Introduction and Peptide Summit Welcome

And welcome to the Peptide Summit. My name is Doctor Matt Cook, and I'm with Doctor Dan Pompa, who is a friend and, one of the, I think, top, influencers and thought leaders in medicine and health.

And, he knows about kind of what I would say, a healthy approach to living, which is the thing that I'm most interested in. So that's probably why we get along and like each other.

But, I'm delighted to have you on the show. I think you're I think the world of you. And so, thanks for taking some time to talk to us now. Likewise. And thank you for that introduction.

And I love to be here. I love this topic. You know, rarely do I get to slice into this topic. And so when you asked me to do this, I was like, I'm so excited.

You know, it's a lot of times we stay away from peptides, right? It's like the guys that people don't want to really bring them up and dig deep. But here we are looking forward to it.

Okay. Awesome. So I'll tell me, tell me a little bit about just so people get a sense of you tell me about a little bit about your history, where you come from medically and and, and how you, how you kind of put health together.

Yeah. You know, it's, life always takes you by surprise. Around 19, the end of 1999, I ended up with, just mysterious illness, like so many people started with, just fatigue.

Right. And then it went from fatigue to, anxiety that I couldn't sleep. And then it was like I either couldn't get sleep, wake up in the middle, I couldn't get back.

So then I became, like, intolerant. Every food, which I never was. So I had gut issues all of a sudden, then just debilitating personality changes, irritability, anger for no reason.

I mean, literally, I could go on with bizarre symptoms, brain fog that I just I couldn't even think. And I went from, like, a photographic memory to where I couldn't remember anything.

So, life as I knew it came to a screeching halt.

Dan Pompa's Health Crisis and Toxicity Origins

I was running a very busy practice at the time. Two young boys. Amazing life. All as well, except that just didn't know what was going on. And, you know, it took me, you know, I don't know, probably three years to get really what was going on and just, fast forward.

I mean, I ended up with, obviously what I call an unexplainable illness, but it was neurotoxic mediated illness caused by a perfect storm, honestly, of neurotoxins.

I had two silver fillings drilled out right before the fatigue hit, and, they contained 50% mercury. It's put a lot of mercury directly into my brain, up into my pituitary.

So like many people, I was downstream trying to fix my thyroid, all the symptoms that went along with it, my adrenals, all the symptoms went along with that.

I, I really I couldn't even adapt to loud noise. I mean, you know, clanging hangers would just be I couldn't handle it. So my adrenals were fried. Although when I was addressing those downstream things, I wasn't getting my life back.

Right.

You know, it wasn't until I realized, okay, Mercury was part of the cause. I was definitely. We are living in an older home, had mold in it. I was training on my bike, for probably 200 plus miles a week.

So physical stress, chemical stress, and it definitely led to emotional stress. But, the perfect storm was definitely mold. Mercury. And, obviously the physical stress I was pretty myself under.

So fast forward, figured out what the causes were, dealt with them correctly. Matter of fact, all of what I learned in that is what I teach doctors around the world on how to get Mercury correctly out of the brain, how to deal with bio toxic illness correctly.

Right. So my five hours of cellular healing is my roadmap of what I teach. Detox really is not just doing a sauna, a colonic or whatever, you know, 11 day ten day cleanse if or only that easy mat.

It's not, you know, but you know, real detox is at the cell. And that's what I've taught for almost 20 years now, by the way, I, I have always loved some of your products and the zeolite product, which is a product this I wasn't going to we weren't scheduled to talk about it, but in terms of thinking about, thinking about this mycotoxins, if you can bind them into the gut and help pull them out, then we're pushing particularly the total body burden that you have to deal with down.

And and that that one I that was the best actually zeolite product that I've ever found. Well, and it's clean. Many zeolite products, like many binders are very dirty meaning have led to arsenic, other contaminants, heavy metals.

And, so it's clean and it's still maintains its structure. A lot of zeolite products, they, they try to get them clean, but they break the cages apart that bind and they become less effective.

So you have to maintain effectiveness, you know, and keep the product clean. You know, I mean, it's a key later it works. But it's it's only one part of detox.

There's there's so much more, you know, meaning you have to you have to upregulate all of the cell functions that detox your cells day in, day out because they get broken.

I mean, just, you know, talking simply. They get broken because of the toxic accumulation, bioaccumulation in the body. And if you don't upregulate those, you're not going to really have a lasting effect in somebody's life.

Right? You're way downstream for what really the bigger problem is. And that's typically a cellular issue. But yeah, we use binders in the gut. We use binders in and around the cell as we're getting the cells to do what we need to do.

