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Thank you, Integrative Peptides. Now let's jump into today's conversation. If a child is like a glass of water where the water's up to the top, and now you put a drop of order, which in some cases the vaccine with aluminum, is supposed to cause an inflammatory reaction, that's how vaccines work, right?

If you have a kid who's already inflamed, who is loaded to top with inflammation, they are going to get a problem and they may end up with autistic behavior.

Welcome to the Peptides and Longevity podcast. Each week, we'll dive into groundbreaking science, innovative therapies, and the future of health and longevity.

Alongside visionary physicians and experts, We'll explore how peptides, cutting edge medicine and lifestyle strategies can redefine the way we age. Get ready to transform your health, optimize your vitality, And unlock the secrets to a longer, healthier life.

Let's get started. Hello everyone. And I think we have a wonderful treat for everyone today. We have Dr. Richard Horowitz. If anyone is connected at all to the Lyme community, you know who he is and just a wealth of knowledge.

He's board certified internist and medical director of the Hudson Valley Healing Arts Center, where he combines mainstream and integrative medicine. to treat Lyme disease, other tick-borne illness, and now into L-chronic illness and dementia.

So, lots of neurodegenerative disease as well. Over the past 42 years, he has treated more than 13,000 patients from all around the world and has advised the Human Health and Services, the New York State Department of Health, government agencies across the globe.

We won't hold that against him. Dr. Horowitz pioneered the MSIDS or MSIDs model, the Multiple Systemic Infectious Disease Syndrome, which helps identify and treat sources of inflammation behind chronic Lyme and many other chronic illnesses and looking like even the neurodegenerative diseases.

His recent article in the Journal of Alzheimer's Disease Report shows that treating chronic Lyme with his nine-week oral Dapsone combination therapy reversed PTAL, the most sensitive and specific biomarker for Alzheimer.

So it's very exciting. And his third book, which launches today, and we'll have links in in, in to attach and get the book. The book is fabulous, I have to tell you.

Ending Chronic Illness is being released by Simon & Schuster, so he went all the way to the top. Again, tomorrow. It applies the MSIDS model to prevention treatment of most chronic disease, including Alzheimer's, autism, heart disease cancer, chronic fatigue and fibromyalgia.

You can get more information on his website, cangetbetter.com. C-A-N-G-E-T-B- E- T-t-e-r dot com. Dr. Horowitz,

welcome. Ted, great to see you as always.

Wonderful. Yeah, so we'll go through it. And I just spent so much time going through the thank you for the pre publication book and I couldn't put it down.

It is so packed with information, but it flows really well. So we will just, I guess, jump into some questions here. And I'm sure we'll deviate throughout this next hour.

Oh, I would expect so, by the way. I'd be disappointed if we don't. Yeah, no, always love that too. So you set out to be a country doc in upstate New York treating blood pressure and diabetes.

And how did Lyme change that? And what did you go from also then LyME to chronic illness? So, you know, it's an interesting story. In fact, I just got back from the IMH conference in San Diego and I told the story and there was like 1700 people at this conference, basically a lot of psychiatrists dealing and also neurologists doing with neuropsychiatry disease.

But the way it happened kind of by accident. is that I was in medical school in Belgium. It was a seven-year program in French. I did a lot of meditation.

Medical school was stressful, as you can imagine. But the fourth year of med school, I had the great fortune of meeting the Tibetan lamas that were just coming from the East for the first time.

And one of my teachers, Lama Gendron Rinpoche, became very close. I took refuge with him and started studying with them. And I went to him my last year of medical school before going out into the world as a doctor.

is put yourself in people's shoes and do for them what you would want done for others. Now, if you've ever studied with, you know, some of the spiritual traditions, it's pretty common advice, love, wanting other people to be happy, compassion, and wanting people free from suffering.

So, exchanging oneself with others, putting yourself into people shoes, is known, but he gave me this very specific piece of advice and what was interesting about it, So here I get back to New York.

I do my three-year internal medicine residency at Mount Sinai in the city and the City Hospital system. A whole other story that was an interesting experience.

In our third year of medical school, this person from Stony Brook shows up and says, by the way, I'd like to tell you about a new disease that is just showing up called Lyme disease.

And you might see these bullseye rashes that I remember specifically turning to my friend Howie Prusak and saved him. Oh, yeah. Big chance we're going to see a lot of that in our lifetime.

It's like that's yeah, so clearly I was not exactly prescient on that one. So I moved upstate. My parents were in Bayside and Whitestone. I wanted to be close, but I also wanted, you know, the country setting of rivers and mountains.

And I didn't know at the time, I was naive. I did not realize I walking into the most Lyme endemic area in the United States at that time. This was Dutchess County, New York, highest level of tick-borne diseases.

So these patients are coming in, you know, many of them with bullseye rashes that, by the way, half the times don't look like bull's eyes. They look spreading red raches that sometimes is confused with a cellulitis, a bacterial infection or herpes zostera or spider bite.

You have to be careful. And, you know, roughly 75% would get better with antibiotics, but 25% or more would come back after the antibiotics were stopped and they relapsed.

So you do whatever, they teach you to do as a board certified internist, refer. You refer to infectious disease doctors and neurologists and psychiatrists, and physical therapists.

Nobody knew what to do for these people. This was back at this point in the 1980s. So I remembered Lama Gendin's advice at that point. When the people were coming in saying, listen, doc, my fatigue is coming back.

I have horrible pain that's migrating all over my body. And I've got brain fog, I can't think or concentrate, and I'm not falling asleep. But I keep waking up.

Um, so anxious and depressed and we'll go through the symptoms. It was that bad point, it was literally like the light bulb went off in my head, remembering Genden reprises advice, saying well, I've sent them to all these specialists.

Nobody knows what to do for them. I guess it's my job to figure out what's wrong with them." That's what my teacher's advice was. And that's, what I would want a doctor to to for me, is go on a healing journey.

So I started reading the literature, I starting going to line conferences, and fast forward 42 years, 13,000 chronically ill patients later, right? Here's how we find ourselves in that position at this point.

For all your sins. So how much has this spiritual journey and how did you initially get into that and because I think a core characteristic and basically core being of Lyme doctors is they have to have tons of empathy if you don't you're going to be so miserable.

And you have to, there's so many things that I think you need to do. You need be curious and constantly looking for better ways. These patients are very complex.

Of course, they're preaching in the choir. But tell me how this spiritual group, how did you get hooked up with this in Belgium? Well, so when I was young, I came in very religious.

So you can imagine from my last name Horowitz. I actually went to Yeshiva. Eventually, my parents got divorced, and I moved to Bayside, but I graduated valedictorian in my Hebrew school.

Without going into all the details, i grew up in a very Religious family, although I Was actually probably the most religious one. And I used to speak to God when I was six years old.

I mean, literally, I remember the conversations. This is before, by the way, anyone told me, you can't do this. And it turns out, without going into all the details, there were things I heard when i was 6 years-old that have come true, 42 years later, about my healing journey and what was going to happen.

What do you mean? So, you know, so I had this spiritual connection from a very young age. When my parents divorced, it was a great trauma. And I lost that connection.

I came in kind of as an empath, as a medical intuitive, but I didn't realize it. Right. So I loss the connection and then when I started meditating in medical school, I starting re-establishing that connexion and I always, even as young boy, wanted to know the meaning of life.

Why are we here? What's the deep meaning? In fact, i'll tell you a funny story. because I don't know that people have really heard this story. So I went, because you asked me about the spiritual path, I was to Lama Gendun the first time I met him after getting a blessing.

I sat down with him with a translator, and I said, Lame Genden, what is the meaning of life? I want to know why we're here, What's going on down here?

And he said… Pretty much the essential spiritual question that everyone wants to ask. And He said to me, Richard, life is like a dream. I said, what do you mean life is like a dream?

He said well, you know how in the dream you're chased by monsters and you are scared and running away? I say yes. He says well life was like that. I said, well, hold on, this body feels kind of solid.

I don't see how this is a dream. He said well when you take a human body, you have dualistic perception. All of what you see is dualist, good, bad, happy, sad, man, woman, life, death, but also subject, object, right?

There's an I, there's a ego, and there is you. In this dualists perception, we seem to see the world as separate from us. He said, when you dive into meditation kind of to the bottom of the ocean, where things are very calm and clear, and he, you know, taught me how to look at the nature of mind, he said you can actually transform it and transcend into a unified state in that unified State.

right? There will be qualities that will emerge of compassion, of empathy, wisdom, joy. So all of these compassions are there. But he said, you really need to learn to meditate to be able to get to this state.

my wish when I was very young to connect with God where that connection kind of got cut off. And it reestablished because when met Lama Gennett for the first time and I looked into his eyes, if you've never been with an enlightened Tibetan Loma, it's like looking into the universe of stars and universes, looking in the eyes.

There was no one home. There was this joyful, radiant being in front of me. I mean, literally every time I was in his presence, I would cry. The tears would flow, and I didn't even know why.

And ultimately I realized it was because of his nature. In fact, when I saw him at the end of this life, he was living near Dordogne. Initially I drove to his center, but he wasn't there, so I had to drive another three hours north.

