Introduction and Speaker Background

Can't hold off. MD is the medical director of the whole staff medical group and the nationwide hole tour for medical group affiliate centers. He is the founder and medical director of the nonprofit academy National Academy of Hypothyroidism, which is dedicated to disseminating new evidence based information to doctors and patients on the diagnosis and treatment of hypothyroidism and advanced integrative diagnostic and treatment protocols.

He is also the founder of Integrated Peptides, which is dedicated to training physicians regarding groundbreaking peptide therapies for their patients and bringing the highest quality natural bioidentical peptides as supplements with unique delivery systems to doctors.

Doctor Holter is an internationally known lecturer, author and innovator in cutting edge research and treatments. He has personally trained numerous physicians across the country in the use of bioidentical hormones, thyroid replacement for complex hypothyroidism syndromes, peptide therapies, immune modulating strategies, stem cell exosome and growth factor treatment.

Hormone replacement therapy for complex endocrine dysfunction and innovative treatments of chronic fatigue syndrome, fibromyalgia, Lyme disease, and other chronic infectious diseases, serious neurodegenerative diseases, and many others.

He is a fellowship lecturer for the American Board of Anti-Aging medicine. He was the endocrinology expert for AOL health and is a guest editor and peer reviewer for a number of medical journals, including endocrine, Post-Graduate Medicine, and Pharmacy Practice.

Doctor Holter has published many peer reviewed endocrine reviews on complex, multisystem, poorly understood conditions. He has demonstrated that much of the long held dogma in endocrinology and infectious disease is inaccurate.

He has been a featured guest on CNBC, ABC news, CNN and many other media outlets, so it's a pleasure to have you on the show. Doctor Holt, I'll call you. Can't do.

You can call me Joe. I know that you do a lot of work in immune dysfunction, in diagnosing it and treating it. You have quite a protocol at the Holthaus centers.

Why don't we start off by having you tell me a little bit about how you look at the immune system, how it's affected by environmental factors, by aging, and then what you do to, to to right the the ship, so to speak.

Yeah. And and basically a family become an immune monitoring clinic and, but use your product for, quite a while, and we have a longevity program, and you'll check people's health before and after, and then this stuff works.

And but really, we brought kind of peptides in with them and really the media that got chronic Lyme terrible. And we had three and a half years of living antibiotics.

Nothing worked because I had no immune system to basically, you know, kill the infection and, you know, even give antibiotics. But you can only knock them down so far.

You need to take over. And if you think of kind of your immune system, everything's an oversimplification because it's so complex. But, you know, one side, you have one other side to this good stuff inside the cell.

This is nope. Outside the cell. Now, especially with Lyme you get Lyme and ABC Bartonella. Same thing that they as soon as you get infected they start secreting cytokines and things that suppress that one.

Then they go inside the cell. And now they're chronic. And your body cannot fight the, the infection, which they won't get. Why that that's true with aging.

You know, the in the hospital with sepsis twice. And they kept saying, I heard the nurses during the ship say, oh, this is that Aids patient. It keeps coming up negative for HIV because my is had no immune system, and I had three and a half years of I. V.

antibiotics that did nothing and doses that no one would give anyone. And so I went searching and I found, you know, peptides. And I went to heart failure.

Couldn't stand up, couldn't take me an hour to walk up the stairs.

Immune Dysfunction, Aging, and Peptide Therapy

And I'm sorry, getting not getting oxygen sucks. Yeah. I'm like, I'm like, I can't live like this. So I knew that, I really thought about, you know, up on myself every year.

I'm like, this is just, terrible. The cardiologist said, in ten years, maybe you get 10% better. Like, are you kidding me? So I was in, Europe, but I found peptides, and I didn't, you know, I tried so many things that you didn't get my hopes for any one thing.

And also, I'm like, I just walked up the stairs upright, you know, and, I wasn't really allowed to bring a man just because of predatory rules. But then they became available in the US and what a lot of these do, for instance.

But I was in beta for or orally. Tb4 frag will, actually raise that one. So and that one not to monitor your body for infections, but also, cancers, but also clears the senescent cells.

So a big problem with aging. Now if you keep your telomeres long then the cells don't go into senescence. But let's say they go into senescence. They're supposed to go under a pop ptosis which is programed cell death and die off.

Now if they don't, it's not just they have cells that are doing nothing. They start secreting all this oxidative stress and reactive oxygen species. And then now did some, you know, studies like, you know, talking about our cell danger response.

But I think it's more of a global thing. And, if you do things to get rid of those, it's like, for instance, heart failure patients, about 50% of the heart cells were in senescence.

So they're secreting all this reactive oxygen species and they're not doing what they're supposed to be doing. And that's what I had. I had diastolic dysfunction.

Everything was fibrotic. It just wouldn't let the heart fail to, to get any blood in. And this became stiff and tons of oxidation, but they were totally resisting.

Said no immunity. So you raise that immunity. That's monitoring to kill your own cells. It sounds kind of strange. You kill your own cells, you get younger, but then you can get rid of those, and then then you become much younger.

You know, a lot of the stress is they don't know you, you know, lowers the telomeres and you know, so many things and it goes along with, you know, stress is a killer.

Same thing. You look at anything that lowers telomere, lowers that one and keeps you from getting rid of those senescent cells. So, couple things like, thymus and beta four.

So as you get, when you, when you're around 9 to 15, your thymus, which is in your chest, it starts in ballooning and moves faster if you're obese or have diabetes or a lot of oxidative stress, and it drops to about 10%.

And what this does, it causes that low time. The the low key one cells and then your body. It raises too much trying to fight infections. It's and it's associated with all the diseases of aging.

