Podcast Introduction and Guest Bio

Your own stem cells aren't necessarily always good for you. And there's several research articles on autoimmune disease, using your own stems cells in auto immune diseases.

So using own your stem cell in an auto-immune state is really not the wisest thing to do. It doesn't help with their autoimmunity. Welcome to the TBD Fit podcast on Dr.

Talks. I'm your host, Daniel Keeley, and I will be guiding you through this wellness journey in terms of optimizing health and longevity, where we unpack the science, the do's, and everything in between.

Come join us. Look forward to seeing you inside. Welcome back to the TBD Fit podcast where we explore cutting-edge approaches to health, longevity, and functional medicine.

I'm your host, Daniel Keeley, a functional medical practitioner. Today, I am honored to be joined by Dr. Gordon Crozier, the owner and medical director of Crocier Clinic, one of America's leading genetic-based clinics.

Dr. Kmosher specializes in personalized treatments using hormone optimization, IV therapy, peptides and advanced diagnostic testing. His background in neurology, neurosurgery and ophthalmology provided him with critical insights that shape his innovative clinical protocols today.

Beyond his clinic, he's a respected educator, author and very thoughtful leader. He has trained over 250 centers nationwide in peptide therapy which we're definitely gonna dive into today and overall integrated approaches to chronic disease.

He's also a member of the International Peptide Society. If you're not doing peptides in your clinic, it's time to get out of and the author of several books, including Healing One Cell at a Time and Heal Your Cells, Save Your Life, which is what I definitely want to showcase today.

Dr. Crozier, it is a genuine privilege to have you on the show. Welcome. Well, thank you. It's great to be here. I love by starting each episode just to get to know our guest a little bit better.

So if you can provide maybe a background, because your story, similar to many practitioners, myself included, is probably the impetus of why what you do now.

But I want you to share that kind of with our guests is how did you get where you are today? Well, wow, it's kind of a long way around, but trying to make it concise.

I became extremely ill when I was working at a university. It was clinical faculty. At a University, I become critically ill so much that I started passing out when as performing surgeries.

Of course, you always have residents that can take over. You have your senior resident with you. And they're really ready to do it on their own anyway.

But I was passing out because of the incredible pain that I had. I wanted to cut my legs off because the pain was so incredibly bad. Nobody could figure it out.

They had me go into this doctor and that doctor, and he says, well, your labs are not quite normal, but we don't know what's going on with you. Then they tell you, you know, well, maybe it's all in your head.

You know? They tell ya you're kind of crazy. And I'm going like, no, I am not crazy and I need to work. I have six

kids. So I got to figure this out. A long short of it, but I did a couple of tests and then I go like oh my gosh.

I've had a mold exposure and wow, I'd have Lyme disease. And of course I did have a history of Crohn's disease from pretty young, when I was 15, and I diagnosed with Crohns.

They didn't call it Crohan's back then, they called it regional anoreitis. But, you know, we called that something different at that point. So I really figured out, wow.

It's all the toxins I have been exposed to through my life. and the lack of repair that my body had and couldn't keep up with it.

Dr. Crozier's Illness and Healing Journey

And I realized I had to figure out for myself how I was going to get myself well. So that's how went around it and I figured out, okay, I need to do different than what they had in traditional medicine because traditional was not helping me at all.

I tried all the different medications. Some of them were terrible. Let me tell you, being on some of them was horrible and nothing helped. So I figured it out for myself.

How did you start? Because your story, I'm certain resonates with probably, if not a hundred percent of our patients, right? We have kind of this mystery illness going on or certain symptoms that While the labs don't look perfect, they don' look terrible sometimes, there are certainly red flags, but many practitioners in the conventional realm aren't necessarily connecting the dots.

And in that lack for these physicians, lack of intellect, it's just… our modern toolkit has been able to evolve to, to connect patterns. And I'm super excited with where things are going in terms of stem cells and peptides and AI, and we'll get into the whole nutrigenomics, but, um, what was, was wrong?

What was off and how did you, how do you start connecting the dots? Where did. Well, I started by saying, you know what? I have inflammation. And so I've got to work at really helping with this inflammation, things.

So I really started with that and really targeting that. And really starting, you know, with the very first peptide I ever tried, which was glutathione.

The glutathiolines kind of morphed over the years and there's good and bad glutothione out there. Unfortunately, 90% of the glutethione available on the counters are not a good form.

