Introduction and Dr. Holtorfu2019s Background

Hi, everyone. Welcome back to the Peptide Summit. We have a treat for you today. And we're going to be talking to Dr. Kent Holtorf, M. D. on reversing aging with peptides and bio regulators.

So I think of Dr. Kent as one of the OGs of the peptide world. Yeah. I mean, I remember when I met him first at ILAD, when my littlest was when I was still pregnant with him.

So he embodies the pinnacle of medical innovation, leading both the Holtorf medical group and integrative peptides with a visionary approach that has market transform patient care.

Renowned for integrating advanced peptide and bio regulator therapies, Dr. Holtorf have expanded his influence through 23 affiliate center and 12 franchises, dramatically improving treatments for a range of complex health issues.

His expertise, notably in the tick borne illnesses, chronic fatigue, fibromyalgia, sears MCAS, long Covid traumatic brain injury and PTSD, neurodegenerative diseases, complex multi system illnesses and beyond with a particular focus and peptides and bioregulator therapy Immune modulation hypothyroidism undetectable by standard thyroid test, hormone optimization, veterans health, longevity and more.

Underscores a focused dedication to immune modulate modulation, undetected hypothyroidism, hormone optimization, veterans health and pioneer in longevity.

Dr. Holtorf's unique methodologies not only to find his niche, but also mark him as a global leader in health care innovation. Thank you so much for being here.

And your bio is even longer than that. But we're going to dig into what got you into peptides. Yeah, it's so impressive. Yeah. thank you so much for having me.

You know, just, love this whole topic and how it's just changing patients lives and transforming doctor's practices, and and you're just, wealth of information as well.

And, I just, honored to be, invited, for the peptide summit. So thank you. Yes, of course, Dr. Kent. Now, one thing that really, I remember you speaking, and I just closed that labs, and I remember stepping into the room and this was it was really my first introduction to peptides and hearing your story about how sick you were and how peptides really changed your life and how that pain that you had brought, the purpose of you getting peptides out to the masses through oral peptides.

Could you go over that with our audience? Yeah, I'll give the the short version. So you probably heard the story, but, you know, going through, you know, I was born at like six months and was supposed to either die or be retarded.

So I have excuse for a lot of things, you know, and, always had kind of weird, things going on, you know, growing up, the very functional, the. No problem.

But, like, one pupil was always bigger than the other. Like, half the side of my body would be freezing their half their young, and, strange things like that.

But then as I started going through college or through medical school, I sort of got. Something's going on. I'm just really fatigued and mentally I couldn't tolerate anything.

And then it got worse and worse. And, you know, I go to the university doctors and they say, oh, you're depressed or stress. Here's an antidepressant.

I got depressed, I just, you know, and I, I did take them for short periods and they didn't do anything. And, it got they got so bad. Were just talking to a patient.

It was just overwhelming to me. And, and so I said, man, I, I don't know what I'm like, I think I can do medicine, but I say, okay, let me go into anesthesia because I want to talk to patients who are sleep, you know.

But so, started doing that and it was totally ingrained in medical school, which I'm, at all hours and I'm sure it is a most where anything alternative integrative functional means no evidence.

Right. So it was very evidence based. I'm still very evidence based. And so I think what am I going to do? I mean, I'm not going to go to those quacks, you know.

And but then as I got sicker and sicker, I go let me the I snuck off. Didn't tell anyone and went to some alternative conferences. And I'm like, what the hell?

They're more evidence based.

Personal Illness Journey and Discovery of Peptides

And the stuff that they're teaching us in residency and, and so I ended up doing, I guess there's the chronic fatigue syndrome. And, you know, again, all these syndromes are all basically the same thing and same underlying mechanisms.

And they just manifest differently. But, and then I form an optimization and thyroid optimization. High dose T3 was a lifesaver. And and that was a major thing in some immune modulation, some, you know, and antimicrobials.

And I'm like, oh my gosh, I'm a new person. And so I'm in anesthesia. I'm like, I hate anesthesia. No offense anesthesiologist But it's like to me it was a mindless like, okay, here you go.

You know, and and so I, got out of anesthesia, went into family practice and started essentially doing, I got one optimization and, and just everything just, just kind of took off, and, that's how I started, actually, a beer company, as well was a we had a hangover free beer, double blind, placebo controlled studies.

But, long story on that. But, and then when, I was, married and then I went through a very bad divorce, and, and this is what stress is a killer, I'm telling you, especially emotional stress.

Then I became bedbound. Just horrible. Sweating our dinner where your skin, you can't even touch it. It it hurt, you know, terrible cognitive function just at night.

