or a kidney cell? Is it gasoline or kerosene? But the mechanism is the same. And so it doesn’t matter the disease.

Everyone, if they think this way, then they will ask the right questions of themselves and of their doctors to help them reverse the symptoms that they’re having.

Jonathan: Dr. O’Bryan, what are those environmental factors? Because again I think a lot of people, quite frankly, don’t hear about these things. They just hear the label. They’ve got it. And then it’s like losing hope right away. You know what I mean.

Dr. O’Bryan: You’re exactly right. And I wish I could say there was one environment factor. But there are many. So I think the most important thing in this one interview—and I’ll certainly give a lot of examples—is to get the big picture.

And the big overall picture is whatever your immune system says is a problem, it’s a problem. Now, it could be foods that you’re eating which are really healthy foods in general. But to your body, they may be a problem.

It could be the air that you’re breathing. I’ll give you an example of that one to start off with.

In the mid to late 90s, they started publishing studies showing that every single dog that they checked in Mexico City—every single dog—had evidence of Alzheimer’s, beta amyloid plaque, in their brains. Every single dog!

And then in the early 2000s, mid 2000s, the technology improved so they could do urine tests and blood tests. And they found out that

every single child that they checked in Mexico City had evidence of early Alzheimer's. Every single child!

Now, Dr. Dale Bredesen is at UCLA. And he runs the Buck Institute. That is the Alzheimer's research center. Dr. Bredesen published way back in November 2014, almost three years ago now, completely reversing Alzheimer's in 9 out of 10 people at UCLA. Completely reversing it! It took five years, but completely reversed it.

And he hosted a seminar a few months ago—and there were 300 of us in the room—a weekend seminar where he talked about his protocols and what he was doing at UCLA. Now, he has over 100 people fully documented, card carrying Alzheimer's patients, completely reversing their situations—arresting and reversing.

So what does Dr. Bredesen do for this terrible disease that we're all terrified of? (Which, by the way, has a strong autoimmune component to it.) What does he do? There are 37 things on the checklist. There's no one magic pill, everyone. If you're looking for the magic drug or the magic pill or the magic vitamin, it's not going to happen.

It's lifestyle that has sent us down that path of that particular disease. If the weak link in your chain is your brain, that's where it's going to manifest. It's the lifestyle that we've lived which means where we live, the air we're breathing, the food we're eating. Is there mold in your house? Are you breathing mold every day?

You have to go through the checklist. And when you go through the checklist, do they have this? No. Do they have this? Yes, fix it. Do they have this? Yes, fix it. And 37 things are on the list. And when you address it—and it's called functional medicine. When you're looking from a functional medicine perspective, you're looking for the biomarkers. You're looking for the indicators where the problems are in the metabolism, in what's setting this whole thing up.

And when you can identify what those things are that are setting it up for you, then you ask the question, "Well, if I have early brain deterioration"—and there are five different types of Alzheimer's. Type 3 is called inhalation Alzheimer's. That's what the dogs in Mexico City and the children in Mexico City are suffering from because they're breathing the toxic air.

So if you find that you have inhalation inflammation in your brain, then you have to say, "Where is it coming from?" And if it's your house, you have to clean up the house. If it's the city you live in or the area of the city, if you live near the highways, then you need air filtration systems in your house. You will start looking and finding out what to do once you start exploring the mechanisms that are causing this.

And unfortunately, our medical doctors are not trained this way. And so you have to ask questions. You have to ask the questions yourself as to why is this happening. And I just want to address that for a moment.

The American Autoimmune and Related Disease Association did a study, a survey, of general practitioners. And they asked them some questions about autoimmune disease. They said, "In medical school, how much training in autoimmune diseases did you receive?" And 18% of them said one lecture. 28% of them said two lectures. 18% said three to five lectures. Now, understand. These are lectures. These are not courses. This is like one, one-hour lecture.

So we have over 50% of the medical doctors in their training had three or fewer lectures on this world of autoimmunity which is a primary mechanism of getting sick and dying. They just don't know about this. They just were never exposed to it.

When they were asked, "Would you agree that you received enough training to diagnose and treat autoimmune disease?" 32% of them strongly disagreed. 7% somewhat agreed. 12% of them somewhat disagreed. Our doctors just haven't been trained on these concepts. What they're trained on—You've got a symptom? Here's the drug to take to get rid of that symptom or to keep it in control.

They are not trained to look at, where did this come from? What is it in your environment that may be throwing gasoline on the fire? They've just not been trained on this unless they go in for extra education called postgraduate education.

Jonathan: Dr. O'Bryan, it's one of the themes throughout the Immune Defense Summit. What I've been saying in many of the presentations with all the people who are contributing to this event is that all of this content that I want everybody to listen to, listen to as many of these presentations as possible. What resonates with you? I've been actually saying, Dr. O'Bryan, I really feel in my heart of hearts that people know deep down inside what it is that they need to go after, what they need to fix.

If they're exposed, like you say, environmentally within their house in terms of toxins, household products, perfumes, bad food that they're buying, on and on, maybe even toxic, poor choices in their supplementation which actually has heavy metals in it, it goes on and on. Maybe they're not drinking enough water. Maybe outside their home in terms of being exposed to EMF pollution which is actually going in the home, the wireless, the poor oral health that, Dr. O'Bryan, you and I have talked about quite a bit and even when it comes to Alzheimer's, all those factors that we talked about in my summit last year. It just goes on and on.

The idea is to pick out the biggest thing, like you were saying on this checklist. And I know Dr. Bredesen's work. Even though it's over 30 items, I know he's actually said, "You know what? Don't feel overwhelmed. Maybe you pick out three, four, or five big things. Tackle them one at a time." And then the symptoms that you're experiencing—the brain fog, the systemic body pain—even if you perhaps do just a few of those things, the bottom line is you're going to know when you feel better.

Dr. O'Bryan: You're right on the money. He said that in a conference where he was teaching physicians on this. He said, "If you hit the top three or four big ones on the list for that person—and for everyone, it's different. But if you hit the big ones, within two to three months these people notice they're doing a lot better. There may be some you have to go after later. But they start noticing the difference relatively quickly."

Anyone that goes on vacation and you come home and you walk in the house and you say, "Oh, let's air the house out." You open the windows to air the house out, you likely have mold in your house. And you're breathing it all the time. It's at a low level. But it's the constant low level exposure that accumulates in your lungs and can go right up to the brain.

So when you hit the top ones on the list, top three or four for that individual, then you start feeling better because you're reducing the major sources of gasoline on the fire.

For all of the listeners, this is overwhelming. This is tremendously overwhelming for people. And I think if everyone just takes a step back and says, "You know what? I'm going to allocate one hour a week, just one hour a week, to listening to another interview that Jonathan Landsman has done on this summit. Just one hour a week. Or I listened to the one last week. I'm going to do a little research on it."

So maybe you allocate Tuesday nights at 7 o'clock or Sunday mornings after church or whatever it is. But every week, you put one hour into this so that it's not so overwhelming to you. In six months, you've really dialed this down. You've got a good grasp of what's going on and what the game plan is.

So I wanted to say that at the very beginning here. Yes, it's overwhelming. It's not possible to take a look at all this without being overwhelmed, especially when you have so many great speakers as you're going to hear on this summit. And everyone has really good, useful information. It's overwhelming.

So take one hour a week. Take your time. Be kind to yourself. Be patient. And just keep looking into this. And you will find what feels right for you

to focus on.

Jonathan: Dr. O'Bryan, I know you and I share in this wanting for everybody to really take this message very seriously. We're about to talk about the link between nutrition and autoimmune disorders. And what I mean by taking this whole topic seriously is how much better it would be for each and every person to be into this like it's fun. It's a project before you really need it.

The eleventh hour is the last place you want to be to try to figure everything out when your energy is so depleted, when perhaps you're not surrounded by the right people. And I'm not judging those people. I just mean the sheer reality of perhaps not having family and friends around you who are so well educated in this topic. And then you want to go try to figure things out when you feel sick.

So please, Dr. O'Bryan, talk to us now about the link between nutrition and autoimmune disorders for everybody to hear.

Dr. O'Bryan: Sure. Let's do an understanding first. Mrs. Patient, proteins are like a pearl necklace. Hydrochloric acid that's made in your stomach undoes the clasp of the pearl necklace. Now, you're holding a string of pearls.

And it's the digestive enzymes that come from our liver, our gallbladder, our pancreas, the good bacteria in our gut—all of these enzymes act as scissors to cut that pearl necklace into smaller and smaller pieces of the protein, smaller and smaller clumps of the pearl necklace, smaller clumps, until you get all the way down to each little pearl of the pearl necklace.

Those are called amino acids. Those amino acids are small enough they get right through the walls of the intestine. Now, I'm going to give you another concept and then come back here.

Your intestines are a tube 20, 25 feet long. It goes from the mouth down to the other end. Think of a donut. If you could stretch a donut out, one big, long donut, if you look down the center of the donut and you swallow food that goes down into the intestines, the food is still in the donut. It's got to go through the walls of the donut to get into the bloodstream.

So the only way it can get through the walls of the donut to get in the bloodstream is because there's a cheesecloth on the inside of the tube, on the inside of the donut. So big clumps of the pearl necklace can't get through the cheesecloth. It stays in the tube. Scissors keep making it smaller and smaller and smaller until the small-enough pieces, the amino acids, go right through the cheesecloth into the bloodstream.

That's one of the reasons why your intestines are 25 feet long. It takes a whole lot longer to break down prime rib than it does a banana. And so you've got to have enough distance where this stuff is traveling through. And your scissors, the enzymes, can break it down smaller and smaller and smaller.

When clumps of the pearl necklace, big clumps get through the cheesecloth, if there are tears in the cheesecloth—and some of you have heard of this before. It's called leaky gut or intestinal permeability. That's tears in the cheesecloth.

So when you get tears in the cheesecloth, now clumps of the pearl necklace get into the bloodstream before they were supposed to be able to get into the bloodstream. You're still supposed to be making it smaller and smaller and smaller. But these clumps get in.

So depending on what type of clump it is, it gets in the bloodstream. And your immune system says, "Whoa! What's this? This is not good for me! I can't make new bone cells or brain cells or hormones out of this raw material. This is not usable. I better fight this. This is a foreign invader." And your immune system makes antibodies to that clump of the pearl necklace.

So if you understand that concept of what the leaky gut is and that these clumps of the pearl necklace get through, then you understand that almost any food may be a problem for people. Or any bacteria that comes in with the food may be a problem for people if that bacteria gets through the tears in the cheesecloth or that clump of food gets through the tears in the cheesecloth.

So I'm going to give you a couple of examples here. And we know where some of the clumps of food stick in the body. And then your immune system has to attack that area to try to protect you.

For example, with soybeans the clumps of the pearl necklace that get into the bloodstream from soybeans, if they get in there, can attach to your skin, to the inside of the mouth, to the lining of the stomach, to the cheesecloth itself, to your thyroid, to your liver, your muscles, your heart muscle, your breasts, and your eyes.

Peanuts. If you get clumps of the pearl necklace that get into the bloodstream, your skin, the inside of your mouth, the inside of your stomach, your cartilage, your liver, your prostate, your muscles, your breasts, your pituitary (that's part of the brain), and the eye.

Potatoes. If clumps of the pearl necklace from potatoes get in, it's your skin, your thyroid, and your kidneys.

And wheat can be almost any tissue in the body that clumps of the pearl necklace from wheat can stick to any tissue in your body, and then when you make antibodies to that clump of the pearl necklace that's sticking to the tissue, you start to damage the tissue. That's why there are hundreds and hundreds of studies that when you take wheat out of the diet, for some people, their brains start working better, their heart muscle.