I saw him in this cabin and they said, Oh, sure. Come in and see him. He was in a dark room. There was literally two feet of light coming out from him and this is by the way, what they've described with the rules.

Oh yeah. I had never seen anything like this. It was, it's not the kind of life that you would normally see. But you could definitely see there was light emanating from his body, and he was just in this joyful, blissful state.

And again, I've been studying with these Kagyu Tibetan lamas now for, you know, 45 years. I had the great opportunity to study with enlightened masters like Mahamudra masters, like Trangara Rinpoche, His Eminence Sita Rinposhe.

So really, know, how the spirituality got caught up in medicine is really just coming in religious but having that connection. I supposed if somebody would have taught me Kabbalah when I was young, I probably would've kept doing it.

But I couldn't find someone who would teach me how to establish that deep connection and have meaning to life because life is so impermanent, right? I mean, i just turned 70 years old.

In fact, my wife's what are thirty year anniversary wedding anniversary is today right so we're celebrating today we got a lot of joy but it's so impermanent when so quickly and i realize i've been so blessed to get these teachings especially because as much as i'd like to think of myself as a good person i don't know actually if i would have gone on this journey.

Define answers for chronic lineman and in my book new book now and then chronic illness. I don't know that I would have looked for the answers for a lot of these chronic diseases that people came in to see me with, from ADHD, autism, Alzheimer's disease, which we'll discuss, cancer, cardiovascular disease chronic fatigue syndrome, digestive disorders, mood disorders anxiety, depression, OCD, bipolar, psychosis, long COVID.

All of these diseases had all 16 of the emsids factors. We now know that chronic inflammation underlies all chronic illness. So this is a paradigm shift in medicine.

This is not even, by the way, something I knew when I first started writing the book. I published on long COVID two

years ago in the journal Antibiotics.

All 16 factors were associated with long Covid. i've been publishing on it for Lyme. 10 articles. One is by, and the 11th is, By Tufts University, that Rifampin and Dapsome cures Lymen in animal model.

But this year, I published in the Journal of Alzheimer's disease reports that all 16 factors are associated with Alzheimer. And what's really interesting, because I just got back from IMH in San Diego, Dale Bredesen and Cat Toops have been running some of the Alzheimer trials.

I got to hear how many patients in their trial. It's not yet published. I got to hear how many of their Alzheimer's patients had Lyme, had BART. I've been telling people for years, my lowest estimate is that at least 30 to 40% of the Alzheimer population is going to have Lyne.

The number was about 33, 35%. And I asked Dale, and I said, well, how did you come up with that number? They used immunoblots, but I said, well, did you use two tiered criteria?

Did you look at bands? In fact, they had to go look it up. But here's the thing. The criteria they used were probably still underestimating. Basically, what this means is they have been fighting spirochetal infections.

Syphilis we've known causes dementia for over a century. They've been finding these in the autopsy studies of these people that died from Alzheimer's with biofilms, with phosphorylated tau, beta amyloid.

Lyme spirochetes were found in brains of autopsi patients with Alzheimer and Parkinson's. But the only reason a neurologist never told anyone to go get tested for LyME is because it was an autopcy study.

It was never in a live human being. I published that for the first time this year that we can reverse theoretically these biomarkers using the nine week Dapsone protocol.

So this is brand new, exciting information where the NIH told us last year, that 42% of Americans are gonna become demented over 55 years old. And James Haskell, who I just met at this conference in San Diego, by the year 2050, half of the world will either be having dementia or dealing with someone with dementia.

I mean, we need urgent solutions to these problems. And so my book is timely, and I'm really excited about putting this out. It's really my gift for the world.

I think it really is. And I mean, dementia, again, we started treating it because that's what we were seeing coming in. You were talking about how people haven't put the connection together because they would always check for Lyme, even if they never would.

But you have to have five bands, it's just craziness, right? So the infectious disease says it isn't there. And so I think you've just done a huge service for so many people.

And 60% of Americans have one or more chronic illnesses. The power of this book and there's so much key information for people to get better and for medicine to basically transform.

Because we're finding, again, the same thing is that when now we treat everything one condition one pill it's like okay you get a diagnosis and so here's the list of three choices to treat but no you look at the underlying pathophysiology and and outcomes are so much better yeah um and that's and the key is it is root cause medicine right many of us in the functional medicine space have been doing it but the beauty is now you have a model it like ok you're seeing a chronically ill patient Pull out the 16-point MSIDS factors, which we can discuss, and apply it when you're seeing the patient.

Because at this conference, for example, they kept about mitochondrial dysfunction and mood disorders. They talked about leaky gut. And they talked infections.

But then you go home, you've learned all this information. And then you're in clinical practice, like, well, hold on, how do I apply this? How do remember to do all these things?

That's the beauty of the MSIDS model is, you know, go on my website, cangetbetter.com. You can look at the Lyme questionnaire to see the pretest probability of do you have Lyne or not have lyme.

you can apply the 16 point model. And this book now, is kind of an integrative medicine, classical medicine with over 2000 references backing it up. So even if your doctor never studied functional medicine they can learn it in ending chronic illness.

to give you the best of both classical medicine and integrative medicine. Yeah, because I think the other option is to spend 10 years trying to piece this information together, and you have it all right there for people.

And for patients, I would definitely do the questionnaire and see, hey, what is the chance that this is going on? And it's a very high chance. It's like every chronic illness I turn around, it' like, you know, check Lyme, Babesia, Bartonella, mold now.

We'll talk more about that. But can you walk us through a 16-point MSIDS map? Sure. So the 16 point MSIDs map basically is root causes. You can think about it as rivers of inflammation going into an ocean of inflammations.

As we said earlier, chronic inflammation is underlying all chronic illness. Whether again, we're talking about ADD, ADHD, autism, Alzheimer's, cancer, long COVID, chronic fatigue syndrome, it's always chronic inflammation.

So the first six points on the EMSIDS map is infections, A, bacterial infections Lyme disease and Bartonella. Now these are both biofilm persistor bacteria.

They're very specific types of bacteria that are in the intracellular compartment under biofilms that cause a huge amount of inflammation and they cause these chronic fatiguing, musculoskeletal, cardiopulmonary, neuropsychiatric illnesses.

B is viruses. So for example, we will see people who've gotten along COVID, they may reactivate their Epstein-Barr virus and their herpesvirus 6. And the last chapter in ending chronic illness is V is for viruses, where I talk about herbs, I talked about medication to treat the viruses and in fact, have a new protocol which needs to be proven by the way.

But I discovered a protocol that I have a feeling may actually help with Epstein-Barr. There's not great treatments for EBV out there. It's now been associated with multiple sclerosis, apart from Birkitt's lymphoma and different cancers.

I've discovered that if you mix certain drugs like spironolactone, which they use for PMOS for too much testosterone, and persanthine, they've used for decades for transient ischemic attacks like mini strokes.

And you give these two drugs at the same time as famcyclovir. It looks like it's shutting down the ability of the virus. Now, this is based on a scientific deep dive review.

When I wrote this book, I did a deep-dive in the medical literature, asking the questions like, do we have anything better for EBV? What can we do? That's what came out of this deep dove.

It still has to be proven, but it is interesting because right now there's not a lot of great things out there. I mean, it causing a lots of illness, Parasites, Babesia being classic, but it could also be toxoplasmosis.

The people with Babiesia, they have questions 1 and 22 on the Horowitz-Emsitz questionnaire, classical malarial symptoms like day sweats, night sweats.

Shaking chills, flushing, air hunger, I can't catch my breath. unexplained cough. And then finally, D, fungal

infections could even be candida overgrowth in the gut.

Candida Overgrowth could actually look like Lyme and Bartonella with brain fog and fatigue and pain. My wife and I both had problems with it. If we don't keep the carbs low in our diet and occasionally treat, we notice it, We just don t feel well.

So the first point is infections. All four types. Second is environmental toxins. Now, if we just talk about molded heavy metals, there's thousands of environmental toxins that get into our body every day.

They're all carcinogenic. Um, they're causing fatty liver. The, the cause problems with neurotransmitters in the brain causing mood disorders. You know, so the interesting part about this book, when you look at it, even just toxins, If you said to me, are toxins associated with chronic Lyme disease?

Yes. Are toxins associated with Alzheimer's disease? Yes. Are Toxins associated With autism? yes. So if you ask me any disease like we're talking about, are toxins Associated?

The answer is going to be yes, how do we know because all 16 absence factors are associated? With all these illnesses, right? So this is like a new paradigm of thinking about these Illnesses with root cause so infections and toxins are clearly the first two that are making most people sick.

And we're finding 90% of our chronically ill patients are now showing up with mold toxins. Interesting, again, at the IMH conference, while these psychiatrists were there, they're are finding the same things.

They're find Lyman, Bartnell, and mold in these people with schizophrenia and bipolar and anxiety, depression. Same things we are seeing. The third and fourth points is the microbiome of your gut.

And also, if you have leaky gut, intestinal hyperpermeability with or without mast cell activation. There's the gut-brain axis and the liver axis. And if don't have the right bacteria in your gut like if they don' have enough bifidobacterium, you don''t have right ratio for Bifido bacterium.

