Introduction to the summit and peptide discussion

Everyone. My name is Doctor Richard Horowitz and I am the co-host for the Doctor Talk Healing Line 2026 summit. And we are today going to be talking about peptides with Doctor Kent Holsworth.

Kent is a good friend of mine, a colleague. We've known each other for quite a long time, and the focus of our summit this time is the Neuroinflammation Brain Protection Summit.

So as we talk about peptides today, whether it be for hormones and immune function and also the brain, we're going to be incorporating some of that in our talks. Kent, thank you for joining us today.

It's a real pleasure to have you again. Thanks so much for having me. I like always, I just, really enjoy doing anything with you. So thank you for having me.

Yeah. Can tell, tell people just a little bit of your background before we get into peptides and what they are and how they can be used in patients with chronic disease.

How did you get into this? What's your background? Well, I think like most doctors in this kind of integrative space, you know, that I had got very sick myself and I was very evidence based, very evidence based, and I just couldn't see patients during during residency.

And I'm like, oh my God, I'm going to have to stop practicing medicine. But I went to all the university doctors. It which they are in your head, you got, you know, depression.

I'm like, I'm not depressed. I can't function. And then I went to an integrative conferences and I'm like, oh my God, this is more evidence based than what they're teaching me.

So ended up long story short, you know, I went into heart failure. I couldn't stand up. I couldn't walk up a flight of stairs and said, I can't live like this and went around the world looking for treatment, or I was going to I was going to up myself on Halloween.

But also I went to Belgium and I did peptides and know anything about peptides and didn't think it would do anything. And like three days later I walked up the flight of stairs and I'm like, wait a minute, what?

And I didn't believe it and went back and did it again. I was even better. And then after a couple of years, I was able to bring those into the U. S. and so kind of in basically focusing on peptides, we do a lot of things too, and we follow all your protocols as well.

Kent Holsworthu2019s personal illness and peptide origin story

But, you know, and treated basically the very difficult to treat and, you know, the Lyme, you know, it's like the team I don't want to be on, but we, we are, you know, and so that's what we've, we've focused on for the last, you know.

Or so. So yours is really a personal story of like, it wasn't just my patients were sick. I had it by the way, I think you know this a lot of Lyme doctors and doctors treating these chronic diseases, they've had this or their family members have had it.

It's not that they're not compassionate. They don't want to help their patients. But a lot of times they have had personal experience. And then they see, like you have, hey, peptides was a game changer.

I really need to offer this to other people, right? Yeah. I mean, it's, you know, there's so many treatments at work

and that was just one that just kind of stood out and we found it.

You know, it's a component and it makes everything instead of spending, you know, two years on the antibiotic, I was on I. V. antibiotics like doing six at a time, but five times a dose and didn't get better because my immune system, my natural killer cell function was zero.

And I ended up, you know, septic in the ICU. And I remember the nurses making a shift change. I heard the one say, oh, this is that Aids patient that keeps turning up negative for HIV because I had no immune system.

Yeah. And, and so that's kind of what we'll get into a little bit of that with, with the immune system, how you know, it's like with antibiotics you got to the immune system has to be able to take over.

You can't take enough antibiotics with no immune system. It just will never work. So it just you need to push it down and then the immune system takes over.

So since you got such help with peptides, you've seen you've been doing this now for patients for decades. Why don't we start off exactly with what is a peptide.

Tell us exactly what it is. And, and you know, compare it to like a peptide bio regulator. Sure. Yeah. So peptides are a chain of amino acids, much like a protein.

If there are over 40 amino acids are considered a protein. If they're under 40, amino acids are considered a peptide. Now bio regulators are, between 2 and 4 amino acids.

And they work different than peptides. So peptides will go to the base of the cell attached to a receptor and have paleo trophic multiple downstream effects.

Bio regulators basically work differently. They absorb very well orally, as long as they're capped, as long as they're seed plated and laminated, and they will basically go into the cell, into the nucleus and attach to either activators or repressors and change protein synthesis.

So they work very differently. But they're a subset of peptides okay. And how would these bio regulators discovered. Yeah. So a very interesting story.

During the Soviet Union, during the Cold War, the Soviet Union found that their cosmonauts, their high speed jet pilots and their submariners were aging very fast.

They were just falling apart. And so they went to the KGB hospital, and it was, Cabazon and padlocked, same guy as Pavlov's dog and said, you need to fix this, and you can't say no.

And turns out rather quickly, they found that extracts from the pineal gland in the brain and the thymus reverse that rapid aging very quickly. And so this was basically they found out, you know, they reverse all these basically rapidly aging military personnel.

And but it was it was a military secret. They only gave it to the, military personnel and the Olympic team. Olympic team did pretty well during that time.

And so but no one knew about it because it was, again, all us, the Soviet secret. And then with the fall of the Soviet Union, they started publishing, but it was in Russians and no one paid attention.