But I started that And then began to realize there's other peptides I can use. And this was, you know, a long time ago before peptide were really known.

Uh, and so I really started with the peptid theory and helping me a lot with inflammatory process. Then I said, oh, I've got to, cause I did a traditional Western blot and the traditional western blots came up positive.

Which it doesn't come up on a positive on lot of Lyme patients, but it did on me. So I said, I've got to get rid of this. I'm got a help this process.

And so I began to realize, okay, well I can do this and back then we had a lot of hydrogen peroxide that was, you could do IVYs that really helped with a of that.

So, did that I did a number of things. And I began to really realize that I needed to help my cells begin to heal. That's when I begin because actually a lot of the European literature was ahead of us at that time.

And, I begun to realize what was in the literature is how you can really help the cells. communicate with each other, but not just communicate, with, each, other really, um, begin to heal up both the cell membrane, the mitochondria,

and nobody was talking about the Mitochondria back then.

You know, that's relatively recent, But you know really that it's an old thing and we really needed to look back on that. And I'm glad that is popular now because it is part, you, know of what goes on with everybody.

And every, I think there's more people out there with mitochondropathies, mitochondrial issues than what we really realize. You know, there might say they have a little brain fog or they might have little fatigue or whatever, but a lot of it's related to that.

That was a to impact there. Let's move backwards and take it one step at a time, which, cause I want to highlight your book is you're focusing on the health of the cell.

glutamic acid, glutamine, glycine. When someone looks to heal the cell, how critical is glutathione? Obviously upstream mitochondria, but because this was something when I just heard you speak recently how you were really myopic in terms of sourcing glutothione.

Where is it coming from and how can patients discern is this quality because You can supplement NAC, Nacetylcysteine Precursor, obviously a late-leading step in glutathione, which is a lot less.

Or you can go directly to glutothione. What is maybe the difference in terms of healing outcomes, but how do you also determine what's kind of the best source?

Well, and I, you mentioned NAC. So I love NIC. Why? Because it is the rate limiting effect for us to creating glutathione in our body. Of course, after the age of 21, if you've been chronically ill, You're not going to create glutathione real well.

And there's several of us, myself included, where we have genetic issues where, we really don't recycle glutothione or utilize glutethione, or even create glutathion correctly.

So that can be an issue for some of. And that was me, but cysteine even of itself does help with some of the inflammatory conditions and detoxification.

So it does helps with detox. It does helped with on its own, even without creating the glutathione. But the glutathion itself, so for my IV part and what I'm doing is I make sure that is number one, preservative free.

And number two, that it's not corn based because corn-based glutathione is coming from genetically modified corn. That is 99% of the corn produced in America is genetically-modified.

And I know I have a corn farmer that I'm treating right now and his is. You know, he says he's tried to grow organically, but unfortunately, there's an overspray from all the other fields.

And so, you know what do you do? You need, so I will not get a glutathione that's corn-based and unfortunately that is where a lot of practitioners are buying theirs is corn based because it's very inexpensive.

I use either beet based. from organic beets and or tapioca based from Organic Tapiocha. There are several compounding pharmacies that you can get that from.

And as far as the oral uses of glutathione, I'm kind of limit my, you know, use, yeah, You can use the patch, there's different forms. I don't like 99% of the liposomal glutathione products on the market are rancid by the time you're buying it.

So what happens if you do a rincid oil in your body? It's going to make you sick. It is going make to you worse. You might think it's working because it is gonna grab up some of those things in you gut.

Its gonna to grab some that stuff that's put off by bad bacteria in the gut but it not really gonna cross over into the

cells and really work at the cellular level.

Glutathione works at the cellular level. It's very critical for glutathion to work at this cellular-level because it has over 400 functions. One of the major functions that glutothione does is delivering oxygen to every cell in the body and every organ system in a body.

Without it, it's almost impossible to live well, to be healthy, and have proper oxygenation of every organs. Yeah, and looking even certainly at phase one, phase two detoxification where it's relevant, unfortunately in our modern era where people are doing like juice cleanses, right?

To me, it is a disservice unfortunately because you're not upregulating things like glutathione or certainly considering that when you are going some of these detoxes you become functionally deficient in cysteine and some other cofactors necessary to optimize for detoxification which would define being kind of ubiquitously known as this master antioxidant.

