Creating a New You: The Use of Peptides, Hormones, and Regenerative Medicine Techniques to Look Your Best for Life Without Surgery Transcript

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Introduction and Guest Background

you know, I think it's important to look at all these pieces because, you know, how many times do people come in to their primary doctor's office and complaining of depression?

And the main issue is either, you know, testosterone deficiencies, thyroid deficiencies could even be something as simple as vitamin D deficiency. And what happens?

Well, they first are put onto a SSRI or an antidepressant, then they're put onto an anti anxiety medication. and then they're put on medications to treat the side effects of those medications and those sort of things.

This is Doctor Talks, real talk from real doctors on the issues that matter to you most. Hi, it's Dr. Kent Holtorf with another episode. Today we'll be talking to Dr.

Meehan. He's going to be talking about anti-aging, aesthetics, everything, you know, how to look and stay young from the inside out. The title of the interview is the newest cutting-edge treatments to look and stay young and beautiful throughout your life.

So Dr. Meehan is a muscle skeletal expert and health optimization specialist focused on total transformation of his clients. He is author of the Amazon number one best-selling book, pretty impressive, A New You, Using the Body's Regenerative and Restorative Powers to Optimize Orthopedic, Hormonal, and Sexual Health Function.

So broad range of stuff. He's got a really broad range of knowledge and does a wide range of things. So really impressive guy. He's currently midst of writing two book chapters for a compilation book called The Codes of Longevity due out in late 2020. He holds board certification in physical medicine and rehabilitation in pain medicine with 20 years of experience.

His treatment plans coordinate on conservative and non-operative measures to help the individual improve their function, pain, pain control, mobility, and longevity.

Instead of the typical, you're going to go to a surgeon, you're going to get cut on. These evidence-based interventions to restore, regenerate, decline, allowing them to live a truly limitless life.

They employ these proactive approaches, including fitness and strength training, mind-body techniques, hormone optimization, peptides, epigenetic testing, sexual health interventions and aesthetic procedures to maximize health span and vitality.

So that health span, instead of who wants to live longer if they're in a nursing home, you want to live better longer. And that's great. He is confident that his client will progress and evolve if they are accountable and embrace the process, which I think that is key.

It has to be teamwork, that the patient has to be actively involved and proactive. I think the days of just listening to what your doctor says and not knowing why you're taking this blue pill are gone.

That's a big problem. Is professional opinion that the client must become comfortable with being uncomfortable and be willing to push the limits of precision medicine to become a super being?

how bad they feel. And then you tell them this.

Oh, my doctor says, no, that's not it. Well, how's that working for you? But anyways, thank you for taking time to be on. Looking forward. It's heard a lot of great things about you and you just have so much expertise and love just the passion that you have.

Well, thanks, Dr. Holtorf. I really appreciate being part of the summit. Yeah. So let's get right into it. And we have so many areas that we can, we can talk about, but you were talking right before kind of about symmetry, but let's go back to what, what would you say is the core foundation to implement, optimize health and beauty?

What would you say are your core basic things that you do for people? Right. So, you know, there's all the shiny objects that we have available and all the neat toys and tools and meds and things that we're definitely going to hit on and talk about.

But I think the bigger point and probably the most important take home message that we're going to start with right off the bat is you got to get all the lower hanging fruit pieces of your health and order things like sleep.

Are you optimizing the way that you're resting and sleeping? And if you're not, then that's definitely an area that must be addressed and or hit.

Health Foundations: Sleep, Diet, Exercise, and Stress

Yeah. Otherwise you're not going to heal. You're going to be chronically inflamed, all those sort of pieces. Second diet. And again, I'm not a big fan of this diet that the other diet, it's more of a lifestyle piece and kind of looking at things that are going to help you.

And diet definitely is important from providing proper nutrition, but also trying to keep your levels of chronic inflammation down. I think the two big take homes again, would be to keep your blood sugar down and keep your insulin levels down.

If you can do those two things, you're gonna prosper in pretty much every part of health, including the way you look, the way you function, the way you feel, the way that you do pretty much everything that you do.

I've been trying to come out with a starburst diet, but I can't figure it out. Starburst and beer. Absolutely. And then, you know, along with what you're taking in, I mean, it's important to get the proper nutrients and that sort of thing.

And we'll touch on those type issues. Exercise is a big piece, both just with relieving certain activities and stress. It tends to stimulate multiple genes that are incredibly important for your health and the way that your genes are expressed.

And the other thing is controlling your stress and really trying to get your cortisol levels down. Cortisol is vilified and almost everything you say, oh, keep your cortisol down, keep your cortisol down.

important if it's chronically elevated. I agree with that 100%. However, you do need cortisol to heal. And if your cortisol levels are chronically low, that's as bad as being chronically high.

Yeah, like anything, we want to have a proper balance of things to try to maintain good overall health. All right, so you're diving deep into peptides and longevity on this podcast.

And we're right there with you. Integrative Peptides stands out, trusted by over 10,000 doctors to deliver real results for their patients. These premium peptides are your key to unlocking vitality, recovery, and a longer, stronger life.

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It's time to elevate your journey, starting now. If you're in the ICU and your cortisol level's normal, you're going to die. Correct. Well, it's all relative.

And really, inflammation is such a key thing, as you were saying. And the problem may not be cortisol so much, but it's that CRH, which then stimulates ACGH, so it makes cortisol.

Huge mast cell stimulator. I mean, it's a major one. So just stress is a killer. With the immune system and inflammation. Yeah, absolutely. And, you know, it's something that's often ignored, especially in the musculoskeletal and pain field.

You know, it's always we're looking at the anatomic issues and we're taking films and all those sort of things. It's important to talk to the patient and say, you know, what's going on with your life?