The Mayo Clinic has published a number of papers on reversing something called cardiomyopathy (it's a big, swollen heart that doesn't work so well anymore) on a gluten-free diet. Mayo Clinic publishes this. There are so many studies on this.

So it's not that there's one food. If there is one food, it's going to be wheat because there are more studies on that triggering autoimmune mechanisms than any other food. But it could be most any food.

So the first thing we have to do when we understand this is we have to heal the tears in the cheesecloth and then stop throwing these clumps of the pearl necklace into the bloodstream. So when you heal the tears in the cheesecloth, you're much, much safer.

So how do you heal the tears in the cheesecloth? How do you heal intestinal permeability? Many doctors have really good protocols to do that. I've got a protocol. Many of the guests on this summit will have protocols. And they all work. To one degree or another, they all work.

But the first thing you have to do, the very first thing, is stop throwing gasoline on the fire. So you have to find out what currently your immune system says what foods are a problem for you. And if your immune system says, "These foods are a problem," you have to stop eating those foods for awhile because you're throwing gasoline on the fire.

And so when you stop throwing gasoline on the fire and then you take nutrients to help to heal the intestines, to rebuild the good bacteria in your gut, and heal the cheesecloth, then you wait three to six months. And you are likely able to eat most of those foods again.

Jonathan: Dr. O'Bryan, I know this is beyond the scope of our conversation because we're going to focus in on the food pretty much right now between you and me. But what adds to the complexity of all this are heavy metals coming off actual, physical mercury, coming out of the silver fillings in people's mouths as they're chewing and swallowing. You've got infections in the body, Lyme, all of these things. The chemicals that are being used in foods more than ever mixing with those foods and being swallowed.

So I'm going to turn it over to you when I ask you about gluten

sensitivity, explaining how much of an impact this has on us in a negative way, explaining why this is going on because, Dr. O'Bryan, I know you've already heard this plenty that maybe the wheat was okay a long time ago. But now, you've got glyphosate. You've got wheat that's so different than the way wheat used to be. It's so heavily processed. There are so many things involved with this one food product.

Dr. O'Bryan: Well, that's a really good point, Jonathan. And when you talk to the scientists about this or when you read the papers on this, even the ancient grains will trigger the same type of inflammation.

So although the wheat strains today have been manipulated a lot and they're much more difficult to digest, no human has ever had the scissors to break down wheat into the pearls of the pearl necklace. Ever! And this is published by Harvard. They published it.

Hollon published this where every human, every time they eat wheat, they tear the cheesecloth. Every human, every time. Not just hybrid wheats that have a lot of glyphosate. Every human, every time. It doesn't matter what form of wheat they eat.

Why is that? "Now, Mrs. Patient, you have an entire new body every seven years." Some cells regenerate really quickly, like the inside lining of your gut, the cheesecloth. Every three to five days, you have a whole new lining to the gut. Other cells are really slow, like your bone cells. So about every seven years, you have an entirely new body. So what happens when you tear the cheesecloth? It heals—fastest growing cells in the body.

So you have toast for breakfast. And it tears the cheesecloth. But it heals. Have a sandwich for lunch, tear the cheesecloth. But it heals. Pasta for dinner, tear the cheesecloth. But it heals. Those are all the people who say, "I'm fine when I eat wheat" because they don't get any symptoms in their gut. So they think they're okay.

The problem, Jonathan, and where this all comes from is called loss of oral tolerance. Now what does that mean? Wheat has always been a minor irritant to the digestive tract, a minor irritant.

Now make no mistake, we have saved millions and millions of lives by eating wheat. When there was a famine in Africa, we shipped boatloads of wheat over there. And we saved millions of lives. But it's a minor irritant. It tears the lining. But it heals. So it's not a big deal.

However, since the early 90s, the level of toxicity that we have all been exposed to has jumped exponentially, as you say, with glyphosates and heavy metals. The studies I read, all tuna has mercury in it now. It's unfortunate. But it's true because the world is so toxic. "Well, I thought

tuna was healthy for you.” It is. But tuna with mercury is not. And so you have to take that into account.

There are so many toxins that we are exposed to. And your immune system’s job is to protect you. So it’s constantly trying to protect you—constantly! And the result is that it becomes trigger happy. It’s fighting over here and fighting over there and fighting this in the water and the toxicity in the water, the toxicity in the food and the vegetables. You’re eating vegetables because they’re healthy. But they’ve been sprayed. And so they’ve got these chemicals on them. Then your immune system is trying to fight those chemicals. Day in, day out, day in, day out.

And this minor irritant, wheat, is in there. But it’s not causing a problem for you until one day. It might be when you’re 2 years old. It might be when you’re 22 years old. It might be when you’re 72 years old. But one day, now you crossed the line. It’s called loss of oral tolerance. Now, wheat becomes a problem for you also. Now, you get the elevated antibodies to wheat.

And depending on where the weak link is in your chain—you pull at a chain; it breaks at the weakest link. It might be your brain. It might be your heart. It might be your liver. But now when you eat wheat two, three times a day, every single day, now you make these antibodies. And the antibodies will attack the weak link in your chain—your heart, your brain, your lungs, your liver, wherever it is.

So when you cross the line, then wheat becomes the problem. And that’s true with most of the other foods. Once you’ve lost oral tolerance—for example, soy, spinach, tomatoes—when you cross the line, it’s really common that you start making antibodies to nerve cells in your eyes. And the cells are called [inaudible 28.25]. And you start producing an autoimmune mechanism going after your eyes.

So it just depends on where the weak link is in your chain and what foods your body says you’ve crossed the line with as to how it’s going to manifest.

So if there is one food that’s the worst of them all, it’s wheat because it’s more common. And there are thousands of studies on this. I’m not exaggerating. Thousands of studies on wheat. So if there is one food and if you want the most bang for your buck and just want to try something, get wheat out of your diet for awhile, for a couple of weeks and just notice how you feel. But it’s not just wheat. It could be most any food. It just depends on when you cross the line.

Jonathan: So Dr. O’Bryan, just to take a couple steps back now, for a lot of people to get more clarity about all this, what exactly do you mean when you talk about autoimmune conditions? Explain this to us please.

Dr. O'Bryan: Oh, sure. You bet. That's a really good thing to think about and to understand. And it might take a full hour in your one-hour-a-week to really grab this one. So I'll give the introduction here. And then everyone might put a little time into looking at this further.

Melissa Arbuckle is an M.D., Ph.D. who, in 2002, went to the VA. And she looked for people with lupus. She found 132 people in this one VA center with lupus. Lupus is an autoimmune disease. Now, if they're in the VA center being treated, they're veterans. If they're veterans, they were in the Armed Forces.

When they were in the Armed Forces, they had their blood drawn many times over the years when they were in the Navy or the Air Force. And what most people don't know is the government has been saving and freezing all of that blood since 1978. So they've got tens of millions of samples of our service people's blood.

So Dr. Arbuckle went back and asked for permission to look at some of the stored blood of these people currently diagnosed with lupus. She got permission. And what did she find? We know that there are seven different antibodies associated with lupus. And what she found was that all seven antibodies were elevated years before these people ever had a symptom. Years! The average was seven years beforehand, some of them nine years beforehand where these antibodies were elevated.

And in her research paper she shows the graphs. Every year the level of antibodies went up higher and higher and higher and higher and higher until they plateaued. And right about then, people started getting symptoms. Now, why would that be?

When you have elevated levels of antibodies—first, let me back up and explain this. Why is it ever okay to have antibodies to your own tissue like your thyroid or your brain? It's because it's how we get rid of the old and damaged cells. You have a whole new body every seven years. You have to get rid of the old cells to make room for the new cells.

So there's a normal reference range for antibodies to your thyroid, antibodies to myelin (that's the Saran wrap around your nerves). There are normal reference ranges. But when you have elevated antibodies, you're killing off more cells than you're making.

So Dr. Arbuckle showed that every one of these lupus patients had elevated antibodies years before they ever had a symptom, killing off tissue, killing off tissue, killing off tissue until it had killed off enough tissue. Now the tissue can't work very well anymore. Now, you start getting symptoms.

So when did they get lupus. It wasn't when the symptoms started but

rather when the antibodies were elevated, killing off tissue, before the symptoms began. We call that the prodromal period. That's a good Scrabble word. Prodromal period. It means before symptoms. But you're damaging your own tissue—your own brain or your own kidney, your own heart, your own joints—before you ever get symptoms. And they build up, build up, build up.

So what she pointed out is that there's actually an autoimmune mechanism going on. There's a spectrum to this. You start with normal autoimmunity, meaning you're getting rid of the old, damaged cells to make room for new cells. So if you get a blood test and your thyroid antibody levels are in the normal range, that's normal autoimmunity. You're getting rid of the old cells.

But then you get what she called benign autoimmunity. And she called it that because there were no symptoms. But you're killing off tissue. So you've got elevated antibodies. And you're killing off tissue. But there are no symptoms. So she called it benign.

Then you get pathogenic autoimmunity, meaning now you're getting some symptoms. There's a pathology. And then you get the clinical illness and diagnosis.

And this occurs over many, many, many years. That's true for all of the autoimmune diseases. No one gets Alzheimer's in their 60s or 70s. You get Alzheimer's in your 20s or 30s. It just takes decades of killing off brain cells until you've killed off enough brain cells that it becomes obvious your brain is not working so well anymore.

So that's the autoimmune spectrum. And immunologists all over the world said, "That's brilliant. Let's go back to the blood banks. And let's look for other diseases to see. Are there any indicators that these people, currently with other autoimmune diseases, they had elevated antibodies beforehand?" And the answer is, "Well, absolutely, there was." It was just obvious.

And with every autoimmune disease that they look at, every single one, they find that the antibodies were elevated years—years!—before they ever had a symptom.

So the result of all that is that our scientists have come up with what they call predictive autoimmunity, meaning if you do a blood test, if you do the right blood test, you can look and see, are you likely to develop an autoimmune disease? And they can tell you that because if you've got the elevated antibodies, they've done the studies now. And they can say for sure. And it's called the positive predictive value.

For example, if you have either of the antibodies for the autoimmune

disease called scleroderma, it's 100% positive predictive value. You're getting scleroderma within 11 years. If you have antibodies elevated for rheumatoid arthritis, depending on which ones they are, it's 52 to 88% you're getting rheumatoid within 14 years.

If you have elevated antibodies to your thyroid, especially after having a baby, 92% positive predictive value, you're getting Hashimoto's thyroid disease within 7 to 10 years. If you have the antibodies for diabetes, it's 29, 42, or 55% likelihood, depending on which antibody, you're getting diabetes within 14 years.

And if you have this antibody to yeast in your gut called *Saccharomyces cerevisiae* (it's a normal yeast in the gut), but if you have elevated antibodies to it, it's 100%. You're getting Crohn's colitis within three years.

So we have the ability now to identify if these antibodies are elevated, that's a weak link in your chain. And the positive predictive value is very high that you're going to get that disease unless you stop throwing gasoline on the fire.

And that's the whole purpose for the book I wrote on this and all the lectures that we give—to teach doctors and to heads up to the patients that you can identify where the weak link in your chain is right now which hopefully will motivate you to listen to summits like this, to listen to them again and again and again and again so that you really understand the questions to ask of your doctors and maybe do some research on your own to figure out, how am I throwing gasoline on the fire?

It's called predictive autoimmunity—identifying, are you on this autoimmune mechanism? And where is the weak link in your chain right now?