And then, you know, I, you, as you were mentioning, to ask you about cellular detox, how what the key to that, it's actually turning that on. Yeah. Look, I mean, my five hours without getting deep into the science and people get bored, but our number one is you have to remove the sources.

Meaning that if I didn't get the rest of these silver fillings out of my head, they were leaching mercury that I was already, you know, already accumulated to a point where my body wasn't tolerating it.

So you have to get rid of the sources. If you live in a moldy home, you have to do something about it. Otherwise you're just never going to get your life back.

And as a matter of fact, one of the things I teach my doctors, Matt, is if someone's not progressing, as you would expect, there's probably a hidden upstream stressor somewhere, whether it be a hidden infection, whether it's, you know, more mercury, maybe it's lead in the bone, whatever.

Something you have to dig deeper in their history to figure out.

Cellular Detox Framework and Upstream Causes

But, you know, when you're dealing with the number one, removing the source, it like I said, it's typically things that people may have thought they dealt with but really didn't.

Our number two is you have to regenerate the cell membranes. If you don't do that, you have 5070 trillion cells in your body. The membranes determine what goes in and what comes out.

The membranes in the inner parts of the cell determine cell energy, which is my R3. If you don't restore the cell energy, you can't detox a cell. And the reason I say that is because the mitochondria, every cell makes energy.

When it makes energy, it makes waste. It's like burning wood. If you don't get rid of the smoke, it builds up in the cell. You're dead. Just like if you don't open your damper.

So these membranes determine what flows in and out of the cell. It's cellular fluidity, and it has to be regenerated for real. Detox. And to get someone's life back.

R3 is restoring the cell energy. As I said, the you know, once a cell becomes toxic, these membranes get inflamed. Now you don't make energy normal and now you won't detox, have to up regulate that energy.

And then after is inflammation. You have to reduce the inflammation in order for everything I'm saying to work, whether it be fix the membranes up, regulate the cell energy.

And lastly as R5 you have to reestablish methylation as something called methylation goes down. Glutathione which cleans the cell goes down as well. Methylation.

You need to get rid of toxic hormones you need for every detox process for DNA goes on and on. Point is, if you don't fix it, you're not going to get your life back.

If you don't fix it, you're not going to detox the cell. We have to fix that in order for all of the detox to flow. And then you have to open up downstream pathways.

You have to open up the liver, the gut, the kidneys, the lymph, right. And allow the body to cleanse itself. Okay. So then I'm 100% with you on all of that.

And then interestingly, you know, if you think of our interest because I'm also deeply interested in the complex illness and then also an exercise and wellness and and yeah, that's the same thing for both sides.

And in a way, maybe it was almost lucky that you figured that out, because then if you can, if you can take care of the sick people and get them better than the same principles that work for them, kind of work for basically people that don't have too many problems.

It's so true. You know, it's like it's like this, right? As it said, in the business world, you can start at, Saks Fifth Avenue or Neiman Marcus and end up at Walmart, but you can't start at Walmart and end up at Neiman Marcus.

Meaning if you're trying to sell a product right up for world, it's the same. If you start up here. It's very complicated. You can evolve down into a better understanding of health, just performance, right?

But to start with performance as an interest and work up to here, it's it's very difficult. I like that analogy, that high end anti-aging as Walmart. But and that analogy, which I think is kind of true because the you know, we're thinking about wellness, but it's relatively simple compared to the deep complex and the Walmart means it's just, hey, this applies to everybody right now.

I'm saying, you know, everyone and there's a beauty in that. But when you're dealing with people with unexplainable illnesses, why am I still not? Well, I've changed my diet.

I eat better than any of my friends. I'm using this hormone. I'm doing that. I'm using peptides. I'm doing whatever I'm doing. It's like I'm still not well, there's a missing upstream, cause look for it.

Believe me, it's there. Yeah. Okay. So then. So then let's say we engage and we buy in and we can. We're doing all that stuff. What's been your experience with peptides?

Where do you like to use them. What's been in your personal life. How have they been helpful and what's going on there? Yeah, well, I can talk just for fun.

We can talk personal, peptides that I absolutely love. And in my life all the time, ones I've experimented with. But for detox, you know, just on that subject of opening up, you know, downstream detox pathways.

There's two in particular that I love. One maybe more than that, 3 or 4. But we'll talk about those. And then even at the same level as I look at, I just expressed my five hours of how you fix a cell, one of which is are three restoring, cell energy.