Where are you? If they're over there, you know, all bunched up like this, you kind of get a pretty good idea that their sympathetic nervous system is on all the time.

That thing that kind of allows you to run away from tigers and cars and that sort of thing. And that's great. At that point, you definitely need that for a quick burst of things, but you don't want that on all the time.

Otherwise, you're going to be a wreck. And again, you're not going to heal, you're not going to prosper, you're not going to function particularly well.

What do you tell people, okay, stop being stressed, you know? Right. I think we try to give them the tools and things that are available or that they can maybe implement into their activity levels that can be helpful.

So for example, try to get them into something they enjoy. A lot of times people will come in, they're taking care of everybody else, as opposed to themselves.

So the first thing is to try to carve out some time for themselves, even if it's 15 to 30 minutes a day, which is incredibly important. try to get them into some type of hobby or something to enjoy.

You'd be surprised how many people don't even get outside nature at any point. I mean, just to have them go out and take a simple walk outside, get a little sunlight on the face and just relax and just smell the flowers and that sort of thing.

I got people pointing at me over here. I gotta finish this PowerPoint, you know. Yeah, nature is very important. You know what strikes me is interesting because it's like normal.

Okay, you're a pain guy, must be a skeletal. Most people go to a doctor like that and they don't ask you anything. They say, okay, where's the problem?

They look at your knee, whatever, and you're looking at everything. So how much time do you spend with patients? Like, what's the process? Because I don't see pain, again, musculoskeletal guys doing all of this.

So I think that's really unique. I think that's great. And that is some of the challenge to most orthopedic practices is you're banging them out in about 15 to 20 minutes, which makes it very difficult to do deep dives and that sort of thing.

However, as I've gone on in my career, I saw diminishing returns on how people were responding and how people were improving as far as the things I was doing.

And, you know, like everybody else, I used to use high dose cortisone or steroid, which is terrible for a good number of things in the body, including, unfortunately, it quells inflammation short-term, but long-term actually increases it because you're jacking up their blood sugars and messing, you know, the hypothalamic.

pituitary and adrenal axis, you're actually affecting their bone health negatively and increasing their risk of things like osteoporosis. It's actually negatively affecting the skin, a good number of things.

Yeah, you're breaking everything down, but you can get them out of the office real quick. Correct. So I started looking at things a little bit differently as I was starting in my career and kind of seeing, hey, things I was doing or that I was taught in my fellowship aren't necessarily making people better.

So that's when I started learning about interventional and regenerative type interventions like proliferative is kind of where it started using dextrose, which is basically a sugar compound that's in almost all IV fluids that can be injected into pretty much any tissue, be it a tendon, be it a ligament, be it a muscle or even in the joint and can kind of set off a cascade of healing and restoration.

So that kind of the next step up from that was PRP or platelet rich plasma. which we can use in any form and a good number of things, be it from an orthopedic standpoint, be it from an aesthetic standpoint, be it from a sexual health standpoint or that sort of thing to really try to change the environment of the tissue, bring in the cells to incorporate and encourage healing and really try to change the environment of the tissue.

And then the next step up from that are the stem cell interventions. that are kind of the Cadillac of procedures right now, but there's other things on the horizons, including things like exosomes, which are kind of signaling cells and kind of tell your stem cells in your body what to do.

And, you know, good number of things moving forward to call them exosomes.

Regenerative Medicine and Joint Preservation

they're now de-severalized growth factors. Ah, very nice. I gotcha. But yeah, that's kind of how I got into that. That kind of dovetailed into learning about bioidentical hormone replacement.

I'm sure you're familiar with Dr. Neil Rousier through World Link Health. I love him by the way. Yeah, Neil's a great guy and he came and spoke at one of the orthopedic meetings I was at and kind of blew my mind and basically turned everything I think we had learned at medical school 180 and was like, wait a minute.

And it's study after study after study after study. And that's what I found, you know, I was sick myself and just orthopedic wise, they said you need a hip transplant and a hip replacement.

And I'm like, you know, what about PRP and stem cell? It doesn't work. And the orthopedist was limping. He goes, well, you need to go in there to do the surgery.

And he goes, I got it done myself. I'm like, you're limping. He goes, well, yeah, my bone collapsed. I was in traction for two months. I got nerve damage.

I'm like, oh, great. I think I'll go. And then, yeah, so I did, you know, some stem cells, some ozone, some PRP. Within a year, it's like 80% better. Right.

And then I do it, I was doing it once a year. Now, it's been fine for five years, you know? Right. Right. Who knows what would have happened? And how many times have you had people come in, say employ knee transplant, knee replacement, or hip replacement, and you're like, well, let's try this?

Right. No, I mean, a good majority of them do. And we still send people for surgery. I mean, there's certain cases, unfortunately, that you're not going to be able to benefit.

But I would say the vast majority of folks, especially for knees, knees tend to do incredibly well, even when they're in the moderate to severe range.

Hips not quite as predictable, but definitely can be worth the process if you can avoid a joint replacement or at least

extend the ability to continue to do the things that you want or need to do.

Or people say, well, my insurance will cover like, okay, you want to like, because people think these things are risk-free, you know? Right. And huge time to recover.

And so it's, yeah. Right. So I think it's, it's definitely in the armamentarium. And, you know, I think, you know the the tide shifting and and things are starting to move more toward the conservative management approach and even a lot of surgeons are starting to embrace it and at least understand that there is literature and data that supports the use of it and there's some that's you know says look maybe this isn't the best form of treatment but I think that's part of the process so it's an interesting and very exciting part of what I do and what I really enjoy doing.

