New Peptide Protocol For The Rapid Treatment Of Microbe-Induced PANS And Mental Health Disorders Transcript

(Transcripts are generated by AI and may contain errors)

Introduction and Dr. Holtorfu2019s background

– Hello everyone and welcome to The Microbes and Mental Health Summit. This is Dr. Miles and I'm here today with Dr. Kent Holtorf. Dr. Holtorf is amazing. He's done a lot of really innovative therapies, like peptides and interesting cutting edge medications like lotus naltrexone when that was really new to the scene.

And he's been involved in thyroid function for a long time and and he helps veterans, He does amazing work in the world, so I'm honored and it's a pleasure to have Dr. Kent with us today. We'll be talking about peptide protocols for microbe induced pans and mental health disorders, which you'll learn more about what that is and why it's important and why it's missed, unfortunately, a lot of the time in today's medical establishment, so welcome Dr. Kent.

And before we dive into the topic, anything you want to share about your story, how you got into this, what, why you're passionate about this work, – I'll give my brief story, but you know, basically going through growing up, there's always something wrong, something wasn't right.

Like half my body would sweat. One pupil was always bigger than the other, my arm would stop working and they couldn't figure out did find on to college and got into medical school and residency. I'm like, I can't function.

Um you go to university doctors, oh, you're stressed, I was depressed and I'm like, I'm not depressed, I can't, I'm just, you know, my brain is just overloaded.

I couldn't talk to a patient. Um and I went into anesthesia because you have to talk to them, they're asleep. Um but and then I started getting worse and like can I stay in medicine and it's ingrained in in medical school, at least our medical school, I think it's same for a lot of places.

That alternative means no evidence, right? So I couldn't, I'm like I gotta do something. So I kind of snuck off to some alternative, you know, conferences and um basically I'm like this is more evidence based on what they're teaching me and residency. And so I found I had, you know, all my hormones like the lowest 20% but normal um terrible immune system, Multiple reactivating infections in that. And so treated with high dose T3 was a savior, love immune monitoring ozone.

We didn't have hepatitis at the time, but I'm like I'm like a new person and I hate anesthesia now and then. So when the family practice and just really started incorporating these things, then went through a very stressful divorce and you know when your wife hires Gloria allred as a consultant, you know, you're in trouble for those who know Gloria.

Um and it just wiped me out, which I think stress is a huge problem, you know, and and the talks I give, it really shows people think it lowers immunity but it lowers that th one but raise the th two cause of the inflammation and other problems, you know, doctors will just stressed out women and it up but we really find the issue comes with stress toxins. Um and and chronic infection is what happens and I'm glad you're doing this summit because there are so many chronic infections and whether becomes chicken or the egg where you get low immunity toxins lower and then now they come back out, you know, suggestions and and these things are spilling over to the anti aging, but then it's kind of, what do you treat? Is it the infection or but if your immune system was fine, the infection would be okay. But if you didn't have the infection, the immune system would be okay if you have the toxins.

So it's kind of that, that multi system thing. And I really think that also we find that, you know, there's all this low level of the community, you know, it's, you know, in the brain because, you know, all these patients that have these multi system illnesses, you know, chronic lyme, chronic fatigue syndrome, post covid. Um you know, even

Alzheimer's, all these things were showing their infectious or they're setting off an auto immune or at least inflammation in the brain, you know, kind of brain on fire.

And you look at the overall majority of these patients we're treating, you know, the vets and that post traumatic stress. I mean, you know, their brains just on fire, they can't anxious, can't sleep. And I remember when um they went through, you know, the stressful divorce and was just bed bound, you couldn't take my blood out. It was so thick um and it's just sweating Zibo.

Immune dysfunction, chronic infection, and toxins

Busia Barnell a lime mold. And my natural killer cell function was zero most the time I remember being in the ICU and I heard the nurses during the shift change like this is that AIDS patient that keeps turning out negative for HIV like they were mad, you know. And and then so then I went to heart failure.

I could not stand up, I couldn't walk up a flight of stairs and my heart was so fibrosis. My human transforming growth factor beta was so high which causes fibrosis.

And the cardiologist said, well Maybe in 10 years you get 10% better with really intensive cardiac rehab. I'm like I'm not living like that. So I'm either going to off myself, which I honestly planned on Halloween for whatever reason. And went around the country at two mph and had bent down and uh and look for you know, treatments.

But a lot of great things. A lot of weird things, you know, I mean ozone is always a key and these immune ma jittery thing, plasmapheresis. I love, you know, just gets all the auto antibodies, all the um uh side of kinds and then I took peptides and you really didn't think anything of it. And then like probably five days later I just walked up the stairs, wait a minute. What did I take?

You know? And then kind of backtracked and started using those in the clinic and kind of treating um, the type of patient for all our sins. That's what we do. Um and uh, and then I went back a year later to the cardiologist, you know, he said, maybe in 10 years you'll get better, totally normal ultrasound. He's like, that's weird that he even asked me what I did know, you know, and uh, but so they really saved my life and so I really did a gratitude. Um and, and it really makes you understand like how bad like these Lyme patients and um, you know, Sears or whatever you wanna call it chronic fatigue syndrome.

They're kind of the same thing as we put them in a different box and people, you can't explain to someone how bad you feel because you, you don't look that bad, something they did, but a lot of people don't.

And so like, oh, if one more person gave me like, let me, you know, extra exercise program and diet like I'm gonna kill you. You know, even my girlfriend was doubting, you know, they get, they get sick of it. People have empathy for about two weeks and then they're like, get up, you know, and life is hard enough.

And so my hat goes off to do all these people, but I'm sure you've seen it. Like everyone's sick now. Um, I go to parties, I have to bring a lot and, you know it's everyone comes up and you know they're sick their daughter family member. But it's funny because I stopped giving them out because they're like I got this my doctor can't figure it out and I'll say well this is this, well my doctor says it's not happening. Well how's that working for you?

You know, okay I'm lucky you know I was I was caring more about them than they did but it's it's going to explode even more so especially call this brain fog and talk about the vaccines. But uh yeah it's it's a big problem and everyone's immune system where you know we were checking people after they got vaccinated and this natural killer cell too, you know lower and lower and we're bombarding ourselves with I mean you can't get away from the toxins and E. M. F.

S. And um and I think we're just poison ourselves. You know we're about you know like climate catastrophe. I worry more about all these toxins. – Yeah it's interesting because a lot of people especially and I'm glad we're having this conversation because you know we have some other talks that really focused on some of the basics and diet and gut and and and looking at some of the things that that people need to look at first.