Jonathan: Dr. O'Bryan, very, very important information. Obviously, everything we're talking about here today is about keeping that inflammation at bay. What are those things that are threatening our immune system? And obviously, do more and more of the things that nourish our body, keep us healthy. That's what this entire event is all about.

As we close out the program, Dr. O'Bryan, talk about—and I know it's generally speaking. But it's important to have a basic list so we can look at ourselves in an honest way. What are some of the foods that we should be absolutely avoiding or keeping to a real minimum? And what foods should we be eating to keep our immune system really healthy?

Dr. O'Bryan: Sure, you bet. The first thing is everybody knows some of

the foods that they shouldn't be doing. And they do it anyway. Really, colas? Really? We do this with kids in the practice. You put a dime in a Coca-cola and leave it there for 24 hours. Then you pour the Coke out with the dime. And the Coke has eaten the metal off the lines around the dime. It's smooth around the edges. We put that down in our gut. And you don't understand how it could be tearing the cheesecloth?

So there are some foods we just know we shouldn't be doing, but we do it anyway. I'm not going to do other names. But some of these donuts where people stand in line for hours, the big lines when they open a new outlet for that. I remember a few years ago for that. They do that.

Sugar. In my book I talk about if you give this three weeks and just stop all wheat, all dairy, and all sugar for three weeks, just notice how you feel. Just notice if you don't feel better. You sleep better. Your energy is up. Your brain is clearer. Just notice if your kid is not doing better in school. You'll see it's true, even without doing the test. You will see that for the vast majority of people, they just feel better.

There are so many foods that we should be doing. But if there were power foods that I was going to recommend to you here, there are two categories of power foods. The first one is called prebiotics, P-R-E, prebiotics, because the prebiotic foods feed the bacteria in your gut. They feed the good bacteria in your gut which is so critically important for you.

So just Google, "List of prebiotic foods." And here comes the list. And there are so many of them that you can choose. Always make sure to have two or three prebiotic foods a day. A banana is a prebiotic food. You'll see ones on the list. You'll say, "Oh, that's really good. I could do that one." So the first is prebiotic foods.

The second is how do we get more good bacteria, the probiotics, in our gut? And the most successful way of doing that is, "Mrs. Patient, go to the local natural foods store, Whole Foods or another store, and buy five different types of fermented vegetables. Five different types. Just make sure they're not pasteurized because pasteurization kills bacteria."

So you buy kimchi and sauerkraut and fermented beets and Italian flavored or curry flavored fermented vegetables. And every day, you walk past the refrigerator. And you have one forkful—one forkful! And some docs say, "Well, I give them more than a forkful." Great! I'm really happy if they get one forkful in. But if we can get two or three a day, that's even better.

But one forkful a day because when you eat fermented vegetables, the vegetables, when they ferment, they produce colonies of this good bacteria. And when you eat the vegetable, you colonize, you inoculate

your gut with this good bacteria.

And there are hundreds and hundreds and hundreds of species of good bacteria in your gut. So taking a vitamin, a supplement, or a probiotic can be helpful. But it can never really create the colonies that you need by itself. You've got to get some fermented vegetables in there to re-inoculate with the good bacteria.

So you've got the prebiotics. And you've got the fermented vegetables for the probiotics. And one more thing I'll give you that comes from my friends in England, Dr. Michael Ash and Anthony Haags. They're both world famous nutritionists and functional medicine practitioners.

They call it stewed apples. I call it applesauce. So you just take four apples, wash them, and then dice them. Take the seeds out. But dice them, throw them in a pot, add water to about a third the height of the apples in the pot. Put some cinnamon in there; throw a little bit of raisins in there. Bring it to a boil. In four or five minutes, you see that the skin of the apple is shiny. That's done. Turn it off.

Now, what you've done is you've released the pectin from the apples so that it's more available to your digestive tract. And the pectin feeds the good bacteria in your gut. It helps to heal the tears in the cheesecloth. And it's an antibacterial. So it produces something in your gut—this is going to be a big word—intestinal alkaline phosphatase. So the pectin in apples increases IAP (intestinal alkaline phosphatase) which is so good for you.

So when you're dealing with an intestinal permeability, the leaky gut, you always want to have four or five tablespoons twice a day of applesauce. Don't put any sugar in it, just a little bit of cinnamon and a few raisins.

And those three things—list of prebiotic foods, get two or three prebiotic foods a day; fermented vegetables, one to two tablespoons a day and vary it every day because every vegetable is a different family of the good bacteria produced in there; and then the stewed apples, the applesauce. Those three things.

And of course, the primary thing is stop throwing gasoline on the fire. So you have to find out, where is that inflammation coming from? Is it in the air? Or is it the environment of the food I'm taking in? Or is it that I have a whole lot of bad bacteria already in my gut? Is that the environment that I have to address?

So you have to address the environment causing the intestinal permeability, the tears in the cheesecloth. And then you hit those three things as a component of healing the gut. That is the mechanism to arrest the development of autoimmune diseases.

And I'll say one more thing. And that is that many speakers on this program will have great protocols to heal the gut—great protocols! These three things that I've just mentioned can be included in any protocol as you learn more about nutrition to take and vitamins to take and foods to eat. These three things you can include with all of them.

Jonathan: Dr. O'Bryan, absolutely magnificent. I want to thank you so much for your time. And I want to thank our listeners for joining us today. If you would like a copy of program plus all the other presentations inside the Immune Defense Summit, simply click the banner you see on this page.

Thanks again for attending the Immune Defense Summit. Talk to you soon. Take care.

The Immune System Recovery Plan

Guest: Dr. Susan Blum

Jonathan: Welcome to the Immune Defense Summit. I'm your host, Jonathan Landsman, creator of naturalhealth365.com. Did you know that every year, drug-resistant bacteria, or super bugs, kill 700,000 people worldwide? And is projected to be more lethal than cancer by 2050? And infectious diseases still remain one of the leading causes of death?

Cancer, cardiovascular problems, and diabetes are, by far, the leading causes of premature death in the world. But in reality, all of this is avoidable with a strong immune system. That's why I created this event. To help you understand the roots of disease and how to prevent and reverse life-threatening illnesses by re-empowering your immune system.

Our show today, The Immune System Recovery Plan. Our guest, Dr. Susan Blum, is a true pioneer in functional medicine. She completed Internal Medicine training at St. Luke's Roosevelt Hospital, her residency in Preventative Medicine at the Mount Sinai School of Medicine in New York City, and is board-certified in preventative medicine. In addition, Dr. Blum received her Master's in Public Health at Columbia University and her training in functional medicine from the Institute for Functional Medicine. The founder and director of Blum Center for Health, Dr. Blum's crusade for personalized medicine is paramount for treatment and prevention.

Her first book, *The Immune System Recovery Plan* offers her proven four-step program, which has helped thousands of patients reverse their

symptoms and prevent future illnesses. Today, we'll explore this groundbreaking revolutionary program that will show you how anyone can eliminate the cause of immune-related diseases and maintain optimal health naturally.

Please join me in welcoming Dr. Susan Blum to our program. Dr. Blum, welcome.

Dr. Blum: Thank you so much for having me. I am very excited to share some great information with all of our listeners.

Jonathan: It's great to have you. Dr. Blum, you offer one-approach to treating all these different illnesses that are considered autoimmune disease, really talked about quite a bit these days. How did you create this system and can one approach heal so many disorders?

Dr. Blum: Well, yes. And actually, I do believe one approach can heal all the different disorders. And so let me answer that by circling back first to helping people understand the current state of the way conventional medicine approaches autoimmune disease. Right now, unfortunately, we are divided up into many different specialties. So for example, an autoimmune disease such as, I'll give you some examples, multiple sclerosis goes to the neurologist. Hashimoto's thyroiditis, which is the thyroid autoimmune disease, goes to an endocrinologist. Rheumatoid arthritis goes to a rheumatologist. And so you can see that people with different autoimmune diseases end up with different specialists.

And the problem is—there are many problems with that. One is that autoimmune disease research is so far behind, let's say, cancer research. It's sort of like saying someone with breast cancer and someone who should go to a woman's health doctor as opposed to an oncologist, right. In cancer, there's an oncologist who sees all cancer. And we don't have a specialty that sees all immune-related or autoimmune diseases. And it's really held back the research, right. So there's not—we don't have really good research looking, in the conventional sense, into autoimmune diseases. They're really far behind the other cardiovascular disease, cancer, kind of large groups.

So instead from a functional—so if we take that and say, 'Well, that's very shortsighted and that's not helpful, we really want to understand what's going on with the immune system.' Because it turns out that all these different autoimmune diseases have a lot more in common than what—their difference is just which organ that your immune system is attacking. But all these different diseases have a lot in common, and the underlying immune issues they all have in common.

And so if we look at it from a more whole person perspective, right—the whole body is connected. You can't just separate—you can't cut

off your endocrine system from the rest of your body. You can't cut off your nervous system from the rest—it's all connected. And your immune system travels through every cell—every system of your body is connected via your immune system. And so the root we have to look at is, how do you have a healthy immune system? And what does it take to repair an immune system that isn't working right?

Now, I ended up finding and discovering this approach, first, because I was working in preventative medicine—I'm board-certified in preventative medicine as you said—but I was really interested in lifestyle and understanding food and stress and how those lifestyle issues affect chronic illness—and we know that they do—and how to prevent them. And I wasn't really finding a good clinical approach to doing that in the conventional world and I discovered functional medicine. I was actually searching for an approach, a clinical approach. Functional medicine is a way of looking at the body as a whole but trying to understand all the roots of illness, the why. We're the why people, the detectives. Why is the immune system not working right? What are triggers? How can we find what those triggers are? And around the same time, I discovered I had Hashimoto's, an autoimmune thyroid condition. And so I put on my detective hat for myself and I started trying to really figure out how to repair my immune system and I was able to do that. And what I learned on myself, I then brought to working with my patients the same way. And what I learned I ended up writing in the book, as you mentioned, *The Immune System Recovery Plan*.

So that's a bit of a long story answering that question but I think it sort of covers all the sort of how I ended up, really, with my approach to treating autoimmune disease.

Jonathan: Yeah. Dr. Blum, we're going to talk about these four categories in a moment. But I think what you've already said is extremely valuable and clearly shows or talks about the shift that is going on. And that is more and more people are frustrated with conventional medicine. I'm sure you would agree. And they're asking why more. You use that word often. Why is something going on? Versus what happens in the conventional medical world and that environment. Somebody is suffering. Their immune system is clearly under a lot of stress. They present certain symptoms or certain conditions or ailments or complaints. And then the doctor just treats. That's in conventional medicine. Western medicine just says, identify the person as quickly as possible. Here's your textbook. Here's your standard operating procedures. These are the pills that go along with these symptoms. And then out the door. And they're not asking why. So I think that's very important that we start off this way, always asking the question why.

Dr. Blum: That's right. And listen, I consider myself a non-judgmental person. So I have one foot in conventional medicine. I'm conventionally

trained. So I'm not anti-conventional medicine. I think everything has its place. And so for people listening, I think it's really important to understand that. It is very helpful to go and get a diagnosis and to figure out what's going on. And a conventional doc can really help you do that and depending on how sick you are.

If you have rheumatoid arthritis, for example. And my next book, called *Healing Arthritis*, is coming out in October. So that's sort of the next thing I've been really digging into and focusing on. If you have rheumatoid arthritis and you're in severe crippling pain, you actually need to go to a conventional doctor to help you sort of get what we call a flare, to help get that under control. Because if it's a runaway train at that moment, you can end up with damage to the joints.