And I think it really makes a positive impact in the folks and kind of the beauty of what I do in some of the facilities I've been in is you're looking at the patient from head to toe.

So going back to your question, how long do we spend with folks usually anywhere from about 30 to 40 minutes, sometimes 45. Pretty quick. going through all that.

Yeah. You do, but it depends on, you know, how you got it primed for your intake. And I usually tell folks, look, this isn't going to be a one or two visit thing and we're going to fix everything that you have.

I kind of set the tone that, hey, this is going to take a good six to 12 months to try to get things cleaned up and get you moving forward. And I kind of go back to the things that we touched on in the beginning.

A lot of times I don't even suggest doing the regenerative piece until we've got some of the other parts in place. It didn't happen overnight. Correct.

So it also, if you don't have the building blocks to heal, for example, if your nutrients or micronutrients are low, your vitamin levels are off, your hormone levels are diminished to the point where you're just not going to recover.

then we're going to fail, unfortunately. So that's where I think getting people up to those optimal levels for those type things is incredibly helpful and important.

Now some people will balk at it and some will walk out of the office in a huff and, and really not come back. And, you know, I understand that to some degree, but by the same token.

Wow. Yeah. That's like, it's just, they made up their mind. Yeah. Don't confuse me with the facts. Right. And I see doctors like that. You know, it's like, here's, here's 50 studies showing that now I don't, I don't believe that.

Yeah. Right. So, you know, and I agree with you from that standpoint, but overall, or were they going to be accountable or the way they're going to do the things that they needed to do, at least from the regenerative part?

Questionable. So if they're not willing to do some of the other pieces to get their health in order, are they going to do the rehab? Are they going to do the other pieces that are going to really accentuate this because you're right, it's not something you just do the injection, have a good day.

I mean, it's going to take still a good anywhere from three to 12 months for this thing to fully recover and heal. You're going to be on your feet a heck of a lot quicker than if you had surgery, no question about that, but it's still some work.

I mean, I've had some work done on my knee on a couple of occasions and it's been about a six to eight month process for it to really feel good and really allow me to get back to the things I want or need to do.

And I kind of set that table early as well. But I think, again, my goal is to have a long-term relationship with my clients and with my patients. I don't necessarily want to be a one and done or have you just see me on one or two occasions and call it a day.

I want you to kind of trust me, understand me, you know, and, you know, some of the things we talked about before with being accountable, sometimes I'm going to push back on some of the things you're telling me a little bit, maybe not agree with you.

but I think that's part of a positive growth process and I would expect the client or patient to do the same and a lot of times they do. They'll come to me with something that I may not have heard of and definitely something I need to explore or research and that sort of thing too.

But I think that's the beauty of it. Yeah. See you're open-minded and I tell patients like, go on the internet, read everything. Look, there's great information.

There's missing for, let's talk about it. But so many doctors are stop breathing and like, why are you questioning me? I'm a doctor, you know, run from that guy.

Exactly. I agree. Yeah. And it's because they can't support, their treatments, they can't defend them, you know? Correct. Yeah. Awesome. Go ahead. Oh, yeah.

So you're doing so many things. So we're talking about, you know, the aesthetics and the concept of symmetry. Correct. So I think, and this kind of goes back to all parts of what I've been involved with, but I think symmetry is very important and, you know, it goes back to the statement and I'm not sure who came up with it initially, but form is function.

And if you've got symmetry in your facial structures, you've got symmetry in your jaw and certain things that's going to allow you to breathe normally.

That's going to allow you to interact with your environment normally. That's going to allow you to move pretty readily and pretty successfully. And you can tell a lot about people by the way that they stand, move, walk, that sort of thing.

And you can kind of get ideas on what they've been doing with their diet. they've been doing with their exercise, what they've been doing with flexibility type activities, you know what they've been doing with their breathing and or you know respiratory type function, how many times a minute they breathe.

I mean most people think normals in between 12 and 16 breaths really we should breathe anywhere from about three to maybe eight times a minute and that sounds minimal but if you look at the data it's pretty profound and pretty pronounced for that.

So yeah symmetry is a big thing and you know as we look at folks and as we look at beauty it seems like it's vilified at this point especially in the media on social media any of those sort of things and we're shaming people or we're fat shaming this person or that sort of thing.

I don't think that's necessarily the case and I don't think that's necessarily the goal. I think the way that you look kind of sets the tone for a good portion of your life.

I mean if you're looking and feeling comfortable with yourself then your confidence is going to be much better. People look at you differently and you know there's no two ways about it.

People that look better and or aesthetically pleasing get better jobs, they make more money, they get more promotions, they get more dates, they get more of you know the potentially positive things in life is that perfect?

No. Is that always right? Unfortunately not, but it is part of life. So I think it's something that we have to look at and really try to improve upon.

And again, does everybody going to look like Marilyn Monroe or going to look like Tom Cruise? No, that's not the point. But I think you try to be the best version of yourself and really try to continue to move yourself forward

If you have something that you don't like about yourself, let's work on it. Let's talk about it. Let's see if we can make some inroads to it. If you have a functional or a muscular skeletal deficit, there's definitely some things that we can do to make that better to help improve your overall function and movement.

And then going back to the symmetry piece, similar to what you were talking about with your hips or with your knees. If you're standing differently, or if you're moving differently, it's going to affect all portions of your body and the way you move, the way you function, the way you sleep, the way you get in and out of a chair, on off the toilet, climb stairs.

Hormones, Depression, and Root-Cause Treatment

I mean, all those sort of things have a significant impact and then that's going to affect, you know, potentially your cortisol or stress levels to some degree, how you recover from exercise, a good number of things.