Then over the years, they found that started getting known. And basically we still have a Russian researcher that pulls up all these studies and more and more every year we find and there's thousands of studies on this stuff and people say, oh, there's, you know, there's there's no studies on these things.

And there's actually thousands of, studies and they've been translated into English. Yeah, yeah.

What peptides and bio-regulators are

Well, or either or we'll do it. Yeah. But a lot of them are by now. That's great. So you mentioned immune dysfunction talk a little bit about the mechanisms behind immune dysfunction and how it contributes to chronic Lyme.

Because you know obviously we do see a lot of immune dysfunction in our patients. Yes. How do you know when when basically you get a bit by a tick. And, and basically that you get the Lyme spiral key.

It will actually immediately start secreting basically cytokines that will suppress that one immunity. So it's an oversimplification like anything what the immune system is.

But if you think of one side of T one you can add tregs over here. Other side t two and 17. So normally they're balanced. So this gets trapped inside the cell.

There's just stuff outside the cell in general. So the line the Borrelia will secrete all these cytokines which will suppress that one. So now the body can't fight it.

Then it goes intracellular. So now basically it's like there's no immune system fight it and everything's a teeter totter. So it raises that two which is called THC 17.

So now you have all this inflammation all this autoimmunity. But you can't fight the intracellular infections. So so really what the big power with the peptides is to boost that one.

So now you can actually fight the infection. And when you raise the TH1 it lowers at 2017. So now it lowers that inflammation lowers all those autoantibodies that we see so much in all these chronic Lyme.

And so really immune modulation. And if you look at even just aging that you get what's called a famous involution. And there was a study that they, they gave growth hormone and these things to just rejuvenate the thymus a little bit.

And it was like, oh, that's big news. But we find you can just give a peptide, you know, it cost $0.10 a day. And instead of trying to do all these things to try to rejuvenate the famoso everything from chronic Lyme to anti-aging and everything in between, the immune system really is the key to chronic illness, to anti-aging and to, you know, basically treating these chronic infections.

Right. Know that that's true. And, and for people listening, I mean, just to simplify also, what Ken said just here is that and another way of saying this is, is that when Lyme invades the body, it affects part of your immune system in your lymph nodes.

It's affects your B cells which make antibodies, but it also can affect the T cells, the thymus, right. The T cells at the same point in time. And the B cells which make antibodies can be wiped out in some patients in our population, 20% of them had chronic variable immune deficiency.

They weren't making any significant antibodies and 85% had subclass deficiency. So we do see this frequently. And those patients with long Covid, they also get T-cell depletion.

Right. So and then you get more toxins with glial toxins on top of it that are immunosuppressive. So it is true. I mean, there's a lot of factors that are affecting the immune system.

Immune dysfunction in Lyme and how peptides help

And what you're saying is, is that you can give these peptides for the T cells for the thymic involution and help. And you've seen the clinical studies in your patients where it's helped.

Oh yeah, very much so. Everything from you know like you look at cancer, we just treat a bladder cancer patient who they're going to take out his bladder or prostate everything in two months.

And then we started all these things and they went in and it was gone, you know. And so we basically with the new epigenetic testing, but really boosting that immune system is so key for so many things.

Everything from again, for chronic Lyme, if you don't have an immune system, you're not going to be able to get rid of this stuff to anti-aging, to chronic illness.

No. And and what's interesting with bladder cancer, right? I mean, you know, this from the literature they used to get people data. I'm sorry, the tuberculosis shots, when they would give them the TB shots, they found that it actually stimulated the natural killer cells, T cells, and they use it for bladder cancer.

Right. So I got one of those, BCG when I was in, Bexhill growing right? Bacteria. I got it when I was in Belgium. Right. I'm assuming you were. By the way, were you talking about Terry Hertog earlier on?

Was was Terry one of the teachers you were referring to? Yeah. It was, yeah, it went when I saw him and I'm like, hey guy, you know, give me some peptides.

And I'm like, yeah. And so yeah, I love him. He's he's awesome. But yeah. And so BCG now is a new therapy for bladder cancer you know right. Yeah. So peptide so similarly for this.

So again so you mentioned also life span. Look I mean I must admit as I'm getting older I am taking a lot of supplements to decrease oxidative stress and things that are also working on my other two and genes like resveratrol etc..

So talk a little bit because we will get a little bit later in this conversation about how we get Lyme patients better with some of our therapies and your therapies, but what can we do?

The actual peptides have been shown to help with aging also tremendously. And for instance, just taking the pineal peptide, a Talen, it's shown to increase telomeres and adding again the same thing that that got those Russian, you know, basically military personnel better the pineal and the thymus extracts.

So those bio regulators dramatically increases the, lifespan. And actually the, Cabazon did, the three studies, ongoing a number of years. And they looked at biologic age and they gave them just a regulators rotating.