Sweats, muscle pain. I was just taking, like, you know, ten showers a night and, and all these things, I was just totally nonfunctional, and then I. I couldn't stand up.

I couldn't breathe and go to the cardiologist, and he says, wow, your heart is like, broke. It's not filling. so there's you're not going to maybe get 10% better in ten years.

And I couldn't stand up. I couldn't walk upright. I'm like, I'm not going to live like this. So, I decided on Halloween I'll get myself to Halloween and I'm going to end it.

but I'll try whatever till then. So I went around the country, around the world. I bought a lot of good, good treatments and dendritic cell therapy that were simulated to, Lyme antigens with Omar down in my Mexico.

You know, ozone helped, you know, a lot of immune monetary stuff helped. And I was in, Belgium and had some

peptides I was reading about, and I get some peptide I wrote and things that happened.

And then I was like 4 or 5 days later, my I just walked up the stairs. Wait a minute. What the heck? I'm like, trying to backtrack. Like, well, I don't think it's a peptide. What else do I did?

It turns out it again, it's peptides. I'm like, damn, I'm feeling so much better. And then started, you know, combining them and then was able to over time bring them back to the US.

And then they started being available from the some of the major company pharmacies. And it just changed my life. And in know in our practice as well.

And I, you know, I go into cardiologists, you know, standing up and he looks at me and goes, you look pretty good or something like that. And I'm like, oh yeah, yeah.

And he goes, well, get on the, you know, being with the echo and just your heart's normal. Oh really? Did he ask me what I did? Now he goes, okay, I'll see you in a year, you know.

But you know, that's kind of the way that that they work. But and so I thought in the back of my mind that, hey, this is going to help me one day. But people have had Lyme, Babesia Babesia, Bartonella.

and it is horrible, you know, and you can't explain how bad you feel every day. And. Right now, I mean, the people are seeing is this everyone's sick, right?

I mean, I go to parties, I have to bring lab slips because, you know, everyone's like, oh, I'm sick. My daughter sick. My, you know, it's it it is terrible.

And, you know, it's multifactorial. But you are, you know, with the US, we have twice the level of chronic illness than any other developed country. You know?

Yeah. It's really it's really crazy how sick people are. And it's great when we hear stories like yours that you reverse disease. And now you're you're feeling so good that you're running all these companies and advocating for patients.

Now the thymus, when we talk about peptides, we have to talk about the thymus. So how how do peptides help the thymus? And what role does the thymus have in aging.

Yeah it's very interesting. So as you get older your thymus modulates. the immune system misses very complex. But a good way to look at it is to break it down TH1 And TH you can break it down and made and adapted.

But this clinically this works better. TH1 TH2 TH1 gets stuck inside the cell TH2 get stuff outside the cell and well, not a TH1 cell, but natural killer cells, a downstream marker for that.

So, like, natural killer cells function is, is our main marker for T one, and then for two is C for a human enduring effect or beta. And and so what happens is as the thymus includes over time and it and it drops down to its lowest point right around 40, 45.

And that's when you basically start getting all those diseases of aging. Right. And and so they, the T one goes down now, you can't fight intracellular infections.

That's what also fights cancer. But you have all this inflammation. So a it's a an H phenotype. It's a, sick phenotype, of the immune system. So you can look and see.

Really it's the biggest determinant of your biologic age is your immune system. Yeah, I can believe that. But even with younger people we're seeing t h1 and H2 imbalance.

yeah. How would you explain that? well it everything a stress it will cause it to involve, much quicker obesity. the certain vaccination, of how like that, that we were checking every time that, you know, they basically got this procedure, that we would check their natural killer cell function and their coagulation, and we look at their blood on a live cell thing, and it would just natural killer cell function every time that did that.

And their inflammation will go up and their blood cells and certain they have clumping together. and they're all their coagulation markers would go up.

And so it just came out like it was two days ago, showing that if you had more than three boosters that you get in printed in, that if they come out with an almost really count, like, what was the purpose of this?

You know, with a variant that's, that's much more lethal. The people who are vaccine local times won't recognize it. and they will have no defense to it.

And it's also like you get the flu shot, you are twice as likely to get the flu the next year, you know, so it's kind of like, I don't want to have, you know, all the vaccine and stuff like that.

People get crazy, but it's everything toxins, pesticides. I mean, we're being the toxins being put to death. and anytime you lower the immune system and have toxins, you basically set up, autoantibodies.

Then you get antibodies to the brain and we can talk about the veteran stuff that we've been doing. But, yes, everything's a vicious cycle. And, you know, it's it's also the food.

It's the you know, we're just being poisoned, everywhere. And I think the stress, like, everyone just stressed out of their mind. you know, when I was growing up, we didn't have computer.