I mean if you're on a standard American diet you gotta look at that first and if you're dealing with something like a significant gut dis regulation important to deal with that.

Um But a lot of people come to me and probably you too with they've had treated once twice three times four times and it's still their guts an issue and they're chronically fatigued and that didn't change from any of those treatments and their multiple chemically sensitive, they're dealing with chronic pain, there's multi system involvement, there's some depression, there's some anxiety sometimes that gets separated out as a separate, this is the psychologic issue and this is the physical issue and and then people are relegated to counselors and psychiatric drugs for the mental symptoms and then they're on a benzodiazepine or an S.

S. Ri or something. And so it is incredibly important to get the basics to to look at sleep, to look at things like diet and lifestyle things and exercise and movement and mobility. But there are a lot of people and this is not infrequent who have done a lot on all those layers and levels.

So if you're in that population, this talk is for you because we're going to be diving into some of the things that we find all the time that are going on that the people who are the most dedicated to paying attention to their diet, their lifestyle, their sleep, even doing lots of stress management tools and techniques are still struggling if many times there are this these issues, these chronic infections, this burden of toxins and it can some of the mental emotional symptoms which we're going to dive into as well and thank you for bringing up and how important stresses for setting this off and brain retraining and limbic system activation is a big part of this and the immune dysfunction and this regulation the other dysfunction that arises in the body can perpetuate and maintain these issues. So we're talking about infections and toxins and stress are so important for the people who have taken care of the foundational layer.

Okay, I've done my diet, my sleep, my exercise. You know, I've worked on basic stress management things, I'm still feeling off. What's next? Let's talk about that. So, can you explain a little bit about immune dysfunction and chronic infection and how that can play into some of these mental emotional and neuropsychiatric symptoms, people? – Yeah. And just a quick comment like members on a cibo conference, I don't know, 10, 15 years ago and that was the big thing, right, fix that. And I'm like, well it's more of a symptom and the guy was so mad, he wanted to kick me off the summit, but you know, it's the gut brain axis, but also the brain gut accents, you know, it sets up the environment for these bad microbes.

It's like, you know, people say, oh it's just change your microbiome and you go from, you know obese too skinny, but as soon as you do that, if you're it's going to go back to the way it was.

Same thing if you have systemic illness your gut it's gonna be set up because with the vagus nerve and basically feedback it sets up the environment for the for the bad bacteria and the information and that's a that's a vicious cycle.

But you know what what I found and really we're finding as a common denominator is really this dysfunctional immune system And it all everything plays into it all right. Um and what you generally see you'll you'll see it with for instance even we just aging. So as we get older about age 910-11 your finest that's in your chest envelopes and it kind of keeps you it's an oversimplification let's say th one here gets stuffed inside the cell th to get stuff outside the cell normally they're balanced.

But even with just a job but a lot of things will speed that up with toxins, stress bad eating. One studies show that people eat fast food. The body reacted like it was a infection You know and so it just keeps going like this and if you look at something about that if you look at uh the you know when the famous uh basically drops down to its lowest point that's when all these diseases of chronic illness and even the c. d. c. says 80% of individuals and at least one chronic condition because of the famous evolution.

So you know why that was okay it's so safe to give these peptides why aren't we doing that? And you know and how much would we say with cardiovascular disease and even osteoporosis and all these uh you know alzheimer's all those things and so we kind of use the immune system to instead of like doing a lot of expensive said tests and you know for chronic infections and all that to kind of also convince the patient because they've done all these tests

which are normal right the doctor said you're healthy you know nothing wrong with you if you do a cbc and chem panel you know and a cholesterol and all your cholesterol is high you know um you're not gonna find anything but you can – And then you and I know and you had sent me some articles about the cholesterol elevation being related to infection and we have these cholesterol particles have these LPS receptors on them.

And LPS the populace aka Ride is one of the toxins. The endo toxins. It's a part of gram negative bacteria and we know with systemic chronic infections that we can see elevations in LPS in the blood and one of the defense mechanisms by the body is to increase blood cholesterol especially LDL particles because those particles can into some of that LPS that the police aka ride and get rid of some of the endo toxin and so even that can relate to chronic infection but if someone's given the statin to lower the cholesterol now the body defense against endo toxin is reduced and the infection was never identified and isn't taken care of and it boils back to this immune dysfunction. – Yeah. And if you look at all the well done that analysis and over and over and over it shows the people with the lowest levels of cholesterol die the fastest, you know and like no one's talking about it and it's study after study after study because they're selling you know of these meds which are you know I think someone healthy person statins have their place you know a window yeah but they want to put in the water, give it, they give it to a healthy person with high cholesterol that's malpractice you know.

– And just for the audience to give a little back story here right, we're talking about chronic infections toxins and were mentioning things like the finest.

The finest is involved in immune function from a young age and the immune system of course is one of the biggest ways in which we defend against pathogens but it's also Dr. Kent speaking to how it can become dis regulated and what that means is that a lot of people with a chronic infection and low defense activity like ourselves, he mentioned for himself were low for example, low defenses can also have auto immunity and that's kind of hard to wrap your brain around in the beginning before understanding immune system is fairly complex and parts of the immune system can be low that defend against infections with other parts being over expressing and attacking tissues in the body.

So when Dr. Kent's talking about immune dis regulation, we're talking about a sense of the low part, the part that's supposed to defend the body against infections a little too low and the part that's supposed to be a little non overactive and when it's over active attacks, tissue attacks itself can be overactive in this expression, in this imbalance in the thymus gland plays a role in the development of the immune system and the maintenance of the immune system. And so when doctor keeps talking about peptides for the thymus, there are peptides that are derived from the thymus gland that can actually off can give some of the function from the gland.

That's it's atrophying, it's becoming less and less active as people age.

Cholesterol, LPS, and immune markers

And we can actually give some of the things that stimulate immune system activation and balance, that can be some of the things that the thymus gland was producing.

So what do you want to say any more about that? – Yeah, definitely cause people think like immune systems low, like, you know, okay, like it's going to lower your immune system. But the problem is like one side of the green systems low, which goes along with aging stress or let's say you get lime first thing it does, it suppresses this th one which gets stuff inside the cell and then th e stuff outside the cell. So as soon as it suppresses that th one it goes inside the cell now you have chronic lyme. And what happens is that that will get lower and lower uh the longer they've had the illness or stress or toxins. But that th two side which is kind of the antibodies and hormonal and inflammation that gets higher.

So it's associated with essentially every, you know, disease of aging, anthro sclerosis. Alzheimer's uh all the auto immune and so we'll look at that ratio and the question is, well, how do you check that?