What else are you considering in terms of going back to healing at the cellular level? What is kind your foundation? So my fine, my foundation has morphed over the years and it's not even in my last two books.

So, you know, I am in the process of creating a new book because we got to keep up with the times. What, what was back then was great at that time. You know we've grown past that and I just, spoke at the global longevity summit in Switzerland.

Glutathione, Inflammation, and Cellular Repair

And that has been, it was an eye opener for me because it had world thinkers, people from all over the world that were really ahead of their time in what they're thinking.

So now for cellular processing and cellular health and healing, I think about different peptides, but I also think of stem cells and then how does stem cell interact with peptide and how do they actually help each other And help each other to, uh, be optimal in, in the process.

So they, they kind of grow together and help. They don't grow as I, as we say, but they actually do help and augment each to do and be, do better things for cellular health and cellular healing.

You're going right to the big guns. I love it. Let's, let's hope. Because stem cells such a hot topic, obviously, our European counterparts, and even in Asia, this has been, again, ubiquitous for decades now.

And it's only kind of coming to fruition here. Unfortunately, with regular regulation, although I think there was one big overturning in the Supreme Court not long back.

which has made it a little bit more viable. I think in the near future that that is going to change. And I always do invite regulation because then it kind of weeds out the garbage when same as you reference glutathione.

People don't realize when you're buying stuff on Amazon, maybe there can be 1% of product that's good, but often enough the rest is garbage. I call it elegant marketing.

So, okay, let's look at peptides and stem cells then. Let's direct traffic there. Where do you start in terms of peptide to heal the cellular level? What peptids?

I know you discussed glutathione. What are you considering that are foundational? what is that interplay between peptides and stems cells? And then in term of stem cell, where does someone start?

Because I hear all the time people that have gotten stemcells and more often than not, they feel better. But A, it's often limited or after a second round they see a plateau or C, unfortunately, sometimes it doesn't have a positive effect.

Like if someone's trying to attack pain in a joint, Sometimes I had a patient come in that he went to a stem cell clinic. And he said, listen, it worked great in my back, but I didn't do anything for my knee and my knees, you know, severely in pain.

And so we, we then integrated peptides locally and he was walking out of pain, I have people walking in crutches that walk out with no pain just from peptide.

Sometimes you don't need to go to the big guns with stem cells. It really depends on what's going on with the joint or what is going everywhere. And as you know, not every state allows stem cell.

So you're limited according to this state that you live in. Several states that you can do stem cells in and then there's other states you, can, do some stem, cells but it's limited to what you.

Can do and it is primarily just joint. You know now you know there are several states, that, you could use it for chronic diseases for autoimmune, states for all those different things.

But first let me go to. Your first question, which was peptides. So I have my favorites, of course. Some of my favorite have been on the do not compound list now.

However, I do have some privy to think that we're going to have these peptide back again, Which I'm really excited about because I think some of them really work.

So one of the peptides that we know really works in longevity because they've been using it in Europe and they still are, is epithelon. So epitelion is a peptide that actually helps with longevity in multiple fashions, and it actually help with sleep.

And helping your core clock, which is key for regeneration is sleep. So you have to go back to sleep, sleep is really essential. It helps with sleep and it helps your telomeres so that end caps to your DNA that can shorten and helps to keep those longer.

And there is some literature that it will even elongate some of those that are prematurely short in your in those telomeres, so it helps with that. So I love epitelan for that, now you don't do it all the time, it's one of those ones that you kind of do for a period of time and then you stop and you can do a for period time.

Usually I recommend people do that four times a year. unless they're having other issues like sleep disturbances and then we'll combine epitalon with like DSIP or something.

DSP is delta sleep-induced peptide. So you can combine it with other things. Some of my other ones that I really, really like, and you're going to be surprised, is BPC-157.

Why? Because there is evidence and there's lots of literature on it on Bpc- 157 helping to control epigenetic how you express your epigenetics. Because of that, I think it's really key in helping with longevity because if you have an incorrect expression of your Epigenetic, then you're not going to live long and you are going come down with some form or some type of disease.

BPC 157 I love and I loved it for intra-articular things because it really helps with with the pain in the joint spaces. But I don't do BPC157 alone when I'm doing a joint injection.