So it's just immune shift. And you shift this back. And that was key to me getting better with line. And which you know, nothing was working. And I had immune activation of platelets.

My blood was so thick, you couldn't you know, you couldn't we couldn't do a test. It, you know, you we everyone's kind of familiar with that now with Covid.

And it's just it's a shift so and biomedicine made a or is actually shown to be undetectable in Covid and and so you get all this inflammation and your body can't fight it in your causing all this hyper coagulation.

So you do things to modulate the immune system. And stress is a killer. And people think stress lowers your immunity, but it's worse. It lowers that one.

But it raises that too. So you get sick and you're basically, but it it bases all the negative effects. So when you look at when thymus drops, that's what all diseases of aging, autoimmunity, cardiovascular disease, arthritis, you know, basically everything starts breaking down neurodegenerative diseases.

So if you have a way of breaking those back now, they do help boost your your telomeres and make your cells younger. But now you actually, you know, result in, a younger body.

You don't you're not prone to those all those diseases of aging, and you're able to reverse those, including, you know, cardiovascular disease, autoimmunity, they're like the best thing.

And we'll say we're giving this a B modulator in there. Some people call me old patients. Immune boost. Why don't you start with my, autoimmunity? I'm to high immunity. Right.

That's it's thought of it like, you know, like, just think high or low, but it's like this. So. Yet it monitors like that. So it's part of our longevity program, which again, we love the to 65 and goes along with it.

Well to you know basically check physiologic age before and after and you know, and so many things play into it. And you look at all the theories of aging before you go to the theories of age, you can just tell us maybe a little bit more, for our listeners and, and for me too.

Thymus in beta four is what you're talking about. And that's a peptide that, has what structure is, is it. Yeah. So it's it's basically a, from the thymus.

And so you're replacing that thymic peptide and doing that job of the thymus. I was a number of them. There's times that alpha one that's approved in about 30 countries for everything from chronic infections to cancer.

And but because people started using it for Covid safe and effectively they banned it. And then there was it has been banned. I wasn't aware of that. Yeah.

They said you no longer make it and but so thymus a bit of for the are these sort of sort of speak bioidentical in other words is what you inject or take orally.

For the peptide therapy. Is that the exact same structure as the one that your thymus was producing previously? Yeah. And the that is produces a lot of them.

And the main one is thymus and beta for the problem with thymus and beta for it's 43 amino acids. It has different parts to different things. And one part stimulates mast cells which is good in the short term.

You do want some inflammation and drive cells to the wound. But long term this is where fighting like with chronic Lyme is. They have massive activation syndrome and so well the upstream effect usually over rides that mast cell

activating and you can't take it orally.

We took out a fragment. We took out that part that actually is the moon modulatory part and the healing part and took out the mast cell activation part.

And so and it's orally available. We're famous and data for would not be. So that's the thymus and data for frag. Oh that's for sure. Yeah I was yeah.

So that's that's something you've developed your your company. Yeah. So I you know I just, you know from my basically, you know, when something changes your life and then it became available here in science.

Really. That's why I still do lectures around the country on peptides. And they changed our practice. And, again, changed my life. And they made all these chronic infections were able to get better so much quicker.

And and also, you know, things like autoimmunity, it's like it's it's great. It's like you're one of the people get out of nearly all the autoimmune, people.

They have the immune system ActionScript like this. And we're seeing more and more of this chronic illness, chronic fatigue syndrome, fibromyalgia. People are aging faster, you know, cardiovascular disease.

It's scary. It's like, you know, people I went to school where they're dropping dead. It's like a little, you know, wake up call. And, and so what what these would be like famous now, for one was more of a peer, one booster thymus.

And beta four is a modulator with a lot of growth factors. So it will raise that one lower that to and then I'll spike growth factors. There's another one called body protection compound 157 BPC 157.

That's actually normal in your gut. And it healed so many things. And when I give lectures on it, people are like, wait a minute, you know, it's just hundreds of lectures on it works orally for your gut, of course.

And but we'll also work for, is a mass, Alzheimer's, if you have strain, you know, basically, ligaments, you know, knee damage. And it does that and then so that combination, you get that under control and things like, you know, parts, you'll see where, you know, they kind of oh, I'm not immune system is is screwed up.

It will fix autoimmunity. It's great. And you know you go to your endocrinologist. People have Hashimoto's and they don't even check their antibodies because they don't think they can do anything about it.

But that is a key therapy. And then there's another that being when you say that, which is a key therapy for, for lowering, thyroid peroxidase antibodies, for instance.

Or they were oh yeah. So thymus and alpha one which again you can't get but the, the T before and especially before a frag. And it's also 100 times as potent as T4 and much cheaper and available as a supplement.

The from TB 4 or 5 fragments. Yeah. So that's it. Integrated. Yep. So how do you choose who is a candidate for them. And then how do you dose and what response you're looking for.

Yeah. And and so a rule is never, never use anything in isolation and. Oh okay. So with the, the tb4, you know, you need a, a prescription for that and injectable.

And it does do my mast cells with the oral. The standard dose is one capsule twice a day. Absorbs very well whole. You know, a lot of peptides are very difficult to take orally because they're broken down.

But this is not, the beads that, and then but if someone's sicker, they'll, Yeah, we'll, we'll do higher dose. Very safe. They like that and BPC they tried to find it to humans, gave them IVs and just kept going up on the dose thousands of times the normal dose.

They can't find a side effect. And, never mind another 50. Yeah. And and then there's another peptide called a battalion, which is a pineal, peptide, which, people kind of think of secreting melatonin.

And it does it brings the melatonin levels back up to normal. Yeah. I mean, you've seen that in those, overnight melatonin saliva test. Yeah, yeah. And, and epi talent does that.