Well, there's some peptides there that are, can be really amazing, but let's go back to one of the pitfalls. When you're detoxing people and, you know, really getting to the upstream sources is that many of the toxins end up in the liver, and then they end up in the gut, right?

And leaky gut in healing. A gut becomes a real challenge, right? So, if it were only so simple to take some bacteria and fix somebodies gut today, or I'll even say this, if it were so simple to just improve somebody's diet and fix their gut today, it's not like that.

There's major, major complicating factors due to the level of toxicity that people are under. And, but having peptides is a tool to at least massively make a difference in the inflammation while you're trying to get somebody detoxed is critical.

Peptides for Gut Healing and Immune Modulation

And in shutting down the leaky gut. So two peptides in particular that I love, is thymus. The thymus and alpha one is wonderful because many people's guts, unknown to them are a problem because your own body's attacking you.

Believe me, autoimmune even know you're not having been diagnosed doesn't mean you don't have it. So what can we do to help down regulate that? Well, starting with, the thymus, the alpha one, is a really great starting point.

And sometimes I even, will stack on it. TB 500, which we'll talk about a moment, but typically from the thymus and one, the L 37 is a huge benefit. Next.

Now L. L 37 absolutely has an anti pathogen effect in the gut. So you definitely have to be careful with dosing. Start very slow and low. L 37 also helps down regulate hyper immunity just like the alpha.

But I like to back down the immune system and then build it back up. So then the L 37. And typically at that point I'll bring in the TB 500, which is more of a, help heal the gut and more of a help, you know, build, integrity back into the tissue.

Whereas the, the thymus now for one, kind of backs down the immunity. But then we can come in with the L. L 37, which just has a tremendous healing effect in the gut.

I mean, it seems to just do more than just anti pathogen, if you will. But you put that with the TB 500 and then now you can start up regulation healing.

And then also oral peptide BPC 157 in the gut that second month. And even the first is really, a benefit to because it does down regulate gut inflammation enough that where some of your other strategies then start to work.

So that combination is really good and it can I can't recommend anyone use peptides. They're in the gray zone if you will. So not making a recommendation I typically lead people to pages peptide science and others where they can read and educate themselves and in short order, you know, they start to educate themselves on, you know, basically, hey, this is something a lot of people are doing, to leverage the healing in the body.

Yeah, I, I also would say that, you know, when I heard your story, there was a gut component to it. And then if you kind of dig in to people with significant problems almost 100% of the time, there's something going on from an inflammation perspective in the gut.

And, and then generally there's something microbial going on that's a little bit of an exaggerated microbial response, especially if there's yeast or bacteria in the small intestine.

And then that, drives autoimmunity. So the thymus and alpha one, as a way to regulate and modulate that. And then the 37 as an antimicrobial, I think makes all those functional medicine protocols that we have always been doing a lot better.

And then I also like the, oral version of it. And then somebody told me this is kind of a way to think about it, that thymus and before us like a keychain and it has all of these different fragments and that second fragment, the 17 to 23, is TP 500, which is it's like probably the best connective tissue healing thing.

And so all your while you're rebuilding and doing everything that we would kind of be thinking about from kind of this functional medicine perspective, why not throw that in and then, you know, it's great.

I've, I, never really talked to you about this, but that's also what I do. So so that's always kind of interesting. We never even discuss that. You know, you just kind of evolve in, into it, you know, look, I personally, I mean, I, I love, TB 500 and, you know, just as a healer, right?

I mean, just when I have an injury, I mean, you hit, you know, 56. Well, I'll be 57 soon. You know, you need an edge, right? And TB 500 BPC 157. Yeah.

There that edge if I, if I get hurt it you know, I go right for those too. But yeah people don't think of those two though is being amazing for the gut.

And of course they make both of those and oral peptides, which, you know, really can hit the gut even more so. But I'll tell you, the TB 500 seems just to help people's gut.

Just, even in a subcu injection. Yeah. And then we, at our house, there's like, we're we're exercising. We're doing something daily. And so there's always little things happening, musculoskeletal, little things.

And so then Barb always says, oh, we're looking for a BPC miracle because, you know, every and and interestingly, that's kind of what happened for me during Covid.

I started having all these people who, said, oh, I can't come visit you until COVID's over. And so then we started teaching people how to just palpate and find areas of pain and just stay away from the nerves and start to do subcutaneous injections, and found that to be shockingly helpful.

And we use that now as a post-op follow up for a lot of people after injections. Yeah. Yeah. Well obviously, you know, it plays into, immunity. Right.

And you know, just in so many there's so, there's so many other other benefits, some of the peptides that, you know, I, you know, I kind of like to utilize it also is peptides that do work, you know, in the cell on cell energy pathway, one that has been used for, weight loss or just the inability to burn stomach fat as motes.