There was like 21 different bio regulators with which work on different tissues other heart, brain, spleen, kidney. And they rotated those and they lost on average seven biologic years, per every year that they did this treatment.

And then when they did, telomere testing and then five years when they did the, methylation. So dramatic reduction in biologic age with these basically supplements.

Right. So in that regard, because in our chronic blind population, we also see mitochondrial dysfunction be a real problem because of all the free radical oxidative stress, the mitochondria have nothing protecting them.

Right. And you need mitochondria for energy that you needed for every cell and organ, a system in your body. Because and Nicholson and others have published on this that it's at least a third of the line patients, we regularly use mitochondrial supplements after I'm done with daps.

But you have peptides for this, right? How do the peptides fit into this? To help mitochondrial function. Yeah. And so some of the, the studies are amazing.

And it's interesting how like SS 31, it protects the mitochondria. You got mop C. Now these are injectables. And there have been in phase three trials for 20 years.

Someone's paying them not not to bring those to market, which is very interesting. But yeah. So you know we have like mitochondrial peptides and CoQ10 PCA.

Well we can get much more potent and much more direct by doing my the these are actually made, in the mitochondria to basically protect the mitochondria.

With my C and SS 31. Well, they work a little differently now, but you got to be careful. You don't want to, like, basically boost the mitochondria too soon because when you look at and we're getting kind of in the weeds, but, you know, with part of aging, you get immuno senescence and cellular senescence, where one thing is the mitochondria, especially with chronic infection, they go into cell danger response.

And that and so the mitochondria, instead of making energy they're making reactive oxygen species. So if we go and boost the mitochondria too soon, especially in these chronically ill patients, chronically infected, all of a sudden people go, oh my God, I feel horrible because now you're stimulating basically the production of reactive oxygen species.

So there's ways that we called analytics that we can get rid of these senescent cells that are essentially they call them zombie cells. And they're just basically not only not doing what they're supposed to be doing, they're basically causing problems and making everything worse.

For instance, with people with congestive heart failure, heart, about half those cells are senescent or with diabetes. And we find you just get rid of the senescent cells and they're dramatically better even just from that.

Peptides for aging, mitochondria, and autophagy

So confer and you know, there's a lot in the mitochondrial hypothesis about this, about my top veggie autophagy, about, you know, maybe doing a five day like limited fast, you know, every three months.

Right. This is the idea behind colon in some of these limited fast because you got to clean out the cells from these senescent, these old cells that are sitting around that are causing a lot of free radical oxidative damage.

So are you saying that in these with the peptides you don't necessarily cause my problem? I actually just discusses my wife. We have the pro line sitting here.

But I have such hypoglycemia when I don't eat regularly, I'm a little bit afraid of doing it because usually I get these pounding headaches. But I realize I have to do it as I get older to clean out my body.

Are you able to do some of this with the peptides without necessarily doing autophagy? My tof AG, meaning we're cleaning out those cells from damaged mitochondria, which are damaging our body.

You can do this with peptides without. Absolutely. So you can take a couple of that peptide. But the satin tube in phi satin which is a supplement, you take that like three days a month.

And that will, basically start getting rid of all your senescent cells. Or there's a, a peptide called foxo for DRI, and that will kind of do the same thing.

And and yeah, so we can certainly get rid of that. And the problem is with all this, you know, intermittent fasting, which is great with autophagy. But when you look at the thyroid, if, if someone diets in their studies by Libo and others that if someone significantly diet elite you know in the studies that three significant basically sequence of diets at least three times their metabolism drop, their thyroid levels drop, and we'll, we'll check everyone's basal metabolic rate and their thyroid levels when, when they come in with a special task called Di flex, which the blood tests are.

The TSH is totally is totally inaccurate. But we find that if you are dieting, especially if you go on these intermittent fasting, you'll basically drop your metabolism by 25% on average, and it doesn't go back to normal after you

resume eating.

So people say, I've wrecked my metabolism. They have now ways to get around that is taking okay and which most people need, whereas if they get older or if they've been stressed, if they can't sleep or, you know, or at hard, hard time losing weight or have dieted, you should be on a little bit of a T3.

But yeah. So, you know, and also trauma. Okay. You really want all this ketosis, but just take your MCT oil. It goes right to ketones. So you can basically take these peptides and take, MCT oil.

And now you've got everything and you don't need to fast. So these are oral peptides. These are not all injectables. These are things like someone like me could do.

Yeah. The, the first one, the just at nib. And by setting our oral the fox for dry little subcutaneous. Okay. Got it. So, let's move on a little bit because our focus on this conference specifically is brain inflammation and neuro protection.

I have an article that I just submitted to the Journal of Alzheimer's Disease Case Studies. It's under review. It looks like it's been accepted where we're able to reverse inflammation using some of the standard drugs.