He'd send a letter off and wait two weeks, and, you know, I was kind of carefree. Now it's like, oh, my gosh, you know, texting and social media. And it's like, I just, I don't we're not made for that.

Yeah, I agree and interesting because you said, you know when one gets disrupted, more inflammation, more cancers. And we have, you know, there's this whole new like turbo cancer thing.

It's like a real thing and it's actually acknowledged. Except no one's really admitting maybe what would be causing this. But but yeah, some of the yeah.

So some thoughts, but I think it's multi-factorial. But yeah, for myself and how I learned some immune modulation was, you know, I was on, three and a half years of the highest dose I. V.

antibiotics, like seven at a time, three times a dose that I wouldn't give patients is too dangerous, and it wouldn't touch it. You know, and I up in the ICU, and I remember the nurses were making a shift change and, so that that Aids patient and keeps turning up negative for HIV and Savannah, my natural killer cell function was zero.

So it doesn't matter how many antibiotics you take, you can't kill it enough. You have to have an immune system here that takes over. And it really had no immune system.

So until I fix that and then that's when I got better. And I remember I had carotid gland inflammation and I'm like, oh, just like it was killing me. And I went to EMT and he goes, yeah, you got you got program information, take some antibiotics.

And I'm like, well, I'm on seven I. V. antibiotics. What would you suggest? And he's like, looks at me and just kind of walks out the room. But, yeah. Yeah, that's a great point. That's a great point.

Because a lot of the times people, they're like, oh, I have, you know, a Lyme. And I just want to kill it. Kill it. They have chronic Lyme though, you know, and I'm like, yes, there's a place to hit it hard with antibiotics, but chronic, you have to make sure your immune system is even ready to go.

Like is good to go and your gut health. And that's why I love one of the oral peptides, BPC 157 because it it can really just give you that extra help, to get to get someone who's really sick, get them more balanced before you start attacking the problem.

Yeah. And it's nice because it works for so many things and it's, you know, kind of the rejuvenating hormone people think of as a gut hormone or their gut peptide.

you know, it heals that gut lining. And everyone has leaky gut now, which means every brain, improves a microbiome and that gut brain axis, and it, will regenerate nerves and brain with traumatic brain injury.

you know, they cut basically say attic nerve of rats. you can do that with attorneys too. But, especially with. Who with who turn. 18. Do rats are attorneys.

The one I thought you said. And, if you know, if they're bathing, one dose of BPC, it grows together. If it doesn't, if they don't, it doesn't. So they just has so many things.

And like, Wednesdays are animal study, but, for they gave rats like inflammatory bowel disease and Ms.. And they all oral bpc treated both of them. Yeah that's amazing.

And you work with a lot of veterans that have a lot of post-traumatic stress disorder. And what kind of peptides do you find really helps with that? Because like you said, stress is is a killer.

And we kind of ignore it. Yeah. And people think stress lowers your immunity, doesn't it modulates it lowers that one. But increase that to inflammation.

So like I'm not a veteran but you know I just see the care they're getting. And it was you know just horrible.

Thymus, Immune Aging, and Chronic Illness

And our first patient actually his mom is here in the room. So she works for us now. But, it was a special on being special forces. And, they found him.

He had basically terrible PTSD, anxiety, cognitive dysfunction. He had Aladin. Yeah. You know, where you touch the skin, and it is big burn so bad. Then they find him face down.

essentially pulseless. Kidney failure, liver failure, heart failure, rhabdomyolysis. They said he's not going to make it. Put him in, an induced coma and said, you know, sorry.

You know, he's not going to make it, but they special forces, right? So he he makes it. And he had been in and out of the VA and seeing neurologist in and out and no one's helping him.

Right. And so he said, okay, well, we'll see him. And within let's see that the first visit we did, bunch of peptides and we also have like a peptide cream and stuff.

And so, yeah, terrible out of genius. So you could, you like it could have a sheep or pant leg on his, on his leg and he couldn't flex. So it's but and then so and I'm talking to at the time talking to Gene his mom and then also I see the other doctor in my office beating on his leg and like what are you doing?

And he's like, it doesn't hurt. He's like, it doesn't hurt. like, you know. And so, I mean, we didn't use any, you know, narcotics or ketamine or, you know, and, local anesthetic, like, they came and it went away within like an hour.

We got rid of his Aladin adenium, right off the bat. And then, you know, over. It's a four visit. He could he couldn't read a book before, and I could sit down and read a book.

He could function. He could sleep. yeah. His I mean, his life was just, you know, he couldn't do anything. You

know, he couldn't even sleep and stay in bed.