So I think that symmetry is one that's very important to really look at and really try to focus on. And so, you know, ways to do it, I mean, functional movement screens, either with physicians, with personal trainers, with even our physical therapy department.

is incredibly helpful, incredibly important to do. I think looking at your respiration, there are multiple tools to do that. You can look at VO2 max, which can be very important.

It's a little bit higher level type thing to look at. But I do think all of those pieces are really important to focus on. And if you look at some of your higher level athletes, actors, actresses, anybody that's in the public eye, you notice how symmetric a lot of their structure is.

And it actually translates over into health. And I think it's very important to really address. And healthy is beautiful. I picture you like, kind of like the psychiatrist analyzing everyone.

You're like at a party analyzing everyone's posture and like, Dude, you need to eat better, like, yeah. Yeah, I mean, it's definitely something that's hard to turn off, I'll be honest with you.

But yeah, I mean, I think as you start observing some of these things and picking up, I mean, we'll talk about something similar to what your expertise is.

You know, when I started learning about PCOS or polycystic ovarian syndrome, I mean, I don't know how many patients, women that I had seen that had that, that I just totally missed.

You know, I whiffed on it. And now I see the patterns and I see some of the things. I don't miss those as much as I used to. And those women, if you can affect them positively, they are incredibly ingratiated to you.

And you can really help them in multiple different ways, including fertility and some other ways as well. So let me ask you one PCOS. Yeah, well, what do you like to do for it?

But yeah, it's true. It's like you walk down, oh, that person's low estrogen, that person's low testosterone, you know. But yeah, for PCOS, what are your key treatments?

What do you look at? Right. So, you know, definitely you want to look at their blood sugar and insulin levels. It's usually, you know, an endocrine issue.

And sometimes it's difficult to define because there can be multiple things that are all over the place. But the vast majority of the women that have it, have blood sugar and or insulin issues.

So definitely trying to affect those positively. So things I like to do with that is really look at their diet and see what they're eating and try to clean that up, try to get rid of any type of processed foods, anything that comes in a wrapper, anything that comes in a can or anything that comes in a box, ready to eat typically.

And the other thing that can be very helpful is trying to shrink their feeding window, doing more of a fasting or intermittent fasting type region. Now, sometimes with women with that, it takes a little bit of time.

So most people eat in about a 12 to 14 hour window. And unfortunately that doesn't allow the body to rest. It doesn't allow it to restore, regenerate itself or any of those sorts of things.

If your blood sugar is constantly going up and down, up and down, your insulin levels are up and down, up and down. Basically, your inflammation levels are kind of the same thing.

So if they're eating in that 14 hour window, okay, let's shrink it to 12 to begin with. And then let's try to maybe get it down to 10 or even eight where they're eating in that eight hour window and kind of fasting around it, not doing some snacking and some other things.

If they're still having some challenges, then that's where things like berberine can be incredibly helpful, which helps to control blood sugar. It also can be very helpful for controlling triglycerides, even blood pressure a little bit if that's an issue.

And then metformin is another piece that's very nice. And sometimes dovetailing those two medications together can be incredibly helpful and powerful.

Most of the time, their progesterone is going to be incredibly low, which can manifest itself a number of different ways. Sometimes they can have headache issues and migraines that have been undiagnosed or they've been treated by multiple people haven't really gotten any satisfaction with relief.

Sometimes if you're able to get them on that progesterone piece, their headaches either improve significantly or sometimes even disappear. And then the progesterone piece also, if it's low, makes them at a much higher risk for things like uterine cancer and breast cancer.

So you can help to kind of decrease that risk. Actually really good for skin. Progesterones are really good anti-inflammatory. The other things that most of them have joint-related issues too, and progesterone has tons of receptors in the joints and soft tissues, as does testosterone.

We'll get to that in one second. but trying to get them on some progesterone. Most of the time the thyroid is going to be off. So intervening with thyroid, whatever your thyroid medicine of choice.

I'm finishing a PowerPoint on basically all the conditions that it's amazing, like PCOS, diabetes, obesity has hypothalamic inflammation. And so they're really have central hypothyroidism.

So they're all with thyroid. Yeah. Right. And then a lot of times their testosterone is going to be off. Now at times it will look high. The reason is that is because there's a protein in your blood called sex hormone binding globulin that's typically low in folks with PCOS.

So a lot of times if you're able to kind of reshift some of the other things that you're treating, that will come up and actually bring their testosterone down.

They can kind of clean up certain things where they've got some facial hair, maybe a little bit of a mustache or chin hair. They may be losing a little bit of hair on the top of the head.

So that kind of dovetails and some of the things we're looking at aesthetically. you don't necessarily come in and go, hey, I'm going to jam PRP into your head.

Let's look at the whole piece here and say, maybe there's some other reasons from either a metabolic or from a hormone related standpoint or something else that's the root cause of this.

Let's try to see if we can fix that before we start doing again, the fun and shiny stuff that I love to do. Don't get me

wrong, but may not be indicated right yet.

So, I think that's another piece to look at. And then, you know, sleep can be another one that is incredibly or is negatively affected by, by PCOS and some of the other pieces typically.

And this isn't always true. Most people think of all these women being overweight and I would say probably at least half are. And I don't know, you probably know the data a little bit better than I do, but those, they're typically are helped a great deal, but there's plenty of women that you would look at and think, yeah, there's no way.

and they're at normal weight and that sort of thing. And they equally have as much musculoskeletal type pain and discomfort that you want to address. And if we get into the peptide piece, a lot of times their, you know, IGF-1 is very low and growth factor and or growth hormone analogs at times can be helpful.