BPC-157, TB-500, and Injury Recovery

Motes, you know, motes really, up regulates cell energy. It's one of the reasons why it works. It when you look at the research on modes, most of it is in and around the mitochondria.

And that's really why it was developed, how it was developed. And when you look at somebody who's toxic, unable to detox, or at least has trouble detoxing again, oftentimes or is is just ultra even sensitive, oftentimes it's the, cellular energy component.

If we can up the cellular energy and get their cells more efficient and even utilizing fat for energy, we can actually down regulate cellular inflammation, decrease the sensitivity up, regulate cell detox, and it can be a breakthrough.

So you may lose some belly fat too. So most is probably underutilized. You know, for some of that because it's just thought of as, you know, help me lose belly fat.

Another one on that kind of same subject is ad, and, you know, I, I played around it with myself. And one of the things that I noticed was I had at that time, I had a left patella tendonitis.

And I was doing some things to, you know, balance the musculature around it, etc.. But I tell you, within a week of taking a load, it actually disappears.

So I mean, and then I was like digging in because I wasn't thinking it like that and realized, oh yeah, this actually is for joints as well. And so and another interesting cellular peptide, if you will, that would help cell energy, but also some joint healing.

So an interesting one that's interesting because that, patellar tendonitis can be a tricky one to, to, to fix because, you know, that there's not a lot there's not quite enough blood supply to those tendons.

And so then if they get irritated, they heal a little bit slower. But then, I like that you said that because then that kind of leads into kind of an interesting sports medicine conversation, because then, I'm kind of grabbing my knee.

You can pinch a little subcutaneous tissue sort of over that patellar tendon. And then, you know, well, I also had, I also got patellar tendon. I just from, doing a workout and then I, and then I also fixed that also by doing subcutaneous injections there too.

Yeah. Yeah. Of course, I mean, I used BPC 157, and it would help, but it seems like I don't know what it was with the A or D, but it seemed lasted. I mean, you know, so, you know, and again, I look no doubt I am a victim, of this because I definitely have my the way my back is, I'm a more flat lumbar curve.

So you can imagine it does this to the pelvis which stretches. There's quad muscles. Right. Which foot? The the patella. Ten and under fire. If I'm doing like you said, the wrong exercise too long.

So, you know, for me, I definitely have to keep my the, you know, those muscles loose or I'm definitely going to fall victim, but I at least I have a good answer, you know, because you could be in that cycle that where it's very difficult to break out of that patella tendonitis.

It's hard. The, the mods or mod C, you know, that whole category that also helps with insulin resistance. Yes. And so then you think about you think about like categories like we talked about the job BPC, you know, all all 37 the either the fragments or of that mess and better for kind of especially you think about metabolic syndrome who's got that.

And that's like like just most of North America, you know, these days, if I think about the percent, I, I heard there's going to be a billion people on the Indian subcontinent that have diabetes.

And so then and then fixing that is kind of like goes back to the beginning of what you were talking about, autophagy and kind of cleaning up the cell and getting it to be more efficient, you know.

And so then these are tools to manage that.

Metabolic Peptides and Growth Hormone Caution

But then they're not independent of everything else that we've been doing our whole lives. Not exactly. These are these are tools in the shed that just work fairly well.

Right. And with look, I mean with very, very little side effects, you know, I mean there's, there's peptides that have too much of a hormone effect for me.

I, you know, and I, I like things that add to health, you know, add to my, anti-aging regimens, you know, but, that all, you know, just help the body heal.

And some of those tools that we just mentioned, very, very little side effects. I mean, I've never had a side effect. I can tell you a very funny story of the the only peptide side effect I ever had.

And it may be humorous and, maybe there's a teaching moment in it, but if you want me to tell the story, I was I little embarrassing, I guess, but that's okay. I've been, I've said more embarrassing things, but, so my, I read somewhere about.

Okay, once, you know, it was like when I was learning about peptides. Okay. So it was like, oh, you know, once you reconstitute them, you really should use them within three months. Right?

And it was like, I was like reading this and I thought that's been in there like three, maybe four months, right? I had some peptides in there. And, and one was a growth hormone peptide that there was two more small and, I and temporarily.

Yeah, I guess. And the other one was the, the, CJC, CJC. Thank you. So okay, so those two peptides both play into growth hormone. Right. All right. So I decide well they're probably almost done.