You''re going to get inflammation. When you'' have a leeky gut you get a bleaky blood- brain barrier. So, bacterial products like lipopolysaccharide gets into your bloodstream, gets up into the brain, causes brain inflammation The fifth and six points on the model is vitamin mineral deficiencies and sleep disorders.

And when patients don't sleep, they keep waking up in the middle of the night. An interesting, when you have all these toxins, people use up a lot of their vitamins and minerals.

So for those listening, if you've not checked your red blood cell intracellular minerals, like RBC magnesium, red-blood cell copper, Red blood cells zinc, it turns out that 99% of these minerals that you need to detox and control inflammation, are inside your cells in the red blood cells, almost 20% of our patients come in with these mineral or vitamin deficiencies, well, clearly the inflammation is going to keep going.

So the first six rivers of inflammation are infections, toxins, microbiome issues, leaky gut with or without mast cell, vitamin minerals, and sleep disorders.

And it has 10 downstream effects. The first is mitochondrial dysfunction. Now mitochondrial dysfunction, mitochondria are the part of your cells, the powerhouse that make energy.

Again, Mitochondrial Dysfunction has been a hypothesis for Alzheimer's going on now for decades. Also autism, ADHD, chronic Lyme disease, again, all of these chronic diseases we're talking about.

But the other thing that the inflammation does is it throws off your hormones because when the information hits your hypothalamic pituitary axis in your brain, men come in with low testosterone.

They're 20 years old and they're coming up with a testosterone of 150 like a 90 year old because they don't have

luteinizing hormone. The inflammation shut down some of their hormones.

Ninety nine percent of them have low adrenal function. You need the adrenals. It's like the battery of your body. So if you try treating these infections and toxins, with low hormones, right?

You're never going to get better because you need properly balanced hormones. The next several ones are neurological symptoms and psychological symptoms.

Now, psych symptoms can include trauma. When you're young, like I had trauma with a divorce, people with high ACE scores who had They can have problems with longevity and more inflammation unless you work on those illnesses.

And then neurologically, you'll get all kinds of things from strokes and other things that can happen. But you also will get in this model, for example, liver dysfunction.

One third of the world's population has fatty liver. It's been called a lot of names. That used to be called non-alcoholic steatohepatitis. Now it's metabolic associated fatty, but this causes metabolic syndrome with insulin resistance, another form of inflammation.

And then these people are deconditioned, they have very resistant pain syndromes. They get immune disorders. When you get Lyme and Bartonella, a lot of times it knocks out your B cells.

These people come in with chronic variable immune deficiency, subclass deficiencies. they get long COVID. Now their T cells are knocked out, so they can't fight viruses or bacteria.

Then they got mole toxins with gliotoxins shutting down their immune system. And they they autoimmune reactions from all of these toxins and infections.

So these are kind of these 16 factors. And the last one is POTS dysautonomia. The inflammation affects your vagus nerve. So people get vagal nerve dysfunction.

Vagus nerve really crucial for controlling inflammation. They stand up, they get dizzy, They feel like they're going to pass out. they do pass. out they Get palpitations, anxiety, fatigue, brain fog.

so you have to do vagary training or limbic retraining and a lot of These people to get the vagous nerve or some of the psychological symptoms better.

You know, the 16 point model, like the analogy many people have heard me say, it's like going into a doctor's office with 16 nails in the foot. The doctor finds two nails and says, come back in a month and tell me how you're feeling.

You've got to find all the sources of inflammation. But honestly, It is the infections and toxins that are usually at the top of the list to simplify this for people.

But you do have to go through all 16 because many people have mold, they have low adrenals, They have POTS, dysautonomia, but it's an easy checklist. If you're sick and you've been to 10, 20, 30 doctors and You don't know where to look, it is such an Easy checklist to follow to see where the inflammation is coming from.

These are very complex patients, but you make it like boom, boom boom. Just go down through the list. And you mentioned Epstein-Barr and I was just wondering your thought on Epsteine-Bar being a primary infection or basically from immune dysfunction that it comes out as a secondary infection.

But then again, then it gets into the vicious cycle. Well, it's both in people because if you look at the chronic fatigue literature from years ago from Stanford, Herpes virus 6 and EBV were some of these infections known to be associated with chronic fatigue syndrome.

Not every chronic fatigued patient is Lyme or Bartonella, but I think what people miss in a lot of the cases, and this is what we've seen after 42 years of 13,000 people, even if you had a virus as your primary, or it came out secondarily from long COVID from viral reactivation.

The point being a lot of these people, even if the initial trigger was the Epstein-Barr virus or HHV-6 along the way, they get mold, They pick up a tick bite, right?

They get adrenals. So even If the initially trigger, was Epstine-Bar H HV6, you know, just living on this planet, most of us are exposed to these type of infections and toxins.

Getting worse. And to diagnose Epsteen-bar, what do you mainly look at early antigen or what kind of you look at the whole picture of all the different antigens or…

So the early antigen is certainly good and I learned basically like you need a four-fold increase in titer. A lot of times when it's tricky about Epstein-Var is a lot these patients come in with hugely high IgG titers, right?

It's not just IgM, it is IgE. But usually what I want to see is fourfold increases in titres or preferably a PCR, a snippet of the DNA. I prefer that.

And honestly, when I've diagnosed it in my patients, I like the PCR because I can't differentiate a lot of these patients when it's actually active because their antibody tests are so high.

So sometimes you might want T cell testing, another form of looking at this to kind of see if your T cells have been activated. There are some good labs in Germany that will do this.

But I do like to PCR as my primary way of absolutely proving that the EBV is active. What labs do you like for that? Armin Labs is one of them that certainly a lot of Europeans have used.

We've used them in the States and they do a of T cell testing. I mean, I think it's kind of a good alternative test when you're trying to figure out, like, for the viruses.

Yeah. Looking at early antigen, looking at fourfold titers, And then also for toxoplasmosis, it seems like all the patients have very high IgG, no IgM.

What's your thought, how to differentiate? You know, It's tricky because one third of the world population has been exposed to toxo. And we know toxa can cause neuropsychiatric symptoms when your immune system has Right.

So a lot of people that just kind of living with it from, you know, dealing with cats and cat litter or getting from other sources, that's most where most people get it.

But same thing with Bart, right? Bart can happen from cat scratches, but also from ticks and mites and flies and mosquitoes. And, there's a of vectors at this point transmitting Bartonella, including the new triatom bugs.

At this. Point, There's. A lot. Of. Vectors, which is why I believe so many people come in with bartonell. That's been kind. Hiding in the background.

and all of a sudden they get Lyme and they got mold and, all the sudden, the Bartonella, which your immune system was handling, comes out, right? I mean, I think that's happening to a lot of people.

That's probably the case with toxo in some cases also. I have not, you know, one of the drugs we used to use to treat Babesia, like Clindamycin or Bactrim, that is what they used the treat toxoplasmosis.

A lot the regimens, fortunately Dapsone is a It's a sulfa-based drug. And I haven't really had a lot of problems with active toxo. But again, the problem is if you're not always looking for it, you may not find it.

A lot the protocols we use, I think, especially getting the immune system stronger and dealing with it have helped a lots of these patients. And how has COVID put a twist into everything?

And do you think that people who get long COVID oftentimes have this basically dysfunctional immune system because they have chronic Lyme or some other or toxins?

Can you speak on that? So I published in the journal Microorganisms with my Phyllis Freeman and my nurse practitioner, John Fallon, that all 16-emesis factors show up in long COVID.

We published this just two years ago. So what it turns out is that when you get these people who come in with a diagnosis of long-COVID, and I might have sent them to Patterson's lab to do chemokines and cytokine, a lot of times they have STC-40 and they've elevated VGF.

And the theory behind the elevated VeGf, vascular endothelial growth factor, is that they had pieces of the virus, their spike proteins, which are stuck in these microclots in the body and they're in endothelials of your cells and causing inflammation.

So I tried the Patterson protocols of using Maraviroc and Pravastatin to lower the inflammation and try and turn down these activated monocytes. Not one of my patients ever responded.

In my population, and this may be different in others, in my populations, the VEGF was Bartonella. They didn't respond to Maraviroc and Pravistat. And I have the protocol in talk about it in book.

It may work for some, it just didn' work in population. Because it was BART. I think now what Patterson's finding, Neil Nathan has done some work on this too, is that Bartonella and mold are showing up in a huge number of these long COVID patients.

So, you know, this is not an either-or phenomenon. you are allowed to have spike proteins and microclots. It's very clear in some cases of the vaccines that, you know, the messenger RNA vaccine stimulated the protein production.

You get more of these spike protein when you get a vaccine than when actually get the regular virus. Some people whose immune function has already been a little on the dysfunctional side, who've had Lyme, have had Bard, had Mold, those are the ones who usually get sickest at this point.

But I think, looking at the reasons for it, and when I talk about autism, it's the same thing about, vaccines cause autism. There's no doubt that there's vaccine-induced injuries out there.

There is absolutely no doubts, but you still got to explain why the autism rates went from 1 in 2500, 75 years ago, to 1 of 31. Right? There are reasons for that, and it's because all 16 MSIDS factors, especially infections and toxins, show up in these kids.

And I was at the MAPS pediatric conference three weeks ago, speaking to Philadelphia, showing the pediatric doctors that the same 16 factors show in autism.