Again, I wouldn't start that right away, but as we're kind of going through the chain of command here to try to get them better, that can be another piece that can be helpful.

And vitamin D levels definitely are something that typically are often most people, but a lot of times in these women as well. So there's a whole cadre of things that we can look at and really make some significant impacts.

And again, not going back to going back to Dr. Rousier, he always tells the story that he apologized to almost every woman that he missed the diagnosis on.

And I agree with them. There's so many of you come in, you're like, That's it. It just hits you in the head. When you learn the news, you're like, oh my God.

Yeah. And because they have hypothalamic inflammation, which controls not only metabolism, pain, all the other hormones. So yeah, so they're low growth hormone.

They basically have pain oftentimes. Their metabolism is terrible. Right. Yeah. So their thyroid looks normal because the TSH is low. They just have a whole slew of problems that aren't picked up because, for some reason, endocrinology is based on, everyone must have a normal hypothalamus and pituitary.

Yeah, I agree with everything there. You also do bioidentical hormones? Correct. You mentioned that? Yeah. I think that's the other piece that's been very helpful, which moved on into the peptide realm.

Hormones, again, is not something that is taught well in medical school or even residencies or any of those sort of things whatsoever. And most of it is vilified, unfortunately, which is just, in my opinion, malpractice.

And again, if you're looking at the lay media or lay press and, and some of the social media type sites, it's kind of still that way. And, you know, it's really, I think, an integral part of management for any type of condition.

But if you're looking at orthopedic issues, anti-aging issues, if you're looking at aesthetics, you're looking at just overall health in my opinion. This should be bread and butter type stuff that we really should be working on.

But basically, the way I look at it is, and I tell a lot of my folks, you know, if you want to know a person that really has no hormones, look at your nursing home population.

I mean, that's very much of a great illustration of what happens when you lose your hormone status. And we start doing that around 30, 35, 40, depending upon the person.

So it's not something that happens when you're 60, 70, or 80. These are things that start happening when we are all young, and I still consider myself that even though I'm 52. But, you know, I think it's important to look at all these pieces because, you know, how many times do people come in to their primary doctor's office and complaining of depression?

And the main issue is either, you know, testosterone deficiencies, thyroid deficiencies could even be something as simple as vitamin D deficiency. And what happens?

Well, they first are put onto SSRI or an antidepressant, then they're put onto an anti anxiety medication. And then they're put on medications to treat the side effects of those medications and those sorts of things.

Whereas, you know, and I know you've seen this as well, if you're able to replace the hormones and, you know, I look at thyroid and or testosterone as the feel good hormones, you hit women and or men, both with those pretty quickly.

They feel a heck of a lot better. I'll just give you an example. I had a gentleman who was just morbidly depressed and his wife came with them to multiple appointments with me.

and to other providers. And she was concerned significantly about suicide and some of the things from that. You know, got some labs and he was low on thyroid and vitamin D and DHEA and testosterone.

And it was to the point where when he was in the office, he wouldn't even look me in the eye. I mean, he was looking down at the floor. I mean, the guy made you feel down.

And so we talked about a good number of things and got him going on testosterone, got him going on thyroid, vitamin D and DHEA. Six weeks later, he came to see me and he's looking up at me.

He's interactive. He's smiling. you know talking with his hands and all these sort of things to change his life I'm sure yeah exactly so you see it every day so you don't think much about it but it's like look how much his life has changed you know right so he was white and his family exactly and he was interested hey I want more than he you know we started him on some peptides and started doing some other things as well but you know I think the big take-home message with that is again trying to get back to the root cause don't just treat the symptoms or don't just treat it with a med just to try to get them out of their office.

Let's try to figure out why this is happening. And let's try to treat some of those issues because the nice part of the hormones or any of the other things that we tend to do is they tend to be pleiotropic, meaning that they help multiple body systems help.

You know, if you're looking at things like testosterone, I mean the higher levels and the data is very clear, higher levels of testosterone, lower levels of Alzheimer's and dementia, lower levels, same, same with estrogen, same thing.

You know, thyroid levels, definitely, you know, much lower risk of things like depression and anxiety and those sort of things. Going back to testosterone, it's very good for cardiovascular protection, reducing risk of heart attack, stroke.

In fact, I talked to a person today who was a friend of a friend said they had sepsis to calm, like that's not good, but it turns out he's So low testosterone, but his doctor Kaiser wouldn't give it to him because it's going to cause heart disease.

I'm like, Oh my God, like, can you please read a study, you know, Exactly. And, you know, if you're looking at the times we're living in now with the COVID infections, I mean, men that have had lower testosterone levels typically have been sicker.

and or, you know, both men and women with metabolic disease. And unfortunately, it's very prevalent. Yeah, depending on who you read, it's 80 to 90% of the US population is metabolically unhealthy.

Oh yeah, we're second only to I think Saudi Arabia. We can wear the big things that cover it up. But just talking about thyroid and depression, so the largest study ever done on antidepressants, STAR report, 4,000 patients.

They did basically multiple antidepressants that typically the way a doctor would do step care. and they also had T3. And it turns out in the end that giving T3, regardless of the starting thyroid levels, was a better antidepressant with less side effects than the antidepressants.

But guess what? It wasn't put in the abstract, because doctors never read the whole thing, because they weren't part of funding of the study. It's nice, isn't it?

And another study, they had 135 bipolar patients, totally treatment resistant. They tried on average 14 different medications without any improvement, put them all on T3.

Again, regardless of whatever, their thyroid levels are normal. 80% responded, 30% total resolution of symptoms. Amazing, isn't it? Yeah. Why are you just doing this, you know?

Yeah. I mean, a lot of times you don't hear about any of that information. You don't read about it and it's not taught. No drug prep selling it. Correct.