I combine it with TB4 or TB500, either one, whatever we have available at the time. So those are key ones for me. And then thymus and alpha 1. Any thimulin, any thymosin peptide, because as we age, your thyrus shrinks.

And if your thymus gland shrinks, it's not going to produce the normal peptides that you were producing that You need for your overall longevity and for Your overall health.

So it is not just about longevity. It's about living healthy longer. Living as healthy as we can for as long as We can.

That's the key. And thymus in alpha 1, it's been shown actually helps, especially in the elderly population, with their immune system functioning normally.

So all of those thimus peptides… They are modulators. They don't up-regulate or down- regulate your immune system. they bring your system up to where it should be.

If you have an overactive immune systems, it can help bring it down. So the thymus peptides are really cool because, number one, they help with longevity, They help your immunity system so you can fight things off appropriately, not overfight them.

If you have an autoimmune disease, it helps to downregulate that overactive immune system to modulate it in a correct way. But it's not like other products, and we have lots of products on the market that actually shut your immune systems completely down and open you up to all the other issues that you can have.

So those are kind of my key. I also like GHKCU. And I'll tell you why, not just for skin, they're using it for a skin all the time. But GHKCU, a copper peptide, actually helps with genetic modulation as well.

So it's going to help with that epigenetic modulation to modulate the expression of your epi genetics, which I think, you know, all these things are very critical in helping with with.

I also have a number of peptides that I like for inflammatory conditions like KPV. It really helps with inflammation, inflammation in the gut. You can take it orally to help with some of that gut inflammation that really help to shorten people's lives by causing incorrect gut biome, but also causing destruction of the tight junctions in Now, KPV, you don't want to use for a long, long periods of time because it's going to be suppressive of all of the cytokines, and you need some of these cytOKines for you to begin to react.

to a viral insult or a bacterial insult, or something like that. So you don't want to be on KPV for too long. And you can actually watch KPB through your basophils.

If your baseophil are one or more, yeah, KP is not going to hurt you. Get it until your basic fills are less than one. I have a bunch more peptides. I absolutely love that and certainly our listeners probably can appreciate and you know what's interesting because I'm sure I mean, we keep connecting.

I know at A4M, I love listening to you lecture. Um, just a wealth of knowledge and, and the wealth experience. And each time I hear you speak, I learned something new.

What's interesting. I suppose that in the next, you know, several years, when we do a round two here, the conversation is probably going to look very different in terms of, what you love that's, that new, but it's always changing.

Quickly to everything that you mentioned, we put out a kind of our own peptide playbook and the foundation is BPC KPV GHK copper and a copper peptides at the tail on in terms of half life.

and frequency of dosing administration, oral versus injectable, oversaturation of the receptors. Because you mentioned epitalon, I don't think people recognize when to use what and in what context to us what.

And you can actually sometimes be doing more harm than good. You mentioned epithelium, that's something I think you said three to four times a year. I usually cycle out with our patients two to three times per year, obviously a suprachiasmatic regulator where it helps with kind of resetting the biological clock as you alluded to.

But these thymic peptides, which we use a lot for athletes or injuries to recover quickly in conjunction with BPC, When can it be too much? Is daily dosing, is that safe?

If you're doing injectables, can you do daily dose? Any issues with that? I think with the thymus peptides, I can pretty much do the daily doses. However, in younger people, you want to moderate the dose.

I usually do it in my younger athletes. And then I say, okay, we need to take a break. You can't keep doing this. you need the stop that. Why? Because of the receptor sites and because we don't know exactly.

And I just had privy to this one article, which is actually not published yet. Hopefully, it's going to get published, but it was by some European people on the thymus peptides.

They actually will down regulate your thimus gland if you use them for extended periods of time. So that article is not out there yet. But I have to take that into consideration that this was a study that was done even though it's not published at this point, but hopefully it will get published.

Peptides for Longevity and Immune Modulation

We can all have privy to that study. So actually staying up with literature, staying with things to actually know what's going on. So, you know, not all doctors, like you do, stay up all this literature.

And I try to stay with all of this, reading as many articles every morning as I can. before it's time to start my job and my work, you know, because why?

That helps me in my overall work and job. And it helps to do a better thing for them. So I do think that you can overdo a lot of these peptides and especially epitalon.

I said three to four times a year. There's a lotta Europeans doing it four time a years. I, in myself, I only do it every six months, so I do only it twice a year for myself.