So I'll give them to my wife and I. Right. And I'll double up the dose. No big deal. Never had a problem with peptides. Before now keep in mind that I must have some naturally high growth hormone, because every time I would take anything that helped your growth hormone from a peptide standpoint, I would feel that hot feeling come over my chest like a vaso dilation.

Right? And, you know, no problem. My wife never felt that. Okay. So I give us double dose, and I'm sitting there and I'm saying goodbye to my son, and she's going off to school, and here comes that feeling, right?

I'm like, you know, I get that right. So. And I took more. So no big deal. It'll go away. Well it doesn't. So I walk over to the couch and, I'm laying down at this point because now I'm getting nauseous.

Right. So unknowing to me, I'm getting basically every symptom of basically this massive growth hormone rush. Okay. So and then at one point I'm like, I'm so nauseous that I have to go throw up and my wife is trying to talk to me and I'm just like, I'm just like, like, you know, she's like, what do you mean?

So I'm like, you know, like, I'm not doing well here. I take two steps as she tells me, and I went face down into the carpet. I wake up to her literally, on the phone with 911 saying, okay, well, he's coming two now.

Are you okay? Like, yeah, yeah, I'm okay. So long story short, I take, I take my blood glucose. I it was the first thing I thought of. It was high one 40s, which would be normal in a stressful situation.

Right. So I'm like, okay, it's not it, that I take my blood pressure. It was like 170 or. I'm sorry, it was 70 over like 60. I mean, it's like, no wonder I dropped.

Okay. So, it like I said, what was happening was I took more. Right. And then, I was also at that time on another

peptide that makes you more sensitive to growth hormone, right?

My wife had no reaction. She was on the exact same thing as me, but I had that reaction. So that's a yeah, stick to the the the doses and the studies probably do good.

That's probably the lesson to be learned from this. So then that would be a that's a good one. But then I'm going to I that is kind of give me something to look up at.

I may do an addendum just to describe it. There's a percentage of people that will have a, blood pressure, kind of a dilating, reaction to, to see, an epidural and, but, and then you're one of them.

And then interestingly, it's more common in patients with limb or mold or any of those things. And so then, and it it's also dose dependent. And then you can also get a little bit of a local, there's a dilating kind of or irritation.

And so then interestingly, you're one of those people. Now, some people will have fairly significant symptoms at low dose or any dose. Other people will only have those symptoms at a high dose, kind of like you, which is interesting.

And then compare that to all of the immune peptides. And in general the mitochondrial peptides. You're not going to see those side effects and almost any dose.

But that one's that one's super interesting to be aware of. Yeah. Yeah. Well that was me too. And I think let's see, as I was going back the, the what I was on, I was I was for the first time trying test a more like which, you know, it helps your cells utilize growth hormones.

So you can imagine I had my own little perfect storm there, but, needless to say, I was fine. But, yeah, we got a little. We got a little. There's a dilation going on, guys.

So then that was interesting. And then. So Tessa, Maryland had doesn't really have any of those side effects. And so people like if people struggle with CJC and morale and then Tessa morale and it's a good backup strategy.

But then interestingly, and you probably know this more than anybody, I remember back, you know, in at the very beginning when I first went to a forum, you know, 12 years ago or something like that.

And, you know, you see all these guys walking around, these big hulking people, everybody was taking growth hormone and everybody was on high doses of testosterone.

Environmental Toxicity, Mold, and EMF Exposure

And then since the peptides have come out, I think almost, you know, the large percentage of people don't do growth hormone anymore just because they're using peptides to tell your brain does secrete growth hormones.

Yeah, it's obviously much safer, you know, and I and never experiment experimented with real growth hormone or test, you know, testosterone. But you know, peptides just, getting your body, just nudging your body as a tool, for me is about as far as I go.

I love experiment, I love trying different peptides. And I just, like, obviously, learning from it and just how my body reacts to it. But for me, it is.

It's because I was someone who lost my health. For me, always first, it's about health. When you the, the, when you have. You know, it's interesting. I was just thinking about your story, and you're telling me you're riding on the bike in that house, and that house had mold.

I wonder if that. Because I often will see people and I'll see, like they have a gym in the house, but I'll be, like, not ventilated or something. And I it's it's interesting.

I think it's important for people to hear how crucial it is to, to manage the internal environment of wherever you are. Yeah. You know, I, I just did, a piece that, is going to be, on, on HGTV and it's about this very top of, of how many people lose their life because of their environment in some way.

And it was interesting. I went in for the shoot. I actually, in Arizona for now. And I went into the shoot and the woman who I had helped in 2017 was the woman that they chose for the show because the environmental, engineer that actually she brought into her house because she heard me talking about how many people are sick unknowingly from their home.