He just was just anxiety and nonfunctional, and. And he went camping. like, I think either on the fourth visit, which when they go camping, they don't bring a sleeping bag, they don't, and nothing like when I go camping.

It's a three star hotel. Right. but, it it was incredible. And then so we started seeing more veterans, and I thought they're going to be totally heterogeneous.

Right? They got all these different problems. So and, and so we were kind of covering everything. So we were able to do, more testing than they would do otherwise.

And we found out that they, they all had okay, they all had traumatic brain injury, PTSD, you know, just, and they were all totally disabled. And so we found that, they had tons of toxins, like huge levels of toxins, again.

And, and normal people due to. But, you know, there's were just even, even higher. and they all had chronic Lyme and, like, how do they get that? And I'm looking in Afghanistan know, I know there's no one there.

You know, it's just like and then but but I found out I was they all trained at Fort Bragg in North Carolina, endemic for Lyme. And they're laying in the bushes for months.

So I think they got that before then they get all the vaccinations, all the burn pits. And if you look at the studies, if you have a chronic infection and toxins, and this was shown with in Africa, they had people working in cobalt mines, they wouldn't get auto immunity unless they were exposed to malaria.

But every single one of them had parents had antibodies to their brain to norepinephrine receptors, dopamine, serotonin. And, and, you know, how's the VA treating them?

Giving them antidepressants and a psychotics. The one of they're not working there because their receptors are blocked and, you know, about 16 beds a day are, you know, putting the gun in their mouth.

And it's horrible. And, you know, all these nonprofits doing good things, but like, no one's getting them better and and their care is just and it's just terrible.

So we saw more and more, and it was very interesting. I mean, and they also had I mean, they're fit guys. They look very fit. And their telomeres were like the lowest 2.5% in length.

So their, their biologic age was, whereas it was they were much older. and and, and and basically and another study was very interesting that they showed if someone has traumatic brain injury, it doesn't revolve think Lyme which was interesting and they had that in the study. But like they essentially without exception, they all got dramatically better.

and. That's, that's so amazing. So could you walk us through with these patients what peptides you found to help them? TB for and probably KVK. Yeah, yeah.

And we found, you know, it's kind of like the nice thing is with all these conditions is that I'm telling you, they all have the same underlying issue.

And if you look at if they get immune dysfunction okay, whether it's from aging you know your thymus in. So it's certainly this. And then if you get, you know stress it makes it worse.

Any traumatic brain injury, any emotional stress toxins and so and and then you get a number of things happen. You get pineal dysfunction pineal hypothalamic pituitary hormone dysfunction.

So they're often low hormones, but it doesn't look like it on a test. Like a, their thyroid, their, their all of that. but their TSH is low normal and their T4 is high normal.

So the doctors go, oh, you're kind of high thyroid. No, that's low because they got hypothalamic pituitary dysfunction, crazy low TSH and low mitochondrial function.

And the T4 requires energy to get into the cell. So it goes up because it's not getting in. So it's up in the serum. But they also have low free T3 and high reverse T3.

So that's how you can differentiate that. And they all have mitochondria dysfunction which is a commonality basically of every chronic illness they'll get immune activation of coagulation.

so the body will kind of try to lay down fibrin trying to wall off that infection, which in the short run that is good. Or, you know, but these bugs and especially Lyme is learned to hide in that fiber.

And they wrap themselves in fibrin, and, and so the body can't get at it. It also is kind of a barrier to not only nutrients getting in hormones, medicines and also waste products getting out.

And, an option that takes normally two seconds to get into the cells could take up to two minutes and we can do a little. It's almost like a parlor, trick or test, but you can do a party.

it's not perfect because it depends on also motivation, but it's pretty consistent to just show someone. So if you have someone blow out all their air and, you know, you get a pulse ox and, but all their air and hold their breath as long as they can.

So what will happen is the normal, you know, blood goes in your lungs there to the heart and then goes in the vessels into the cells. So that will drop after a minute or two and it'll start going down.

It's about, you know, the 70s or so. but people that have this fiber laid down, it barely budges because the oxygen is taking so long to diffuse into the cells.

And so we. Oh, it's great. Your, your pulse ox is 98. No, it's not because it's not getting into the cell. So don't have we will call air hunger. and you give them a little heparin and all of a sudden they go, oh, my gosh.

Or along with, some of the vascular enzymes and lumbar kinase nearby may Chinese bromelain, which also dissolves spike protein to but and and and so that and also we'd have people that they're not responding and then we check their coagulation IVs and then after we clean up this regulation which you can check the markers D-dimer, prothrombin, antithrombin, the prominent complex prothrombin fragment one into so if I monitor so the number of things that you can look at, plus we have another collaboration test and, we look at their blood, it's all, you know, so it looks like chili sometimes, but, and you clean that up and things that didn't work before, and now start working because they're getting into the cell and, and with, you know, no oxygen, the mitochondria dysfunction.