You know, people do cytokine testing but I think that can really throw you a straight because the body can be trying to go back but it's not working. And so they go, oh you're a you know, basically a th one dominant because you've

got these cytokines trying to boost the th one but it's not working.

So we can really tell one that correlates with your biologic age, correlates with your how sick you are, your symptoms and what we use, which are not really, you know, we talk about th one th two and I mean it's so complex but um and we found that if you're looking at the cytokines is gonna throw you astray and a lot of times they all come out negative zero.

Um But we use natural killer cell function as the downstream marker for th one, you can do natural killer cell number. So Quest does the function. Lab corps does a kind of a function but they do more number but they'll actually do cd 57 which is a mature natural killer cell which is also associated with immuno sin essence. So as what we're finding is a big issue with chronic infections if your immune system is stimulated for a significant period of time, whether it's cancer, community, chronic infection that the cells and then you get mitochondrial dysfunction that normally the cells should go under what's called apoptosis and die and people say well my cells dying you need to get rid of these bad cells because these senescent cells and also t cell exhaustion very similar. You can reverse t cell exhaustion supposedly not venus in essence, but you know that's everything we think one thing that changes but um and for instance just getting rid of those senescent cells can reverse diabetes, reverse heart disease. Um And and all these things because not only are not doing their job, they actually the mitochondrial cell danger response.

You know. So everyone has these theories which takes a little part of you know everything and instead of making energy for the cell it just starts pumping out all this reactive option species which then recruit other cells to become sin essence. So not only are not doing anything, they're actually causing harm, they're they're making the whole whole Nothing worse.

So it's kind of a big topic right now with anti aging and and that where if you just get rid of those cells all of a sudden you're much healthier. You know it cuts down on all that you know chronic inflammation which which makes everything worse. But and then on the th-2 side we'll look at in general see for a human transforming growth factor beta is is huge.

And you'll hear like some mixed things like it's anti inflammatory but it's one of the most inflammatory and sets off everything stimulates mast cells causes fibrosis.

That's mine was so high it just caused my heart to find gross and uh and you lower that, it's going to correlate with. That's where with the book that I shot over that hopefully finishing. But uh it's kind of like nothing against you make sure makers in such a great job that you know bringing awareness to Sears and all the studies he's done but he tries to fix the immune system by getting rid of those toxins right? But you're much better off going right after the immune system and you can detoxify much faster and you know in the final uh you know, ultimate therapy is this basil active intestinal peptide V.

I. P. But if you give that in the face of high trend humans the effect of beta they're going to get a lot worse and it kind of mask. And if you look at people in V. I. P. We found is that they feel better.

But if they get exposed to mold again or something boom they're right back because it's it's kind of doing the wrong. It's kind of making that you know it takes to hire, lowering th well I feel better to have less information but so I talked about that in no way is it a knock on uh you know shoemaker protocol?

It's it's really expanding that you know, we stand on the shoulders of giants and he's done you know so much and but we just look at peptides as the main initial therapy like there's no one magic of anything we use you know a lot of things but you know and looking at you know peptides such as um by alon and marginal for one G. H. K. And T. V.

Four frag they will directly lower that human transforming growth factor beta which we're fighting is probably the number one clinical correlation with how bad that person is and what they're going to suffer.

Th1/Th2 imbalance and chronic illness

– And I find very similar in my practice and look at human killer cells and and natural killer cells and cd 57 I look at T. G. F. Beta one as one of the main markers.

So just to to recap this for for the audience if immune to look at the immune dysfunction that's present in a lot of chronic illness and and especially if you've done the foundational layer, if you've done the basic you know diet lifestyle things and you're you've even gone into some fun stuff and you started to look at gut health and things like that.

One of the next layers is look at the immune function and part of the way to do that is looking at the natural killer cells, cd 57 cells on the part that they can become too low. And then to look at the especially T G F beta one transforming growth factor beta one and then the other inflammatory markers like you mentioned C four A we could say mm nine inflammatory markers that might indicate the other side of the immune function. And if if we have these elevated and this deficient over here then that's going to be a real pointer to okay, a therapeutic to help with, you know, regulation will be very likely helpful in this picture and there may be toxins and infections that play that needs to be considered too. And can we can we balance out this immune function. – Yeah. And we're fine.

We've kind of become an immune monetary clinic because that's what we've learned that you can you know, a lot of times you can spend so much money chasing after these infections.

And we say chronic line, what are we really treating? I'm sure there's a line there, there's you know basically you know there's things we don't even know. But they're all kind of doing the same thing.

The reactivating infections especially if someone has C. M. V. Is a good marker for immuno sin essence. So we're starting to use the what they call sin analytics uh in these chronically ill patients and getting some good initial uh benefits for these people that are just stuck in your you know people have been great doctors pounding on them and you know like myself I did 3.5 years the highest dose I. V. Antibiotics that I would never give another patient because it was seven at a time and you know three dose and no better. You know you just you feel worse.

And remember that product gland inflammation. I went to the E. M. T. And I would get these spasms and he goes yeah you get information take some antibiotics. Well I'm on seven ivy what do you think?

You know? And so – And this is one thing that a lot of people with chronic infections do is they just go after the infection and and and don't pay attention to the immune system imbalance. And that's you know I treat a lot of line and the and chronic infections as you do and and I find like you do that the multiple antibiotic approach for a very very long time isn't very effective and sometimes makes people worse and if we can really pay attention to, you know modulation, it goes a long way together potentially with some things that are helpful or infection, but it's not the infection alone is enough. Yeah.

– Now we do months, you know if we even do it a lot of times um like this that we treated it was in a coma and couldn't read and within two months he's like I mean he was just multi Caledonia or he couldn't even touch the skin.

Um And yeah, you know, and even then it affects disease. Guy said it's probably due to a chronic infection of the brain. I'm like wow these guys diagnosing and that's weird, you know, but it his immune system was so low, you'll see it with PTSD, you'll see it with depression which then also causes you know, a vicious cycle of hi neo hypothalamic pituitary hormone dysfunction, get a little bit thyroid even though all that looks normal.

Um You know, little growth hormone uh you know, like all these guys you probably you know just testosterone levels are like 200. Um And from from all the information they get immune activation of coagulation which causes you know, everything is a vicious cycle and then you know the gut gets leaky very quickly um which that means you have a leaky brain um and let's go very quickly, right right together um and you know and everything, the mitochondrial dysfunction. Now the cells don't have enough energy one to allow the cells to do natural apoptosis, which is cell death.