So there is sort of a 'time is of the essence' to get somebody who is having a crisis in their condition under control and conventional medicine is really good for that. But once that big episode of fire is sort of under control and out, the long-term answer or where you go next is always, Why did this happen? How can I go under the surface to figure out the cause of this? How did I even get rheumatoid arthritis? What are the causes? What were the triggers? How can I treat those causes? And the other thing I want to say, too, is, I have a lot of people come to see me who have just very mild symptoms but they know something is not right. And they go to conventional rheumatologists, let's say, and they get a diagnosis. That's actually a perfect time to say, 'Time out. I don't need medication right now. I am not in severe pain. And I'm not in any danger. There's no big danger here of me waiting a few months while I work with an integrative doctor or a functional medicine doctor to try to get to the root cause of why I have this. And I'd rather treat myself that way'.

So I just wanted to set it up because people listening—there's a whole spectrum of people who are listening that might be just first diagnosed, have mild symptoms, all the way to people who are really suffering. And there is a role for conventional medicine. But at the end of the day, we all want to get to the root cause of what triggers immune dysfunction. And so that's what we can go into next is what those root causes are.

Jonathan: Exactly. So talk about these four categories, Dr. Blum, that influence autoimmune diseases. And if handled correctly, you're saying, could actually help heal the immune system. Can you explain why they're so important?

Dr. Blum: Yes. So here are the main triggers. Let's just summarize from the get-go the main triggers. Then this is evidence-based. We didn't make this up. This isn't woo-woo, left wing medicine. I mean, there are really good evidence in PubMed and the literature for these. And my book is well documented with plenty of articles. And so the

main foundational triggers for autoimmunity are food, what you're eating—and we'll dig into each one, but the list is food; stress; and trauma, traumatic events, unrelenting ongoing stress. The gut and the importance for healing the gut so that your gut microbiome, those hundred trillion bacteria—the importance of the gut on a healthy immune system. Number four is toxin, environmental toxins, everything we're exposed to and we'll talk more about that. And then lastly I do want to just mention is about infection because there are definitely infections like Epstein-Barr virus, for example, that we know can trigger autoimmunity.

So my book is really focused on using food as medicine, balancing your stress hormone, healing the gut, and supporting the liver with detox. Because those four things are the way we heal those four foundations of the body and the four foundations of the immune system and make it strong. And once you do that, you can also help clear the body of those viruses and those infections. And so, those are what I call the four foundations for healthy immune system. You don't have to have autoimmunity to work on those four foundations. It's for people who get sick all the time. It's for people who have asthma or allergies. It's for people who just feel their immune system isn't working like they wish it would. And it's especially good for people with autoimmunity.

I think one thing I do want to clarify about autoimmunity. A lot of people think that autoimmune disease is when the immune system is just overactive, like a runaway train. So autoimmunity is when the body attacks itself. The immune system is attacking your own tissue. And I would invite people to think about a little differently. It's not that there's just an overactivity of the whole immune system, to the point where you wanted to squash the whole thing, which is what conventional medicine does. If you go to a conventional doc, the doctor just, they give you steroids or immune-suppressing medicine to shut the whole thing down. And that's one way to get rid of your symptoms. And that works for only that purpose.

The foundational problem with the immune system is that it's just dysfunctional. It turns out that—so if you think about your immune system as

like the military, for example. This is the analogy I use. It's the military and you have the Army, you have the Navy, you have the Air Force. It turns out that in autoimmunity, one of those, like the Air Force, is way overactive and become a renegade and is firing on the tissues of your own body. But then the Navy and the Army are not working right. And so it's actually an imbalance. It's an actual imbalance in how it's functioning. And so I like to say these four steps are going to help you repair the functioning and the proper balance of your immune system rather than make it stronger. You follow me?

Jonathan: Absolutely, Dr. Blum. I think right now is probably a good time to give people a head's up and to get that pen and paper. They're probably going to want to take their own notes when it comes to the things that you're about to say. And I know step one, as you mentioned, is food, right? So why don't we talk about that?

Dr. Blum: Yes. So food—so a lot of people ask me all the time about food and especially gluten. And when it comes to, say, using food as medicine, gluten is very important. And I'm not going to focus too much on that in the time we have here. But there's a lot of research showing the connection between gluten and autoimmunity. And so I always recommend that people, with any kind of autoimmune disease, adopt a gluten-free diet.

I want to instead, with food, I also want to point out that the most important thing for your immune system is to eat an anti-inflammatory diet. And what that means is you must remove foods that are causing food sensitivities. We need to help you figure out what your food sensitivities might be and remove those foods. And then you need to work on focusing on what we call just the basic anti-inflammatory diet, which is getting rid of—and we'll keep this short—getting rid of processed sugar.

So looking at the sugar in your diet, right, the processed sugar, the white flour, so processed foods. Healthy fats, increasing healthy fats like making sure you're eating avocado, we always talk about as healthy fats, but nuts and seeds, omega-3 you can get from fish or fish oil supplements. But in choosing the fats in your diet, you want to eat healthy fats and get rid of really too much of that, the dairy and the animal fat. You want to—so the fats and the sugar, I think, are the first things to think about. And then to eat a lot of fruits and vegetables, a lot of color. This is the basic anti-inflammatory diet.

I think a good old Mediterranean diet is a good framework for people if they're looking for what that means. But the food sensitivity piece with autoimmunity is really important. When you have a foundation of low sugar and good healthy fats in your diet, you then want to eliminate—and then we do sort of a very good basic elimination diet—gluten, dairy, soy, corn, eggs. Some people feel better if you take out legumes and nuts as well. And you do that for three or four weeks, and then you can reintroduce those foods, except gluten, and see if they trigger any symptoms. But basically, bottom line, food is medicine. Identify the foods you're sensitive to, remove them from your diet. And as a foundation, make sure you're eating a basic anti-inflammatory diet. And I explain all of that in my book. And there are plenty of resources for that kind of information.

So once you clean up your food and eat foods that aren't triggering your

symptoms anymore, you're going to feel much better. And that alone, has the power to help you feel well. With people with arthritis also, I always take out the nitrates, which is tomato, potatoes, eggplants, and pepper.

And so that's number one. So number one, at the end of the day, you must fix your food. You cannot take pills and have a quick fix and fix your gut and detox if you're eating a very inflammatory standard American diet. And that's just the bottom line.

Jonathan: I love that you're stressing that this is an anti-inflammatory diet. And also the most important thing that you said at the beginning, don't wait until you're diagnosed with an ailment. I think it's great that people think about calming down that inner fire by just following this as a lifestyle. Because I've said this so many times in the past, Dr. Blum, it's the worst time to try to make changes in the eleventh hour, when you've been diagnosed with something. You've been suffering for a little bit and then it gets worse and worse, and then something really terrible happens to someone's health and then they got to go try to figure things out.

So, again, I know another thing I say all the time is it's not so sexy to do this, but to do it so much ahead of time. If your stomach is bothering you after you eat, if there's gas after you eat, yes, chew your food really well. But pay close attention to the foods, like you mentioned, Dr. Blum, that might be disagreeing with you. It's really respecting what those signals are. And when those things are gone away, calm inside your body, you have a much better chance of not walking around all the time so inflamed.

So in moving along, Dr. Blum, I know you have step two, which is understanding the stress connection, which is huge. I would see that even connected to food like don't ever eat, for example, when you're angry or you feel sad, so these kinds of things. So, of course, we all know there's plenty of stress all around us. Can stress really trigger autoimmune disease and what can we do about it, please?

Dr. Blum: Yes. And this is really important to emphasize, just like you did, that food and stress are lifestyle approaches that have to become the foundation of a permanent change in your life. Because here's the thing, you can't just do these interventions. If you have something going on, an inflammatory condition or your immune system isn't working right, these are the permanent changes because it has the power to permanently change not only your inner terrain of how your immune system functions directly, but food and stress are the number one and two most important determinants of the health of your gut microbiome, which is really where the majority of the immune system lives. A healthy gut is a healthy immune system, period. If you go home with nothing

else, we're going to get—and that's step three, which we're going to get to. But coming through steps one and two, food and stress have the power to have a direct effect on the immune system but they also affect the immune system via the gut.

So what's the direct effect on the immune system? You have a stress system. It's important to you. Nature gave us the stress system because it helps us deal with the everyday stresses of life. It's good. So you have to give a talk. You have to perform. Something happens, you have to run away from a lion, I don't know, that's sort of the joke we always say. But the stress system fires up and your adrenals, which sit on top of each kidney, make something called cortisol, which is your stress hormone. And the sympathetic nervous system, which is the nervous system part of your stress system, it fires up and increases your heart rate, your blood pressure goes up, and these two things together raise your blood sugar. And so what these things do, your nervous system and your cortisol, is they alter the functioning of your immune system directly. There's hardwiring into all your lymphoid cells where your immune cells grow. There are cortisol receptors on every immune cell in the lymphoid tissue where your immune cells grow.

And so the stress system really tries to divert all your attention, to take your immune system and say, "Stay tuned while we're busy doing this over here," and that's not good for your immune system. Now, it's good in the very short run, for a day, that's okay. But when there's chronic ongoing stress in a persistent way, your immune system can be triggered to be pushed in one direction and suppressed in the other and there ends up this over activity of some parts of your immune system, which can lead to autoimmunity. So we have the science. We know the research. It's absolutely true. And it happens via cortisol and the sympathetic nervous system. So what can you do?

So here's the thing, we all know that stress is important. Doctors, healers, patients. We all sort of know that there's an issue about stress. But we don't always really know what to do about it. And we're like, "Yeah, yeah, yeah, stress. Oh yeah, I know." And I hear stories over and over again. I developed this; my brother got sick, and then I got sick. A family member died, and I ended up with pneumonia. You hear stories all the time. I had a terrible flare in my arthritis after I was working. It was tax time. I worked for three months and I had a terrible flare of arthritis.

So we hear those things all the time. And so we definitely, we know there's a connection. But we don't always know what to do about it. And so I teach mind-body medicine, I believe in teaching people meditation and different tools to bring into their ongoing lifestyle every day so that they can't feel their stress system, turn it into the off switch. And I think that's what we have to do.

Jonathan: You know, Dr. Blum, I go back to my athletic training, which was huge for me personally and also working with high-performance athletes. What does this got to do with stress? And I tell you, everything you said is so right on. And I would want people to really visualize something. Taking a deep breath, what a huge thing. Chewing your food that I mentioned before. Just sitting down before you eat and expressing gratitude for that meal, which is a thought process that is less stressful. A chance to pause, a chance to take a deep breath, then chew your food really well. What a huge impact on stress levels. You'll absolutely feel so much calmer if you're dealing with a lot of anxiety and a lot of stress in your life.

And going back to the high-performance athletes that get a lot done, you'll notice that they're in bouts of extreme intensity and then they breathe out after every single point. Let's say, a high-performance tennis player or even in football or basketball. There is this breathing and this breaking and then right back to the tension that allows them to perform at such a high level for such a long period of time and stay really, really okay. And I think there's a lot of take-aways for that for the average person as well. Not to always be high-strung all the time and have no balance or break, you know what I mean.

Dr. Blum: I do. And I know we're going to move on. But just right before we move on very quickly, I want to say that—so what's the first step? The first step for anybody who has an inflammatory condition or an immune condition is to become more aware of the stressors in your life and to become more aware of what circumstances help you feel better, make you feel worse, and to start having some awareness about stress in your own life and about how it might be affecting you. And I think that awareness and understanding your own connection between your stress, health stressors and your perception of stress, might be affecting you. And then finding something you can do every day, whether it's just a few deep breaths, like you said the athletes do right after they exercise, or it's something like really exploring and finding a meditation practice, doing yoga, walking in nature. There are a lot of different options.