Now with with Patel 181 Patel 217 beta amyloid. In our study, we lowered Patel 217, which is one of the most significant, inflammatory markers. You know, as far as, like your chance of going on to dementia, right, 18 to 20 years later, we showed this with our short term therapies, with the peptides that you're using.

Let's talk about cognition. Because cognitive functioning is terrible in a lot of these line patients. Some are mild. But a lot of the ones we see their brain fog and their memory concentration is terrible.

So what peptides can improve cognitive functioning and maybe break it down into injectable versus oral. So people have a sense like what's available for them.

Yeah. And so if you look at injectable, the one that's been around forever, it's approved in like 72 countries. The cerebral system, which is basically pig brain all round up like totally sterilized with never been an issue with it over the last 40 years.

And it has multiple peptides and shown to dramatically improve, Alzheimer's and other dementias, autism and those things. So, that that is an option. And, again, it's hard to get in the US because it's safe and effective.

So they don't they don't like to have it. So we came out with with integrated peptides, came out with the oral version and with the oral version one dose.

They had EEGs on on patients. And they found for basically about 90 minutes after, taking the oral dramatic changes in the EEG to show that it actually does absorb and, and it works.

So that that's what we called our cerebral pap. And, and then we have a cognitive pap, which actually has the bio regulator version of that, which is a single molecule, and it is shown to be actually dramatically more potent.

And then we also add what's called the vessel bio regulator, which actually makes things actually, absorb much better in the brain. So the the studies are numerous studies on all this showing dramatically improved cognition, although there's no huge randomized, double blind placebo control.

But the testimonials are just incredible. With all these things. And, you know, with with all this stuff, you look at all the vaccination studies and that like just BBS, right?

I am putting more weight into multiple anecdotal studies from our patients than I am in some big trial. Oftentimes, just like there is so many things that you can do with the cognitive function.

And then you look at if we look more at the injectable and the things like de hexa clanks, Cmax, which all they work on, very different things, you know, to try to go through in detail while these things right now.

But you do a little nasal spray of these and I mean people can notice an improvement and even just, you know, hours or days. So question my new book that will be coming out later this year, Ending Chronic Illness.

We found that all 16 factors on my absence model were associated with dementia and Alzheimer's. In a lot of our patients, when they have these really bad cognitive issues, it's line like number one on top of the list with Bartonella, but usually we'll make it worse.

Sometimes we'll see viral reactivation with Epstein-Barr herpesvirus six. But probably afterwards after the infections comes environmental toxins like mold and heavy metals affecting cognition.

Now we still see like leaky gut muscle activation with vitamin mineral deficiency sleep. There's a lot of things that affect cognition. All 16 M's. It's factors for these peptides to work.

I guess this is an important question for me. Do you have to clear mold? You have to clear all these infections using biofilm persistent drugs, or can you still get some effect?

Do you do you know, do you have any evidence of that at this point of where would doctors fit it in at this point? Yeah, and that's a very, very good question.

And why I wrote is in e-books. I don't like your book. It's just an e-book. But the the peptide protocol for the rapid Treatment of serious chronic inflammatory response syndrome.

And what, you know, Richie Shoemaker has done so many great things for this whole thing. And, you know, all these patients have more, but also typically Lyme and they are brain on fire.

So and so we kind of stood on the shoulders of rich shoemaker giant and found that we can make all this stuff happen.

Brain inflammation, cognition, and neuroprotection

So his whole protocol is to get rid of the toxins. Right. And then that will then boost the immune system. But no, we can boost the immune system right off the bat, which then allows you to detoxify much faster.

So it's just kind of flipping one core, part of the protocol. And we now have set up because I wrote it because I was like so many patients were like, oh my God, I've been doing the binders for seven years.

I'm like, I'm too A. D. D. for that, you know, let's get you better quicker. And we found that we can really just speed that up by, again, boosting the immune system, which then boosts the mitochondria because you need actually intact and functioning mitochondria to kick all those toxins out of the cell.

It's it's it requires energy. So it allows that to speed up that whole process of detoxifying. So, so for the people, if I'm hearing this correctly. So some of the people, most of the people we'll treat with that some combination therapy.

And to Quinn Mallon you know ivermectin and herbs for bobcat and were detoxing mold. They do get better. But there's always going to be a subset. We all see it of highly sensitive patients.

And you'll Nathan probably sees it a bit more than I have. But we're they're slow to respond. Right. These are the people like you've done everything that works for the majority, but they're very highly resistant.

Is this may be one of those areas where we want to consider these type of peptides. Yeah. And and I think I mean it's a core for us because that's what we, we know.

And it just you know, but so many people come in, they're doing everything right. But just it's not working. Obviously you fix the immune system like myself.

You know, I was doing years of IB antibiotics and didn't get better at all. Just had, you know, basically, you know, just all the side effects and Herkimer but I wouldn't I could not get a sustained, improvement where now the peptides will allow you to, to get that sustained improvement.