So once the cell goes squirrely, right, that body basically it's supposed to self basically signal, hey, I'm going to get out of here. Um but there's not enough energy to do that. And so we find you get that, you know, build the

mitochondrial back up but you don't want to stimulate the mitochondria it too early because if they're, you know, you're gonna make more inflammation.

Um So uh there's, you know, things that you kind of want to get themselves first, uh we're we're finding it's not totally true, like things like mont c will actually be a center more fick where it will lower the reactive auction species, but kind of boost and that's the thing. There's so many different ways and uh I tell patients have 100 things that can help you and have 100 things that may not help you.

You know? But in general, if we focus on, if we can't get there means system right, uh you know, at least getting it better and then everything else kinda comes like with me, I know immune system, no matter how many antibiotics I took because people think it's going to kill the infection, it doesn't it knocks it down enough, so you're just going to take over. But if your immune system is way down here, you can't get it down farm and hiding and I don't know if you ever get rid of lime and you know I think it's kind of like you know Epstein Barr you know it's but you shouldn't have it active because the immune system suppresses it but that drops comes back out you know the shingles and what do we do now? Well it's given vaccine instead of like fixing the problem you know and actually with diseases of aging and all that.

– Yeah. Yeah this is so important. And so I'd like to I'd like to sort of bring this into a step by step for people. So if we're talking about okay what's causing dysfunction if if if a person's you know got a decent diet and lifestyle and they're sleeping and they're they're doing their best to manage their stress. Even if they're doing all those things there may be immune dysfunction at play. So if we're looking at the mechanism of action behind how this creates neuropsychiatric symptoms.

We've talked about trauma ptsd depression, anxiety, these kinds of things. There's a mechanism of action behind how infections toxins and immune dysfunction leads to the infections and leads to the accumulation of toxins that once those toxins and infections are accumulated that we know that things like line like borrelia burgdorferi has a protein structure that looks a lot like thyroid tissue. And so the immune system can especially if this side is active start to attack tissue thyroid or we know dopamine receptors turbulent ganglia side. So can we I think if we if we outline the mechanism of action behind why and how people can become chronically fatigued multiple e multiple chemical sensitive and have mental health symptoms all through the mechanism of immune dysfunction. And then we talk about the testing where we've talked about the the natural killer cells, the T G F beta on the C four A D MMP nine.

And then we can talk about the model stories and the analytics and sort of give this give this a progression for people. So for mechanism of action to to onset of symptoms to then therapeutics like peptides to help regulate and and then two other therapeutics to help with the issues.

Where would you say? We're at – Here to do a eight hour lecture In 15 minutes. But it is very everything is a vicious cycle and you know so many people, even healthy people now their immune systems suck and and so with this immune dysfunction, whether it's a toxin stress and then you get chronic infections, reactivating infections, con dysfunction, that your body one like let's say you look at a chronic lyme patient, they have all these low level auto antibodies, a lot of like anti possible lipid syndrome, they get diagnosed with that and like it will go away like my doctor is a genetic and it's not I'm like don't worry you know and chronic kidney disease autoimmune and you know all these things are I think the instance of pans or pandas, which is it kind of came from, you know, kids Strap would get a reaction because Strap would mimic um you know, their own body attack the brain.

But you know, um we should do a lot of the testing for that, but it's expensive and like everyone is positive. So it's like just kind of assume it's there. Well, how do you treat that is get that th two down and that th one up. So the body is trying to compensate um with the lack of that th one which gets stuck inside the cell um by creating all these antibodies and a lot of the basically infections, the antibodies will cross react.

But also I think that a lot of it is actually infection in the brain. You know, you look at uh studies by Mcdonald, you know, head of Harvard brain bank and biopsies and Alzheimer's patients and 90% or 88% had headline and they wouldn't let them publish it because to, you know, basically cause panic. But you know, or you just look at even HSV one, you know, everyone has human herpes virus.

Peptides for immune modulation and repair

One, they might get some cold sores with her son but we suppress it but as we get older and that th one goes down, we find it then reactivates travels up the olfactory nerve and into the brain and associated with Alzheimer's and or like with chronic fatigue syndrome, it was like okay, what's the virus of the month?

Because they have all these things. Well, do you think they got chronically syndrome? Which I hate that because it allowed doctors to basically go, okay here, here's antidepressant and I don't have to look any deeper, you know? Um and uh and you know, they have a bunch of everything. Well, did they get all these infections or is the problem the immune system? So they have a lot of inflammation but they can't fight these interstellar infections And and and so we find, you know, also the sick patients have, you know, tons of, you know, they probably have autoantibodies tons of inflammation so it activates the micro glia like mast cell activation which 10, 15 years ago, you know, you'd see two patients in a lifetime now, it's like everyone that comes to the door and a couple of things with that is that if you will find a lot of people with these multi system illnesses, they'll have low adrenal function so low cortisol but they're a c th is high so the body is trying to stimulate it.

And what that means the body's making atropine releasing hormone which then should stimulate a c th which then should seem like cortisol help you deal with that stress.

But they have little cortisol that high a c th which means the body is pumping out releasing hormone which is a huge stimulator of math cells. So, you know, so they have, you know, these mast cells in the brain mike Birbiglia all over multiple chemical sensitivity and part of the, the mastermind, math cell group.

Uh and those guys are like the smartest docks ever. But they're just like into the bio cameras, look at, we're clinicians look at the big picture like look upstream um and and direct mass selling headquarters fine. But we find like with pots and you know, all these math sell things, we kind of don't worry about it because once you fix the bean system, it fixes itself. So all of a sudden we get so many testimonials, like people even with just, you know, the something that took BPC and cerebral pepper, cerebral license and they're like, hey, my pots went away.

You know, they go to the neurologist and they blame their fatigue. They do a tilt table and say that's the cause of your fatigue. No, it's a symptom of the fatigue. You know, and, and so we're finding that, that, you know, the key is that immune modulation, which kind of sets everything off because you get with mitochondrial dysfunction, you then get, you know, the pineal gland, just like your pineal glands and flame um, you know, pioneer leon talent, delta sleep and like delta sleep inducing peptide.

It sounds like, okay, I'm gonna put you to Sleep. But really what it does the highest levels are in the gut, which is interesting because like the mom will make a lot is it's lower it's great for lowering that inflammation, the sleep center in the brain.

And we've had some lyme patients came in that have seizures 567 times a day. And that's one thing we do as a nasal spray and it really cuts down that information.

Love K. P. V. Two and we're coming out with actually pull new delivery systems and we'll be able to expand everything. We've been like out another story but um and someone wrote a testimonial and they said oh my gosh this has changed my life and you're out of it and you with you know you have a responsibility now you put that to make sure we're not out of this and I'm like she's right, you know, but everywhere you go, everyone's screwing up. And so we test the heck out of everything.