I'm 68, and I think I am pretty good for 68. Right? If you guys see him in person, number one, he is unequivocally the best dressed man in the room. That used to be me, given my Italian heritage, but you blow me completely out of the water.

If guys can see the video, very well dressed so I appreciate it. It just speaks to how you approach your life and to me it's in the details and we have constantly seen each other at these conferences recently because my goal is to stay on that cutting edge of where modern medicine is evolving to because peptides and stem cells to be is a non-negotiable and accelerating care What we see clinically is our patients are healing if not 50% faster than ever before with the use of these, I call them natural nutrients in some capacity.

BPC naturally synthesized in our gastric enzyme that has been one that I've been messing around with for over a decade. I used to purchase it when it would say not for human consumption on the label.

Yes. And I see now that there's regulation, that it's compounded, the degree of efficacy is exponentially better. When patients come to me and they say, yeah, I have been doing BPC, it hasn't really worked, and I'm like, okay, what is this sourcing?

What is the dosing? How are you using it? When are using? Because these can be, you know, very fragile molecules and all that matter. And so order of operations as well, not to kind of overdo things.

The problem becomes I see too often is people want to go right to the mitochondrial peptides, which we'll get into here, but we haven't mastered the foundation.

So looking at the health of the cell that's unwell, full of toxicities, like you're trying to start an engine that is full gunk that you haven't released before.

Right? So that certainly matters. But now going back to KPV, what I want to highlight this in particular, because that another one that we absolutely love.

It's a bioregulator, right? Lysine, proline, valine three amino acids. How, how are you using bi oregulators? in conjunction with peptides to support maybe the thymus or to the pineal.

Are you ever doing epithelon with a pineel peptide or some of the thethymic peptids with any of bioregulators? Yeah, so I do and I love KPV in conjunction with a lot of the thymus peptides because it is a bioregulator.

The other thing that I have to say about KP It helps with stem cell preservation, but it also helps the niche. The stem cells are held in this little niche, this protective thing.

If you want to do the best for stem and you're going to be giving stem, you need to give KPV along with the stem. You're doing a disservice because you're not having those stem cells work as long as what they need to.

And so I always combine KPV with my stem cell because it helps the preservation of the stem-cells, it help the longevity of them, and it also helps with the niche, that little niche that's holding those stems-cells to be able to differentiate into what we need them to do.

Now, not all stem cells will differentiate. You know, you have to have the proper form. So, they need to be mesenchymal cells and so many mesenchymo cells need be mucous cells, which that was discovered in Japan recently, the muce stem cell.

which they're saying we don't have any Muse cells in America, but that's really untrue because there's a certain portion of mesenchymal cells that actually are Muse Cells already.

We already know that, and that more research is being done in Europe. You have one country that finds something and then you have another country, that takes it to another level and says, No, actually, these are in a lot of the mesenchymal cells.

And I got to meet a lots of these people doing a little bit of research over there in Switzerland, so it was wonderful. I met one of those guys from Japan that was in with that study when they found the MUSE cells, And he and I spoke for a long time.

And then this other guy came up and he says, well, yeah, but it doesn't kind of end. So they got into a little bit of a debate. I love the debate between two PhD, wonderful people.

It's just, I don't know. Let's get off on it together. Let me provide context. I think an analogy that maybe you will respect. Growing up, I used to spend summers in Italy.

That's where my dad's side, all my family reside. And I would see fashion trends there that would then appear here one or two later, because I can see you're extremely well-groomed, which again I appreciate.

that just runs in my DNA as well. What's interesting is I always reference, we're like living in the dark ages here. And certainly we're ahead than some other countries, but I think that nowhere near sometimes some of the data and research and high degree of efficacy with these peptide stem cells and studies coming out of Japan and Asia and certainly Europe that you alluded to.

And so we were kind of slow to adopt things. On the other hand, we are quick to adapt pesticides and herbicides and fungicides to kind, it provides sterility.

Going back to KPV here. What I really love is it retains the body not to release TNF alpha. So in terms of adding it into the stem cell equation, you dampen that inflammatory cascades so the STEM cells can work their way around the fire.

The fire isn't burning so deep so they don't become swallowed. They can get directly to the point of where they need to go to, as you say, differentiate and create an impact.