She hires this gentleman who brought me in on this HGTV project. Right. And we didn't know that it was the same woman that, you know, she was following my work and hired him.

And here we are years later, in her home to shoot this show of how her, her home was making her sick. You know, an IRA. And here's an ironic situation.

That same home, her daughter became very sensitive because of the hidden mold that they found in the home. And she was getting headaches at night. And so when he came in and he measured EMF load in the house, he measured everything, right? Mold, chemicals.

I mean, he measures mold behind walls, not just air samples. Anyways, he, measured the EMF coming off of her wall where head is, What? She was sleeping off the chart.

Now, electromagnetic frequencies, can be very, very oxidative. Damaging. Right. Which we know. Well, it was from the refrigerator on the other side of the wall.

And so they moved where she was sleeping in the room. Not another headache. And I'm sure the mold as we explained, actually made her even more sensitive to the EMF.

And so anyways, peeling back perfect storms, this woman also had very high mercury levels, that she gave to her daughter. Right. So, you know, perfect storm situation, house, heavy metals very similar to mine.

And, have since we're, since that's, we're still in pandemics to some extent, but, now I feel like we're dealing more with long Covid than actual Covid, especially as Covid gets better.

Have you had any insights or thoughts on that side of things? From, from from either from clinically how people are coming in presenting or in terms of therapies?

You know, one of the things that I believe is happening is what is known as a cellular danger response, aka integrative stress response. So what happens in a stress situation?

I use myself as we've been telling my story, is that your cells go into a phase to save your life. We all get under stress, and there's kind of three phases to this response that your cells in a healthy situation go into and out of.

And it does that to protect you. Literally it starts shutting down cell energy. It goes into this. It slows down protein synthesis. It does all of these cellular processes to literally just save your life.

The problem is if you're under chronic stressors, again I describe that perfect storm.

Long COVID, Cellular Danger Response, and Senescence

Typically, it's not one thing that makes people sick like me. It's a couple coming together. If you remember the movie George Clooney The Perfect Storm, they described three weather fronts that come together and cause a catastrophic storm.

That's typically how people end up where they don't want to be like, like myself. But what happens is, is that perfect

storm comes together and the cells end up in the cellular danger response.

Now, when you look into the research, infections are especially viral infections. You put the cells into this response. The problem is, is why do some come out and others don't?

One of the things that I believe is we have to start examining other unknown stressors in your life, meaning that if you are a month before my bottom fell out, my, you know, I got very sick, if I would have gotten Covid as an example, I definitely would have been a long hauler because my cells were already, you know, ripe and ready to be locked into a cellular danger response.

So, you know, one of the things that we've been doing, and I teach a group of doctors and we experiment with different things, is helping people come out of this cellular danger response as a an answer, potential answer to the long haulers and Covid.

I also do believe that a lot of people that have a lot of senescent cells unknowingly to them, you could be 35 and say, I'm very healthy, but still have a lot of senescent cells.

And just for most people know what this is, but some don't, is that cells that just live too long, they typically, you know, are low immunity cells and drive hyper immunity drive inflammation right there.

So they they're they cause mischief. They're wasting cell energy and hanging around doing nothing. Right. Sounds like some very bad people. But, when we can reduce the senescent cells, we also seem to be able to, you know, knock people out of cellular danger response as well.

But anyway, so there's this, this combination of too many senescent cells that people get, you know, very sick and can end up in long haulers. And the cellular danger response.

And then, you know that, that if those senescent cells, they basically basically have what they call an inflammatory phenotype. And so then they basically drive inflammation.

There's a peptide fox. So for drive that will actually facilitate killing us. And cells. Then there's all kinds of supplements. And then people will take these rapid log type of medications that will work on senescence.

And so then there's this whole spectrum of things that are sort of managing senescence. There's a whole sort of spectrum of things that are helping your cells kind of become more efficient.

There's I, I think it is often that perfect storm or 2 or 3 things that just like use that. Exactly. Right. People didn't know about. And so they didn't they didn't know that they had that under the hood.

But then when you start to look and figure that out, often we find tick borne illnesses are infections, which is why that long Covid population, regardless of all other things, seems to respond quite well to, the, the immune peptides, because generally there's, there's an immune process, but it has several other fronts coming in.

And they also to me seem to respond to, they respond to the they can respond to the mad say, they can respond to human and, and kind of from a cognitive kind of enhancement perspective, which is just feeling a little bit better.