But um we've got a lot of people from like big farm on more. We've been the dark side people but um do everything liposomes. And most liposomes. People take lessons in and possible we should get up and go oh it's liposomes but they're not stable.

So uh this company that they will look at it under electron scanning microscope and stable for two years and so you can get much bigger peptides. And people are putting like you know peptides and trophies And you know big long peptides and like they're not going to absorb even G. H. K.

You think oh let's put on the skin is going to get in, it doesn't get in that well. Um And a lot of things don't work that well morally even though you think they will. Um VPC is a little odd.

Yeah and that tends if you look at all the studies that compare like oral to interpret real ivy sub Q. It's actually equal potent for systemic illness um that it gets in really well for whatever reason, you know.

Um And there's now we're looking at you know cell penetrating peptides, what we don't want to do like with you know you hear stable BBC uh with they made an argentine sold a company that had the patent nominee is circulated BBC, it ran out so they always come with something New and they made salt and said Oh it's more stable in the gut. But you know three independent studies show that the BBC is made in the gut. You know and it lives there that 24 hours it was totally stable. But the problem so the body wants to protect the peptide from getting broken down, it assimilates it and it might annotate the other side as well. So once that so called stable BBC people though it's gonna be more stable. The gut according to the government makes its study. So even if that is the case with dysentery coded anyways and gets through um that once it gets into the gut it gets broken down very quickly. It's also more polar so it doesn't absorb as well. And so they're adding like snack to it, which is a substance that breaks open tight junctions.

Well our patients have these, you know, tight junction problems and for instance the oral semi blue tide, which the love and the man jaro, you know, those I think are great for you know, weight loss and diabetes.

Um they did every trick in the book to get that to absorb and it's still less than 1% absorb. But it up put it out there. – And just for the audience here because we're talking about some very technical things.

The peptides are these amino acid chains. So proteins are are bigger amino acid change, peptides are smaller amino acid chains. Things like insulin is a very well known peptide has a very strong effect.

Peptides can have very specific and strong effects in their natural amino acid chains. And they're configured in a certain way and there's a certain number.

And when Dr. Kent saying smaller, we're talking there are some peptides like a PV 23, you know, acid chain and there are others like VPC 157 that he's discussing, that's a 15 peptide chain. And so when we're looking at a bigger one, that's 15 peptide chain. It's important to look at studies and see if it's orally absorbed or else you have to inject it and VPC just happens to be able to be orally or transdermal e absorbed and and Dr. Kent was mentioning about pots and BPC 157 and and there's a mouse trial I was looking at recently that found a correction of arrhythmias in mice.

It was a mouse study but in rodents that had been given neuroleptics or other things that induced Q. T. Issues and induced arrhythmias. You could co administer BBC 157 and have a lack of the just corrected the heart rhythm issues. And the other co administration study in mice was with Nsaids and with you know things like nonsteroidal anti drugs like like people take you know things like Leave and Ibuprofen and they think you know it's not going to cause problems but at high enough doses we know definitely causes problems and liver and kidney issues. And we saw administration co administration of VPC 157 together within say it's reduced lesions and rodents and so it's a stimulatory peptide that stimulates repair and can cross the blood brain barriers.

So so that's what Dr. Kent is talking about – And when I especially when I initially started giving lectures on it you know first doctors like how come I've never heard of this and there's hundreds of studies but it helped so many things you know people think there's a gut but like for example one mostly animal studies but there's also human studies too but they gave them you know inflammatory bowel disease like Crohn's and then also um they treated with oral B. B. C. And it helped both.

And inference we had our executive director's husband came in in a fib and I gave him essentially a vial of BPc and broke it. Um It will also protect you like from E.

M. S. Uh One of the things like E. M. S. And and this is it's a big problem. I don't want to spend too much time on this but um you know, we get E. M. S. From everywhere but they're all random to cancel each other out. But when

you're getting from a cell tower it's basically unit directional and it's a secret. So it's like this and it's causing the charged particles in your body. It opens up the calcium channels and cause which initiates action production by L. Six which then kind of sets everything off.

But the BBC will help limit that calcium influx and it's it's kind of a home a static have tied where let's say your blood pressure is too low. It will raise it if it's too high we'll lower it if you're hyper equitable will bring it down if you can't quickly and you believe that it will it will keep you from from bleeding.

So it's a very interesting peptide and so you can yeah that's a great one. – And yeah great repair peptide. It's been found to run two different tissues.

The tendons ligaments like injuries repair organ systems, the heart cross the blood brain barrier. It's amazing and so that's repair. But obviously if we're repairing damage and something still doing damage.

How about the immune function and regulating that immune function? What? Let's see if we can focus just a few peptides of few few of the main things that that that you find to be.

I know you're a big fan of K. P. V. And I know you're a big fan of famous in Alpha one and so talk to me about just a few of the top choices for the because we've been talking a lot about this immune dis regulation leading to infection.

So for immune dis regulation and infection contributing to mental illness and things like Pan's, anxiety, depression O. C. D. Eating disorders like what you go first in that.

– Oh just just a quick thing on O. C. D. One of our doctors daughter. She's okay me saying but um you know very high achieving big university cheerleader but just had terrible O. C. D. And she just kept pulling on her eyebrows out they tried everything you know uh And then we gave her five amino one Mq.

Which is a kind of mitochondrial booster increases the N. A. D. In the in the cell and two days later No problem you know and so on with the brain is you know so many diseases associated with mitochondrial dysfunction. But back to the question.

So kind of the mainstay um was thymosin alpha one because it was approved in 37 countries as anticancer um anti infective for autoimmune disease. So it really will boost that th one, lower that th two. So everything is like a teeter totter.

So that was kind of the main state had the most definitely the most studies because it did get like FDA approved for orphan drug. But a study came out and showed that it was effective for covid safe and effective. So they abandoned uh you know because they couldn't do an emergency uh you know approval of the vaccines.

But so we said hey we need placement. So um happen to meet this guy who has an amazing lab with metal below mix proteomics, transcript comics and I said test all these, you know mean monetary peptides. Tell me we want to mimic thymosin alpha one and it turned out to be um via LAN which we can't call violin because it's a proprietary name. But uh immune peptide a to what we call it to use that name. Um and find magician together was actually much more potent at stimulating that that th one um and which again is going to if you know it's approved for your body, your natural killer cells and we'll do this for people like who had cancer of cancer and you look at people especially post chemo right? They wipes out there mean system their natural killer cell function so low they're gonna relapse.