Jonathan: And then no doubt as well, another thing which I've often told athletes but I also tell the general public now as well is, when there's a lot of stress and a lot of unknown situations, it's amazing how low your stress can go even if you have a lot to do if you organize things. Like putting this event together takes a year of work. There's a tremendous amount of stress. There's all the people to talk to, all the organizing, all the planning, all the interviews to do, but I can only do one day at a time. So I love what you're saying Dr. Blum, it's about perspective. It's about being aware of it. It's about thinking what exactly do I need to do today and then even perhaps tomorrow and the next day or next week? Have it clear in my mind even if it's a lot to do. And wow, the stress level goes

down but I'm able to do a lot. So I hope that storytelling does help on some level.

Dr. Blum, I know step three is healing your gut. Can you describe the connection between a healthy gut and a healthy immune system, please?

Dr. Blum: Yes. And actually, the gut is really the place to start. Your gut is the foundation of your immune system, 70% of your immune system lives right below the intestinal lining in the lymphoid tissue. We call it the GALT, the gut-associated lymphoid tissue. And it runs throughout your small and large intestines.

What it means to have a healthy gut means that you have these brilliantly beautiful flowers I call them, your inner garden, a hundred trillion bacteria or your good microbes. There's so much research right now on the bacteria that live in our gut and the importance of their health for our health. And so the goal of having a healthy gut; so what does it mean to have a healthy gut? I think that's what we have to understand because that's what we're working towards.

A healthy gut means you have all the bacteria. They're helping you digest and absorb and assimilate the food you're eating. Which is really important, because how can you get all your antioxidants in what you're eating? That's what your immune system needs. How can you get all of your B vitamins and your fats and your amino acids, right? So we need those good bacteria. They help us do that. And really importantly, they help keep the barrier function of your intestines working properly.

So if you think of your small and large intestines as a long tube that's a closed system, it's supposed to be closed with walls. Your whole gastrointestinal system starts in your mouth and it ends in the anus. But the small and large intestines is this tube. And it's lined with villi, which are the cells that line the intestines, and all the bacteria. And the wall is supposed to be a barrier, and your body decides what comes in and what comes out. Actually, there are these gates called tight junction. Well, it turns out that the microbes in your gut help regulate those gates and help the body keep that barrier function working properly. And we know that autoimmune disease is associated with alterations in these gut microbes, a condition we call dysbiosis. Which is perhaps an overgrowth of weeds in the garden, we could say, with bad bacteria, yeast, or parasites; and the damage to the intestinal lining, a condition we call leaky gut.

So in order to have a healthy immune system and to treat autoimmunity, we want to make sure that we treat any dysbiosis you might have. Or, the other side of that coin is just make sure that your gut microbes are healthy. And we'll talk about how to do that in a sec.

And we must make sure that the intestinal lining is good, and there is no leaky gut. So treating leaky gut. And when we do that, the immune system, which lies right below the surface, right under the lining, is where your immune system is. On the other side, the immune system can calm down. Because when there's a leaky gut, the contents of your intestines just seep into your blood, and the immune system sees it and it reacts and it fires and you end up with this whole sort of imbalance in your immune system.

And so when we look at the foundational triggers for autoimmunity, we must fix the leaky gut, and have a healthy gut microbial population. And so that's always, always a part you have to do. If you have any autoimmune disease. Or even if you're getting sick a lot. Or you've had asthma or allergies. Make sure you have a healthy gut. It's, I would say; well, they're all important. I shouldn't say it's the most important foundation. But you can't skip this step. You absolutely have to address the gut health in order to have a healthy immune system, period.

Jonathan: And Dr. Blum, I know a lot of people are going to appreciate what I'm about to say. If you want to go really deep in the Immune Defense Summit, I've got some real treats for you. We've got Dr. Tom O'Brien, who's going to be talking strictly about the gut for the entire presentation. Microbiome Medicine is going to be with Dr. Raphael Kellman. If you want that, please make sure you listen to his presentation as part of this event.

And also another one, which is very personal for me. I've been involved with this now for many years, and it's poor oral health and that connection to the gut. Make sure you listen to Dr. Stuart Nunnally, who's the past president of the International Academy of Oral Medicine and Toxicology. Dr. Nunnally's presentation is all about the mouth, what's happening in there. Gum disease, mercury-based fillings, root canal treated teeth, cavitations, how all of that has a direct impact on our entire immune system, and whether we're going to get sick or avoid sickness in the future. So these are very important presentations, make sure you check them out.

Dr. Blum, I know that the fourth step is huge because there is no way that we're avoiding all the toxins that are around us. You call this step sort of like supporting your liver. What is your detox program and how does this help us to heal the immune system?

Dr. Blum: Yes. So nature gave us a liver for a really important purpose. It metabolizes all of our own end-products for biochemistry every day and our own hormones, right? But it also has to manage and detoxify or process or render harmless anything we bring in to our body via our mouth, our lungs, our skin. It has to be processed for excretion and to protect us. And so that's why we have a liver. The liver is in charge of

doing most of the heavy lifting for that. I mean the kidney does some, but the liver's really the main heavy lifter for removing toxins from the body.

And so there's really good evidence, and like you said, there will be people speaking on this during the summit in terms of mercury and toxins. So for me, I'm going through the checklist, and then there will be other people digging into each topic. And I do want to just say before we move on about the oral microbiome, there is so much research connecting that and rheumatoid arthritis. And I dig into that in depth. If you have rheumatoid arthritis, you must get my new book that's coming out in October on arthritis, because we talked all about that.

But coming back to detox. So toxins are known triggers for systemic autoimmune diseases like lupus as well as Hashimoto's thyroiditis. There's a lot of concern about mercury, for example, for sure, heavy metals. But there are also toxins like persistent organic pollutants and pesticides and glyphosate and Roundup. And we live in a toxic world. We are exposed. We can't live in a bubble. I do the best I can. I eat organic. And I try to be as clean as I can. But I go out to restaurants and I travel and go to airports and I have to eat on-the-go so I'm being exposed. And so it's really, really important.

What I want to invite people to think of, when I have; my detox programs focus on two things. It focuses on giving the liver a tune-up, right, giving the liver really intensive nutrients to help it do better clearing toxins out. So that's my approach. It's supporting the liver so the liver will clear the toxins. I'm not so much advocating jumping in, at least at the very beginning, with chelation or any kind of intensive ways of pulling toxins out. Nature gave you a liver to do that. And so we can really tune up the liver to do a better job.

The other thing I want people to think about is, often people come in and say, "What tests can I do to find out what my toxins are?" I think while that's really important and, certainly, I do target mercury for testing and treatment. I think it's really important to talk about, and I talked about this step four in my book, *The Immune System Recovery Plan*, which you mentioned at the beginning. I really talk about, and I give sort of assessments that you can take to understand your toxin load.

This is, again, about awareness. This is all lifestyle change. This is all the way you need to live. You have to live in a way that; you're eating in a way that supports. And an anti-inflammatory diet is also food that supports your liver to help it always detox. This is a lifestyle change. You need to be doing this now. You need to do this forever. Eating foods that don't bring in toxin, and that support your liver, antioxidants, B vitamins, good enough protein. The liver needs a lot of colors, cruciferous vegetables. So the way you eat will support your liver.

But to understand that there's this general sense of toxin load, it's everything. It's everything that you've been exposed to your whole life including if you were a painter, if you lived in the 1920s house that you've lived there while it's being renovated and there was dust everywhere. There's all sorts of discoveries that I have when I ask people all these questions. Were you somewhere where they were spraying fields with pesticides? We have a load. It's constant exposure.

And then how well we've kept up. Have you eaten a whole foods diet? Have you been feeding your liver? What are your genetics? Some people are really handicapped in their genetic ability to detoxify and their enzyme activity for an enzyme called glutathione. We could test that.

And so at this moment in time, anyone listening, your toxin load is a combination of all that is everything you've been exposed to in the past and now, and how well you've done getting rid of it. And so you want to live in a way that always supports your liver. That you're always feeding your liver good stuff. And you want to look around you and assess, what kind of ongoing toxins are you exposed to? What kind of solvents are you using in your house? What kind of makeup are you using?

And I always send people to the Environmental Working Group, ewg.org, they have great resources. Clean up your world. Because the goal is to lower the total toxin load in your body, and to give your body the resources to keep it low. Because toxins, that last filling that you might have or that piece of tuna or swordfish that you ate or you binged out over the summer and eating a lot of fish with a lot of mercury. If your toxin load is already high, it's sort of like having cup that's full. And then you just add some; the cup runneth over. That last thing is the last straw. And it tips you. And toxins damage your immune system straight out. And there's a mechanism for that and we know it happens. And so we must keep your toxin load low.

So it's not just approaching one particular toxin, it's thinking of it as a whole lifestyle of keeping your toxin load down and there are all sorts of strategies for doing that.

Jonathan: That is so well said, Dr. Blum. I mean, I use the bathtub as an analogy as well, right. The water in the bathtub is not an issue, like you were saying about the glass. And when it gets too high, it starts spilling out all over the floor then all hell breaks loose. That's when we have a problem.

So if people are interested in just liver detox and liver health, one of my favorite people that inspired me to actually get into beet juices. You know, beet is just great for the liver. Dr. Ellen Jensen is going to be giving a fantastic presentation about liver health. Believe me, after listening to her talk, you'll be very motivated about juices and the best things to do

just to clean out the liver.

Dr. Blum, I know you and I are on the same page in terms of just being fed up with all of those people out there. And I'm pointing my finger right at those health agencies and those so-called experts, that say everything you talked about, especially when it comes to toxins. "Oh, calm down, Dr. Blum, Jonathan. You're doing a whole program about toxins and how we've got to lower our stress. Everything is just so little bit. It's a little bit in makeup. There's a little bit in lotions. There's only a little bit that's legalized to put into all of our food supply."

You must shake your head at this all the time. I mean, I know I'm personally sick of it when I hear, "Oh, it's so little. Don't worry about it." But there's a synergistic effect. And what they're not telling people is that every one of these little things that they're blowing off and telling people not to worry about and putting into all these products and these foods, when we're absorbing them into our skin and swallowing them, they're being stored into our tissue. And that's where that glass of water analogy comes into play, where it just keeps building and building. And then later on, that's when it's causing a person the problem. What do you say to this?

Dr. Blum: Well, that's exactly what I just said. I mean, this is the idea of toxin load. And I've had colleagues say to me, "Well, so which toxin is it?" And I try to explain that, yes, can I measure some of them. Okay, so you can measure organochlorides and pesticides in the blood, plastic residues, phthalates. And there's a test for that. And I do measure that sometimes in my patients who want to know, or at least when if we're stuck and we're trying to figure out why aren't you getting better, I'll then start doing some of those deeper tests. But I test mercury on all my autoimmune patients. So that is a known autoimmune and there's really good research for mercury.

But the total accumulated load in the body, don't underestimate the power of that for really damaging your immune system. And I think that everyone must address that. And I do believe that. I come at everything always from preventative medicine too, and so this is a lifelong process. I think there's so many things so we can't avoid because of the way the world is now, that anything we can avoid, we should. Because you're always going to have a little teeny bit of toxin load. We are going to have them and there is nothing we can probably do about it.

But what we can do is nourish our immune cells with a lot of antioxidants. Because what do toxins do? They create something called free radicals. And free radicals are little sparks. And they need to be quenched by antioxidants. And so immune cells are always trying to manage to get rid of those toxins for us. And it's like a lot of friendly fire going on all the time, or not so friendly fire. But there's a lot of little

sparks all the time as your immune system is trying to clear that out.