Peptides for Recovery, Sleep, and Longevity

Correct. But yeah, I mean, the hormone piece I think is integral for pretty much every form of medicine. And with the orthopedic part going back to kind of where I started and things I've talked about in my book, again, people weren't progressing and weren't healing and weren't getting better with some of the things I was doing.

I was like, something's missing here. And then when I heard Dr. Ruzier talk and started bringing some of that back and looking at the stuff, it's like, yeah.

So then you start getting their levels up and all of a sudden, magically, they're able to do more, they're able to tolerate more and lo and behold, they tend to respond much better to regenerative medicine because now they've got the building blocks, they've got the ability to heal their inflammations down and all the pieces associated with that and it's pretty refreshing to see and it's important because I think it's integral to helping improve our overall life and the health span of some of the things that you talked about in my intro.

Yeah, nice. And it's like, it shouldn't even be a debate. Like the biogenic hormones used to be like quackery. And now there's so much overwhelming evidence.

Like if you want to get breast cancer, take a progestin. If you want to prevent breast cancer, take a progesterone. But the standard like OBs and they don't differentiate between the two.

It's like they both, progestin's got to prove because they do protect the uterus, but they have exact opposite effects on the breast. Progestin stimulate breast cancer.

Progesterones protect, you know? Right. And it's just, it's nuts. It's nuts. So peptides, let's get, what peptides do you like? Sure. So again, I mean, the nice part with many of the peptides is they tend to do multiple things for multiple reasons and have musculoskeletal indications, they have aesthetic indications, they have weight loss indications, they have aesthetic indications and all kinds of things from that standpoint.

So, you know, we do use a fair amount of BPC157 and TB4, both orally and sub-Q injection-wise, and sometimes even we'll put it in near soft tissue or even into the joint.

from an injection standpoint to try to help with those issues. We do some… Can you go kind of back and just explain that a little bit more? Yeah. So, you know, it has positive effects for healing tissue.

And a lot of the data and information suggests that putting it close to areas of either trauma, inflammation, if it's a nerve, nerve compression, or those sort of things has actually been shown to hasten the healing.

It cuts down on cytokines and some of the other inflammatory cells that sometimes can reduce healing, changes the environment for the positive and all those sort of things which are very much of a positive.

So BPC and TB4 are kind of staples that we use. Others, there is one called AOD9604. which initially was used for weight loss, although it's kind of hit or miss with that.

About 50% of the people… It's an anti-obesity drug. They try to really put it that way. Correct. Yeah. So it's a fragment of growth hormone. That's correct.

So it has the effects, but doesn't increase IGF-1. Right. And you like that injecting locally? Right. It actually comes from certain pharmacies mixed in with hyaluronic acid.

which is basically the gel injections that we do like Sinvisc or Suparts or Jelson that help to kind of change the environment of the joint and can help to improve pain function that sort of thing.

So AOD is another one that can be injected intraarticulately that can be of benefit and or help musculoskeletal conditions. And that's another one actually that's been shown to grow hair.

So actually, either doing it sub-q or even doing it into the scalp potentially has some growth benefits for trying to improve hair growth. Other things that we like to use from a musculoskeletal standpoint, one is called pentose and polysulfate, which technically is not a a peptide but it's kind of thrown into that.

That's another one that you can either do subcutaneously or you can do interarticulately. Another one that's really good is an anti-inflammatory and actually has been pushed a little bit too to try to help treat the cytokine storm with COVID.

You're saying the pentasam? Yes. Yeah. And so that's really a mast cell inhibitor. It's proved for interstitial cystitis. but yeah, it works everywhere, you know?

And inflammation is the key. Absolutely, no question. And then some of the growth hormone analogs, looking at things like Tessamerelin, Hippomerelin and CJC 1295. Can you just say how those work, what you're doing so you're not giving growth hormone?

Right, so the beauty of these is they don't tend to quell or turn off the endogenous production of your growth hormone. So they work in a couple different ways depending on what you're using.

They either stimulate growth hormone releasing hormone to tell your pituitary to release more growth hormone, or they go through a hormone called ghrelin.

And ghrelin actually tends to stimulate hunger, but also has the ability to help with growth hormone release. And these are pretty impressive compounds to be honest with you because again, they can help with, you know, muscle recovery and growth.

They can help with strength gains. They can help with fat loss and or weight loss. They also help improve skin, skin integrity. They help improve even mood and things from a brain standpoint overall.

So they've got a lot of positives too in a number of different ways. So they are all darn well tolerated. The one thing that's been a little bit you know, dodgy lately is the FDA kind of came down with Tessamerelin and made that more of something that could not be made by compounding pharmacies.

So there is a prescription based one, but it is incredibly expensive. So it's crazy. This whole, the FDA is the basically enforcement arm for big pharma.

No question. I probably shouldn't say it now they've come after me, but it's very true. And I would agree with you. But yes, I mean, they are pretty impressive compounds and can be used in a number of different ways to benefit

overall health aesthetics.

function, energy, that sort of thing. So again, we use them both in the orthopedic realm as well as the aesthetic realm. Do you use a delta sleep nus peptide or epitalin?

I have not used DSIP a great deal and familiar with epitalin, but I have not used it myself or have not prescribed it for other clients or patients. But I think the literature is pretty impressive with its ability to really you know, improve overall health, improve telomere function, and that sort of thing as well.

Yeah, it kind of works great with so many things. I found like the best sleep combo is Epitalion, the Delta Sleep, and either a growth hormone, AOD, can just work really well.

And actually the Delta Sleep is hugely anti-inflammatory. It doesn't make you sleepy. It takes a couple of weeks. It kind of resets. We're using it for pain and doing it throughout the day, doing it IV.