And we see especially with colon cancer, they go, oh you're cure has been five years, I'm telling you 67 years. That's when it's everywhere. So one of one of the key things keeping that natural killer cell function up.

And the nice thing too is within myself, a one doesn't really lower human growth factor beta much. But the Imogen and the pylon actually do that very well or more th one then there's thymosin beta four, which is the most abundant. – Sorry, my internet cut out so I'm not sure if the recording did as well, but I see a low side.

So let's just yeah, let's just back up to the to the, when you're talking about the times now for one with the climate jen and the that part still it's – So we went to the lab guys, I said tell me using medical ethics transcript film makes proteomics, which peptide or combination peptide is going to be able to replace famous and Alpha one because that's what people are used to about studies and that's what they came up and showed it was even more potent and it's orally available or orally active.

Um which you know famous and Alpha one is injectable. I mean I don't mind injected. I like injectables more than taking up a bunch of pills. But – You're talking about now.

– Yeah, so and damaging together. so it's damaging alpha one. And so that's really a th one stimulator. Then there's you know there's another – That's dealing with the killer cells that are low in that th one side and the cells taking in infections were really building that strength up and then that other side – Yeah in huge studies over and over and over consistently on both those peptides for reducing cancer, increasing longevity um and uh and and all those things and then there's um uh thymosin beta four which people use a lot of it's it's a th one booster also lower that th to uh and has more regenerative healing properties.

Thyroid, T3, and mental health support

But it's a it's a multi domain peptides 43 amino acids, you can't take it orally. Um But it one domain will actually directly stimulate mast cells which which can be a problem in general like the studies on M.

S. And and things that the immune monetary will override that. But so when we looked we said well what if we take that section out and if you look at the famous in beta four, the workhorse of the molecules in the first four amino acids which tv for frag there's a lot of different brags but we that's uh general and it actually also will suppress the effect of beta better. So it's another um each one booster as well um and it will lower also. Uh for instance like um you know the cumulative effect of beta shown to really help the healing post.

Am I less fibrosis uh Nash you know basically you know anywhere there's fibrosis, chronic kidney disease. Uh Great great studies on that which is a huge problem you know? Um And then you have a final in that's only available by injection currently it kind of does both as well but it's a little more uh anti inflammatory. Um And so that's a good one.

You know they all work for Alzheimer's. Uh And because you get this big shoot up of that th two so actually help and getting rid of the mast cells and then you know all these mass cell patients are just miserable.

Um And then you can look at the other side and everything is kind of a teeter totter. So you know things that reduce that th two Bpc um 1 57 will will do that. Um K. P.

V. Which is probably the I think it's the best mass cell inhibitor um that we have very difficult to make and stabilize. And so we're getting better at that but we've been out of it and people just go crazy. But also another thing that got banned was cerebral license.

You know it's been around for 40 plus years as an injectable for Alzheimer's dementia even you know memory helping sleep even in normal people helps concentration. Uh and it does work orally.

Like one study they give just one dose uh two elderly people and it helped their memory orally. 11 dose made E. G. S. So we know it it gets in um we get a lot of uh feedback on that saying oh my God uh traumatic brain injury or my government.

I'm just so different. In fact we shouldn't say. But my stepson uh was just getting squirrely be honest. He's becoming an ask you know we're like what's going on and I think he's infected but he doesn't believe in you know and so here here take these and even his brothers were like hey he's nice again you know what's going on. And so that's also very anti inflammatory.

Unfortunately company keeps everything somewhat secret even on the label doesn't tell you what's exactly in it but

it tells the amount of amino acids in each thing.

Um And uh and so yeah all these things that they're overlapping so you can't really screw it up because the nice thing is most of these peptides they can't find a toxic dose.

In fact a lot of times water is more toxic than you can overdose on too much water. But you know huge therapeutic window. It's rare to have a side effect. I mean there's always someone that you know uh we don't know it was really from that or you know people can give someone a yellow pill 30% are going to go I'm dizzy and you know and stuff like that.

But um it's it's been very gratifying just getting the people's lives and their and their supplements, so very easy to and we like it to go to the doctor.

Um You know, they get they get much better results with that, but you don't have to go through, you know, the compounding grab and you know, the FDA trying to ban everything. They're going after supplements again, hormones again. Um And also with this, you know, maybe we missed that. I don't talk a little bit about that.

Uh So we have a nonprofit national gallery of hypothyroidism and a big fan of, you know, pretty high dose T three. Uh for instance, the Starr report, largest study ever done on antidepressants.

Uh they tested a bunch of different antidepressants and they showed, as you probably noticed that after a year they stopped working. Um if you and they had T three is one of the arms and T three ended up performing better than the antidepressants.

Less side effects, less anxiety, less palpitations. Um, you know, no sleep problems, more energy. They were calmer. Now, wait a minute. Doesn't make sense.

So it never got in the abstract because they didn't find part of the study. Yeah. And or another study, 135 bipolar patients, Tony treatment resistant. They tried on average, 14 different medications and imagine all the stuff they've tried without any improvement.

They just put them all on T. Three, regardless of their thyroid function tests, 80% responded and 30% total resolution of symptoms. – And this is so important. And what kinds of doses.

Because I've seen some of these studies that use pretty high doses of T. Three – Normal. The nice thing is if doctors get leery of giving with normal levels or suppressing the TSH but the studies are clear that with chronic illness your TSH goes down but you're low thyroid um that if they have depression it is standard to give 50 micrograms of P three. Now one issue is if you get normal goes up and down and there's basically thyroid works in the nuclear receptor goes and change the protein synthesis. So it's really slow on slow up.

But there is a cell surface receptor that works with calcium and potassium channels that levels high that activates that palpitations and those things.

So we like time release but a lot of times doesn't work. And they're somewhat right because PCC A. Which is a very good service that doc that the company pharmacies use to use all the formulas but their formula for thyroid is they add too much method still and if you have any gut issues that just goes right through you and you know you can argue we'll just give more but when you start getting to 400 my grams on the chart it doesn't look good at all. And so we did an extensive study looking at different percentage of methicillin and looking at absorption?

We did, you know, Staff sticking the heck out of them every day. Um and we found that 14% was what were and some compounding pharmacist at work like no, I'm not doing that, you know. Um but one pharmacy which I hate to promote because it was my pharmacy. You can't own a pharmacy in California.

So I had to put its sole and separate property to my wife at the time. Uh And the attorney says, well how's your marriage? You know like that's good. Okay. But it's also right, well it's hers now. But so um and I know she does it.