How does it work? Curious. Oh, yeah. Basically it's it's, much, you know, it's pineal hormones. It will stimulate the melatonin, which made in the pineal gland.

But it's a very interesting compound because it will fix your hypothalamic pituitary dysfunction. So then I have a whole lecture. We have our nonprofit, National Academy of Hypothyroidism, where I've been saying for years that the standard way we do thyroid this country is wrong because everyone who as they age, as they, you know, more stress, toxins, pesticides, MPs will basically make your hypothalamus fidgety.

Dysfunction. And how do we standard way to diagnose low thyroid is that, you know you taught a medical school for 15 minutes. Whatever. If your thyroid levels low drop your pituitary responds, it increases TSH prominence.

As you get older or sicker, your TSH doesn't do that. So you get low TSH but have low thyroid. And so it will fix that and lower the inflammation of that.

And it also rejuvenates the famous. So every talent does all of these things. Yeah.

Thymus Peptides, BPC-157, and Immune Modulation

And they had one study where they gave this is a rat study where they gave up these 135 rats who were menopausal. They gave them all up a talent. They all started menstruating, and 25% had live birth.

We were using it in our fertility. We'll see what's called anti-malaria hormone, which is your reserve of your eggs. That goes up. But you see anti-malaria hormone levels go up in so sort of late reproductive age women on Epi Talon that seem pretty revolutionary.

Yeah. And from I mean, when you're pretty close to not actually having any it's a very low no number. So you're talking about going back from the 40s into the 30s in terms of your antimalarial hormone.

Yeah. And their FSH. Now it will come down as your levels will come up by way of levels. And it seems to also go, you know, fixed the diagnosis which is converts T4 to T3 and T4 diversity three.

And so it's, it's pretty amazing. So I use that. Okay. I'm just I'm a I'm, I'm, you know a little flabbergasted because. So I want to know about your dosing and, and how you, how you go about achieving this with epi tell because I don't use in my practice and I sounds like I'm going to start by.

Oh yeah. And before today I'll tell you another study. So this is a human study. They took 100 and something patients with severe cardiovascular disease.

They gave them just six doses of, EPP Italian and basically thymus, in which, it was famille in different version, but works basically the same. The mean jittery.

They only gave them six doses and they found the ones on normal therapy, you know, Ace inhibitors and better than their cardiovascular function got worse over time. They followed them for 15 years.

The ones who got the EPP, Italian and thymus and their cardiovascular, function got better, better endurance, dramatically less heart attacks and strokes.

They had a 25% increase in mortality, a 200% decrease in cancer. Again, you raised that to one. And then they did, a subset of that. They took patients and kind of gave them more continuously, still very low.

But and they found they had a 400% decrease in cancer. And, so and this is this is a Russian study, cancer. Yeah. Yeah, most of those are out of Russia.

Is it I mean, it seems so incredible. Has it been, tried to be reproduced in the US or any other countries or if you see any more, no one has the reason to do it because it's not on Pat.

And. And who's going to spend the money? Well, I mean, yeah, that's partly true, but, you know, testosterone is not on patent anymore. And that doesn't stop five different companies offering form of it because it works very well.

Yeah. I mean, yeah, they're all but I don't know, they've just shied away from peptides. Although, you know, 40% of new drugs being approved are peptide.

Right for sure. So every talent is I mean I'm particularly interested in its telomere effect, but it sounds like it may not be a direct telomerase activator.

But but it does increase telomerase. Oh it does okay. Yeah. And so so what's the structure of it. So is it a large peptide a small peptide. It's 14 amino acids.

And so it's normally difficult to get it to absorb orally. But and we started this company, if I would have known it would taken us $500,000 to jump through all the hoops for the FDA, the consultants, and do studies on bioavailability.

And you got all these people like putting peptides and sprays and sublingual and just saying, oh, they absorb and they don't. Right. So that's pretty common in the supplement industry.

Yeah. And so we're, you know, showing that they actually absorb a lot of things we have to do to them. One thing we don't do and all these companies do like, the peptide GLP one, you know, it's a bunch of them back goes up a great for, you know, for type two diabetes and weight loss, it's, it's hundred to 100, something long.

And what they do is they add stuff that breaks open the tight junctions in your gut so it absorbs, that's not good. Yeah. So they go, oh, it's temporary, but, you know.

No, my patients, they all have leaky gut, you know, and and the BPC, actually, and, we'll will help leaky gut and TB for frag will actually, reproduce will heal the tight junctions.

So it's interesting. So we won't do any increased viability like doing things that way. But we found ways wasn't cheap. But to get things like Apatow.

And there's also had one pi million which is very similar to other plant another pineal hormone that that we use together. And it's if you take, anti-aging, you know, take your to 65, take talent and 5 million and the famous and and probably tb4 I came up a bunch because it's kind of like they all just work together and and we can tell, for instance, when someone comes in like, you know, going blames chronic fatigue syndrome, or, you know, the doctor doesn't know how to treat it doesn't exist.

Like we can pick them out and chronic Lyme on a blood test. We do a lot of we do a lot of tests. About 40 tests. And we're always on the records wherever the whatever, wherever they go.

But, we can pick how what they have, you know, and how sick they are. And it totally correlates. It's that immune system that it it correlates with symptoms, correlates with aging.

And if you fix that immune system and lowers the inflammation, and now you start killing intracellular infections, you can basically monitor the body for cancer.

Then you're basically, have a key, tool for longevity. And, and, and I found, you know, repaired my art, which is so fibrotic and, oh, than TB for free is the most potent anti fibrotic, substance that we have, so reverses, diabetic

kidney disease.