So feeding yourself a lot of antioxidants. And protecting yourself by eliminating as many as you can from your world, that's all you can do. And I think that anybody who doesn't believe it, I just send them to PubMed. There's so much research on it that I really think that people who don't believe that this is an issue, they are actually not as well read as we are. And I say that with all humility, okay? Because what is it, Jonathan, you probably know the statistics, they estimate that about 60% of doctors and private practice don't keep up on the literature at all. They're practicing medicine as they remembered it from when they went to school.

And so I know in my field, being an integrative or functional medicine doctor, I am probably as on top of everything as anybody I know. And I read everything. And I think me and my colleagues all do. And maybe that's because we're always up against the naysayers. So we stay armed with what the current medical literature says. So there's plenty of evidence out there. And if anybody says that to me, I just send them articles. "

Jonathan: And Dr. Blum, just my final thought and, of course, you can get the last word as we wrap up this program. So many people, they've asked me, "Why are you doing the Immune Defense Summit?" Because I feel like this is really the most important thing that we should be focusing on all the time no matter where you're coming from. If you have a health problem, focus on your immune system. If you're looking to avoid a health problem, focus on the immune system.

And for me, Dr. Blum, even though I've done lots of research and I can razzle dazzle with statistics and science and everything. Just on a common sense level, the way I look at it. If I'm sleeping well and I want to, and I mean I really emotionally and mentally want to get up in the morning. I have energy all day to spend time with you, with my wife, with all my friends and family around me. I have a great attitude all the days that I'm awake, sleeping well, happy, energetic. That's where I want to be. And if I'm not, right away, I want to look at what is stressing me? What do I need to change? And I think that's what we need to do.

It's just like you say about awareness, asking why. I love the way you kept saying it over and over again throughout the whole conversation, just raising awareness as to what's going on with us. Because if we're depressed on a chronic basis, anxious, and we don't even know why, we just feel that stress level. My whole message is, don't ignore it anymore. Do something about it. Pick out something in this summit that really resonates with you and then just go for it. Your final thoughts, Dr. Blum?

Dr. Blum: No, I think that everything you said makes a lot of sense.

And I would just invite people to realize that we are asking them to understand this is a lifestyle change and to take in everything that they hear throughout the summit as foundations. That we're really trying to teach people the foundations of a healthy immune system and that they can do it. And it's possible and it takes time and perseverance. And we're here to support them. And that's why I wrote the book. It's very easy, *The Immune System Recovery Plan*, an easy four-step program, one step after the other. It's very much a workbook with recipes and all that, easy to follow. So I would invite them there.

And then the other thing I would say, if you're interested in asking me any questions, I'm on Facebook Live every Tuesday at 1 o'clock East Coast time. Come find me there. I answer questions, I give a topic every week, and I'm live and it's interactive and that's a lot of fun. And I also have a great website blumhealthmd.com, where I really do a lot of online programming and supporting of your goals for healing your immune system.

Jonathan: Dr. Blum, I want to thank you so much for your time. And I want to thank our listeners for joining us today. If you would like a copy of this program plus all the other presentations inside the Immune Defense Summit, simply click the banner you see on this page.

Thanks again for attending the Immune Defense Summit. Talk to you soon. Take care.

Repairing and Defending Immune Function

Guest: Dr. Russell Jaffe

Jonathan Landsman: Welcome to the Immune Defense Summit. I'm your host, Jonathan Landsman, creator of NaturalHealth365.com. Did you know that every year, drug resistant bacteria, or super bugs, kills 700,000 people worldwide, and is projected to be more lethal than cancer by 2050? And infectious diseases still remain one of the leading causes of death. Cancer, cardiovascular problems, and diabetes are by far the leading cause of premature death in the world. But in reality, all of this is avoidable with a strong immune system. That's why I created this event, to help you understand the roots of disease and how to prevent and reverse life-threatening illnesses by reempowering your immune system.

Our show today, repairing and defending immune function. Our guest, Dr. Russel Jaffe, received his bachelor's of science, medical degree, and PhD from the Boston University School of Medicine. He completed residency training in clinical chemistry at the National Institutes of Health from 1973 to 1976, remaining on the permanent senior staff until 1979. Dr. Jaffe is board certified in clinical pathology and in chemical pathology. For over 30 years, Dr. Jaffe has advocated a system that treats people not as a diagnosis, and promotes long-term sustainable solutions as an alternative to a system dominated by prescriptive, symptom-suppressive solutions.

Today, we'll address some of the best ways to repair and defend the immune system. Like I always say, your best defense against any disease is a strong immune system. If you're immune compromised and are looking for an effective way to rejuvenate your body, mind, and spirit,

this conversation will be perfect for you. Please join me in welcoming Dr. Russel Jaffe to our program. Dr. Jaffe, welcome.

Dr. Russel Jaffe: Thanks for having me.

Jonathan Landsman: Dr. Jaffe, I would say most people think of defense when they think of the immune system. Can you explain, though, this other function of the immune system, meaning repair?

Dr. Russel Jaffe: Yes, I'd be delighted to. And it's very important. Defense does come first. But the immune defense and repair system is also responsible for the parts of you that wear out. For example, no part of you is more than 10 years old. And that's your bones, large blood vessels and joints turnover about every 7 years. And much of you is new from the last few months. So when your immune system is able to do defense and repair, you stay healthy.

But when defense becomes preoccupying of the immune system, then repair is deferred. And too many of us; those with inflammation, which is really repair deficit. Those of us with autoimmunity; self-attacking syndromes, of which there are over 1000, last time I checked. All of these are indications that our immune system has shifted from defense and repair to defense dominant and repair deficient.

Jonathan Landsman: It's interesting, Dr. Jaffe, what you have already said alone, from other conversations that I've had with other experts as part of the Immune Defense Summit. I kind of get this analogy as you describe this, of sort of somebody who is filled with toxins. They're battling all kinds of disease symptoms, if you will. And then they're complaining about having trouble going to sleep at night, where we know that the immune system really needs that good quality sleep. Especially from 10:00 p.m. to 2:00 a.m. And they can't get that kind of sleep. I'm wondering if all of this activity that you described could happen to somebody, about defending themselves all the time from toxins and all kinds of issues going on. That literally those battles inside make it hard for the body to relax, go to sleep, and then repair itself, no?

Dr. Russel Jaffe: Exactly right. Restorative sleep is essential. But restorative sleep means that when you're ready to lie down, your body is ready to go to sleep. At a technical level, that means that in a certain part of the brain, adrenaline falls at the same time that serotonin rises. Now, adrenaline comes from phenylalanine, an amino acid that's essential. And serotonin comes from tryptophan, another essential amino acid. Very often, people's adrenaline does go down, but their source of tryptophan is depleted. They don't make serotonin or melatonin, and that is a problem. And it leads to either difficulty falling asleep, or that the first two REM cycles; the first two deep sleep cycles, which are supposed to be associated with release of growth hormone and other

reparative hormones, is blunted. In many cases, absent. So you are in bed for a certain period of time. But you don't get restorative sleep, and that is a problem.

And it's especially a problem when the immune system is on high defense status, because of digestive problems. Or because of exposures that could be avoided if you only knew what it was that riling up and keeping preoccupied the defense side of the immune defense and repair system.

Jonathan Landsman: I hope people stay very clear about the message. One of the key messages in the Immune Defense Summit, is that we're discussing things with all the experts to show you ways of avoiding things that hurt you, to allow the immune system to stay calm, and focused, and very energized. Very capable, if you will. To defend you from things that really matter and that might hurt you in your life.

So, that's what all this is about. All of these discussions. So, enough about that, Dr. Jaffe. I know that you speak a lot about this repair deficit. What exactly is a repair deficit, that you're talking about?

Dr. Russel Jaffe: Well, when people say inflammation, what they're really saying is repair deficit. So inflammation is the pathologist term for signs of swelling and heat and discomfort and the signs of inflammation; there are 5 of them. I can even say it in Latin if you want. However, it's really important for people to look physiologically; to look functionally, to look individually, to look predictively. And when we do that, we find out we've had some of these issues just backwards. We have been suppressing inflammation with NSAIDs, aspirin, steroids, and other kinds of either steroidal or nonsteroidal anti-inflammatories. As if inflammation was a problem. It's really repair deficit. And when you boost the innate immune system's capacity to repair, now defense is done because you reduce the exposures that provoke this defensive activity. And then you stimulate repair. In the digestive tract microbiome. In the metabolism, the metabolome, and the detoxification system. You restore neural hormonal balance as well as immune tolerance.

Jonathan Landsman: I know this all makes a lot of sense to those who are looking to get that balancing in their immune system. And here's the part that I think is going to be of great interest to a lot of people. Dr. Jaffe, some of the most important steps that people can take to make sure that their immune system is working really well. That's what this is all about.

Dr. Russel Jaffe: Right. Now, what do we do to restore tolerance? First, we have to find out for each individual what is it that has been burdening their immune system? That has been adding to their defense work? That has been causing deferral of repair, deferral of wear and

tear. So you become more leaky, which means your tissues are boggy. You don't have as good definition in your muscles. You are kind of puffy a little bit in your face. There are lots of signs and symptoms that physical diagnosticians can use to confirm. That many people; many young adults, as well as long-lived people, really do have considerable repair deficit known as inflammation.

But we don't fight with inflammation anymore. We see repair deficit as an opportunity to bring in the necessary repair. Essential amino acids, vitamins, minerals, cofactors that are essential; that are required. At the same time, that we reduce the load on the immune system so we can shift back towards tolerance and away from intolerance. Nobody that I know of wants an inflamed, intolerant immune system. People I know do want a repair capable as well as tolerant immune system. And that's why certain functional tests that are breakthroughs are really needed today. Because the 21st century is just a very different time to live in than the 20th or even the 19th.

Jonathan Landsman: Dr. Jaffe, it's very interesting. As you just spoke there about what's happening inside the body, I'm thinking a lot about my days when I used to be an exercise physiologist. You know, and as was my training, and I worked with people one on one. And I would see the difficulty they would have wanting to do exercise, right? Mentally and emotionally, they wanted to exercise. They thought it was good for them. Improved their blood circulation. Good for their heart. And on and on and on. It all sounded good.

Except the problem was, that in so many cases, as I got into the natural health and natural living part of coaching people, I noticed that because they had so much heavy metal toxicity. There were all kinds of other chemical imbalances going on. Hormonal imbalances in their body. That they were always doing not that much exercise, but in so much pain. They were achy and just weren't recovering well.

And I think that's sort of what you were just talking about. Versus a lot of these really healthy, high performance athletes that I would see who were able to do a tremendous amount of activity. And they were able to bounce back and recover so quickly, and do so much week after week. Is that sort of, I guess, a sign for a lot of the average people out there that if they can't tolerate exercise that well, they're in a lot of pain, that there's a lot of inflammation going on there? And that there's a cause for all of that. They've got to clean house, really take care of things, before they go to try to get really physically active. Does that make sense to you?

Dr. Russel Jaffe: It makes a lot of sense to me. And to people like me who, well we're medical professionals. We look at the physiology. We look at the individuality. We use predictive biomarkers.

I was privileged to do a report called clean your room. This was in the early 1980s, for the Consumer Affairs Department of California. It was 19 subjects on the built environment, and how to keep the bad stuff out and the good stuff in. And it turns out there are even more problems today, because we've progressed in our living styles. So there are 5 major categories of toxins. They all consume the essential and protective antioxidants. They tend to waste the beneficial minerals. And they are toxic metals, solvent residues. What are called hormone disruptors or persisting organic pollutants. Mold products, and radioisotopes.