And we'll check everyone's also basal metabolic rate. So we'll check how many calories they they burn over 24 hours by basic extrapolate. And we find that they're usually 25 to 40% low.

how many calories burned. They have no mitochondrial function. And they have, you know, low, lower body temperature. and, and they all have like, low thyroid.

So you have the mitochondrial function you can do on a controlled peptide, you can do T3, but so the key with, with these guys where is immune modulation we're finding is t to most everything.

And like whether it's long Covid and mass you know ALS we have people in wheelchairs coming in their jogging. you know, any autoimmune, you know, Hashimoto's, I mean, you can kind of name any of it, and you got so much immunity first and then, where we're finding so, like, usually so think of, you know, as the FDA, you and I guess to me, the peptides were safe and effective.

So they had to kind of ban most of them. But, so we kind of lost those injectable immune modulators. But the nice

thing is there's they are replacement.

So, for instance, there's TB for frag, so thymus in beta for its immune modulator and also has, rejuvenating factor. So the famous alpha one, which is approved in like 38 countries for immune boosting and cancer because a booster one and they banned it as soon as it, they made the mistake of coming out showing they were safe and effective for Covid right off the bat.

So if that was safe and effective, they kicked off the vaccines. But, and then virus and beta four is multi-domain, meaning that it has it does a number of different things.

It has a domain. The first four amino acids are that kind of meaning monitory part. there's a part that binds actin. There's a part that actually stimulates mast cells.

Veterans, PTSD, and Immune Modulation

And then there's a part of the ages part on the other side, which is kind of rejuvenating. and so we'll use the, first part and isomer of the first part that is about a half life 20 times the half life of the standard TV for free.

But so it boosts that one. And then you get like BPC will lower that to and have a lot of rejuvenating properties. It's, it's, you know basically as multiple effects and then Cfpb is the last three amino acids of alpha minus a sibling of our amount.

It does not say we want a site. It's amazingly anti inflammatory but it boost the immune system. And we're having very good luck. And just like two weeks ago or so this person what, what's that blog?

Ferguson. Jen. you know, what's it called? my recovery. Let's just, Oh, yeah. diary of recovery. So she was a mom, and her, son had autism, so she had a blog and had a big following, trusted her, and then she got long Covid and to Cfpb and change your life.

And then all of a sudden, all these other people are taking it, and it's just, oh my gosh. Oh my gosh. I mean I knew it work, but I didn't work that well you know.

So it if, if you go to that, dire of recovery, some very touching, case studies on that. And it's also like it's more, it's more potent antifungal than flu.

Con is all at one 1000 the dose. It's more anti. it's a more potent antibiotic against staff at about 100 the dose. So you're killing these bugs and lowering the inflammation and boosting the immunity.

So and we use an isomer of that too that's much more potent and resists breakdown. so yeah that's it's kind of an amazing thing. A lot of studies on, autoimmune and psoriasis and, both of those things.

Yeah, it is pretty amazing, especially long Covid. I mean, I've had to really go outside the box to get these patients better. And, you know, the vaccine injury from, from that, I don't know, without peptides how they would be, you know, back to work.

I've had patients that were on disability and, you know, they came to me, we well, we removed some root causes, some mold issues, and with peptides just life changing.

So it's frustrating because a lot of the things you're talking about, you know, people might be listening and they're like, well, I'm just going to go out and ask my doctor for about the stuff.

But unless you're going to an integrative or functional physician, they're probably not going to know what you're talking about. So you really have to advocate for your health with these things.

Yeah. And I think that's how the worlds change that you no longer just listen to your doctor. And I tell patients, hey,

don't you know, listen to I go check what, what I do, ask me any questions.

And if I can't answer, go somewhere else. Because. Or it's okay to say if a doctor or, some patient will say, my doctor says that he doesn't know. Stay with that doctor.

It's a doctor's, you know, less a doctor knows the more adamant there. Right? Typically. But, I agree, and they never call me back. Like the conventional medicine, even though I'm a double boarded doctor, you know, like, they don't they don't call me back.

When did they ever call you back? Do these doctors. No, no. They just. And and people are funny. The patients like if you get a like, let's say they've been beaten on the patient for ten years and patients are very sick.

You get them better and send them back to that doctor. the patient thinks that doctor is going to be happy. No. They're mad. Oh, yeah. We had a patient with a hurdle cell cancer and a doctor.