I've noticed y'all can be fairly helpful. And, and I would say a third of that long Covid is just mentally feeling a little bit better. Like if you can get people just feeling a little bit better, that and and maybe that actually helps with the cell danger response because yeah it does.

Absolutely. It sure does. You know, I just led, a fast of, 1600 people and, I was shocked at how many people said that they broke out of their long haulers because the fast.

And then I was I literally did one of these to myself, you know, this is someone who wrote a book on fasting and understands that the fastest way, cheapest way to get rid of senescent cells is to fast your body, utilizes senescent

cells for energy, drive fast, and recreates new cells via stem cells.

Right? Okay. So knowing that, of course. And then me saying gosh, yeah, this long haulers has to do with cellular danger response and senescent cells of course fasting actually you know, will do the exact opposite.

Gets rid of senescent cells and knocks people out of so dangerous spots. So anyways, fasting and I had many people who do partial fast as well as pure water fast, but how many people felt like that was the thing that kicked them out?

That's that was what I was. My next question actually. So I we're doing good. What what is what time how long was that one. And then what what sort of timing do you typically see the most benefits in terms of fasting?

Yeah, yeah. Look, I five day fast I've done since the 1990s and there was no science around it. Then. I came to five days for people because it would take them at least three days to break through.

And day four felt like, wow, I broke through. Okay, write it out for another day was always my advice. And that's really how I stumbled on this five day fast.

Now fast forward vulture, Longo and his group have found to be there's magic around five days that you hit. Most people hit what we call max autophagy day four, where the body's just getting rid of all these senescent cells, and you have this big growth hormone rise that takes place on day five.

Fasting, Autophagy, and Senescent Cell Clearance

So now what people benefit from some longer fasts? Some people what. But just as a general rule, most people will get the most benefit from an extended fast for at least five days now.

I do a lot of fasting in my life. I can enter into max autophagy, which simply means that the body's just, you know, using cells at a very rapid rate for energy.

I can get in to that by like, day two, so I can benefit from shorter fast. Although this one, I did five, five days of water. That was just last week, actually.

And, when you look, there's an art and a science to fasting, right. It's know it's a little different for everybody. Many people in the fast I recommend it is their first fast.

Just doing a partial fast where they're eating at least under a thousand calories a day and keeping protein under at least 20g, protein a day. And if you're smaller, you probably have to keep the protein a little lower.

And if you're in your calories a little lower, if you're bigger, you can get away a little more. But the bottom line is, even in a partial fast, your body goes through this autophagy where it's eating bad cells.

Simply put. And there's many other benefits from from fasting, the stem cell creation, because it doesn't just take a bad cell out, it stimulates a stem cell to replace it.

So when you, you know, years when this whole Covid thing, the literally the what it first started, they interviewed a scientist and he seemed like he was out because of an amazing article that he wrote about who will be hit hardest from this virus.

And he said people that have the most immuno senescent cells now, these are immune cells that live too long. And he was he cited some great research. I was fascinated by it that again, if you have a lot of these immuno senescent cells, you will not do well.

It doesn't matter if you're 80, it doesn't matter if you're 35. It just so happens that older people typically have more of them. So that led me to realizing that fasting would be some type of, hidden solution.

As always, ways with fasting because it gets rid of immuno senescent cells, and then you stimulate a stem cell and you produce a naive, you know, cell that's ready for action.

It's ready. It's not senescent at all. It's it's ready to fight in a good way. Not hyper immunity, lazy inflammation driving cell. So, you know, fasting obviously, you know, even when you look at it, that research from a senescence cell standpoint makes a difference.

That's awesome. That's kind of like a reboot or a reset. Yeah, yeah. And then, you know, also during fasting, you have this what I call energy conversion.

You know, it takes so much energy to just process food, right? Assimilate food, digest food. Then what happens at the cellular level when you take that break?

You know, it's like taking a stay home vacation. You don't just you get bored watching TV for one day and then you're out doing things in the yard. You're fixing everything, right.

It's like, that's what your body does in a fast. It doesn't just sit on that energy, you know, it takes that energy and diverts to massive healing. And, it's really fun to watch the body's innate intelligence take over, you know, faster.

There's a thing about the mental game, too. Like when I started fasting, I remember the first day I thought I was going to die. Like I was so hungry. And then I remember being so hungry.

And then all of a sudden I felt stone called normal. And, I went crazy again. And normal. But then what? After? And so then for years I did a fast a 24 hour fasts every week, and then basically I just got to the point that I got free from that.

And now basically if I eat, I eat, or if I don't, I don't, but I feel fine every way either way, you know, fasting is in vogue now. I, you know, I when I was into fasting in the 90s, I mean, it was me and some Natural Hygiene Society guys that are gals that I had nothing in common with.