And really healthy people have enough antioxidant reserve and buffering mineral reserves, that when they're exposed to these oxidative risks, they neutralize the oxidative risks and they repair quickly.

Then there are the people you're talking about. The weekend warriors. The people who get all sorts of little injuries, or shin splints. And they're trying to exercise. Because they need more cardio endurance. They really need the exercise. However, they're pushing uphill to get anything done because they lack the essential protective antioxidants, buffering minerals, and certain other cofactors. And so when their needs are met. When their biochemical, individuality is satisfied, then they shift from the at risk vulnerable population to the resilient, and as you said, highly reserved and able to restore population. The people who are tolerant in their immune system are able to repair, and are able to restore themselves. And that's what we want everyone to be.

Jonathan Landsman: You know, you really quickly went over a very significant list, Dr. Jaffe. I know it's beyond the scope of this conversation. We're about to get into a test that you developed that I'm sure is going to be of great interest to a lot of people. But really quickly, when I look at these people, even the ones that are young, who are not conscious yet of the toxic load that they're putting on their body. And they can handle it, because they're young enough. But what I'm referring to, even back to the exercise, are the women that are putting cell phones right into their bra as they jog. Or putting these wireless devices in and around them. In their home. When you talk about all this wireless technology. And all of these chemicals that they're putting on their hair and their skin. It just goes on and on and on. That exercise and eating some good food every now and then, for an individual, might not be enough if they're tipping the scales too much to these really toxic loads that they're putting into their body. I'm sure you see this all the time.

Dr. Russel Jaffe: We see this all the time. In the 19th century, you eat a whole foods diet. In the 20th century, supplements were elective. In the 21st century, survival depends upon supplementing the best of diets. Because, as my grandmother used to say, the rents are going up and the ceilings are coming down. So the essential beneficial minerals, vitamins, cofactors in the food have been declining for the last 50-plus years. And

even if you go beyond commercial to organic sources, the soil is less mineral-rich, and therefore the foods less mineral rich. A carrot in my parents' youth had 20-30 mg of zinc and essential immune boosting mineral. The same carrot today is just as orange. The carotenoids make it orange. But it has 10% of the zinc. Because the soil doesn't have the zinc. And if it's not in the soil, it's not going to get in the food. That's just one example of which I could go on for the entire time with other examples.

The point is that we need more of the essentials requiring safer, more effective supplements, and we also need to lower the burden. It turns out that 80% of this toxic schmutz or this toxic material that you're referencing is short-lived. We bring it in regularly. We can stop it at the door. We can stop it by changing our kitchen, our personal care, and our environment. So yes, we are marinating in a sea of chemicals. But it's a choice for at least three-quarters to 80% of that load. We can reduce the burden on us, and then our body can better utilize the essential nutrients that we get from a diet that we can digest, assimilate, and eliminate without immune burden. A diet that is less or not contaminated, but is more nutrient dense and rich.

So, we can, in the 21st century, be proactive on our own behalf. But we must be proactive on our own behalf to get the healthiest possible diet. One that we can digest, assimilate, and eliminate without immune burden. And then enhance through targeted supplementation and a healthier lifestyle. The ability to be healthy in the 21st century, despite all the toxins that we are exposed to.

And by the way, the anti-toxin mechanisms that healthy people have depend upon a high energy state for the cell. When you have lots of antioxidants and minerals, you have a high energy state for the cell. When you deplete the antioxidants, like ascorbate, when you deplete the minerals like magnesium, now the battery of the cell begins to shut down. Elective, protective molecules are not made. The elective, protective molecules are the ones that soak up the toxic metals. Metallothionein is the technical term for a biological sponge that soaks up toxic metals and prevents them from harming us. But you have to have an energetic cell to produce that.

And similarly; we can detoxify the solvent residues and the hormone disrupting, persisting pollutants. We can deal with the oxidative burden from mold products or from isotopes; radioactive materials. When we have enough of the antioxidants, buffering minerals, and essentials for us as individuals. And this is where biochemical individuality comes in, and where we as scientists and clinicians have been able to add to a deeper understanding of how proactive, predictive, personalized, primary prevention. We now have the ability to do tests that predict years to decades ahead problems that you can avoid. Improving the

quality of your life, but avoiding catastrophe.

Jonathan Landsman: Dr. Jaffe, it is so refreshing to hear a medical profession like you take such a good, accurate, large view of what's really going on. So many people on an intuitive level already know that it's a tiring, ineffective message just to tell people, oh, hey, you're overweight. Eat less calories and get moving a little bit more, that's good for you. Burn some calories, and eat a little bit more fat and protein or carbohydrates. And eat a balanced diet. You know, just very superficial things, and not taking into account a person's individual situation.

They might be so depleted, like you say, that diet alone is not enough, it doesn't mean that diet isn't important. That we eat the best quality food we can on a very consistent basis, especially when someone doesn't feel well. But we've got to also, for that individual, find things that are most effective at calming down issues inside the body, improving immune function, giving the person more nutrients through supplementation. And also some of these other natural protocols that are available from integrative physicians, like yourself.

So you just made a reference, Dr. Jaffe, about testing. This is where I think technology is doing an amazing job, and maybe I could even say western medicine should really get on board with something like this. But talk to us about the testing that you have developed. How it's different from other tests, and, you know, why it should matter to us.

Dr. Russel Jaffe: Well, when I was at the National Institutes of Health, I was trained to develop new, more sensitive, more predictive, more reliable lab tests. Once I left government service, I picked the immune system because it was considered to be a "black box." We knew when your immune system was healthy, you were healthy intolerant. We knew when your immune system was not, you had autoimmunity, self-attacking diseases like diabetes and migraine headaches and multiple sclerosis, and arthritis, and eczema, and psoriasis, and asthma, and on and on and on.

But we really didn't, and this is back 30 years ago, we really didn't know how to understand for each individual what they were tolerant to and what they reacted against. So I developed an ex-vivo test. This means we watch immune reactions just as they occur in the body. We developed the first one-step amplified procedure, so we could get cell cultures done with very high precision. Less than 3% variance on 4,238 consecutive line-split samples. That we reported at a technical meeting, experimental biology, ASIP last spring.

So first we had to develop the technology; the methodology. A precise way of measuring individual, delayed, hidden immune responses. These are immune responses that occur 3 hours to three weeks after

exposure. So you can keep the most perfect food diary, but if it takes two or three weeks from the time you get exposed to something until the serum sickness; the Arthus reaction. The Shwartzman reaction. The delayed reactions occur, the most perfect history will not give you that information.

So we needed a test that was accurate, predictive, and reliable. That's called ELISA/ACT, the lymphocyte response assay by ELISA/ACT. LRA stands for lymphocyte response assay. And lymphocytes are white cells. They are long-lived white cells. They carry memory in the immune system, and they come in generally three categories. The so-called B cells, that have to do with antibodies. Then the immune complexes, and then the T cells, which react without any antibody, but are actually more important in these delayed reactions.

So we figured out how to do an ex-vivo, or highly precise cell culture, to determine the foods, chemicals, medicines, and toxins that each individual person reacted against. And then we developed a health appraisal questionnaire and a treatment interpretation that includes what to substitute, what you're tolerant to. So the good news is what you're tolerant to. The other news is what you need to substitute. Where hidden sources for that exposure might occur. Then what specific supplementation, mental, and physical activities would evoke your healing responses. Because the goal is to restore tolerance by reducing the defense workload and enhancing the reparability of the person. And then, correcting their deficits. Getting the essential nutrients in, getting the toxic materials out. This general takes about 6 months. And then we recommend retesting, because generally it takes more than one cycle. Because generally it took more than a few months to get into the office with the inflammation and/or autoimmunity. And it probably will take more than one 6-month cycle to fully restore digestive, detoxification, neural hormonal balance, as well as immune defense and repair competence.

Jonathan Landsman: Dr. Jaffe, I can already hear thousands of people chomping at the bit here. We've got a lot of health care providers that are listening to this program right now as we speak. I guess we've got to spend another minute or two; get us on the ground about this test. How exactly would it work? Do you have training for physicians? What's the name of the test again for individuals to demand from their doctors? Walk us through this. How does this actually get done?

Dr. Russel Jaffe: Right. It is LRA by ELISA/ACT. All you have to remember is LRA; lymphocyte response assay. This replaces the old serology. So doctors used to look at antibodies, like IgG antibodies. Except antibodies are not functional. They can be helpful or harmful. Only harmful ones need to be detected. And yet two-thirds to three-quarters of the antibody reactions are actually beneficial, neutralizing, and helpful.

So we had to develop a cell culture. We had to be able to obtain a specimen without any activation or damage. We had to be able to transport it overnight, so our lab could then do the culture of the living cells. And we're closing in on 80,000 cases. We're closing in on 25 million cell cultures. So we've been at this a while. We've reported the most successful outcome studies in type 1 diabetes, type 2 diabetes, fibromyalgia muscle pain, chronic fatigue immune dysfunction syndrome, and over time, we will go through all of the inflammation, all of the autoimmune, all of the chronic disease conditions, at least the major categories, as resources permit.

But we're confident that we have moved upstream. That we really are very personalized. That we're proactive, and that we're able to restore tolerance one person at a time, rather than just allow them to slip down the slippery slope of chronic degenerative inflammatory autoimmune disease.

Jonathan Landsman: And, Dr. Jaffe, just out of respect for those health care providers out there, how can they connect with this? Understand it a little bit more? Get a little bit more of a study about this. What do you suggest to those people out there?

Dr. Russel Jaffe: Well thank you for asking. If you're a health professional or a health coach, the Health Studies Collegium Foundation provides the Well Guard Certification Program. This is a self-paced set of modules that will allow you to get familiar with the science. And more importantly, get certified as a Well Guard practitioner. So yes, we do train folks in this.

Our lab provides the kit. You must have a special cell preservative. You must follow certain instructions. We provide the kits. Very often, people have phlebotomy at home because you have 12 hours of water only before the specimen is taken. So we don't get any false negatives or positives from that. And we have worked out all of these logistics so that for convenience, some folks have the specimen taken at home before they leave in the morning. Other people come into a phlebotomy center having followed the instructions. As long as you follow the "rules" we get a good specimen. We can then do a good job, which means we check for negative and positive control in every specimen. And most importantly, we're highly confident. Because on blind, split samples, there's less than 3% variance. That means if you sent in two specimens from the same person with different names, we'd come up with essentially the same results.

So we're very confident because of all the years we've been at it. All the cases we've done. All the successful outcome studies that we've been able to contribute to the literature. And now we're ready for many more health professionals and health coaches and individuals who just

want to tune up their immune system so they can be tolerant in the 21st century. That they can survive the toxic burdens and stresses of the 21st century. And thrive. Them, and hopefully for generations to come.

Jonathan Landsman: And just real quick. Dr. Jaffe, you are referring to blood that has to be drawn, correct?

Dr. Russel Jaffe: Yes. This is blood. And it does require a venipuncture. It uses a 19-gauge needle. If you ever have given blood in a blood bank, they use a much bigger needle. They use a 15 or a 13; that's a really big one. We need a 19-gauge needle to get free flow. We don't want any damage to the blood clotting system. We don't want any damage to your lymphocytes. If you draw blood through a narrow needle, you'll damage the red cells. You'll damage some of the white cells. You'll activate blood clotting. You won't have an ex-vivo specimen. We will require another specimen because, the positive and negative control that we do with every specimen reveals when folks "don't follow the rules." Now, we provide a 19-gauge, relatively small butterfly needle. It's a vacutainer tube, but a very special anticoagulant cell preservative. And then a special kit that allows it to come overnight.