Like, we got to get this out this week, and, you know. And then she called me. I said, you know, it's inflammatory cancer. I just maybe, you know, give me 2 or 3 months and we'll see.

So she decides to do that, tells him he got a death wish. This is crazy. And, and so we we did, basically peptide treatment, but stuff. And we get a scan even earlier than we were going to, and it's gone.

So she is so happy. Shows doctors be my friend for 20 years is oh. It'll be spelled out there like I don't know we'll think so. She goes all happy running up to show him the scan, and he won't come out of the back, and he's told the the receptionist to tell her you're no longer a patient.

Wow, wow. And that's. I don't know why they're so scared that maybe something that we weren't brainwashed with in medical school. You know, that pharmacy is the only thing that works.

And the big pharm stuff, you know, why can't you just realize that maybe you were duped? I mean, sometimes I want my med school loans. You know, the rest of them that I have left paid off.

Yeah. Do you have other doctors that work under your. No, not yeah. You know, it's it's sunny out today, but it's really hard to get people to move to northwest Ohio.

Yeah. Well it's hard to get people to move to California. They live well have they. And they go they know it depends where. I mean, I was looking at this the speaking about toxins like northwest Ohio.

We have so much glyphosate. And I tell my patients, well, the area we live in used to be tons of mold. Right. And then there with all this glyphosate and I'm like, you know, I have colleagues and like, people just get better faster than here.

And when I work with people, health coaching from other states, they get better, faster. And I'm like, we just live in a toxic, really toxic area. But yes, why is glyphosate still legal?

And no, no idea. I don't you know, we have we're we have an opening if you want to come to California. Oh, that would be a big change. I don't know how that would work.

I'll think about it. Okay. I came out here visiting. We're looking. And here's the problem that we're finding is that, like, our model is trained, the doctors for like two years and we can treat pretty much anything.

Right. And now the doctors are trained to be this algorithm because they can only do what the insurance company allows. And it's just this is what you have put you in a box.

So you get this medication and they don't know physiology anymore. And I agree and I agree because they they can't even think Covid made me realize that like so many doctors are just going through the motions.

And it's not always their fault. Sometimes it's because they have to see so many people and they have no curiosity. The incentives are wrong. Yeah, yeah.

And the doctor who cares the least in the standard model does the best they do. They should give out bonuses not based on if all of your pedes patients are up to date on all their things that they should do, how many don't have a chronic disease?

And who do you only see once a year for health visits? But you know, we live in a broken system, and that's why you're kind of, you know, like I said, an original gangster with with all of this, you're just off the.

Yeah. And the doctor burnout rate is so high, it's like 65% of doctors are depressed. They don't want to work because we've given up control. And, and they're just, you know, 9 to 5, they're just, you know, told what to do.

They don't have, you know, any ability to their judgment doesn't matter. It's just paperwork and how much they can build and how fast they can see a patient.

They don't want to see a complex patient and clog up, you know, because they don't get paid anymore for seeing a patient. For I, I've been four hours with everybody with a patient and I do that.

You get immediately fired from Kaiser. Oh I've had it happen to my friends that are surgeons and well they looked for other jobs. They were like, I will not be in this toxicity.

Sorry, I am worth more than this because they were told they had to cut down the time they talked to their patients. But anyway, okay, can't let's talk about because we could vent all day.

Or I could, but can you talk a little bit about the different formulations of peptides? the difference between a natural isomer and a regular peptide.

Yeah. So we found that, you know, the big problem with, with oral peptides is they generally get broken down in the gut. And, and now there's BPC 157.

And so the smaller the peptide generally gets less than three amino acids. It's it's going to survive in general for maybe maybe not. and what the body does that if it wants to protect a peptide or a protein from being broken down in the gut because it's a critical peptide or protein, it calls with capsid it acetyl H one side and imitates the other.

Oral Peptides, Isomers, and Bio Regulators

So it puts usually two caps on it instead of being a salt and BPC 157 is interesting because it's 14 amino acids, and it's so in an aberration that it absorbs so well.

But the studies show that they, every study that's looked at compared it. Same study doing oral C related BPC and injectable. It's been equal. So it's it's worked as well for systemic illness.

whether you give it a shot I would say that probably isn't true if you're injecting into a joint where you're going to get higher punch rates, something like that.

But so the company that had the patent on a C later BPC, it ran out. And so they came out with arginine BPC and R arginine will stabilize peptides in general.

But then so they did a study where they, they put it in gastric juice, low pH and said that the AC related broke down and they arginine did not. And that went flew in the face of numerous third party studies.

That BPC is related is totally stable in the gut. That's where it's made like, you know, they went over 24 hours and numerous and it was already stable.