Post them I, you know, when the heart gets fibrotic and also senescent cells. So, these things will basically, you know, basically reactivate those cells.

It will decrease the size of an MRI if you induce an MRI. If you have kidney disease from diabetes, peripheral neuropathy, all those things, we've become kind of a peptide clinic.

And now we made them available to the general public, integrated peptides at a fraction of the cost. We have a couple new products that we're excited about.

One is the thymus and Alpha one replacement, and which will be another thymic peptide and a bio regulator, which are tiny peptides which you can't believe they have an effect.

And it's very interesting. So doing these studies, I, they can't find a receptor. And one step three studies showed they were harmonic. It's they vibrate a certain frequency and stimulate the cells.

And I think what EMF does that hurt. But it's also protects you from EMF, EMF, toxicity, which would take, you know, a whole nother thing. But, you know, which one you capture does this you're talking about that protects you from it.

Basically BPC well, what the EMF is do is they'll activate which call, it's called the calcium voltage gated channels. And now open those up and allow calcium to fly and things like that.

And then, and so it will, heal those and prevent that from happening. And it also this is the BBC 157 and protects your body against all these different toxins as well.

They're mycotoxins from mold, you know, all that all the toxins we get every day, you know, in the environment. One study show that eating fast food caused the same reaction as if you had acute infection.

It caused that immune right, and didn't go back to normal even after eating normal. So with BBC two, you, you are kind of protected. So, I've heard with BBC that there's some people who use one dose.

Do you have a dose range? Do you how do you decide whether to stay with one dose, increase it. And I suppose it depends on whether you're taking it orally or by subcu injection.

And just in follow up question on that is, is the subcu, as protective in the GI tract as the oral? Probably not. But exactly. Great question. And for instance, like we can't start people on BBC 157, it does so many things.

And there's actually people think of it as a gut hormone right within in the gut heals the gut. But it's shown to be equal potent to an injectable. So for the same dose you will get the same systemic effect.

And you did one study on rats where they did inflammatory bowel disease. You know, I forget it was ulcerative colitis or Crohn's disease also colitis.

And Ms.. And he took it orally. They put it in their drinking water. And it fixed both of them. And part of that is probably the you know, the gut brain axis.

But and these are also key, because the gut brain axis goes both ways. The gut affects the brain, but not the whole body. Really? Sure. But the brain also affects the gut.

So for someone who has Sibo, they're it's it's going to probably come back because their gut is there. They don't secrete all the, you know, basically enzymes and digestive juices.

And they don't have the peristalsis. So the environment isn't very great. So it comes back because it's conducive

for those pathologic bacteria. So you had the BPC which kind of lowers the inflammation of everything with a great results with inflammatory bowel disease.

And remember a nine year old came in, they're going to do a collect me and you know tried everything, you know, high potent chemotherapy drugs and I think took about three weeks.

But totally fine. You know, this is this is orally, and, and so it sounds like you use it exclusively orally since it has systemic effects as well as, well, we'll use both, but we found that you can and it's much, it's very getting very hard to get injectable peptides that I'm in California and California, the People's Republic of California is like trying to ban everything.

The the next thing I heard, they're going to ban I. V. vitamin C and glutathione. Yeah, I mean, the whole system is crazy in and of itself, but, yeah. So so then so you're using it orally and, it's I know we're going to have an oral epithelium coming out, so we figured out how to, stay legally and make them work.

And we're doing metabolomics to, to show that these work, which is a where's the new method will they'll check like 5000 small metabolites after you give whatever treatment you're going to give and you compare it to normals.

And so it paints a huge picture. So we're showing that things are absorbing and, you know, making the changes that we think and comparing them to normals we're doing also for, you know, hypothyroid patients versus thyroid, which is patients go undiagnosed to the TSH is normal.

But you do the test and they're all low. You know, who are you using for your metabolomics. Yeah. We know that we and I didn't mean to make that sound as a clinical test right now, but we're using it for for research.

But that's our goal right now. You know, we treat probably all our patients with low thyroid have a normal TSH. You know, they've been told, hey, your thyroid is normal.

But like even with with sepsis, not only does your tb4 level go to zero, your thyroid level in the lungs goes to zero. Really. And there's a couple of smaller anecdotal stories that giving T3 to severe Covid patients dramatic improvement.

Epi-Talons, Telomeres, and Thyroid Optimization

So very interesting and great for, you know, congestive heart failure, endocrinology are scared to death and giving T3 where they with heart problems.

But it know I can tell you a whole story which is pretty amazing but that it lowers the risk for arrhythmias. And it also BPC 157 will prevent arrhythmias.

We had our, executive directors husband come in and AFib. And so again, a big shot of BPC, you know, okay. BBC 157. So they see all the ones that I've talked about are available orally.

And then the other one we have, which is currently we have two more coming out weight loss, one, and then the replacement for time is another one is k PV.

Have you heard of that or. I have not. Yeah. So it's a real alpha blindsight stimulating hormone course. And that goes up when you go in the sun and you get it, you get a tan.

But it also has great immune modulatory properties. And it's amazing anti-inflammatory. But all that anti-inflammatory effect comes from the three little peptides, from alpha monocyte stimulating hormone.

So we had a number of doctors and really big in the line community, of course. And that's what is my life. And I lived it and got through it. And it's the worst disease to never wish it on my worst enemy.

But, and heart failure along with that, that they were using like melanin tan one and melanin ten two, which was known as the barbell peptide because you got tan, you lost weight.

You had increased energy, you know. So, but you got tan, which is good if you're probably under 25. It looks good, but as you get older, it can. Those can darken your, like, you know, age spots or whatever it may be.

And I remember I took too much, and this isn't working. And all of a sudden I was so dark. People are just like, what the heck? Where are you from? You know, but we don't have to do that once again.