Yeah. But, you know, now, it's different. Fasting is so in vogue. Then I go around reminding people that the feast is as important as the fast. Many people are fasting too much.

You know, it does this autophagy pathway. It's a catabolic pathway, but too much of it's no good. Just like much caloric restriction. You know, your metabolism slows down.

It ends up to be a negative, not a positive. I mean, I don't know if you remember the biosphere two project, but that's when they said, okay, if caloric restriction basically extends your life and turns on all these, you know, great genes for life extension, then surely we, you know, could do this.

In a study, they built this biosphere, which was like the perfect food, perfect environment, no pollution. Amazing. And there was eight people that dedicated themselves to two years of 30% caloric restriction.

And all these wonderful things were going to happen. Not it didn't. It was a fail. They actually came out catabolic. Their organs shrunk, their immune systems were lower.

Oh, they did stimulate the Sirt1 gene for longevity. But the problem is, is they were more unhealthy. And so it didn't work. And that's when we realized that, you know, short terms of caloric restriction or fasting or awesome, too much is no good, you know?

And then the opposite, there's a pathway called M tour that a lot of these peptides stimulate short term M tau pathway. It's anabolic. It's amazing. Your body heals too much time and you run into the same problem.

You run into hyper growth and you could make bad cells and tumor cells and cancer cells. Right. So too much autophagy, too much enter. The key is both.

So think of M feasting. You need to feast. So I typically 1 or 2 days a week eat one meal. But I always have two days a week where I feast. I eat a lot of food. Right.

The feast is important is the fast. So if I fast somebody for five days, I'm telling them to look ahead and pick five days to feast. Whether it be higher calories, whether it be higher protein, because high protein for short periods can act the same way and stimulate immature and act in a good way, as long as you don't do high protein all the time.

Because high protein, you and I both know it's damaging, right? So bodybuilders are doing high protein. High protein not good. It will age you prematurely, but short bursts of it.

Like what tribes would do if they would have a kill is it actually can be healing. The feast in the famine are both equal. I believe the magic. And that's part of a concept that I teach called diet variation.

And, it actually is a way that we utilize in my doctor group to, add diversity to the microbiome. We stress the microbiome. It's a premise called for. Mrs..

If you had a stress just like exercise, you don't get stronger in the gym.

Feast-Famine Cycling and Peptide Rotation

You get stronger because you add a stress and your body adapts to the stress. And if it does adapt to the stress, you get stronger, better. Well, if we stress the microbiome, we can actually create diversity as long as your body adapts to the stress.

So diet change is a way that we hermetically stress the microbiome and create more diversity. Fasting feast famine is another way. It's a stress on the microbiome.

When you fast, all bacteria stress out, then you have an opportunity to re inoculate. So anyways, those type of feast famine diet variation strategies that are one of my strategies I've been teaching for many years.

I 100% agree with that. And then I also think probably when you're taking peptides like feast and famine on that one as well, because taking that when I like to do it, and then I'll take days or periods of time off and then I'll sort of feel how I feel in that time.

And that's sort of, one of my favorite times is in, in those and, and the juxtaposition of those. Yeah, I agree, you know, it's just like everything. Right?

The body finds what we call homeostasis, meaning they, Okay. You know, it's I figured out the stress. It's not stressful anymore. So it just kind of sits back.

Well, exercise is a great example of that, right? If you're doing the same exercise all the time, you go from your plateau and your results. But worse than that, you actually start to decline and no different by eating the same diet all the time.

Your body finds this plateau and actually starts working against you. So diet change is magic. Peptides, right? So you're taking them. Your body is adapting to what the peptide is doing.

And in that adaptation, just like exercise diet change there's a hormone optimization. There's a you know, the cells are doing things and responding, but then you can start losing effectiveness.

So that's why running different peptide, peptides at different times and using different things keeps the cells out of this homeostasis is no different than taking supplements and herbs.

If you rotate things change that. Your body will actually benefit greater than being Mr. Consistent all the time. Amazing. Well you are Mr. Consistent all the time.

And I always love talking to you because you're a wealth of information and and I would say everything you talk about I agree with. So thanks for what you're doing for the world and for your practice and for all the doctors that you teach.

And I'm grateful I'm grateful for you as well. One of the best injectors on the planet right here. And a great mind. Matt Cook, you are. So thank you for having me.

Oh, thanks. So much. Have a have a wonderful and have a wonderful year this year. And I look forward to seeing you. Yeah. Likewise. Okay.