Interestingly enough, and I don't think most people realize this, the Alzheimer's biomarkers that I have been finding in my chronic Lyme population beta amyloid 4240, p-tau 181, P-TAU 217, neurofilament light, glial fibrolyticidic protein.

Some of these biomarkers show up in the autistic population before they get sick, like neuro filament light. For every one picogram per ml increase in neuro-filiment light there's a 19% increased risk of autism.

When everyone's saying, a parent who says, gee, I don't know, should I give my kid a vaccine, they might get autism, What I explain in the book and in studies I've done is you can actually measure inflammation in your child before you give them vaccines because if a child is like a glass of water where the water is up to the top and now you put a drop of a water which in some cases the vaccine with aluminum which is supposed to cause an

inflammatory reaction, that's how vaccines work, right?

If you have a kid who's already inflamed, who is loaded to the top with inflammation, they are going to get a problem and they may end up with autistic behavior.

But when I spoke to pediatricians and I said, how much when you're treating Lyme or BART, do these autistic kids improve? Oh, absolutely, doc. How much, when when pull out the mold, are these Autistic kids improved?

Absolutely, Doc. In other words, everything I have been talking about in the chronic Lyne population for years, These pediatricians are showing up in the autistic population.

The problem is you're not going to read about it in peer-reviewed literature. I'm letting you know because I heard it at the MAPS conference and I've spoken to the doctors doing it.

But I got the references, right? There's over 2,000 references in my book backing this up. So it's really like a paradigm shift, of how do we look at this?

So whether you talk about long COVID or autism and how vaccines may be affecting some of this, I think the reason some people get these vaccine injuries is they're already loaded with inflammation.

It's a very logical way to explain why many patients don't get sick, but some really do get. And let's say someone was able to and had the knowledge and foresight to check their child for inflammation, let say they're loaded with inflammation.

The problem is they go up against a pediatrician and say, if you don't vaccinate these kids, we're calling, you know, child services. And it becomes, it can become pretty nasty.

At least I know in California. Yeah, you know, I think because I have literally over 2,000 references backing it up and I've loads of references, people can go on my website, cangetbetter.com.

At the bottom of the website they'll see a link for references. Just go to the autism section and take a look at all the references I found of how bacteria, viruses, parasites, fungi, mold, toxins, how it's affecting autistic brains.

The literature is there. Now, what most doctors want is science. You could copy and paste and put this on a Word document or just give your doctor a copy of the book and show it to them and say, listen, I want my child checked for these inflammatory factors.

I'm happy to give my children a vaccine because I know, you know measles can be deadly. It knocks out your immune system in some cases. Right. But please do this for me.

And here's the science backing it up. If you're not with a doctor who's open-minded and compassionate and looks at the science, you may need to be looking at another doctor at that point if it's not somebody who can look at this literature and say, oh, this controversy is out there, but you are right.

Dr. H has provided a lot of science on this. Let me take a look. You mentioned earlier curiosity, compassion, disease. You absolutely have to have that in medicine.

And with what we're talking about, you have have doctors that have because this is an evolving field. It's not like we have all the answers in the medicine, but where medicine is pointing us, where science is point us is that all 16 inflammatory factors on the MSIDS model are now underlying all these chronic illnesses from chronic Lyme to autism.

So we need to take this information We need to do randomized multi-center placebo trials. Some of this is association, some of is definitely causation.

But if you want to convince the medical societies out there and the pediatricians and neurologists, you're going to need stick money, right? They're too tough, just tough cookies to crack.

No, and I know, because right now the pharmaceutical companies control the dialogue. In med school, it's like, name the disease, throw the drug at it.

Or what I learned from Dr. New at MAPS, Name it, blame it and tame it! You know? Throw the drugs. You said it earlier. Just name that disease. What are my three drugs I might use for it?

Not that drugs aren't helpful, I use them all the time, but there's a time and a place for them. And root cause medicine means this is the way normally we should be doing it.

The beauty is, is this all supported by hard science, right? Because there are a lot of people with ideas and theories out there of what's going on. We still need to use science.

People are questioning what is true. What is false? Am I being… Science in its purest form is truth, so I've got really good peer-reviewed science backing all this up.

Yeah. And, or for instance, my ex had two kids, twins, and they were premature, one had a heart issue. So I wrote a very pleasant, nice email to her pediatrician and said, Hey, you know, can you consider delaying these and dah, dah dah.

Do you don't have to read all these studies right now? Just get back to us. Within like two minutes, email comes back. I don' need to them if they aren't fully vaccinated, find another doctor.

So I think there's unfortunately more of that than the other. Well, when you consider the autism rates have gone from 1 to 2,500 to 1 in 31, that is not unreasonable for any parent to say, listen, I read Dr.

H's book. I've looked at the science. There are these 16 inflammatory factors. My child right now is normal. just please do me a favor and check my child for this inflammation.

And I explain in the book, I know since you read it and you were up till five o'clock in morning reading this, you would tell me, since it was a page turner for you and couldn't put it down, this is a section in a book with three levels of inflammatory markers, level one, CRPs, relating to interleukin-6 and VEGF and MMP9, right?

I go through some of the basics. The second one is functional medicine. How much free radical oxidative stress? To check your lipid peroxides, to see how much inflammation is affecting your cell membranes.

Check 8-hydroxy-D-guanine for how many inflammation's affecting you DNA. check protein carbonals, how inflammation affects your proteins. And then the third level, check you cytokines, your chemokine, and your Alzheimer's biomarkers.

knowing that 42% of Americans, according to the NIH, are going to become demented over 55. Just like a guy goes for a PSA, colonoscopies, mammography, everybody at this point, in my opinion, needs to be checking these biomarkers because Dr.

Tammy Lidey, who I've been helping with with some line consults, right now, as I'm moving out of clinical practice, I am working with doctors. In fact, you and I could work together on any patients, of course, if you would like to.

It would be a great pleasure to do this consultation model to help doctors, this way we keep developing our friendship and we help patients. So I asked Tammy to start looking at how many of her Lyme patients who are chronic had these Alzheimer's biomarkers.

To my great surprise on a recent podcast, she told me it's almost 100%. I was finding it about 50%. And when I now heard Dale Bredesen and his study that has not yet been published, or it is at least around 35% of his

Alzheimer cases was LyME, and I believe it was probably a little bit underrepresented because they did immunoblots, but they may not have looked at it the way I looked specifically.

Nevertheless, You know, if you look at the literature on Alzheimer's, there's a 10 times higher risk with a spirochetal infection. So this is brand new information that literally could save people's lives.

But it feels for me like it's my legacy, it is my life work that I had to get out into the public for doctors, for patients, and even for people that wanted to stay healthy, that are healthy.

I'm 70, I am healthy but my whole family died of cancer. You know, I wanted to make sure there was a section in cancer. One of the doctors, she told us this just yesterday when I was speaking.

She came out and said she was one of Alzheimer's trials. you've got to look at your toxin levels. You've gotta look in infections. Your immune system and your natural killer cells, your CD4, CD8 count, immunoglobulin subclasses.

If you don't have a healthy immune, you can't fight cancer. There's a lot here that needs to be unpacked, but in a sense, it's simplified version. of no matter what we're calling disease, here's the 16 factors.

So it's great for lifestyle, for trying to stay alive and good health, but also for those searching for answers, both doctors and patients. Yeah, because my dad passed away, I'm 62, at 60, passed way of neurodegenerative disease.

It's been nice knowing you. I probably won't remember you next time we speak. But do you think real quick that Tylenol plays a part? The Tylenol thing is interesting.

So, you know, I don't think that Tylinol necessarily itself causes autism, but here's where someone who takes Tylenoid could have a problem. To detoxify Tylenol from the body, and you know this, but this is for the people listening, you need to use glutathione.

How do you make glutothione? You need antacetylcysteine. When you take Tylinol, your body uses up cysteines and it uses glutathiol. Well, when you use up glutathyone, now you're not going to have enough antioxidant reserves to deal with all these toxins coming in and all the free radical oxidative stress.

And there are some mothers out there that have folate receptor antibodies, and some of these people that may be predisposed genetically, although a lot of autism is not genetic, it's environmental, as we talked about.

So I think in some people, if you deplete your glutathione stores, right, what do they give you if have a Tylenol overdose in the emergency room? Cysteine, that's what they gave you to reverse the effects.

There definitely could be a subset. where the Tylenol could play a role. But again, because now we've understood that all 16 MSIDS factors are associated with autism, you wouldn't put it down on one thing.

It's not vaccines cause autism. Tylinol, it's, not that simple. Right. What do you think we get in trouble arguing? But are there cases where, the tylenol and the vaccines are, associated?

Absolutely. There's no doubt. depending on how much toxins coming in, we've used up your glutathione because you've had to use it to detoxify Tylenol.

In the Alzheimer's findings, you reversed the pTAL in chronic Lyme patients. What should the alzheimer's doctors and that the whole field take from that?

So, so if people want to read the study, and it's really, it is a fascinating study. It's in the Journal of Alzheimer's Disease Reports, April 2026. I just published it, what, whatever, six months ago.

And the studies was looking at chronic Lyme patients, specifically two patients. One who had chronic lyme for 15

years, refused to do any antibiotics.