Many times it's potent. And, you know, studies are different, but 50 to 100 times as potent as giving alpha. It's too many hormone. And we can find side effects of these things.

And so it's great for planetary. We have a lot of tan right now. Cfpb okay. We've been talking about all of them. You know it's side effects are just unheard of.

And normally when you dose anything you start low and go slow. You know. But if someone said I'll start high get them better faster and then come down to a more normal level, what does KP v stand for?

Yeah. So it's just basically, you know, all the peptides they have either a three, letter, based identification or one letter. So it's just identification of the, of the three amino acids.

Oh I see what it is. So it's a tri peptide, then. And, so BPC that's but the BBC is, is like a 15 has 14. Yeah. Right. So, what is the BPC versus body protection component?

I guess they don't always name them that way. But Cfpb is is name because of the three amino acids. It never got another name. Yeah. So and that's available through your your integrated peptides.

Yeah. So that came out and the other what we have is I don't know if you've heard of cerebral licensure. Not a but it's it's a bunch of different neuropeptides and they hide the secret.

They only tell you which ones they are, but they increase neuro growth factor. Been used for 30, 40 years in Europe, IV for dementia, and increasing memory.

And again, just recently the FDA said can't use it. It's too safe and effective. So it doesn't have anything. Right. It probably doesn't have Bdnf in it that that wouldn't be.

We don't we don't. So a single company made it and and they is proprietary. What's in it is that it must be an extra. Yeah. And or. Yeah. And it has a lot of different things in it and something's going on because someone bought up their entire supply.

Oh. So I don't know what what that means, but it's, bioavailable orally being a bunch of small peptides and it's shown to work. Within, one minute, like, they'll do EEG.

And we've gotten more feedback on that from people that just, for instance, my stepson, who's just kind of being a jerk, right? You know, and, and so here, take this.

And then all of a sudden he just starts be enormous, but he's like, oh my God, he's back to his old self and he's bragging about his memory and, can improve memory even in normal people.

So we're we had a lot of feedback from, from all these things again. So it's, it's it's changed our practice and people that we, you know, kind of train on these peptides.

They say the same thing that they can treat conditions that they never would have attempted to, exceedingly safe. And so we'd like to do the peptides through the doctors.

And so we go to integrated peptides.com. I can sign up and get a wholesale account and all that. But, it's been exciting because, you know, and you look at these are not new studies.

There's new studies coming out, but these things have been around. And when I give a talk, I have hundreds of studies and people are like, how come I've never heard about this before, you know, and we tend to treat, you know, the sickest of the sick.

That's what we're kind of known for, for good or for bad or for all the other sins I made in my previous life. But you look at someone just wants to stay healthy.

And, you know, so-called longevity or autoimmune disease or will and we. Fine. Let's say someone has Hashimoto's, right? And and we love T3. We have our nonprofit, National Academy of Hypothyroidism and a hypothyroid form where we supply all these, you know, wrote a bunch of review articles showing the way that we treat thyroid in this country is wrong.

We go by the one tissue in the body that acts different than every other tissue. You know, based on that unitary which as you get sick, it, it drops. And, so it's only thought you when your thyroid levels drop, your pituitary should increase TSH.

So the high dsh or I always love it's low you know, it's I know it's normal. But what happens as you get older your or sicker your TSH drops but so does your T3.

So it's not a good marker. And oftentimes and then they'll never want to get too complicated. But they'll have a low TSH and high T4. And the doctor will say, oh, they're, hypothyroid.

Right. Mild hypothyroidism. And. Yeah. And that's what you see with depression looking for depressed patients and you'll see have low normal PSA, high normal T4 and and all these studies going forward.

It didn't work well. But if you check the T3 reverse T3, the T3 is low and the reverse T3 is high, which is an antique diary. And so they're giving the wrong hormone.

What it is is that the mitochondria messed up. And to get T4 into the cell, it takes energy. So you don't have enough energy so that it just leaves it outside the cell.

And then same with the but the pituitary is not energy dependent. So it so it's low. It yes it is low but the T4 is high. And it actually that's a sign that they need thyroid which goes against everything we're taught in medical school.

Right. Do you do you then use mostly or exclusively T3, not a T44, T3 combination? Or, you know, how do you go about doing that then you must do it multiple.

Yeah. Yeah. And and we find in general. So I'll use mostly probably 80% all T3. Some people feel better with little T4. You know T4 doesn't do anything. It's a pro drug.

But these convert the T2. But 53 is pretty short. So do you have a extended release for, the serum? Half life is very short. But it goes in and has physiologic effects, which lasts about two days.

Oh, and so you were actually so once a day dosing is fine for T3. Yeah. And now but you get real complicated. But there's also cell surface receptors that are quick on and quick off.

So if you have a big spike of T3 palpitations and things like that. So we use a time release T3, but the ones that are mostly available, they use too much methicillin.

Make it two time release and that's what they put in the reformulation of armor. I don't know if you remember, but they reformulated armor thyroid which which is a pig T4, T3, and they tried to make it time and it didn't absorb it.

Everyone went crazy because it didn't work. And that's a lot of people say time-released T3 doesn't work and they're kind of right because of the formula.

But you fix the formula and that works. But the sicker the patient, the more T3 they make. And for instance, the Star report largest study ever done on any depressants showed it compared all the antidepressants and then they just happened to put T3 in there regardless of their thyroid levels.

They gave them all T3, T3 outperformed all the anti-depressants with less side effect. It worked when the other end presses didn't work. You know, most antidepressants stopped working after about a year.

That wasn't the case. But it never made it to the abstract because they didn't fund a study. Right. So doctors don't hear about these things or another study 135 treatment resistant bipolar patients.