Right. I mean, what, what we discovered and I mean, I didn't discover it, but what I found in clinical practices, when John Hopkins discovered with the Shopee's group for the University of New Haven and Stanford, Kim Lewis, that these are biofilm, persistent bacteria, the problem is, is that ibuprofen doesn't hit the biofilm, persistent forms of the bacteria, right?

So, I mean, part of the problem, of course, in trying these things I haven't had to use, I've had actually in years, ever since we discovered Daptone.

But but it it is true that even though it's highly effective for the majority of people and we have this case study now that's, you know, going towards publication, you still have to do all these other things of treating Bartonella and Bbca and mold.

And it sounds like this is a very good like integrative therapy to add in there, especially for these slow to respond patients. Right? I've been on these treatments for years.

Yeah, absolutely. And for instance there's also like 37 antimicrobial peptide which will punch holes. You know basically it's natural. So typically the the body will one you basically it will, it will basically try to trap the infection.

Basically what the a laying down fibrin on it. And then it was inject L 37 is antimicrobial peptide into that space. But the problem is is that so immune activation of coagulation is a is a part of your immune system.

But the lime has basically again turned it on its head and wraps itself in fibrin and has the same, basically an outer surface molecule. So the body just it doesn't see it.

It just looks like it's fibrin. But, yeah. So L 37 can be a key one. Now it doesn't really the immune system, it actually does more of the inflammatory, but it directly kills.

And it's very synergistic with all the antibiotics. That's great. You're talking about a lot of different peptides. One that I think a lot of people have heard about is is BP 157 so can you speak a little bit at this point about its use for clear trophy killing?

But there's a debate about its bioavailability and different forms. Yeah. We talk a little bit about oral versus injectable and how we can use it, because I think it's maybe one of the most popular peptides that's out there at this point. Right.

It really is. And and because it does, it works for so many different things. It works for God. It works systemically and and people and and rightfully so.

You know, doctors say, oh, you can't take oral peptides because I just get broken down in general. That's true for long peptides. Now for shorter peptides.

And some exception like BPC 157 is 14 amino acids. Now it will survive. It's it's it's basically you produce from the gut. So it will survive if it's acetal eight and emanate if it's capped.

So the body will cap basically peptides and proteins that it wants it to survive. So because it has an effect so it if it if it needs it to survive, it will put these caps on it.

So if you look at the products out there, they're actually the company had a patent on the, assimilated nominated

BPC 157, but the patent ran out. So they then made arginine salt, which is not capped, and said they called it stable BPC and it's actually unstable BPC because it basically gets broken down.

So if it's tapped, it has a much, much better chance to be absorbed and basically resist all the enzymatic breakdown. In fact, if you look at BPC 157, bioavailability studies, the ones that compared oral intraperitoneal, subcu intravenous, it was equal potent.

And every study that that showed that as long as it was capped. So yeah, you can totally take it orally again as long as this cap and the ones that are Catholic, the arginine salts, they'll add what's called snap to it, which breaks open the tight junctions in the gut so it so it can absorb weight.

We're fighting leaky gut. And then you take BPC 157 that needs to break open your tight junctions. Like you don't want to do that. It was your right. So it's the opposite of what you want in that particular case.

Exactly. So they're you know, they're fudging the whole thing. And let me mention one thing, because I know Andrew Huberman, mentioned that he's concerned about BPC 157 because it may increase the risk of cancer, because it increases angiogenesis.

Right. And and no, it is so far from the truth. It increases angiogenesis in basically damaged tissue, not in general, but also things that increase angiogenesis, vitamin C, vitamin D, they don't increase cancer.

So actually back to studies show dramatic reduction in cancer. And all the studies that looked at cancer and BPC. 157 so you'll we we hear that all the time.

It gets thrown out there because people do a search like, oh, watch out for cancer. There's no reason to believe that it could be increase the risk of cancer.

You know, my my take on that in part, and I don't think there's been enough research done, is that when we measure VEGF vascular endothelial growth factor as a marker.

Right. Because that's ultimately what this does is it's creates angiogenesis. Right.

Detoxification, chronic inflammatory response, and resistant cases

It's Bartonella that shows up even long-covid when you find elevated VEGF and you do some of these panels, I'm convinced at this point it's not just the spike proteins from Covid that are sitting in the intestinal walls or sitting in the vascular walls that are driving inflammation.

I think Bartonella is there a large part of the time and it's now associated with cancer. It's associated with melanoma. They're finding in an inflammatory breast cancer.

And the problem is in cancer. They have not looked at these bacteria. Even Lyme is associated with certain cancers. Have this you know, in my new book with like certain forms of leukemia like CLL.

I don't think people realize it. So bacterial infections do cause it just like viral infections. And I don't think there's been enough research there.