She was the classical chronic line PTLDS that anyone from the CDC or NIH who read this study cannot say that this was not a true post-treatment Lyne disease case because she had a rash.

treated with doxy, still had active inflammation with rheumatoid factors and joint pain. She didn't think she had, by the way, cognitive issues, but she did.

So, this patient was sick for 15 years. These were case studies. Now, what we found in this patients is she has Viver 6M SIDS factors. She had Q fever, Coxiella burnetti, which we treated early on.

She have metabolic syndrome, insulin spikes can be a cause of dementia. Uh, she had vitamin mineral deficiency. He had heavy metals, right? As a toxin source.

So she has several of these MSIDS factors and we had addressed them over the years. But she, we were getting, I was getting close to finishing my one-on-one clinical practice before now doing consultation medicine, working to serve the millions by hopefully doing randomized multi-center placebo trials.

And I said to her, listen, Quest and LabCorp recently just released the ability for us to do these Alzheimer's biomarkers. I know the medical literature, they show that Lyme disease is a potential cause of Alzheimer's.

Can I do the biomarker?" She said, yes. She comes back with an elevated p-tau-217. The reason you need to understand the significance is because p tau 217 is the most sensitive and specific biomarken for Alzheimer disease.

We're talking 88, 89 percent sensitivity specificity. Her PTAL-217 was more than twice above normal range at.33, and I said to her, listen, I'm about to finish clinical practice.

You've been refusing Dapsodil for 15 years. Would you please do this? I don't know whether it's going to work, but I am afraid I'll be leaving clinical.

Practice, you're going go on and have cognitive issues and dementia. She said, doc, i'm willing to try it. So she does the nine-week Dapsone protocol.

Now, this is the only antibiotic she's taken in 15 years. This is what's so great about this story. We check her Alzheimer's biomarker three months after.

It's completely normalized. it's gone down by 63%. Now when I submitted this to the journal, what I did not realize, no one had ever done this before.

If you look at the anti amyloid drugs that are out there, Dananumab, right, what are the toolbox? What's the tools in the tool box that the neurologist use?

Aricept, Namenda, let's use the acetylcholinesterase inhibitor. Let's block NMDA, or let just pull the amlyloids out of your brain without figuring out, by the way, why the aminoids there in first place with p-tau.

Turns out by way that amylate and ptaut are anti-microbial peptides. Lemme repeat this for everyone because you really need to get this one. Amyloid and p-tau do not just show up in your brain, they are known in medicine and in science to be antimicrobial peptides.

If you get a virus or a bacteria, these things are showing up to try and protect your brains. Unfortunately, that's not what ends up happening. Once you disrupt the microtubules and you put down amylloid, it starts disrupting the neuronal communication.

But neither case, I didn't realize that no one had ever reversed it. The anti-amyloids drugs lowered by 23% over six

years. I lowered it by 63% in nine weeks.

Right. So why? Because I treated the cause of why the p-tau was there. What was really interesting is when you look at the graph, her amyloid went down.

You could also see the amyloid goes all the way down at the same point. Even though she didn't have high amlyloids, you can see on the graph there was less and less amylide over time.

You do not want a low beta amilyde 42-40 ratio. A low ratio means you're depositing the sticky form of beta-amyloide 42 in your brain. That's not what you want.

So you actually want actually a high ratio and you look at this study you'll see that the ratio just keeps going up. It's exciting. Now, again, it's one case study.

We can't extrapolate and go, Harwitz has discovered a cure for Alzheimer's, although who knows what I've discovered. I have no idea. But do I think, based on the literature of Judith McCloskey from Switzerland, who had published on these autopsy studies with Alan McDonald.

God bless you, Alan, for all the great work you did with Eva Schoppe from the University of New Haven. They found in Alzheimer's and Parkinson's brains, they clearly showed biofilms, right?

Biofilmes are like you go to the dentist to take the plaque off your teeth or you get gingivitis from porphyromonas gingivalis, cause of Alzheimer. So there are these biofilms that protect the bugs from antibiotics and also, by the way, protect them from your immune system recognizing them.

When people say, why is my immune having a negative Lyme test? Why is it not recognizing the antibodies? It's because these bugs are hiding under bio films.

They protect you from, your system from seeing it. It also protects from the antibiotics to getting to where they need to go. So they discovered p-tau, beta amyloid and spirochetes in the brains of these patients with Parkinson's and Alzheimer's on the biofilms.

So I knew the literature, but it was in autopsy studies, never in a live human. We now published it, we can do it in alive human, the next step is for my colleagues in ILADS, I'll be presenting in eight or nine days at ILads in Virginia, Washington DC.

I will be showing them a study and convincing my colleague to start checking this. And I spoke to EB Cornish, hopefully we'll working with the Aming Clinic, We want to do a study of spec scans before and after doing Gapsone combination therapy with Alzheimer's biomarkers, maybe a pilot study.

So anybody listening to this who, you know, wants to contribute to my 501C3, the MSIDS Foundation, msidsfoundation.org. or maybe we'll see if Daniel Lehmann has himself maybe funding to do this, but we want to at least do a pilot study looking at people who've been diagnosed with Alzheimer's dementia who have these biomarkers, or, maybe even a small group of chronic Lyme patients with these bio markers that have not yet developed mild cognitive impairment or full-blown dementia, do the Dapshong protocol, address the 16 MSIDS factors, and then see what happens.

Now, in the study I just heard from Dale Bredesen and Kat Toops, When they addressed exercise and vitamins and hormones and treating infections, they reversed cognitive decline.

This is the study that still needs to be published, but it's not like Alzheimer's dementia, even APOE4 for the genetic form. It is not a life sentence.

You have to know how to reverse inflammation and deal with these factors. So their study should be publish at some point, once a journal accepts it. I thought I had problems getting stuff published.

hearing it from Dale, I couldn't even believe it. But the Amen Clinic is a perfect place because we can do spec scans and look at all of this and get a real good idea of what's happening in the brain.

It's really exciting because this is brand new research that should be benefiting tens of millions of people worldwide as we go forward. Because I imagine you're not just going to find it with Lyme patients and Um, did you, because it seems like all these are the things where, where you have, you know, all of these multi points of the MSIDS markers that they're all going to have high p-tau because all those can be upregulated and beta amyloid.

Do you think it's a, the same mechanism that's going on in Alzheimer's? Yeah, so basically we know it's neuroinflammation. If you look at ADD, ADHD, autism, and Alzheimer's, there's a genetic pathway, by the way, called mTOR, the mechanistic target of rapamycin.

This is a lot of people in the longevity space are really interested in this, right? It turns out that this pathway if it is hyper activated, Right, so now you're making too much proteins.

That's why autism brains in some cases are large. And that's, why in Alzheimer's you can't get rid of these pathological proteins like beta amyloid and p-tau, because what it does is it interferes with what's called autophagy.

You get these dysfunctional mitochondria. So your mitochondrial powerhouses of your cells, you need to fear neurons in your brain to work. When they get damaged, the body has to get of them.

It needs to take the garbage out. Well, the process of taking the garbage out and getting rid of this dysfunctional mitochondria is called autophagy. Well if you have an mTOR hyperactivation, and by the way what reverses it, this is really interesting, is things like broccoli seed extract, sulforaphane glucosinolate.

And at John Hopkins studies years ago, they gave two to 300 milligrams of broccoli seed extract to the autistic kids and their brains woke up. They did the same for the Alzheimer's populations and they're brains got better because what you're doing is you are calming down and normalizing that mTOR hyperactivation and you letting these dysfunctional mitochondria driving inflammation in the brain, you getting rid of them.

right, so it helps to lower down the neuroinflammatory process. So it's all based on neuro-inflammation, right? Rheumatoid arthritis is peripheral inflammation.

And by the way, in the Alzheimer's study I published, this woman had rheumatoid factors that were positive for 15 years. When she finished the nine-week Dapsone protocol, her rheuma-toid factors for the first time in 15-years reversed to normal, while her joint pain got better.

We not only lowered neuro inflammation in We lowered peripheral information at the same point. Really exciting stuff. The fact that I came upon this, the fact after 42 years in medicine, I stumbled upon bridging Lyme disease and Alzheimer's disease, and all these illnesses.

It honestly, it feels like a blessing. Going back to where we started this podcast, when my spiritual teachers said, exchange yourself with others, The other thing they told me to do is to plant seeds in the ground like a farmer, and they would call it aspiration prayers, like put these seeds of aspiration on the grounds, for example.

Every day when you wake up as a doctor, may I be of benefit? May I heal my patients? Maybe be well, maybe be happy. There are these things called the four measurables.

May all beings have happiness and the causes of happiness. May all beings be free from suffering and the causes of suffering. May beings know the great bliss which is free of all suffering, may all being know great equanimity which free all attachment and aversion.

So what I did 45 years ago, I would be planting these seeds when people think of my name. This is actually what i did. If people thing of Horowitz, maybe be well.

It was hippy dippy stuff if you think about it, right? But this is the kind of stuff I was doing because I don't know how it worked. Let me plant these seed to be of greatest benefit.

Well, now fast forward, my life feels like a spiritual science experiment, because I followed the advice of these enlightened masters, right? Planting these seeds, exchanging myself with others.