Um But also if you find a company pharmacy uh pharmacist that's open minded and wants to see our, even our data and convinced them because they're very scared to go against the, you know the standards. I think it's gonna go way up.

But people use side animal in general um pretty safely. And they, you know, shown studies that giving it ivy after heart surgery less a fib. Um And people a lot about, you know a fib Well the study that they point to is a silent study where they showed that elevated TSH increase a fib okay.

Um and then suppressed TSH increase a 50. But if you dig down the data, people who were on thyroid that suppressed TSH know 1/5. So it's really about, Are you overdosing and really one of the things that really suppressed TSH is a basic cardiac dysfunction.

So it's like yeah these people have low TSH because they're probably function we're gonna have more rhythm because they have you no heart problems. So that study that they used to oh my God and also like paralysis oh you know is you know suppressed TSH we've never had a problem.

But for the doctors out there and the healthcare practitioners check like A C. T. X. Or N. T. X. Which looks for the bone breakdown um initially. And then you can show because you can test that every three months where a bone density maybe six months but more likely a year.

And so someone claims the osteoporosis but um studies show suppressed TSH meta analysis as long as they're on some estrogen or making estrogen plus when you add vitamin D.

Hormones and you know I remember this this endocrinologist freaking this patient out gonna get osteo process and our bone density just keeps going up and up and up.

You know – It's a classic causation versus correlation. I mean you can correlate suppressed TSH with certain things but if it's not an intervention study in you're not actually giving thyroid hormones and it doesn't go that it's the giving of thyroid hormone that causes the issues and the same issue show if it's not – And rise three fold increase in osteoporosis never Dr. Warren a patient about osteoporosis – I know a lot of practitioners like to give T three and a mixed with T four, similar to the ratio of thyroid glandular is like 4 to 1 or something along those lines. What are your thoughts on that?

– That my thought is? We're doctors, we intervene if because once you get inflammation, you get high reverse T three, it's gonna one cut down that T four to T. Three conversion.

So if you give T four, it's making more reverse T three, which then has negative effects even when they say it's just an active metabolite. Um but also with chronic illness, you know, we kind of think whatever is in the blood is gonna be inside the cell, but we think it just diffuses in, but thyroid is active transport. And I have graphs on this, that we plotted out where the T four transporter is different than the T.

Three and it is more energy dependent. So, um if you don't have, you know, mitochondria at at 100% which anyone with chronic illness doesn't or age, the T four is not getting in the cell. And then also they get that pineal hypothalamic dysfunction. So their TSH with chronic illness, the TSH goes down and the T four goes up, you know, a little bit because of the lack of conversion. But the big thing is it's not getting in the cell. So that's classic.

Yes, any endocrinologist, most doctors like that's hyper thyroid and if you look at depressed patients, they almost always have that picture. And even remember study by Harvard, they said, well these patients are you know subclinical hyperthyroidism, you know dada and they give them T four and say see it didn't work were given the wrong thing because the T four is not getting in.

But if you look at their, you know, three T three or T three, that's like you know using the lowest 5% and 20% and then we're reverse T three is high, which is a basically a marker because the reverse T three transporter is has the same pharma pharma kinetics as the T four.

So if you have high reverse T three, you know, T four is not getting into the cell and there is a problem with it. It used to be a much better test when they use the radioactive, you know, s a correlated with symptoms.

The reference range is much wider. Now they use the more precisely inaccurate L. C. G C. M. S. And it just crunches that that you know, the reference range.

So it's not as useful and people like what's that ratio, you know. Um But you know, you can even look at you know, T. 42 ratio as a good marker for immune dysfunction. Um And all those things and interesting that um epic talent which is the pineal um peptide and finally in uh that they took the pituitary is out of chickens. And basically they found that they gave them a talent or a million and it fixed their faces and their thyroid levels to a good degree. But how to do without a pituitary, You know, it's interesting and if you're gonna pick like an anti aging peptide, you know, um talent especially when combined with thymosin, um they want to study on people with cardiovascular issues.

Human study, 15 year study um that cardiovascular disease. And they only gave him six doses over 15 years. And they found the ones that got the treatment, their cardiovascular basically health got better um their quality of life, their endurance, their, you know, mental um everything got better while a standard care got worse also increased, you know, longevity or decreased mortality.

Um less cancer, you know, all those things. So and that's just six doses. So and I really as kind of a pearl is if someone has a sleep disorder is you know, give delta sleep inducing peptide ePA talent or an alien or both.

And uh some sort of growth hormone. Now with the, you know, one of the people love the growth hormone secreted dogs, right? You can't overdose because it's not gonna go to a certain level and considered to be much safer and you know, growth causes cancer. Well, I'll reviewed all the literature.

This was a while ago. But up to that point, there was no study ever shown that giving growth hormone causes cancer and but that's okay, I'm fine with those, but I found especially the sick patients did better with growth hormone than they did with the screen dogs in general.

Um But I've come across a lot, a number of studies that show that growth hormone releasing hormone stimulates cancer. And so now I'm thinking like, wait a minute, you know, should we be going back to growth or month? Uh It's more controversial and associate with bodybuilding and all those issues but and and expense and but he gets some good deals, like, with university has a nice program and things like that. But yeah, so I might kind of rethinking that.

But yeah, I don't want to, So let's bring that up, right? Yeah, because I was gonna freak out. But – Let's recap a little here.

Plasmapheresis, detox, and treatment strategy

So for thyroid it's straight T three is generally – Better with a little T four, but we have people thyroids and we get them straight T. Three, they find pregnancy okay, We always tell people go on a T.

43 because there are no studies on T. Three. In fact, they went to the end of society meeting to meet the world renowned expert on thyroid and pregnancy and I'm like, hey, it's T. Three cost the but I don't know, you know. Um but you know, it works.

We have so many patients that have said, I'm not going to forget it, the babies come out great and it's actually you know people have trouble getting pregnant. Um and this is before we had even epic talent but you know giving T3 a little heparin little progesterone all these people that did all these failed IVF.

Um more times than not they're going to get pregnant naturally. And then in one study it was on the talent. This was an animal study. They had menopausal rats. They gave them all up a talon, 80% started menstruating again in 25 at live births.

So uh we like for fertility will give that again T three. Um uh Captain we talked a lot about but it has some unique properties and uh – Yeah sometimes to 43 sometimes T three.

And just to recap the summary so we've talked about the immune dysfunction in this regulation. We talked about H one side of allowing infections and toxins in the cells and then the th two side of auto antibodies and being able to have some markers, some blood markers. Looking at the natural killer cells.