I think trying to highlight just one thing that you know, is driving angiogenesis doesn't make any sense to me, like you said, because there's other factors that are there.

And like, I mean, we're finding Bartonella in 90% of our patients. How do you say that part or these other things are not even responsible? Oh, I'd totally you know, we try to just, you know, single out one thing just a little bit. Jeff's story.

I had the my bed gap was off the chart from from Bartonella and my leg. The veins were just so gigantic. And they

weren't they weren't, you know, a basically sparrow story.

I mean, they weren't, varicose veins. I just had giant veins everywhere, and I remember I was walking up the stairs, a little kid goes, daddy, what's wrong with his legs?

You know, and and so I went and got them sclerosis. And they sclerosis. My greater sapien is. And I'm like, oh my God. And I did my like, I had these big veins here.

And then I got rid of Bartonella. Now I have no IV access because it's corrupt, stole my veins. And when I had all the high VEGF. But yeah. So, just a little side story there.

Yeah. We were discussing as far as, like the factors that are keeping people sick and one of the things that does cause brain fog is low blood flow to the brain, right?

Pops to side anemia. These patients that stand up, they get dizzy, they feel like they're going to pass out. They do pass out their fatigue. They have palpitations, anxiety. Talk.

Can you talk a little bit about autonomic dysfunction in Lyme and kind of maybe how these peptide and by regulators can help a little bit with it. Because it's it's a big problem.

And a lot of our patients it is you know and people go oh my gosh we got a pox patient, you know. And it's like, oh shoot, what are we going to do? I don't even worry about it anymore because we have found that when you give basically the by a regular the pineal by a regulator and it just kind of baseball boost, adrenal function and synchronize it and then but also the vascular bio regulator.

And so what happens with these patients? They have a lot of inflammation. And they and all their blood vessels are inflamed. And so they're very stiff. So think of like a solid pipe.

Their blood pressure goes high and then just drops really low. But if it was more like a balloon then you won't get that. So we find when we combine the pineal we use pineal Pep which combines a number of different pineal peptides.

And the and it has vascular peptide in there. All of a sudden that goes away. So you see an improvement in some because you know there are some Pots patients that we'll go through like the anti hopper dynamic neural retraining and the up the air and primal tries to go through limbic retraining, getting rid of the mold.

But some of them still need to stay on, fluid cortisone and midbrain and drowsy dopa because they cannot maintain a blood pressure. You've actually seen these kind of peptides help with the resistance.

Like, it's funny you started naming those meds. Like you wouldn't use those meds forever. Because you don't need to. Yeah, that's right, it works. Almost without exception.

And how many, how many patients, for example, have you tried this on? Just so I can get a sense for the audience? I don't see that many patients anymore.

But, you know, over the last 20 years. Okay, great. Yeah. No, it's a it's a very common problem. And it does contribute to obviously the fatigue and the brain fog that people have.

Yeah. And and and as you know, it's hard because like we're treating so many things and all of a sudden because typically what happens is they go through like oh how was that.

Oh yeah. That's gone away, you know. And but that wasn't you know, sometimes it is the main thing they come in with, but oftentimes it's not, it's like a side thing.

And so you don't like track it. And we're terrible at tracking stuff and, and that. But yeah like it used to be like oh no.

What are we going to do too. Don't worry about it.

You mentioned a little bit earlier about the TSH not being reliable, and there's a thing I should tell the audience about because it's true in chronic Lyme disease and in my patients, in my population, all the inflammation gets to your hypothalamic pituitary axis.

And the inflammation basically can affect the pituitary. And the TSH goes low. So I have a lot of patients. They have a low TSH but they're not hypothyroid.

We learn in medicine. It's like the opposite like high TSH is hypothyroidism. Low tissues, hyper. But it doesn't apply to line because of the inflammation.

So what have you found specifically as far as like again these peptides and bio regulators, what have you found as far as like because a lot of our patients like over 90% have adrenal dysfunction.

Many of the men have low testosterone. The thyroid is thrown off. They have autoimmune, you know, issues.

BPC-157, angiogenesis, and cancer concerns

Where do you fit in these peptides and by regulators in that population. Yeah. And so thyroid was my my first love. And that's what really got me better initially was doing T3 with my initial line.

But yeah it all line patients are low thyroid. You know or at least 99.99%. And the problem is and you look at all the studies and I published a number of review articles on this, and we have actually a nonprofit site, the National Academy of Hypothyroidism Integrative Sciences, but shows that the way that we diagnose and treat thyroid in this country is wrong.

It is, especially with any chronic illness. What you'll see is and I have a basically eight hour PowerPoint on this, but to explain that these patients will have low normal TSH, high normal T4.

And so the doctors go, oh they're kind of high thyroid. No it's low because they have low normal three and high normal university. And these patients will respond to T3.