I want to give that a whirl. I'd love to hear what your thoughts are on it. Yeah, I think that'd be great. And again, going back to what we talked about with trying to optimize sleep, no question.

Sleep definitely reduces pain and inflammation, some of the other things you talked about. I mean, even dovetailing on that, I mean, melatonin is another one that's actually very potent as an anti-inflammatory, actually a very good anti-cancer agent.

great for overall health and function. And again, tends to be something that doesn't turn off your endogenous production from your pineal gland. So there's the beauty of a lot of these compounds is they again have multiple effects and not just one focus thing that it tends to do, which is Yeah and I think that's key and you've mentioned that you like you know harm of the safety is because they're doing multiple things like where drugs will like stop one thing and it just throws everything else out of balance where these like stimulated cascaded growth you know are healing and there's yin and yangs for so many things that they keep in balance.

Absolutely. find a toxic dose in a lot of these peptides, like BB3, TB4, like these keep going up. It's like, well, a thousand times the dose, no problem, but safer than water.

Try that with water or Tylenol. Yeah, very true. Yeah. Yeah. I mean, they're all natural compounds coming from your body to some degree. So, you know, you're right.

I mean, the, the lethal dose is on some of them or isn't one, so. Yeah, Tylenol, it's scary. I should also mention that Tylenol may be one of the biggest causes of autism.

I've been reading some studies, just wanted to get that out there. I was just amazed at some of the evidence on that. But me and Tylenol, the kids are crazy, you know?

No, no question. But biohacking, so I love the term. What's your thought on biohacking with health and beauty? I think, again, this is where some of the gadgets come in and some of the other things that are a little bit higher level once you've got some of the lower hanging fruit cleaned up, your hormones are good, your supplementation is good, your diet's good, all those sort of things.

You can incorporate them at any point. I'm not saying they can't be. But things like hyperbaric oxygen therapy, which is a little bit higher level, has been shown to be incredibly helpful for brain health.

Another one that's incredibly helpful for reducing all over body inflammation and pain. It's another one that actually helps to stimulate your own endogenous stem cell production.

and can almost help you turn over yourself. Usually you have to get up to at least two atmospheres to do that. But if you got a high level facility that can do that, it can be incredibly helpful and powerful.

And it's very good for your patients that have things like Alzheimer's, dementia, traumatic brain injury, non-healing wounds, a good number of things.

So it's got a lot of positives and utility to it. And do you guys have a chamber or do you send them somewhere? We do not, unfortunately. Definitely on the wish list, for sure.

If you have a heart, it's like a bomb. The regulatory issues are really tough with it. They are, and they're quite expensive, but they definitely have a pretty significant role.

I mean, other things like sauna or infrared sauna can be incredibly helpful and powerful. And usually one of the things I tell folks to try to detoxify themselves is to sweat.

And if you can't get in a sauna, get in a hot shower. If you can't do that, get outside and move around in nice degree weather and get a good sweat and get a good lather buildup.

So it's good for just getting rid of stuff. It's really good for stimulating mitochondria, especially when you're in the sauna and some of the other things.

Following that with a cold shower is really good for stimulating your vagus nerve, which is great for mind, body, and or your gut. Really good for stimulating what are called heat shock proteins which are very beneficial overall for health.

That combination is very good for blood pressure control if you can do it at least four times per week. Got a lot of positives to it from that standpoint.

So just it just made me think of basically like cold shower, heat shock proteins. Do you like cryotherapy if you had or Um cryo can be reasonable. I don't know that you necessarily need a cryo chamber.

I mean a lot of the data has been shown to be better either with cold shower or with immersion in a cool pool or a cold bath. You can do that very easily.

You don't necessarily have to have it at 32 degrees but You can put water in, just put some ice cubes in and goal was to stay in at least two to five minutes.

Biohacking, Toxins, and Advanced Testing

You do want to shiver. You do want to make your teeth chatter a little bit. I know that sounds a little bit sadistic, but actually, you know, helps overall health.

It's actually really stimulates your metabolism. It does. It's great for weight loss. So you just took the words out of my mouth from that standpoint.

And then it actually stimulates your white fat to turn to brown fat, which is actually metabolically more healthy. because it's got more mitochondria.

That's why it looks more brown than white. I have a two degree temperature tolerance. I don't know if I can do that. I can't believe these athletes that get in those ice baths and sit like, oh my god, forget that.

So you kind of dovetailed it into toxins. What do you check for? What do you think are problems? I mean, we're in such a toxic environment. That's correct.

I mean, I think you could test out the wazoo for everything. I think you have to have somewhat of a a clinical indication. And again, I think going through some of the simpler things that we've already talked about, and if folks tend to improve, the likelihood of them having a significant toxin issue is low.

We all have it to some degree. It's just a matter of what your body and or you can tolerate. But if you're starting to do treatments and you're just not seeing the patient or the client progress, that's where I think you got to think of things like mold.

You got to think of things like heavy metals. You got to think of things like glyphosate. which is basically the chemical. BPA blocks the thyroid receptors in the periphery, but not the pituitary, you know?

And I think what you're saying too is that, which I agree, like, let's say you have just toxic expo, you're fine. Or if you just have Lyme, I'm telling you, if people just have Lyme, they're fine, but it's when you get everything else.

Correct. when your immune system is compromised and then you start seeing some of these things come out and you know it can be challenging to treat there's no two ways about it and these folks are at times have been told you know multiple things or exactly or they've been told that they're treated it's your fault it's full you know and you know these folks are significantly altered or limited and again it's another one that if you're able to help improve them they will be ingratiated to you for life and they will send you a good number of folks and a good number of patients too, which is always nice having that word on mouth type.