I don't think it's a coincidence, by the way, that somehow my work is now expanding, where I believe I found a cure for chronic Lyme. My wife is not eight years in full remission from Adapt Zone Therapy.

She had all 16 MSYS factors. If you got COVID twice, she got the flu. It's never come back. Now, she did take Dapsone lower dose and kept relapsing until I figured out the dose that was needed.

And by the way, the full Dapstone protocol is written, you know this, because you read it, is in the book like a cookbook, but I also put in a book a low-dose Dapseone protocol for these people that are sensitive, that say, gee, doc, I'm working, and I can't be out of work from herxes when I am having inflammation.

I put it in protocol you've never seen before, how to do it low dose, stopping and starting. You will still get benefit because I've done it on people.

I try to like pass on my knowledge base that people will have the knowledge that I had of how I get people better. With the dementia, I may be more of a conspiracy theorist, but it seems like the medications for dementia and Alzheimer's have just been horrible.

They've been worthless. And meanwhile, there's peptides like humanin, was called human in because it made Alzheimer patients human again, P21, ARA290, which works on the innate healing receptor and reversing neuropathy and dementia.

And it just seems like they don't… What I would advise you to do, because this is the way the science gets out, is because you are the guy, right? You're the peptide guy.

Just like I'm the lime guy and Neil Nathan's the mold guy? If you're a peptid guy publish your results on this. Because here's thing, you now in an administration who loves peptides.

Right? I mean, they're, actually encouraging it. So I, mean whatever people out there are using it, get the published science out, there because I agree.

I think there's a lot of tools in the toolbox that need to be expanded, but for the average doctor to incorporate it they just need the, published research.

so I would encourage you with your kind of experience to, if you have the time or, and I'm, by the way, I am happy to work on any of this stuff with you if, you need me.

Awesome. No, I'd love to. But I don't know about conspiracy. I hate to say this out loud, but I mean, look, it's finances. The reason nobody has ever looked at Dapsone for Alzheimer's.

Oh, i should tell people this. This is fascinating. So there's a leprosy study that took place in South Korea where over 3,000 leprosy patients took Dapsone for 15 years because they use it to treat lepersy.

The Alzheimer's rates were six times less. Dapzone, it turns out, is a drug that can theoretically help Alzheimer because it blocks an inflammatory pathway in the brain.

We talked about Alzheimer, ADHD, autism is neuro inflammation. A lot of downstream effects of it. Right, so it blocks a pathway called NLRP3 inflammasomes, which, by the way, is stimulated by these dysfunctional mitochondria, right?

So Dapsone blocks the NLRP3-inflammasome. So the only reason you've never heard about Dapseone for Alzheimer's, even if people don't have Lyme, it's because it is generic and it doesn't cost anything.

The drug's been out for 50, 60 years, nobody makes money on it. So it's like shame on you, shame, on, you because we could be taking generic drugs and helping these people.

And in fact, I told Dale Bredesen and cat tubes just again in San Diego yesterday. I said, listen, You guys in the next study you do, do you have got to look at this?

Because I had 80 year olds take low dose Dapsone, 25 milligrams. For me, it was like homeopathic Dapzone, a little minnow because they just didn't want to do the full DAPZone protocol.

their brain got better, their cognition got, better it didn't hold when they stopped and I did see the Alzheimer's biomarkers high but it helped them.

So this is again like a study that should be done but the reason nobody's doing it is nobody is making any money off of it and that is just a crying shame because we may have answers and it's just all of these drugs are now being driven by the pharmaceutical industry and making money instead of putting patients first.

What, what do you think about what I think is a very underappreciated route of transmission is in utero and I know for very, very likely it's how I got it.

And I thank all these people that I don't have Lyme because I never been camping. What do think the percentage of people were exposed in Utero? I mean, interestingly, you say that because the case study that have in ending chronic illness in my new book on autism is mother who's a doctor.

who didn't realize she had congenital Lyme and passed it on to her child and the child was diagnosed with autism spectrum disorder. I got to him when he was 12 years old and we found Lyman Bartonella.

He did the Dapsone protocol. And he never finished it because he forgot to tell his mother or hit it that he didn t want to take methylene blutes as the very end of the protocol, which you need to lower methemoglobin.

So he, he dint finish it, but even not finishing it. One month later, the mom calls me up and goes, Doc, I got to tell you, my son is a completely new individual.

His brain has woke up, his speech patterns, he's not, you know, where the repetitive behaviors are down, and his sports are so much better. Then we found Bartonella being treated and then she was loaded with mold and so was him.

So it's interesting because I think congenital Lyme happens and the reason it happens is when you just look at the population of what's been published in the medical literature, BMJ Global Health published four years ago that 14.5% of the world's population, one out of seven people has now been exposed to Lyme disease.

The numbers actually I think are much higher. I would put it at least 25%, 30%, at a least a third, knowing that it's mimicking chronic fatigue syndrome and fibromyalgia and autoimmune diseases and Alzheimer's.

Think about all these diseases we have that are now chronic diseases think about how many times we're finding lime underlying as a factor, but it's not being called chronic lime.

So I think the numbers are probably a lot higher, until we get more published research. But yes, I agree with you, congenital transmission, it is definitely out there.

And what a shame that the OB-GYN population has not, like my HMQ, the Horowitz MSITS questionnaire, again, which is on my website, cangetbetter.com, download it, they could be giving this questionnaire out to women in pregnancy, sitting in the waiting room, just hand it to the doctor to see what their pre-test probability is of having

Lyme and tick-borne disorders, right?

It could so easy and yet it's not mainstream yet in OB-GYN literature. We will get right back to the episode, but first a quick thank you to our sponsor, Integrative Peptides.

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That's integratvepep-tides-dot-com. Code P. O. D. L. I. F. E. Now back the the And we touched on this, but yeah, it's interesting. All these different syndromes, right?

And, they all have, and it is a chronic fatigue syndrome, fibromyalgia and they just go to painstakingly try to differentiate and long COVID. But as you're saying, there, all basically have so many things in common.

And that's why when you look at the literature on long COVID, they started publishing on metformin recently, can help early on, or certain serotonin uptake inhibitors like fluvoxamine.

Oh, that can't help. Well, if you don't have the right bifidobacteria in your gut, right, you're not going to make enough seratonin. So it's not all that surprising.

Just like if give psilocybin in some cases to people with trauma, even with chronic Lyme, some of their symptoms will get better because of the way the trauma works on the brain causing inflammation.

Long COVID is all 16 M SIDS factors. So the reason when they do these studies, they're looking at one drug or they are looking one intervention, instead of saying, hold on, these chronic diseases are multifactorial, right?

So, the studies we need to be doing have to studies looking these multifactorial factors, because chronic inflammation from these 16M SIDs factors these root causes is what driving these Chronic Disease Epidemics.

And we have such an epidemic also of depression, anxiety, and I totally agree with you. It's brain on fire. And have you had any breakthroughs in that area?

Well, just like you, we've seen people completely reverse their anxiety or their depression. I've had patients get obsessive compulsive disorder out of the clue blue sky from a tick bite from Bartonella, that Bartonella fish was positive.

We have reversed people with schizophrenia who had auditory and visual hallucinations, whether on antipsychotics. It was Lyme, Bartonella, mold, it was MSIDS factors.

In fact, one of them right now, who we've become friends with, I saw at the Project LyME Gala in New York City a few weeks ago, she's going for her nurse practitioner program to start treating LyMe.

She's completely well. she is off her anti-psychotic, She is doing great, getting straight A's in school in NYC. This can be done. And in fact listening to all these psychiatrists in San Diego for the last couple of days, talk about infections and toxins.

It's not even me just telling you this. It's in the functional medicine psychiatry mindset. These doctors who get up on stage, they were talking about Lyman Bartonella.

They were taking about mold. So it's not just me talking. Oh, yeah, it was interesting. Also talking psychedelics and integrative family systems therapy, internal family system therapy to help with trauma.

Talked about a whole bunch of really interesting things. But ultimately, yeah, they were talking about how leaky gut can affect the mood and how infections and toxins affect mood.

And mitochondrial dysfunction, everybody who's talking mitochondria function in mood, yes, absolutely, and that is in my book. If you look on the Mood Disorders, M is for mood disorders, you'll see it all.

There's the mitochondrion, there's infections. It's everything that they we're talking in San Diego, but in one place, to have an easy to follow map, if you're sick, about do the diagnostics and also how to do treatments.

And in terms of toxins, we don't mold, mycotoxins are a big one. How important do you think are like microplastics, PFAS? Oh, these are huge. The New England Journal just a couple of years ago showed that the people with higher risk of strokes and heart attacks, when they took out the plaque from the carotid artery after having the stroke, one third of these people had micro plastics in there.

Same thing with heart attack. And PFAs is showing up in these with fatty liver. So if one-third of the population has fatty livers, is one of those main primary toxins that is causing this fat accumulation with metabolic syndrome, insulin spikes.

These environmental toxins, we've put over 100,000 different environmental tokens that are all EDCs, environmental chemical disruptors, hormone disruptor, right?