But we basically put the cells to sleep by cooling them down. Just right, not too much. And then we wake them back up in the laboratory and incubate them with various different substances. We can actually do hundreds and hundreds of cell cultures on just one ounce of blood. So we have a tiny sample with high precision that tells you what you may eat, what you react against. And then, if you're willing to provide the questionnaire, we can give you an entire interpretation of how to restore tolerance. How to enhance detoxification. How to get the good stuff in and the bad stuff out.

Jonathan Landsman: Wow, this is fantastic. Dr. Jaffe, we're going to shift gears now to what you've already made reference to before, and throughout the Immune Defense Summit. Of course, we're talking about gut health, and how important it is. We often hear that 70 up to 80% of our immune system resides in the gut. It's like a second brain down there for our entire body and our life. Can you talk a little bit more about how you explain this whole network?

Dr. Russel Jaffe: Well, I'm so old that I was taught the immune system lining the digestive tract was vestigial. It had no function. They were called Peyer's patches. And then we discovered over the last few decades that, as you said, half or more of the immune system is actually lining the gut because what comes in through digestion, if it is foreign to the body. If it's a large enough molecule to provoke immune responses, you're going to burden the immune defense and repair system more or less with every meal.

And since so much of our food today is highly processed, since we eat the same foods over and over again. Since we often don't eat vine-ripened and really high nutritional density foods. We're really kind of setting ourselves up for the kinds of deficits in essential factors and accumulation of toxins that too often we see. Especially in people with inflammation with autoimmunity and with the kinds of problems we're talking about. So we developed the LRA by ELISA/ACT test so that people could accurately know, for them as individuals, what they react against, and what to do in order to bring back the healthy, confident digestion, metabolism, detoxification, restorative sleep. Repair, so that when you exercise you feel better, not worse, etc.

Jonathan Landsman: It's incredible. Dr. Jaffe, this is the kind of information that people need more. Because just to say, oh, eat better, or you know you've got to change your lifestyle. If somebody, with all due respect, is on a cellular level been dumbed down and doesn't have that inner awareness, if you will, without this kind of testing and without the right kind of health care provider, for someone I'm thinking that's really suffering with health problems, it's like just taking shots in the dark, isn't it? To make changes and hope for the best, right?

Dr. Russel Jaffe: Well the old tests that were not functional really were shots in the dark, and they didn't work very well. The reason that we developed this lymphocyte response assay; the LRA by ELISA/ACT, was so that colleagues and consumers. Because we're all ultimately consumers of health care. And hopefully it's healthful caring, not just symptom suppression. We wanted to be a leader in this primary prevention. In this really personalized, proactive, and predictive approach that saves lives. By the way, a million a year, we could save. And we could improve the quality of life for the people whose lives we save.

So there's lots of people who are chronically ill, have inflammation or autoimmunity. They deserve to have this kind of technology. This kind of 21st century, functional personalized approach. And the reason we spent a lot of time validating it and then a lot of time putting together training program was because it is a paradigm shift. It moves away from 19th and 20th century physical chemistry, and into 21st century functional, integrative, comprehensive, if you will, systems biology approaches to restoring tolerance.

And yes, in general we should do generally good things. But it's when you can get specific and tell me that it's this food, that medicine, this activity, that environmental exposure. That's what's causing my specific problems. Now I have a whole different level of interest. And by the way, this is how I raised my children. This is how we took care of my parents. And I can tell you we have lots of anecdotes as well as lots of evidence that this is a new paradigm. It is a shift towards personalized

and predictive medicine. And I believe it is what is needed today, more urgently than ever.

Jonathan Landsman: So, shifting gears again, Dr. Jaffe. A lot of people, of course, are dealing unfortunately with the condition of allergies of all kinds. Their skin is itching, their nose, their eyes. Their head is clogged up, their ears. They can't hear so well. All because of allergies. But I would like you to sort of draw the line, I guess, in the sand here, and try to make the difference for us between allergies and hypersensitivity. What do we need to know here?

Dr. Russel Jaffe: Well, here we go back to the 1960s. There are actually 4 kinds of allergic or immune responses. The first one is what people are familiar with; the allergist who deals with hives, wheezes, itching, and anaphylactic shock. This is IgE to IgG4 ratios. It's a specific kind of antibody. And you do an IgE and an IgG4, or you do a rest serum test. And that gives you the information about the immediate allergies. That's the common kind of allergy people think of.

If I take a bite of the strawberry and my lips swell, or my wind pipe swells, I can pretty well say there's a link between the strawberry and the swelling. It happens within seconds. That's typical type 1, immediate allergy.

Then there's the hypersensitivity. The delayed allergies. The hidden allergies. The mystery allergies. The occult allergies. There are lots of names for them. But these are the ones that our lymphocyte response assay measures. We do not measure type 1; we do measure type 2, 3, and 4. We pick up only harmful antibodies. We're not confused by helpful antibodies and neutralizing antibodies. We do get immune complexes. We do get T cells.

So we are more comprehensive, more predictive, and reproducible than any other technology. To do a cell culture more accurately than most labs can measure a blood sodium or a blood sugar is quite an accomplishment. But it's necessary if you want to have a personally predictive assessment for that individual.

Jonathan Landsman: Didn't you say there were four types, though? Am I wrong about that?

Dr. Russel Jaffe: Four types. Type 1 is the IgE. Type 2 are the B cell antibodies. Type 3 are the immune complexes. And type 4 are the T cell responses. And this was defined by Gell and Coombs in the 1960s, published about 1967. A brief little anecdote; Coombs was a very famous pioneer of blood banking and immunology. Gell was his protégé student. Professor Coombs wife was a famous French cook. She made a bouillabaisse. The student comes in, takes two breaths, falls down in

anaphylactic shock. Dr. Coombs runs and gets the adrenaline, brings Dr. Gell back, and the first words out of his mouth were; "Henry, we have to publish this!"

Jonathan Landsman: That's funny. So, as we close out the show, Dr. Jaffe, the idea of the importance of delayed sensitivity in health and disease. You've mentioned it already, but can you just kind of go on a little bit more about some detail?

Dr. Russel Jaffe: Yes. Thank you for giving me the chance to kind of summarize and bring into perspective what I'm talking about. Because this is a new approach. It is a paradigm shift. It allows us for the first time to get information about the immune defense and repair system, ex-vivo. Just as it happens in the body. So a mere one ounce of blood, properly taken, analyzed in our lab, within one week we can have the results back to the clinician so that you can then substitute for the adverse reactions. The things that are burdening the immune system, impairing sleep, preventing repair, inducing autoimmunity and chronic ill health and inflammatory repair deficit responses.

So all of this is a web of life. What we have done is moved upstream so you can now predict years to decades before harm and catastrophe what's going on so that the immune system can restore its tolerance, digestion can be improved, detoxification can be improved. Hormonal and neurochemical balance is restored. And along with it, your moods are better, your ability to go out and exercise and enjoy it is enhanced. Your ability to get restorative sleep is restored. And frankly your ability to lose that extra water weight. That extra 5, 10, 15, or 20 pounds of water weight. An extra 5 or 10 pounds of stool that's in for too long, because your transient time from consumption to elimination is too long.

And maybe on another occasion, we'll have the chance to explore some of these self-assessments as well as the kinds of laboratory testing. A blood sample that comes to our lab overnight, and allows us to look into your body ex-vivo. Allowing cells to react, just as they do in the body. And allowing us to then say all of the things that you're tolerant to, the things you react against, and how to substitute for them. And then how to stimulate your healing responses, mentally, physically, and biochemically, or functionally.

Jonathan Landsman: Dr. Jaffe, as we close out, just one more quick thing. I know I might be putting you on the spot, but I think it might be interesting in terms of talking about somebody. Perhaps that was maybe like what I referred to before Dr. Jaffe; more of a clueless individual. And then they kind of go through this whole process, and they sort of discovered; wow, this, this, and this was not so good. And maybe they brought in a couple of things, as well, that made them feel better. And

kind of the change that happens to them. Maybe you've got a story or something you can share with us?

Dr. Russel Jaffe: I'd be happy to share with you a couple of quick anecdotes. Rebecca, mother of my two wonderful children, developed Lyme syndrome. Was treated essentially naturally. And has been largely in remission for many decades. Because Lyme is an autoimmune or immune dysfunction condition. And too often people have chronic infections. Or they have chronic problems with inflammatory and discomfort and pain. Or their exercise leads to feeling worse, not feeling better.

Or each time they eat, their body is invaded by delayed allergies, and there are many people, executives, who tell me they basically have to do all their serious work in the morning. Because after lunch they're tired, sluggish, irritable, and can't concentrate. These are signs of delayed allergies. Not acute allergies, but delayed allergies. The hidden ones. That ones that in the past we couldn't figure out, and we kind of ignored what we couldn't figure out. But now we can figure them out.

So in the 21st century, we really need functional, personalized, predictive tests. This lymphocyte response assay that we had the privilege of developing is one of those breakthroughs. And it's available to serve you now. So only if you want to survive the 21st century and thrive. Only if you want a tolerant immune system. Or if you do want a tolerant immune system, if you do want competent digestion. If you want the ability to get the toxins out and get enough of the good things in to manage the oxidative stress of high tech living. Then for sure, you want to look at our approach.

A rethinking approach that has redefined inflammation as repair deficit, has restored immune tolerance in more people than any other approach, and while many people have not heard of this breakthrough yet, it is decades in practice. We opened in 1983. And as I indicated, we have pushed past many thousands of cases and many millions of cell cultures. We wanted to be very sure that our science, as well as our clinical capacity to change someone's life for the better, were equally effective.

And my dad, we had till the age of 90 even though his medical history was such that he should have passed before he was 50. He followed through on what we asked him to do, and he was definitely better for it. And he often called me up to say, "You know my son, you didn't do me any harm. Because you gave me a few extra decades of life."

And I will tell you that at 83, my father had a stroke in my living room, and completely recovered. And then every day for the next 7 years were the best 7 years of his life. And yes, he did pass on at 90, because life is

a mortal event. But I'm also glad to tell you he passed in my arms with dignity. And while we tested him from stem to stern, we were not able to find any medical problem. It was just natural causes.

And the first and only death certificate I have ever signed as a doctor was my own father's. And when I finished training, a woman came to me and said, "Doctor, you've never had to sign a death certificate." I said, "Do I have to?" She says, "Well don't you want to know how to do it?" I said, well when I need to, I'll check back with you." It was about 50 years after that; actually more than that, that my dad passed away.

Dr. Russel Jaffe: Wow. Dr. Jaffe, you have certainly given us a lot to think about. And I want people to appreciate, of course I'm going to say the obvious. The reason why the Immune Defense Summit took me nearly a year to complete is because I'm picking out speakers, experts like you, Dr. Jaffe, who have been involved in integrated healthcare for decades. And I'm sure that's obvious to anyone listening. Please make sure that you share this event with someone that you love, because this information, quite frankly, I've said it many times before, is not very easy to find when you search on the internet. You certainly can't get this. There is a lot of censorship going on out there. That's for a whole other program. But I know people understand what I'm saying.

Dr. Jaffe, I want to thank you so much your time. And I want to thank our listeners for joining us today. If you would like a copy of this program, plus all the other presentations inside the Immune Defense Summit, simply click the button you see on this page. Thanks again for attending the Immune Defense Summit. Talk to you soon. Take care.