But even then, let's say it wasn't using a terrible T capsule. But now the big problem is, is when it gets into the gut that arginine now dissociates from because the salt from the BPC, and now it's just vulnerable and gets broken down.

So the people that use I mean but then they called it stable BPC. Very good marketing. Right. and most people that that supply that they'll add like snack to it, which is a substance that breaks open the tight junction so it can absorb, which yeah, it helps it absorb, but you use it.

People have leaky gut. You're trying to fix the tight junctions, and so you're breaking them down so you can fix them. Yeah. So it's just a little a little strange. So, it's, it's just when you, when you look at the data.

So. Yeah. Well, not only captures, but also the body will make certain isomers that they're exactly the same molecule, but they have a different twist to the amino acid.

They're like mirror images, and the body will have a certain percent that has that. And they tend to be, more active and resistant to, enzymatic breakdown because they don't fit with those enzymes, but they're often much more potent now, certain ones can be less potent.

but, you know, there's, there's studies and all those things. So, yeah, getting the natural isomers, can make a big difference, like the TB for a frag at 20 times the half life.

If you look at the graph or the KP, KPD dramatically, much more likely activates it. It will basically attach the receptor, with a much higher affinity and breakdown much slower.

Okay. That makes a lot of sense. Yeah, because a lot like you said, we have to move towards more of the oral peptides because a lot of the ones that were subcutaneously are being taken away, which is just ridiculous.

But, We'll see what happens with that. hopefully change. Yeah. But for right now, we're, we're just doing the best we can and pivoting. So now there's also something that we talked a little about the summit with other people, bio regulators.

So there's peptides and there's bio regulators and bio regulators. You know they are those shorter chains of amino acids. Yeah. And so the history is very interesting.

And it's you know, basically in the Soviet Union, they realized that their submariners, you know, their submarines, their, their high speed test pilots and their astronauts were aging very quickly.

And so they went to the, you know, Soviet military, gerontology Caverns and said, you fix this problem, you know, so you better and I don't know how he I don't know how many things he tried first, but he found that, in particular, he took fetal diamonds and pineal gland extract and, injected those in these people, and it essentially reversed it.

And so and then they started finding other, of these compounds. Didn't know. They didn't know what they were. They were just extract and highly purified and, they only they were they were military secret.

They only gave it to the military and the Olympic athletes, and they did pretty well during that time. and so there's, numerous ones for like, almost every, every tissue.

And there's it gets very confusing because they got Russian names and there's synthetic and and natural. and, but really the key ones that he found, the initial ones he found is the, pineal, which the synthetic one would be, epi talent, and the thymus, which would be, time again.

So oral time again is about a hundred times as potent as, like injectable by military. So, very potent. And then there's, one called bio with 22 amino acids, and it kind of has and it has a brain aspect and a, pineal aspect and it and it's amazing, like the I imagine the studies on, animals and humans dramatic reduction in cancer because again, it's raising all this to, at the epitome and little lengthen telomeres kind of resets.

It's kind of the control of all the hormones and lowers inflammation, raises melatonin, sets the circadian rhythm. And especially when you take two things, you take like the, battalion and and the thymic peptide and say thymus, the time again and, like the human studies, they found a group of, humans over 65 years with significant cardiovascular disease.

They gave them 6 in 6 doses over 15 years for 15 years, dramatic reduction in cardiovascular disease mortality, morbidity, you know, cardiovascular mortality, morbidity, less infections, higher quality of life.

Their cardiovascular system got better, not worse. and there are so many things like that now. Kind of the big thing with these, bio regulators is lowering, reducing the biologic age.

And, and so it's really cool. Now, we can check someone's, you know, biologic age based on either telomeres, which are the little caps on the chromosomes and those basically every time it replicates it, they get shorter and shorter.

And as they get shorter, it messes up cells, or by methylation patterns. And, there's a study published soon. They had people, I think now it's gonna be about three years of different, bio regulators, ten days.

And then, you know, kind of rotating them and they're like losing, I think, average of five years biologically instead of gaining three years and, some losing 14 years of, age.

And because, you know, what is the biggest correlation with chronic illness is age. And so if you can de-age yourself as you age, that immune system, you are so much better off and, and one thing so they, this hit trial came out and to rejuvenate the thymus and they use growth hormone and metformin and DHEA.

But it's like, okay, going through all that hassle, like we have thymic peptides that are orally available in G. So just it's like, you know, trying to stimulate the, the testicles that cost it.

You know, you can do that, but, stimulate the thymus a little bit more difficult. But they, we give testosterone for that or we give estrogen. so just keep the thymic peptide and, and so you combine the Italian and the, in the thymus that it's probably the number one anti-aging thing that, that you could do.