They've thrown this out and a lot of these have never even been studied, much less studied them in combination with each other. So we are living in a toxic soup of infections and toxins and all the medical societies are doing is name the disease for the drug.

But you're right. I mean, these toxins are huge. They're playing a big role even in cardiovascular disease and these other disorders. If you want to get healthy and stay healthy, I'm a complete agreement, Ken, all of these things need to be addressed.

And that's the whole point of this paradigm shift that I am putting in ending chronic illness, is this is really the future of medicine, of how we're really going to get people better and keep people even with lifestyle for those who are well, because you can't ignore these toxins and infections if you want to stay well.

Yeah, I think this is just groundbreaking. Are you ready for the rapid fire? Go ahead, give it to me. I love this part with you. Okay, most underused lab test in chronic illness.

VEGF for me, because vasculinithic allele growth factor is an indirect marker, not just of cancer, but of long COVID and of Bartonella. And because we are seeing so many people come in right with Barton long-COVID, I think VGIF.

Um, and that's in the book. When I talk about these inflammatory markers of one of the first 10, um, it's way underused because, we picked up the Bart in a lot of people this way.

Yeah, I would say human transgeneering growth factor beta. Because indirectly with mold, TGM multiple. Yeah. How about the MSIDS factor most doctors or doctors miss most?

Well, in my world, of course, they've missed Lyme and Bartonella infections, but honestly mold and mold is right. It's just kind of everything, right?

Yeah the infections and toxins are at the top of the list. But when these people come in and say I've been diagnosed with chronic fatigue syndrome, fibromyalgia, or I have MS, Right.

And then I go through the MSYS list and I got, oh my God, it's not just chlamydia and pneumonia with your MS, but you've got Bartonella and Lyme and mold causing demyelination.

The reason you got demylination, which is what causes MS is it from lead, mercury, arsenic, mold toxins, Lyne, Bartonella. It's like they never got to the underlying root causes of where the inflammation and the demyalination was coming from.

People that have come in with half of their body is numb. Oh my God, I can't tell you the number of times with Lyme and Bartonella. We've seen this at this point with a neurologist said, MS.

And it's like, no, that's Lyne, Barton. Oh, and I'm sure you've had, we've got all these, you know, diagnosed with MS, but it it like especially ones, standard ones.

Okay. You got MS you find that they have all of these infections and all things going on. But those ones that just don't look quite right. I think really respond as well.

Yeah. Well, what supplements do you take every day? So remember my whole family died of cancer. I have none of my first, you know, first degree relatives.

And even in my second degree, some of them have gotten cancer, actually many of. So when you look at my kitchen cabinet, but what I would say for most people to simplify it.

If we've now understood that chronic inflammation is underlying all chronic illness, the first key, there's an inflammatory pathway inside your nucleus called NF-kB.

This inflammatory pathways associated with everything from Alzheimer's to autism to ADHD to chronic live disease to cancer, I mean, it could go on. The way you block it, is N-acetylcysteine, I take 600 mg twice a day, alpha-lipoic acid, 600mg once or twice This actually interacts with the pathway I was talking about earlier with mTOR, right?

The nRF2 pathway, on the other hand, helps to lower inflammation, and it even helps with P53 cancer gene, which needs to be stimulated to kind of open up your detox pathways, because it opens up what's called antioxidant response element genes.

The four things you take for that, organic green tea. Procurement, turmeric, I take a gram a day. Broccoli seed extracts, sulforaphane, glucosinolate is one of my favorites of all time.

I took 120 milligrams, it's called broccolinate. And by the way, all of these supplements are discounted on my website for those who need discounting supplements.

It cangetbetter.com. But, and that including resveratrol. So those four I Then you've got the NLRP3 inflammasome pathway. Interestingly enough, the first two pathways, those supplements interact with NLRP3 inflammasomes.

I do take low-dose naltrexone. It's been compounded. And I've been taking it probably for 20 years. Sometimes a little bit of low dose melatonin will even help.

To lower inflammatory prostate glands is good organic mercury-free fish oil. Very important. You know, NAC, alpha-lipoic acid, glutathione to block NF-CAPA-B, curcumin, broccoli seed extracts, sulforaphane, resveratrol, green tea to stimulate NRF2.

If you're interested in LDM, you just can't be on narcotics taking it, and a good for inflammatory prostaglandins. And also, I do suggest fiber. I love MGP Fiber 1 from Orthomolecular.

It's like a natural GLP-1 agonist. It's not only pulling the toxins, but it's creating short-chain fatty acid bacteria in your gut that lower inflammation.

So I take prebiotics, probiotics, and postbiotic, right? So the gut-brain axis, I mean, you can't underestimate how important this is. When they've looked at the people that have aged and have issues with longevity, You have got to have the right bifidobacterium and lactobacillus.

If you have too many of the wrong types of bacteria or fungi or viruses in you gut, It's really difficult to maintain health and not get a lot of these chronic illnesses.

I rotate my probiotics. I'm working my microbiome with these other three inflammatory pathways that we talked about. Now, I probably mentioned a good 12 supplements but I am not exaggerating if I told you I'd probably take 60 or 70. But remember, my family history is so strong.

Yeah. I'm not, I've kind of not taken a chance. So I am doing high intensity interval training almost daily, trying to get eight hours of sleep. Meditating daily.

Doing everything on the 16 point emphasis that I can to stay alive and to serve humanity for as long as I, until God, Buddha, Christ, till they pull me and go, good job Horowitz, time to move on.

How was your natural killer cell function? I haven't checked it myself, but I take Immunotix 3,6-beta-glucan daily. I've been on a gram of beta-glucan for years, also a really great supplement.

And I go mushrooms reishi and mitaki mushrooms. Fabulous also for natural killer cells. So I'm actually on three different supplements for my natural killers cells you're asked It's so interesting you say that because I just spoke to my wife and I said, you know Honey, we really need to go to the lab and check some of my markers So since you just asked that I'll actually go check my NK cells, but I will send you some thymic peptide.

Oh great Right and by the way at the conference at AMMH people were talking about alpha thiamin and how important it can be in certain people because obviously your T cells go down as your age because your thimic Involutes, right?

Yeah, yeah. And then you got upstream the pineal hypothalamic pituitary thymic axis. So yeah, we'll send you some for that. What one symptom should a doctor think of when their patient has Lyme or what's a common one?

The most important one that people, doctors and patients need to know is migratory pain. There's only seven diseases in medicine that cause migratory pain.

Migratary neuropathy, migretory tingling, numbness, burning, stabbing, vibration sense that moves around. Lyme is the only thing that causes it. And there's six other diseases which do not resemble Lyma at all, like hepatitis and acute rheumatic fever.

I mean, gynecological arthritis and lupus and Reiter syndrome. I don't resemble chronic Lyme at all. So I would say migratory pain is the number one. And again, when you look at my questionnaire on my website, cangetbetter.com, if you score high in that questionnaire over 63 with migrating pain, you need to go speak to your doctor about getting you tested and treated for chronic lyme disease.

How about the same for Babesia? Questions one and 22, that's the malarial type symptoms, day sweats, night sweats chills, air hunger, sweating. Those are the common ones.

In fact, you know, what's so bizarre is I served on the board of 60 degrees pharmaceuticals that looking at tefenequin as a new drug for Babesia. They're doing a clinical trial right now, but they're using fatigue as the marker for Babesia.

And what I said to them, I spoke to Jeff about this, they said, you do know that these patients with Babiesia oftentimes have Lyme, Bartonella, and mold that cause fatigue.

So instead of looking at fatigue where you have overlapping inflammatory factors driving fatigue, why don't you look at the malaria-like symptoms instead?

I couldn't convince them. But for me, it's the malarial symptoms for babesias that are the most important. Bad neuropsychiatry, if you have unexplained rage, severe neuopsychiatric symptoms, and you got pain in the bottom of your feet that is severe with migratory neuapathy and bad POTS dysautonomia with immune dysfunction, that's Bartonella.

And the stretch marks. Yeah, you should go on and look at the studies I've published and in the journals. But they kind of look like you gained and lost weight, except the problem is they're perpendicular to the skin pranes.

They're oftentimes purplish or whitish, but oftentimes they change color with treatment. Those, just like an erythema migrans rash is classic for Lyme, these purples or whiter stretch marks, which can be perpendicular or sometimes in-the-skin planes, they are classic Fibartonella and that's one way that you can pick it up.

Awesome. Three words. What's the best diet? At this point, the Mediterranean mind, you know, dash diets, these are the diets right out there. They just got published this morning.

The Mediterranean Mind Diet, that's the one that has the most scientific evidence at this. And space, The Mind diet is kind of a combination of the mediterranean diet.

There was one published morning just on the Nordic diet where they're making a few substitutes, but it's still a lot of cold water fish and, keeping away from certain grains, we're using more Ryan Oats.

But those are diets that have clearly, this is in millions and millions of people that had the and enjoy it with longevity. I agree. In fact, I was gonna actually do, by the way, have a sub stack, and I'm gonna write a substack on coffee soon, because I've been cued leading all these articles on the benefits of coffee.

The only place you have to be careful with coffee is you've got mast cell activation. And I am a little histamine sensitive, so I can drink it now. But coffee has really amazing antioxidability.