In terms of stem cells, autologous, non-autologos, you mentioned mesenchymal stem cell, mu cells V cells. Where does someone start? What is quote unquote best?

Is there a best for everyone? I just saw some research how we're finding some cells in our teeth that are now being harvested. So where kind of, what are the do's, What are they don'ts?

Where do someone's start. So I was always an autologous person. So, I always wanted, uh, was harvesting, getting bone marrow, harvesting it, and then getting stem cells from, from people's own stem.

I began to read a little bit of literature that as we age, our stem, cells are not so good and maybe not as potent as what they need to be or being able to differentiate like they normally should.

So I kind of went off of that, and then I started using some other stem cells that you can get mesenchymal stem cell. You can it from placental tissue, from cord blood.

Right now, I use a combination of placental with this 50-50 placenta and 50% cord-blood mesenchymole cells. Why am I doing that? Because the state of Florida doesn't let me use.

people's own stem cells. I don't know. It was just in their rules, but you know, I didn't why that happened. Perhaps that might change in the future. But they did, July 1st, they signed it that we could use stem cell again in Florida, it had to be under these controls, so we had get it from a tissue banking lab.

and it had to be mesenchymal stem cells from a tissue banking lab. So, you know, that's where I'm at for what I am using at this point because I want to stay within the laws.

And we have to make sure we're staying within laws because they're wanting to shut us all down, right? And I don't want them to shut us down. I want us to work smart so that we can actually still offer our patients what they really need to have and do and how they can get the best out of that.

So that's what I'm using right now. But I used to be on the other fence, on other side, and still I started realizing that, you know what, your own stem cells aren't necessarily always good for you.

And there's several research articles on autoimmune disease, using your stem cell in auto immune diseases. So using you own stems cells in an auto-immune state is really not the wisest thing to do.

It really is, uh, it doesn't help with their autoimmunity. That's according to the recent research articles. Okay. I'm just saying what I've read. But is then non-autologous harvested from obviously, a birthing mothers.

Is that, is there a concern there with compatibility or quality? There could be, now, in the state of Florida, for us to use them, they have to come from a tissue banking lab.

The tissue-banking labs wash those stem cells so that there's no HLA attached to it. There's not HLAs, so you won't get an immune reaction. Does that make sense?

And so if they're washed, then they are clean of all those things. But you also have to make sure you're using a bank or a stem cell bank, or company that tests their stem cells.

to make sure that there's no infective disease processes. They don't have any infections. And the one that I've been using, they go back three generations.

But I know there are a lot of them will go one generation or two. This one goes back 3 generations to makes sure there is no genetic abnormalities for three generation back.

So that's kind of interesting that they make and they're going back that far. But it's hard because you can't always test three generations back and you don't know if everybody's always telling you the truth.

But we try. Now, the other problem with those cells are some people, they're stored, some of them are going to be in a sulfur containing agent. And some people have sulfur allergies and they can react to those stem cells.

So then you have to make sure that you can have stem-cells that are not in, so there's a different product that they could use other than the sulfur and the sulfa-containing agents that the stem cell are held in.

Does that make sense? Yeah, no, it does. It goes to, again, quality control delivery in terms of administration. Does it depend on the context? Is it more often IV?

Are you then adding in KPV and an IV after, is it an injectable? It depends on what they have, it depends what's going on. If it's a back injury, then I'm going to inject it around, I use ultrasound guidance.

I don't have a C arm in my practice, so I can't do it directly into the spine or directly in to the facet because I cant necessarily find that. However, we know that they will move, and they will migrate into that area.

So I can do it around the spine area, they migrate in to the area that's needed. And I've done it for, I don't know how many people I have done to them for spine issues, And they've really helped them quite a bit.

Now if it's a hip issue, then I'll direct it into the hip. If it is a knee issue directly into knee. Shoulder, directly in the shoulder area other people that have autoimmune issues, then I will do it IV wise, because you can use it for IV.

There's a number of research articles on stem cell application and for Alzheimer's. And because I was in neurology for a numbers of years, and I really liked that, I do do stem cells for for Alzheimer's, but I believe that we must address other issues that are critical to that.

So number one, if I'm going to have somebody and they want to do stem cells, I want a number 1. Make sure they have a clean diet, a good diet. Clean diet does not necessarily mean that they need to be a whatever.

It's just make sure that all the foods are clean. Proper vegetables, proper carbohydrates, and proper meats. Make sure they're organic and clean. Make they drink enough water.