Yes, absolutely. It's so exciting what we can do. And you just need, you know, a good guide to, to walk you through this stuff. And, and I think. You're so safe too.

Yeah. Yeah. And I want to kind of end with you talking about, the mold, the illness and the whole trials update book that you wrote and, you know, maybe some a little bit of pearls you can give us from that.

Yeah. So, you know, I, you know, with Sears, it's also kind of like. Yeah, all of you with chronic fatigue syndrome and chronic Lyme. I mean, most people are Sears chronic inflammatory response syndrome.

it's essentially people like it's mold, but it's really toxins again. But toxins, along with an infection you get all this immune dysfunction.

Mold, Chronic Inflammation, and Practice Updates

And and so Shoemaker has done so much for this area I mean it it's just incredible. But I looked at his program and I had so many people coming in and they've been sick for like eight years, ten years or.

But they're like, I know I'm gonna get better. I'm on these binders. So the, the basically mechanism of his protocol is get rid of the, the mycotoxins.

And then that once you get rid of them and that will fix the immune system. But with a low immune system, you have, with the dysfunctional immune system, you have inflammation, you have mitochondrial dysfunction.

You can't detox with the immune system like that. So, like, why don't we we can easily go after the immune system first and then add, you know, all these, you know, different areas or whatever is wrong.

Let's say it's, again, if, and, you know, mitochondrial peptides, in the kidney peptide I love because I had chronic kidney disease with secondary to Lyme, Babesia Bartonella and just totally reverse that.

But so you fix the immune system first. But that's, a pinnacle of, of his. And so he's trying to fix the immune system by getting rid of the toxin. But you can also get BPC 157 and other peptides that protect the body from the toxins and fix the immune system.

Now their mitochondria systems better. They get rid of the toxins and the heavy metals and all of a sudden everything just starts coming back. And so you don't have to just try to get rid of all the mycotoxins, which are getting, you know, so many people are getting so much and other toxins.

So it kind of reverses that, that whole thing. And we find you can get people from A to B in months rather than years. Yeah, that makes a lot of sense.

And definitely those people are looking to recover quicker because they feel like such garbage. They can't even get through their day. Yeah, yeah. And so we'll have that available as a bonus gift.

As that's awesome. Well, thank you so much, Dr. Holtorf for sharing your us, your expertise and being so passionate about what you do. It's we really need it.

We need a hundred million more doctors like you. just really being as passionate as you are. So tell everyone where they could work with you, where they can find integrative peptides.

Yeah. And we have about, scheduled to come out this for like 20 new products, which will be combinations, peptides and bioregulators like the first one is a we have a cognitive which is the brain bioregulator, the pineal and the vascular.

So the vascular is amazing because, you know, all of this, a cardiovascular disease even brings disease. The, and the lining of the vessels are inflamed and that's, you know, and it reduces that and that the studies are amazing.

Oh, we have reversed cardiovascular disease there. you know, basically cognitive dysfunction in pretty much everything. So one has the cortex, which is the brain, the pineal and the vessel.

And maybe, it's seeing the veil on. And then also cerebral revelation, which is brain, peptides in the pineal, as the epithelin the another one in the assignment and there's one is, pineal one, brain.

And then we have a thyroid bioregulator out. And the problem with the natural ones, they're expensive. And, you know, you got to extract those. And we actually had, we had some natural made, some natural BPC getting from pig gut.

The company even said we are never doing this again. Okay. So it's so expensive that we have it and, so we can put we're going to have like three four bio regulators together and we'll be able to sell it for, you know, for, for the price of, the natural.

But we also do both. So, yeah, it's kind of a very exciting with that. yeah. We're integrative peptides. And, we also have coming out is peptides, for pets.

And we have, so many like, heartwarming stories with pets and, which is really cool. You know, people like, oh, the human, they're probably a jerk anyways, but animals and people will care about their animals more than they do themselves or, you know, right.

And so, that's the we have, one of the few biologic vets on board. We're going to be doing, clinical studies and all

that. So, we're kind of looking forward to that.

you know, a lot of stuff in the, in the pipeline. Awesome. Well, that is so exciting. I'm so excited for the new products. Oh, and I forgot to mention, we're also have a starting.

Okay, year long training. So that's great. Yeah. So anyone listening out there that's a practitioner. If you want to learn how to use peptides, that would be a great course for you.

Or if you want a job. Yes. Yes, exactly. awesome. Well, thank you so much. It was great talking to you as always. Great. Thanks so much. Yeah, great job with the, with the summit, I think it's I'm looking forward to.

Thank you.