There's a lot actually written on it, but it depends how much you do. You don't probably want to go past three or four cups a day, that seems to the sweet spot, you know, for coffee, But for those people that are really histamines sensitive you actually have be carefull with things like coffee and dark chocolate.

My wife used to have migraines, my wife's story, by the way, is ending chronic illness, you know, for Lele, I can't remember if I actually named her, but I think I did.

She had all 16 emsids factors with the most horrible migraine, which we used joke about was from my mother-in-law. It turns out she had mast cell disorder and was basically taking in too much dark chocolate and coffee, and also histamine foods like, oh honey, i love bone broth, right, or fermented foods, like well for those of you who don't have mast cells and histamines great, But for those of you who do, those histamine triggers can trigger your migraines.

She doesn't have any more migraine since she got off these histamines triggers. So yeah, I mean, coffee in general is great, but there's a sweet spot of probably three to four cups.

And kind of a little bit on the same line, how about nicotine? Nicotine patches, obviously don't recommend smoking. Yeah, that's interesting that they're starting to look at the nicotine receptors for Parkinson's and all these things.

When I look the literature, it looks a little bit all over the place for me. Certain things look like it could have potential, but the only reason I don't think I've seen enough positive stuff on it is if you're going to use this for Parkinsons or some of these diseases, and again, knowing now it's multifactorial with 16 causes, how do you expect to change one thing on the model and expect it to see like a real one?

And it is true. Yeah. Well, because those are good YouTubes like this. It's the miracle. Let's see. Did you use hydrocortisone for low adrenal or what do you tip?

So if I will use generally adrenal glandulars from companies that I know are safe, like Zymogen and PHP products have ones that we know are from countries.

And I've used them myself, like traveling from San Diego. I actually use them just to keep my adrenals in order. But you don't want to use cortisone. Hydrocortisones you can use, but not prednisone, so hydrocortizone is bioidentical

to what the body makes.

You can give a chronic Lyme patient with very low adrenals, hydrocortisone, Cortef, five milligrams, 7.5, 10. I try and keep it in physiological ranges, but I find the adrenal glandulars will work.

And there's even a story in my book, I think I called him Larry. This guy had like 10 MSEDS factors and was sick for 12 years. He said to me, you know, when I was in the hospital and they gave me steroids years ago for back pain and I got sick as a dog.

When I went through his hospital records, this guy, he had no cortisol. I sent off a DHEA cortisol test, and he was flat. This guy was stage three, almost Addisonian, with no cortisol.

And I said to him, you really need some hydrocortisone. Doc, I don't want to take it. I got sick in the hospital with prednisone, said it's not prednizone I want take.

At the time I gave him PHP products, adrenal glandular. amazing turnaround that this guy who'd been sick for 12 years, 85% better, just supporting his adrenals.

I hadn't yet even treated his limers, Babesia or Bartonella just treating the adrenal. So I really, you know, between the hydrocortisone in some cases, which is helpful, I find the adrenal glandules can also be helpful in a lot of these people, but I use also know, supplements with ashwagandha and, you know and B vitamins and patothenic acid and ginseng.

I use adrenal essence or a lot of this one from what the molecular also that I used and these combine a lots of these herbs and vitamins into one. In fact, I still take it myself just because I'm still traveling and doing just to support my adrenals.

Yeah, I used to use quite a bit of hydrocortisone like 20 years ago, but now we have the adrenal bioregulators and we can work on the access and they have glandulars as you said.

Let's see, methylene blue, hype or help? It's a huge help. They're using methylene blue, low dose, 120 milligrams for Alzheimer's, for mitochondrial function.

I use methyline blue higher dose in the Dapsone protocol to reverse some of the side effects of hemoglobinemia, and it's quite effective. But the other thing about methyylene blue that's amazing is it a biofilm persister drug.

It really works well with Dapseone and Rifampin and Cythromax. For treating Bartonella, John Hopkins years ago showed that Zithromax with rifampin with methylene blue kills Bartonella six days in culture.

That's how he came up with the Bartonnella protocol was based on the Hopkins research. Using methyline blue with Zitromox and rifapin, you know, thank God for some of these university research from Hopkins, Eva Shoppe's group from the University of New Wave in Stanford.

Without that research, I would not have been able to come up with the protocols that I have, but yes, methylene blue, fabulous. You just got to be careful.

If you can't be on it with psych drugs, you'll you, can get serotonin syndrome. So you have to know the contraindications of using it. But once you're off your psych drug, so you know how to use it, yeah, it's, an amazing drug.

Nice. Toughest co-infection to treat. Bartonella is on the top of the list. I mean, Babesia can be tough, but I do have the new tefenequin-malarone protocol with the herbs in my Inainu book, where we talk about acornion, Chinese gold cap, and Japanese knotweed, cryptolepis, or domicinin.

And I talk that protocol, which is effective, The nine-week Dapzone protocol, followed by three high-dose Dapsone

pulses about two to three months apart, Bartonella is a lot more difficult to treat than Chronic Lyme.

Someone like this patient, who I published in the Journal of Alzheimer's Reports, we treated her years ago when she had exposure to BART, but she clearly was not active.

Because if not, I don't think her PTAO-217 would not have reversed to normal. But active Bartinella, where you're Bartinella FISH-positive by RNA, You've got to use pulsed biofilm persister drug regimens like Dapsone combination.

It's the only regimen, by the way, that has been published in the peer review literature for this. Some of the disulfiram studies that Ken Liebman looked at may have some effects, but that 14-day half-life of disulphuram causing neuropsychic reactions and liver function elevations, it's not an easy drug to used.

Daphne also has side effects. reversible anemia, methemoglobin, but because of the 14-day half-life of disulfrum, and I don't think it's nearly as effective for treating Bartonella.

And the tefenequin for Babesia as a sole agent? I don't know. As a soul agent, I have not found it to be enough. And when they do the study, maybe they'll find differently.

They're doing it out of Harvard right now. I had to mix tefeniquin with 4-malarone a day with the herbs we talked about, cryptoleptis, artemisia, Japanese knotweed, Chinese skullcap, acornia.

We had a mix these together. And I'm using actually a little bit higher dose of tefenic when I found the loading dose has to be like 600 milligrams over three days, but we found if we gave 200 milligrams once a week afterwards for six weeks, it actually worked better at 300 milligrams for up to eight weeks.

Now, again, this is anecdotal and it needs to proven in larger controlled studies. But I did put the protocol in my book that we've found effective. But you just have to be G6PD positive.

You have have an enzyme. Same thing to take Dapsone. Otherwise, you're going to get hemolysis with anemia and methemoglobinemia if you take Defenequin.

It has some of the same side effects as Dapzone. But useful drug, but I'm not sure. In Babesia otocolli, one of these resistant species that is now emerging, showing up in a lot of Babessia cases, I am not so sure they're gonna find that the Defnequin alone is gonna be enough.

Again, this is where randomized multi-center placebo trials will be helpful. I could keep going but I think this has just been wonderful and I thing people should be excited to have a new paradigm shift in treating not just chronic Lyme and dementia but chronic illness in general.

So thank you so much. And anything you want to finish up and summarize or any? No, just again, people want more information, please go to my website cangetbetter.com.

I have a medical detective sub stack, which I do weekly is free to sign up. There's no charge for it. Some people pay me $7, you know, a month, but it's free.

And I think it's a good reference source for updates in medicine. I'm on Facebook, Dr. DR. Richard Horowitz. My last really words for people is, please don't give up hope.

Lyme community knows there are people who've given up who have suicided. Neurolyme with neuro-Bartonella with mold, these people are severely ill and they have a lot of neuropsychiatric reactions.

There was a horrible story in the New York Times just recently for somebody from Erie, Pennsylvania, that just killed people. When I hear these stories, I just got to wonder, especially in Pennsylvania where the rates of this is so high, how much of what we're seeing out there in these severe neuropsychiatric reactions are due to Lyme and

Bart and mold.

People need to know, you've got a look at this and you need know also if you have been sick. and have not found answers, there is hope, and it's true hope.

It's hope based on hard science. Its hope is based in seeing over 13,000 chronically ill people in the last 42 years. We have gotten the vast majority of our patients better.

I can count on one hand the people who have And the ones that have not responded, who I'm counting on one hand, loaded with mold, load it with other factors that still had to work on this by the time I was finishing clinical practice.

So there really is true hope out there. Please don't give up and know there are answers. And please, if you're a doctor, get them a present for Christmas.

Get one for yourself and go buy your doctor a book so they have this as a reference source. This was written for you, this was for your docs. Then again, for people, mothers and fathers with young children who want to keep them healthy and people who Again, like me, they're healthy, 70, but you know they want to stay healthy.

Want to know how to do it. You kind of reverse engineer the 16 point absence model to see that you don't have inflammation coming from sources. So, Kent, this was great today.

Thank you. We covered a huge amount of information. I think people are going to get a lot out of this podcast. thank you for doing it was. Great. And I love just connecting with you, you're an old friend.

you feel like a brother also from another mother. I just love this information and talking to you, I could see the breakthrough. So thank you for all that you've done and thank for taking the time.

And congratulations on the book and there should be a link below and you can also go to Dr. Horwitz's website. Thank you again, everyone. Thank and unlock preferred pricing.

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