Cd 57 on the one hand and looking at the 4 80 G. F. Beta one on the other hand and then looking at some treatment options. Looking at BBC 157 to calm down the th two side to stimulate repair a PV to calm down that th two side. Looking at things like some of the finest based ones like T. B. Four frag.

We talked about we talked about the the the pylon, we talked about the thymosin alpha one as things to bring that immune function. We talked about K. P. V. Being great for mast cell activation.

We talked about for the O. C. D. And depressed for O. C. D. Sometimes maybe mitochondrial peptides might be helpful and then for depression for anxiety, making sure that we're addressing this immune dysfunction and looking at potentially also something along the lines of of thyroid and and T three as well. So that's a I think a nice summary of where we're at I think any there's so much more but you know like yeah, so any any last things to to summarize or to to wrap up here.

– Yeah, I mean I think for someone starting like those are going to get you going to a degree and we found that you know, we were you know, let's say chronic line patient, you know, doing you know, kind of the horror which is amazing. Uh you know, just doing higher and higher. I do that myself just higher levels of antibiotics and we find the people are just suffering and it not so effective that even, you know, there's a big battle with you know, my lads versus the east side of America and one of the big problems is is they can't show that long term antibiotics, you know, works in some people but may not be a great treatment without these other supporting treatments as well and we love the ozone, you know a lot of the treatments that were end up being immune module torrey we just don't know of them that they are and um actually went to Zurich to get the special plasmapheresis um which is designed for environmental toxins and and these things and they did lifestyle on me and the guys like holy crap and what happened was we've been building his house, it's going forever. So we had to go in temporary housing and then slowly I got sick again I'm like what's going on?

And then when he did that test he's like everything was just clumped uh and and and he's like you're getting you're getting poisoned first girlfriend, let's see. But he's been having a drink this weird drink you know? But I called and I said check that place for mole. And the old guy came in and he doesn't do remediation so trustworthy and was also a friend of a friend uh he goes get out of here, you know and it was just such high levels of uh not but uh story um um Penicillium um and the green one which they look beautiful.

But yeah and then wall and the wall was just coded. So I've been living out of a suitcase for the past and just driving crazy. But um and that's what happened. So I did two treatments and it's interesting.

So you do the first one and a lot of them came out. He's like all this is heavy metals and there was like organic toxins and then all these immune complexes and uh inflammatory side of kinds.

And then so it filters about 4.5 liters which is close to your blood volume. But your total water content is about 40 liters. Right? So what happens? And then as you clean that out, the water from inter cellular and you know basically outside the vessels then gets into the the second one was even more go. And then so we did that lifestyle again which we were doing and we had um university antibodies against was awesome.

We lost our tech but we're getting it again but it was totally free flowing after that. And uh and it would be great for post covid uh I think it's a very important therapeutic people should, you know, find people that do it. This thing was all self contained.

You don't use human either. The problem one problem is you're giving back out human which is a human product. And what the heck you're getting with that.

But this is nice that you don't you don't need that. But it's totally anti aging. And you look at the studies where they combine like a old rat to a young rat and the young rat gets older, old rat gets younger. They didn't know what it is that the old rat getting rid of the stuff to the young man or young rat giving you know things And it seems that it was a lot of parts just deluding all the bad stuff and you also can't detoxify when you have low th one. Um you can't convert I.

G. M. Antibodies which aren't that effective. They don't see my compliment to I. G. G. So let's say someone is positive for Lyme we'll see a lot of I. G. M.

And they've had it for like you know 10 years 20 years infectious disease. Doctor says oh so that's false positive because you've had it for a long time.

But as soon as you fixed the immune system now converse I. G. G. Like all I had was a 41 kill adult band I. G. M. Right so oh that's nothing and then fix the immune system and also did some some antibiotics and then I had eight I.

G. G. Antibiotics you know – Yeah we can see those changes we as we do and so immune function is so important. We can't just rely on antimicrobials. And I think people are starting to learn that. I'm hoping that that's becoming clear and even in chronic infections that we really need to look at immuno modulation in addition to any other aspects of treatment that we're doing. So thank you so much.

Resources, training, and closing remarks

This has been really insightful and helpful I think for people how can people find out more about you about the peptides and where would where would you like to send people if they want to learn more?

– Yeah well you know we're the company's integrated peptides and we've been slow coming out because we have to make sure we test more than the pharmaceutical and make sure that what you get is absorbing and all those things and then we found this big pharma like social company and they guarantee again they'll be intact in two years. And so that's gonna really up their ability to do longer peptides as well. So that's integrate peptides in their supplements and patients can buy it but we prefer you go through your doctor and you'll get it actually cheaper through your doctor than our site.

And then we decided to finally after being asked for years to do a training program which called my Better Medicine kind of because of this documentary that people do from the vet that just was in a coma.

And uh we couldn't read, he couldn't function at all academia or you know that he was better in two months. No antibiotics and even the disease said he probably has a brain infection. You know we had also hippocampal degeneration and um all the stuff but so I said okay well we'll do it.

So we're launching february 14th two day online. Um you know, conference webinar. And we're gonna keep it inexpensive but you know, really dig in. I want to really make it a good experience for uh these doctors because I mean it changed my life.

It's changed our practice. We can get people from from A to B. Or before it was okay. Two years now. It's you know, sometimes a couple of months like, you know, there's a bet who's so sick. Two months later he's jogging doing these hikes and you know, reading a book cover to cover and all these things.

So that's gonna launch February 14 with a two day kind of overview and then we'll do once a month as well as question and answer and which I think is is really key for doctors. I think that's where they learned so much. So – Wonderful.

– So great at taking complex you know issues and concepts and making them understandable. So I commend you do a great job at that and you're so calm all the time.

– Well, I appreciate that. Dr. Kent it's been an honor to host you and have this discussion. Yeah. And this is just such an important discussion. So thank you everyone for tuning in for this interview with Dr. Kent Holtorf.

Please check out integrative therapeutics and some of his work and thank you everyone. Integrated peptides. Sorry therapeutics. Different company integrated peptides being – Go to our site will have stuff at the National Academy of Hypothyroidism.

My mom profit on thyroid. All our sites got hacked. So like you go to our website, I don't even know what we do because you just wiped out everything. Like, I don't know what the heck happened, but maybe we'll see. But so we're trying to really, you know, my I really like you is educating patients and doctors is really the key because how many patients can can we see?

And, you know, patients are just rushed from doctors to take this. I don't even know what they're taken. And so we're gonna have split off a kind of a health coach, but also kind of a general public basically a spin off of that, you know, so – Fantastic. Well, thank you again and thank you everyone for tuning in, take care and have a great day. Hey, thanks so much.