They tried, on average, 14 different medications with no response. They came all T3, didn't care what their thyroid levels were, 85% responded and 30 I think it was 32 or something.

Percent had total resolution of symptoms. Did they give a fixed dose or did they titrate in some way? They tied it up to actually up to 100, 103 better dose for depression 50.

But it that's a lot of and and here's the thing too is if you think you. But what happens if you look in the PDR you know it says T3 is 4 to 7 times as potent as T4, which makes no sense because T4 really is an active.

And in a healthy person, you'll make almost 50% of people will convert to T3. So at the most it's 2 to 1, right? So, you know, they were giving them, essentially about 200 to T4, and they had less side effects than antidepressants.

We measured TSH was fairly suppressed, though at that point. Yeah. Nothing matters, nothing it matters. And then that's. Yeah. So I have a whole nother lecture on that and freaks out.

But yeah, I got to get osteoporosis and we, we get in a corral just on us and our bone density just going up and up. And the biggest meta analysis show that does not actually giving any depressant.

Well, you'll have 2 to 3 times the risk of osteoporosis, but they don't mention that. Right. So it, not a problem. They're, arrhythmias. They're actually showing that giving IV, T3 after cardiac surgery lowers the risk of, of arrhythmias.

There's one study that they, pointed out. The salon article, which it showed low TSH caused. Basically increased a-fib. But what they don't tell you, if you take out the people who were on thyroid, there was no cases of AFib.

It was the people that were so sick. They were had low TSH because they were sick. Especially heart disease. Patients get really low T3 when they're sick, but low TSH, they had low TSH.

And they have low teens H because they had, heart problems. And then surprise, surprise, the people with the low TSH due to heart problems had more heart problems than people did, you know?

So it's. Yeah, you could argue that T3 suppressing finish prevented AFib. You know, I'm not going to go there, but high TSH, low thyroid is a bigger risk for AFib than high a-fib than high T3.

But the whole key is knowing how do you test this. Because it's intracellular is what matters. So and we're kind of getting a little way off in the weeds here.

But you know we'll check everyone's basal metabolic rate which is the amount of calories they burn over the day. It measured over ten minutes. Use a calorimeter for that like review or what's called a, a body gym measure the body.

Yeah. And and we find is that people who, you know, they have every symptom a low thyroid doctor won't treat

them with. TSH is normal. They generally have about a 25% lower metabolism.

And, you know, and the women are so happy. See, I told you, I know metabolism. And, and you look at, you know, chronically ill patients, and older patients like fibromyalgia patients, one study showed 20 about 25% lower levels.

Now, we also the British Medical Journal, Major medical Journal, showed that a knowledgeable doctor looking at someone's ankle reflex is a better test for thyroid and blood tests.

A normal reflex would go, but the lower the thyroid, the slower the relaxation phase. It didn't. Yeah. So we measure that via a computer and so we can get a good sense and also with symptoms and studies.

So if you have a combination of, you know, these five symptoms, your chance of being low thyroid is, you know, 96%. And on our nonprofit site, the National Center for hypothyroidism, we have a test you can take where you plug in your numbers and and all that.

And it will, you know, tell you your risk, thyroid. And one thing you can check, which is a little pearl, is sex hormone binding globulin. Sure. You know, most actual think of it as it will bind testosterone and you want to lower that to raise free testosterone.

But it's a marker of two things. Two and a half things. The amount of thyroid, the amount of testosterone in your liver, it will go, actually, the amount of, like, the amount of estrogen and the amount of thyroid in your, in your liver.

Also, if you have a chronic infection and can leak out. But so we you do a FPG let's say for women should be above 80 which is also associated with health less cardiovascular disease last osteoporosis.

And if you feel their normal estrogen they're menstruating normally or they're on estrogen. And they're especially if let's say they're on thyroid, they're getting first passed metabolism as FPG should be above, you know, 80.

If it's not, it shows at the intracellular level of your thyroid is low. So that's a marker that you can look at and follow. And we'll find people, you know their TSH is fine or urine that low normal range.

And doctor says I'm kind of high in their pulses 48. They're freezing cold. They're gaining weight. They get a bad thing. Are myalgia. And that number will be about ten.

And, and so it's just another another piece of information. Yeah. Yeah, absolutely. It's, it's interesting. So do you. I mean, some people talk about aging and metabolism and maybe some of the centenarians or, or people in their 90s that have a slightly lower metabolism, lower T3, sort of mild, not hypothyroidism, but lower thyroid function is associated.

I mean, that's one of the things that's helping them get because they're not burning the candle is bright.

T3 Therapy, Metabolism, and Hormone Misconceptions

Do you have any thoughts about that and whether that might be. Yeah. And it's the same thing with growth hormone. Well, I mean, but you're right, they do say a similar thing with growth hormone.

Yeah. And where the people who live, the lungs have the lowest levels. And what we find is that people are sick, they get thyroid resistance. So they actually have higher thyroid but having less of an effect.

And I think, you know, if you're totally healthy, your levels can be low and be fine. And it's kind of like cortisol. Yeah. What's a normal cortisol. What. Depends on the situation.

If you're totally healthy and then no stress low cortisol is fine. But if you're in the ICU with normal cortisol you're going to die, you know. Right. But but yeah. Really.

So it, I think it explains that is and we find that and that's what happens. And also it happens with testosterone and, you know, like with testosterone that it's very anti-aging.

We thought of it as, hey, you know, originally, you know, men got heart disease. Women didn't tell us you must be bad, but, well, we know that's totally wrong.

And you look at every ten years, you know, the reference rate just keeps coming lower and lower. Where if you had you know, we have now we have kids coming in at 22 levels of, you know, 290 or so.