You know it can be dramatic. I mean not everyone totally responds but it's everyone's low. I mean they have numerous things going on. You just want to make sure their adrenals are covered.

And because then they may not tolerate it because they're low adrenals, but they are all low thyroid. And just I had also, you know, patients who come in, they've been on great treatments, but why aren't they getting better all of a sudden?

We add a little T3 and it makes all the difference. So so in these patients and again we were both treating a lot of these patients with thyroid diseases.

It's extremely common in this population. So explain a little bit like apart from giving them T3 which, which can be helpful. And you know there's a difference between tissue hypothyroidism, right, of what actually gets into the cell and what you're finding in the blood.

Do use the salivary hormones. Do you still use the blood to measure it. And how does this go along with your bio regulators? Like do you sometimes use them together?

Yeah. No, thank you for asking. With the thyroid we do what's called thyroid flex, which measure the tissue level of the British Medical Journal showed that a knowledgeable doctor looking at someone's ankle reflex was a better test for thyroid than blood test.

So this was a British medical journal, you know, top five journal. Then we also check people's based on that a

bollock rate right. But and so with that so we will give to you, which now we're now kind of replacing with the bio regulators.

So there's a thyroid bio regulator which studies show that you give that let's say people are low thyroid. You give it and that will raise their or T3 levels.

But it didn't work for Hashimoto's. But the thyroid access by our regulator not only would boost their thyroid levels, but it would also dramatically reduce those autoantibodies.

So that's is in the integrated peptides, thyroid PAP, which is the thyroid access by a regulator. So a lot of patients can do without thyroid with that, but will tend to combine, just because we want to get them going quickly.

So so speaking of hypothyroidism, you want to discuss a little bit the effect of GLP ones, because a fair number of our patients, right, who are overweight have been using things like gooseneck will govi, a semaglutide and all the different derivatives.

You want to talk a little bit about the relationship of that in the family. Yeah. And the GOP ones, obviously everyone's just, you know, going crazy with them, but they're actually it's one of those things usually when you try to take a drug that is for a specific thing, let's say diabetes, and then you try to use it for everyone should be on it for weight loss.

Usually there's a lot of side effects, but there still can be. But it's showing that the side effects are actually good. Lowering brain inflammation. You know, and and basically having a lot of anti-inflammatory effects, but also again comes down to people don't eat.

And there they basically get into, you know, where the body senses that, hey, we're starving now, it's going to drop your thyroid levels and the thyroid won't go back to normal even when they go back to, eating.

So the same thing we're talking about with that intermittent fasting, you got to watch out with the GOP one. So patients are like, oh, I'm doing great. I'm doing great.

All of a sudden. Now they have to take it just to stay even, and then they'll start gaining the weight back. So it's one of those things where a little, thyroid by a regular thyroid access by a regulator or, and, or a little bit of T3 can just basically make all the world of difference.

That's great. I hear that you have a new cutting edge epigenetic test for complex cases. And I think this is about like some unique custom peptides that you figured out for people for these help with these abnormally upregulated genes.

You want to talk a little bit about this. Yeah.

Autonomic dysfunction, thyroid, and GLP-1 effects

Beyond beyond your genetics of how these things can help. And it's not me. It's actually a research lab that we work with. And it's like it's like Nobel Prize stuff.

So they'll check the person's blood, either that's cancer or chronic illness or even just anti-aging. And, look at what genes are upregulated abnormally.

For instance, I mentioned before we got on where I have this basically have terrible genetics. And with the chronic Lyme upregulated, all these horrible genes, I'm dumping amyloid in my brain as up.

So basically it will they will synthesize custom peptides unique that will target like 15 different abnormally activated genes and, and then will basically repress those in over a year.

And we're we just started doing it. But we're already the results are amazing. I mentioned that the cancer patient the bladder cancer patient and it just it just is just it I'm blown away with the the science behind it.

Right. So this this is really something for people to consider. For example, if they do the genetic testing and they notice that they've got certain markers, right, that they may age quickly or things that these are things that might be able to help.

Yeah. But again, it's genetics versus epigenetics. So genetics is basically what you're born with. But epigenetics is what is upregulated. And so the genes maybe have 15 to 18% of well we're going to affect your health.

But epigenetics is basically what is going on. So you look at you know basically infections will upregulate the the worst genes. And they'll basically rapid aging.

So all these line patients, they're rapidly we're all rapidly aging with our Lyme people. And and so that is basically will tell you what is actually causing the symptoms or is really going to be the, the risk.

So, so they're going to basically shut those genes down, instead of just saying, oh, you're, you're likely, you know, more at risk for this. Well, that's that's basically a static thing.

These are dynamic. And we can monitor them and see and see what, you know. Basically genes respond. So it's pretty incredible. That's great. So one final question that I'll ask you if people can get in touch with you, websites and help people in touch.