But yeah, I mean, you know, just from a personal standpoint, my daughter has dealt with a chronic health issue for three plus years and It's been a challenge for all of us and including her and starting to turn around and she's starting to see some benefits and improvements, but a lot of it seemingly is in relation to some some gut pathology and issues and probably some autoimmune type problem.

And have you noticed like, I mean, I just think standard medicine just misses so much, and the empathy is gone. No, I agree. You know, and I think doctors are miserable, standard doctors, and the system also, even if they want to do it, they can't, I guess, you know, so try not to blame them, but I just get, oh, You know, it's just, the care is just so poor in standard medicine and we're the crazy ones, you know?

Right. And that's going back to the thing you talked about with the time. I mean, a lot of those folks unfortunately don't have control of their schedules because they're employed by the hospitals or other clinics and you know, they got them on a rat wheel and their job is just to try to do the best they can and other times you're right they don't take the time or they don't listen or they don't hear or that sort of thing too.

That's where we've got to kind of change this paradigm and kind of reduce this sick care model into more of a health care model. Yeah, I think it's moving that way, but I would agree.

There's sure a heck of a lot of forces against it. You know, it's like money versus the people, you know. This is great. This is, I think you're doing some amazing stuff.

What type of tests do you do on patients in general? Um, you know, for the most part, I would say, you know, initial evaluation, really good history, really good exam.

You know, if indicated, correct. If indicated, I do like to get DEXA scans pretty regularly because I do think that objective data and showing the client and the patient where they are and also how they progress and how they improve.

I think that's as important as anything else. And kind of looking at bone health and, you know, osteoporosis is poorly treated by everybody. going back to some of the things we talked about with hormones where I think that is beautiful for that.

Look at their body fat deposition, but also kind of look at their muscle mass and then kind of checking it every six months to see how they're progressing and how they're moving forward.

Again, going back to the thing we talked about, a little bit of a functional movement screen, look at their symmetry, look at their motion, look at their skin, look at their hair, look at some of the other things that they may want to address, maybe not right at that point, but at some point in the future.

I do think a comprehensive blood panel is very important. And you know, that can morph and dovetail depending on what you're looking at, but I think there are a good number of things that are incredibly important to look at that just you're not going to get from your GP.

A lot of that has to do with your hormones and nutrient levels. I'm amazed how little is tested by standard medicine. I mean, they'll do a chem panel, a CBC and a cholesterol and your whole self-worth is based on your cholesterol, you know?

Correct. And they give you a statin, which is inappropriate 90% of the time. Agreed. And, oh, then they give you bisphosphonate, you know, for osteoporosis, which is nuts, but…

Agreed. Yeah. But yeah, I mean, I think you have to, and some of it's relatively standard, but some of it's what you get from the history as well, and try to guide what you're looking at.

Yeah. I do think genetic and epigenetic testing really is beneficial in trying to really become more precise with your management. it kind of takes a lot of the guesswork and a lot of the trial.

Yeah, we're loving that. I think it's going to be playing more and more of a part. Sure. And it's interesting how it does correlate with the symptoms, you know?

No question. And also I think it's important to look at, we all say, Hey, you should go low carb or keto or paleo, but that's not always true for everybody.

I mean, for the vast majority of folks, I would agree with that, but there are certain subset of, and I had a colleague, that had done some coursework with, and we had done the epigenetic testing and we're looking at it with each other and trying to learn.

And his genetics suggested that he needed to eat 200 to 250 grams of carbs per day, otherwise he wasn't gonna lose weight. And it born out because he had done keto, he had done carnivore and some of the other things and he wasn't progressing.

And when he did that, he started losing weight and started gaining muscle. So yes, I mean, for the most part, you know, even the things we say are more population based to some degree, not quite as much as, as your general MD population would be, but it's still important, I think, to get that information that's germane to them.

And then I also like to get, you know, if possible, wearable data, see how people are sleeping, seeing how their heart rate variability is, which tells me how they're recovering, which also tells me how their sympathetic and parasympathetic nervous system is working and how balanced they are from that standpoint.

Look at their exercise and look at a good number of things from that standpoint. If I was a patient, I'd be faking the exercise. And then looking at cortisol levels either via things like a Dutch test, which is usually a urine evaluation, or there are other ways that you can look at it through saliva.

I think that's an important piece too. Not the best way to look at all hormones for sure. Serum is usually better for most others, but cortisol is much better either in urine or in saliva.

So, and then depending on what we see, what we find then you know we morph it and look and then if you're looking at heavy metals and some other things you know urine screen i think is that at least a place to start and then you know depending on what you see what you find you can start them on potential treatments you can do some chelation you can use clay you can use charcoal you can use spirulina you can do some other things what's that i'm sorry you guys do ids there uh we do some ivy treatments we don't tend to do chelation or ozone or any of those sort of things so But yes, we do some IV therapies.

Well, I feel like you're doing some great work and changing some lives. That's the goal. Absolutely. You as well. Yeah, so I really appreciate you sharing your knowledge and you're obviously a kind of unicorn in your area where

you actually care maybe and also like looking at all these things that contribute and I think that's a problem with standard medicine.

Okay, you go to this doctor for this little part, this, you know, doctor for this and no one puts together. You're putting it together and that's the power I think, you know.

I agree. I agree. So wonderful. Well, thank you for sharing all your knowledge and keep up the great work. I appreciate your time as well and thank you again.

Great. Thanks a lot. All right. Have a great day. Thank you for tuning into Dr. Talks. We hope today's episode has enlightened and inspired you on your path to optimal health.

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