And the doctor is you're normal, you're fine. And they let this lower limit of testosterone, which 30 years ago was like 450 to 1400. Then it went down to like 300 to 1100 and then down to like less than 200 to 900.

And people are is getting, you know, worse. So it's all, relative with that. And so you want to be optimal with testosterone. It's all these things that we were taught, you know, or frankly, wrong.

And, and testosterone is, is great for longevity, reducing cardiovascular disease, reducing cancer and all those things. No studies ever show giving testosterone or growth hormone actually increases prostate cancer. Nope.

But that's real. And when freaks out. Yeah. Prostate cancer. Don't give them testosterone. Well, hey, why don't you cut off their testicles? And if that's what you were.

Yeah, most of urologists that I work with now, thankfully, that really. And I was just listening to a podcast with, Doctor Ted Schaefer, who's a urologist at northwestern.

He thinks that, low testosterone is actually a risk factor for for for prostate cancer rather than higher testosterone. Yeah. And it's more aggressive.

Exactly. There's really no issue there. So, thankfully that that we've turned that page. Yeah. Get back to, yeah, yeah. I was going to say, like, you know, all these standard doctors and there I just get really mad at them because, they just, they, you know, because they don't know this or that, they don't care to.

And, the whole piece on, you know, the study and Anna's internal medicine found most doctors practicing 10 to 20 years behind what's available in medical that year takes, on average, 17 years for a proven new therapy or technology, except the mainstream medicine, unless there's a new drug with the sales force. Right.

And they found out why was that? And they found one. Doctors don't read medical journals even though they say they do. You know, they'll give them what the drug rep does and look at it.

But that wasn't the real reason was that if you give them here's 50 studies showing what you're doing is incorrect. They will discount it. They'll just throw that away and but also say you're really mad about that.

But they're in a system where learning more works against them. You know, there's you know, let's say they have a chronic fatigue syndrome patient. This is their worst nightmare.

They are judged on how cost effective they are, which means how many people they see a day, how many tests they don't do, how many therapies they don't do.

And they keep cutting the lowest 20%. So they, you know, if someone says they go, oh no, I don't believe that, you know, keeps them so they can sleep at night, but we can pick out a chronic fatigue syndrome patient, like I said on a podcast, 7,080% time and how sick they are.

And a system isn't made for multi-system illness. You know, when you go there for your GI Bill, there for neurology, you there for cardiology. And I think, you know, that is the big problem.

So, I'm not quite as mad. And I used to think that if you they had a patient, you know, 20 years who they couldn't

get better, you send them back better, you think they'd be happy?

No. They're not, they're pissed. They they basically discharge the patient. But, And that's why I love what we do, you know? And we're able to do all these new things and, you know, and look at these, you know, telomeres and, to 65 and, and use these things in our patients and look at literature and be able to implement those for our patients.

And they're stuck and they're miserable. You know, doctors are miserable. But, you know, I love what I do. And I mentioned, you know, it's, I was up all night because I was doing research.

Also, the sun came up, you know. Right. And, it's it's neat and, you know, weight, medicines, lines getting a little scary with the FDA. And, you know, they want control of everything and with connection with big pharma, which there's a, a whole nother ten lectures and ten hours to talk about.

But let me ask you about the just getting back to telomeres for a second in terms of how you I mean, you used to 65, in your practice, how do you go about, deciding who's a good candidate for it?

Dosing it, follow up, or talking to a patient about it. Always curious to hear about other other doctors approaches mean I do a lot of tumor testing in my practice, but, other doctors don't.

What? What's your approach? Yeah. And and we, we have kind of up to now where we get, you know, what the sickest patients are taking so many things that kind of start falling down on the list.

But, you know, for the healthier patients that we have, you know, we, you know, we we just may need a little thyroid aid and look for ways for longevity.

And we've just started a longevity program where where that's key. It's kind of everyone gets that, you know, and everyone gets, uptown. We check their immune system and we'll give them almost always.

I've never seen anyone with a good immune system being older, especially now, even younger people from all these toxins, pesticides and stress and stress is such a killer.

And and I and I think, you know, everyone's sick. You know, I go to go to a party, 20 years ago, 32 people weren't sick. But now it's like everyone comes up and they say, hey, you know, I'm so sick or my, you know, as a doctor, that's why.

Yeah. You out. Yeah. And I have to carry lab slips in my pocket, you know, and but usually get the response as well. What about this is my doctor says I don't have that.

Okay. Well, how's that working for you? You know. Yeah. They, they just they don't test for it. So I really think longevity is going to be the way of the future.

I mean, and you increase your telomeres, you're going to prevent all these things. And sometimes it's hard to get people to stay on this, you know, because it's not like, hey, you know, I feel ten younger.

Yeah. And like, me on a blood pressure medication or something like that to sort of I mean, we do hear some anecdotal stuff, but but that's why I like to use the measurements, which of course, you know, there is some expense.

But when people can see that their own life is not getting shorter and, you know, oftentimes it's getting longer, then they're like, oh, okay, it's working.

And I'm going to keep taking it because it's not inexpensive. And, you know, you have to triage, between different things to take in you. Right. Some of the peptide therapies that you're giving, have sort of more immediate effects on symptoms.

But in the end, if you are stimulating cells to replace other cells, getting rid of senescent cells, you need something to help the stem cells and the immune cells to, to keep their tailor as long enough to continue doing that.

So that's that's sort of the discussion I have with them. And, you know, and I think it's totally true because it's a couple things. People don't worry about it until it's a problem.

Like, you know, these people, they go to a forever. And these things I want to do preventive medicine. Well, you're not going to have any patients because people tend not to come in until they have a problem.