But just one other quick question. So inflammation ultimately is underlying all these chronic manifestations for Lyme infections. In fact, for all the the chronic diseases that we're seeing, it's the basis of my new book.

The question I would have for you is insulin resistance and metabolic syndrome. It's 50% of Americans. A third of the world has nonalcoholic stay out of hepatitis or fatty liver disease, which causes metabolic syndrome, insulin resistance.

It's known that it causes also brain inflammation. It's one of the causes of dementia, right. Do you have treatments for this because it's so common in the population, whether they have fatty liver or whether they just have metabolic syndrome.

Do you have peptides or anything you can do for this population? Yeah. And the nice thing about all these by our regulators, they're very tissue specific.

So for instance like with if someone has answers we give them the pancreas by a regulator dramatically improves insulin resistance. Kidney. You know I have chronic kidney disease from, from Lyme and it just kind of hangs around.

But if I just take the kidney by a regulator and drops my creatinine dramatically, normally it's like 1.6 and then it goes down to 0.8. We've had people on dialysis that we've gotten them off dialysis.

And in like for instance, one of our medical systems, our mom was on dialysis, like, oh, you take this. I forgot about it. She forgot about it. And her mom calls her and says, the doctor said she's never had anyone get off dialysis.

And and so it just like, oh, wow, you know that saying does it every time like we know, but it's, They're incredible. You know, liver we we give you they do elevated liver enzyme fatty liver and give that dramatic reduction in, liver enzymes.

Epigenetic testing, metabolic syndrome, and contact information

And so what the nice thing is, yeah, whatever it may be that we can, you know, basically give those specific bio regulators. The problem is, you know, there's 21 different bio regulators you want to take, you know, this one, this

one, this one.

So that's why we're putting them all together. For instance, for the thyroid, you know, the thyroid pep. And we'll, we'll combine them all for more or with the a cognitive pep.

We'll put all the brain peptides together. So that way you don't have to take 21 different peptides. So you're talking about a lot of different peptides today right.

We've heard a lot about BPC 157 the others. How do people learn about this. Where do they get more information? What is your website? How do they contact you? How do they how do they get more information?

Yeah. And and we're going to finally keep threatening it, you know, an online training program. I'd love to have you involved. And, and they can go to our website.

Whole medical group. Joel TRF med.com. Then for thyroid, we have the nonprofit National Academy of Hypothyroidism, NIH. Uh.org. And then integrative peptides has a lot of information.

And if anyone has any, if they have any questions, they can just email integrated peptides. And I'll send them a bunch of information. Great. And I mentioned that we have our the e-book, the Peptide Protocol for the Rapid Treatment of Sears.

I think that's available as a gift. That's great. So again, one more time, just so people have because I think a lot of people they know about the peptides, but they really want the right information from an expert like you.

So again, just one more time, the website and the best way to contact you. Yeah. So integrative peptides integrative peptides.com whole talk Mediacom whole TRF Mediacom.

That is great Kat this was fascinating. You know I always learn every time I speak to you about these things, I, I learned that I think to myself, gee, I'm trying to have healthy aging.

And I'm thinking maybe I should speak to Kat to better I as well. I'm doing. And I know it's kind of like drinking from a firehose. We're all over the place, and, I apologize for that, but, hopefully you will give people kind of an introduction and where that will kind of pique their interest and to do a little deeper dive.

No, I think it's important because people need to know all the options that are out there, you know, at this point for healing. I mean, I have certain protocols have developed with Daptone and the M6 model, but there's a place for all of these, especially in these resistant patients.

I may have great results with the majority, but there's always going to be a certain grouping of patients that need something else, right? Whether it's peptides, that's what they need something else to move them in the right direction.

So I think it's important for people to learn about it. And I'm really glad you've been kind of pioneering this for, you know, decades at this point. And it's been your own healing, right?

I mean, you're you wouldn't be where you are now if it wasn't for the peptide. Yeah. No, it's totally true. But yeah, it it's basically it's a good time to be alive.

I think, you know, there's so many new things coming out and it's just it's hard to take in what's bogus, what's not. But there's a lot of cool treatments.

Seems like every month there's something new and but, you know, publishing all all the things that you're doing and, and writing. I got a I got to read your book. That sounds amazing.

Yes. Thank you. So for everyone who's been listening, my name is Doctor Richard Horowitz. I'm the co host for the,

2026 Healing Line Talk. We're talking this year about the Neuroinflammation Brain Protection Summit.

You were just speaking to Doctor Kent Huff and myself about peptides and how we can help the chronic Lyme disease patient who has, in fact, multi systemic issues and how peptides help with a broad range of hormones, immune issues, leaky gut.

We covered a lot today. So please make sure you're listen because there was a lot of information we covered. And Kent, when we come off you and I need to touch base a little bit.

But I want to thank you today for spending the time with us. And again, please tune in for another episode soon. Thank you so much.