I mean, there's a few which are they're awesome and they want to optimize everything. And until we're sick and then we go, oh my God, I'll do anything to, you know, not have it.

Well with with line. I am basically atheist. But I said God and I'm sure as a woman because I know she hates me, but, you know, take everything and just make me better and she, came through, you know, I got divorced and my ex hired Gloria Allred, and.

Wow. And I got an attorney who said it doesn't have to be nasty. And I was sick. And so, she took more than everything, but I got better, and that was the best exchange.

And people worried about making money, but. And people don't like paying out of pocket for health care. It's a weird thing. They'll they'll do it for cosmetic stuff.

They'll go buy that $200 perfume or that thousand dollar purse. But hey, these labs cost $400. No way. I can't afford it. Well, it's just you don't want to spend it on that.

And not until you're sick. But you don't realize your money is worthless when you're sick. And you know, you have a personal experience of that for sure.

Right. Well, so we're coming up on an hour. I wonder whether you have any sort of closing thoughts on, you know, where things. I mean, you talk about longevity medicine. I totally agree with you on that.

I've been so I've been doing it for a long time, but I think shoring up all the systems that have sort of subclinical programs to, to disease, which, can be addressed, which I think is sort of the way to go.

Longevity Medicine and Closing Advice

But but it sounds really like you have some great protocols to help people when they do have symptoms. It'll be good for you to have a balance of patients that are, you know, sort of healthy and wanting to stay healthy and then, you know, have the satisfaction of making people that are really ill feel better.

In my practice, pretty lucky to have it were more skewed towards patients that are doing well, but just want to keep on staying. Well, you, so, so, yeah.

So any, any any closing thoughts? Referrals. Yeah. Is that we're, we're finding that, you know, really the key is, you know, they go, I have my doctor's, everything's fine.

If you don't check anything, you're not going to find anything, right? You know, they'll check a CBC cam panel on a cholesterol and they'll give you a stat, which is a whole nother argument there.

And your whole life is. You think you're gonna live long if you have low cholesterol. And if you don't, you're not. Which is crazy, right? There's so many other more important things.

And you realize don't how you know how you don't realize how valuable your health is until you lose it. And it is so true. And, and get into one of these programs, you know, spend the money, you're not going to get it at Kaiser.

They're not going to even want to run the tests because they're they're gonna have to do something about it. They're going to lose their bonus if they do the test.

They're not set up. But if you want to, you know, people that want investment should I, should I give how about in your health. You know and and give yourself a birthday or Christmas present and and go to one of these longevity doctors or a doctor that you know, it's going to look at much more things and or people say, what if you don't find anything?

Well, it hasn't happened yet. You know. Right, exactly. And and it is and I just, you know, think of it gets a little weird, you know, I get 40. Think you're really all that 50.

You know, and 50 people, people are 50 year old, age or 50. Oh, now you know, 60. You know, that's all. You turn 60, you know, and but you can see that quality of life and you don't want to be, you know, where you're just in pain or you're demented in a nursing home and, you know, quality of life is key.

And people care about money, money, money, money. I want to work. I want to work, you know, invest in yourself, invest in your health and and do these things.

And yeah, you may not feel you know something. You're you're feel great, but most people do have something particular they need. But you know, like, you know what the to find.

This is an investment in your future that even having a future that you're not going to get a stroke, that you're not going to have a heart attack or, you know, and, and I think it's just I can't emphasize it more, but it's also we have, I think, a defense mechanism.

And let's say you get the worst flu ever and you think back, oh, yeah, it wasn't that bad. But when you had it, it was like, you know, the worst flu you can imagine.

And everyone seems to lose their empathy after about two weeks, you know, and people with chronic illness, my heart goes out to you and chronic Lyme and, you know, their doctors don't believe them.

They say it's psychological. And just to just their testament to how bad it is when you don't have your health, you know, those patients and I can attest they whatever they tell you multiply by a thousand and that's how bad they feel.

And and you want to prevent those things and or people will, you know, we give them a blood test. So can I take this off? How about this? About this. You take anything you want, you know, but you we we don't want to miss anything.

And it's the best investment you're going to have. Yeah, I wouldn't worry about the 400 and K and all the stuff. You may not be around for it. Yeah. No, I call it, your biological 401 K and you gotta have that because otherwise the other 401 k doesn't matter.

So. So I think you've been doing great work and you kind of came out of the gate, you know, doing this stuff. And I think people are finally coming around to realizing, hey, I'm going to may have to pay out of pocket for this.

And, you know, you know, by, what, Rolex or whatever, or a new car, but not, well, I'm not paying for health care. And those times are changing. And, you know, people are, you know, chronically ill patients.

It's, you know, the actual the even the CDC said everyone, you know, over 50 years old had at least one chronic illness that is due to the famous immolation.

It's kind of like go get back famous former famous good times shredder and and and fix the immune system and immune system the key and it goes into all the inflammation and even that it's the same with the telomeres and and all that.

So so find a doctor you know and peptides. And it saved my life. And they're well right there with T 65 and, and and being so anti-aging and preventing aging and people kind of think of I want it to age on my skin to look better, you know.

Well it does that too. But you really want the inside to be better. But yeah. And invest in yourself and take an active role in educating yourself. And I think, you know, you can thank me.

And 30, 40 years. That's right. Exactly. Well, that's always a pleasure talking to you. Can't, learn quite a few new things myself. And I hope, to, to speak to you again soon, guys.

Okay. That is wonderful. Keep up the great work. I think the summit is going to be great. You got a lot of great speakers, a lot of great info. So I'm, looking forward to watching it.

Thanks. All right. Take care. Okay. Thanks a lot. And I.