They don't drink a bunch of sodas. If they do, the stem cells probably are not going to last long and they won't be so good for them. So that's kind of what I do for people.

And then we'll give the stem. But also for Alzheimer patients, a lot of them will have high heavy metals. I detox them from heavy metal first before I'm going to give them stem cells.

Otherwise, stem cell are not going work. There's plethora of literature out there on heavy metals really causing an inactivation of stemcells. So I don't want to gave them something that's kind of pricey.

Stem Cells, Quality Control, and Autoimmune Care

and then it's not going to work for them. So a lot of people will say that it doesn't work or stem cells didn't for that. Well, number one, I don't know the quality of their stem cell.

Because there's some companies that test debris, not just cells. So they're going to say they have whatever billion cells, well, they probably don't have billions of cells because that's going be a lot of debris that is going present there.

And so you want to make sure that they are live stem cells that are counting. And you want to have that on their certificate. And they'll say that, on the certificate, if they really count live stem cells, they will tell you, these are live stems cells.

This is how many. They won't count debris. But other people do. So that's how I kind of like to do it. If they have heavy metals, I want a detoxify them from heavy metal first.

Then we'll give what we need for the stem cell. Now, yes, you wanted to know if I give KPV with my IV stem cells. I do do IV-KPV before I gave the stem cell, and then I'd give the stems cells, so that's how I kind of do it.

A lot of times if they have a high inflammation, I might add a little bit of KCF 18 along with the KPV. Those two you can do together. You can't do all peptides together, right?

Because they're kind of fragile and sometimes it becomes muck and you don't want to do that. What nutrients are you adding in? Is there a glutathione?

Any sort of just a foundational nutrients in it? Cause you talked about, which is again, what is the order of operation? Most people haven't mastered the basics.

My foundation is you got to eat right, sleep right. Move right talk right poop right? And it's either we're doing one of those wrong, but, more likely two of them wrong.

And then people want stem cells in this kind of like magic miracle and they don't achieve the degree of efficacy they're looking for again because of everything you shared.

So are you then adding in other nutrients? Yeah, so I do. I like to make sure that they have proper amino acids. If you're giving IV peptides, It's not a guarantee that those peptides are going to do what they want.

If you're deprived of amino acids, they're going break apart because remember those, peptide bonds are very weak bonds. Those will break a part and you'll pull those amino acid to go and do, what you need them to and go do and be.

It's not guaranteed you're going to get the use out of your peptides, especially in an IV, but even in a sub-Q and IM category, if you are deficient of amino acids, you probably not going get full use of them.

That's why some people don't get any use from them, and you talked a little bit about it before, and I wanted to touch on that, is getting peptides just across the market.

You don't know where they're coming from, the problem with peptide is that mycotoxins love peptids. There's a lot of peptidies that are full of mycotoxin, you could be doing yourself a disfavor by just getting them from a physician that actually vets the compounding pharmacy and make sure that the Compounding Pharmacy gets what it's supposed to have in there.

So that's number one. But yes, I do a lot of prep before stem cells. Some people, they're not so well. They need two weeks of IVs before they get it. Yeah, we'll do it.

And then the other thing is if it's for a neurodegenerative disease, you want to make sure that they have a proper phosphatidylcholine. and they need phosphatidylcholine, and it needs to be appropriate before you're giving IV stem cells that you want to make sure.

And if you do IV stems cells, make there's a little bit of sugar in there because that helps open up the blood-brain barrier, you know, so they can cross over into the brain barrier even though none of us have an intact blood brain-barrier anymore.

We're exposed to so many toxins. Neuro information is certainly real. Going back to PC, so you're doing that in IV. What about in a push? Any difference?

Yeah, I do do it in a push. For some people like myself, what you do is then you have to draw back some blood with the PC. You can't just give raw PC as a pushing to the veins because it will sclerose the vein and it'll burn and you won't feel good.

So you mix it with blood. And so that then when it circulates through, you're going to circulate better, the phosphatidylcholine is going circulated better.

So I do that a lot of times because number one, it saves a little bit of time. Number one. You don't want to fluid

overload people, especially as they get a bit older.

Yeah, I love PC. Again, going back to the health of the cell. If it's not, you're looking at membrane health. I think that's one, again, foundationally, that that where people are overlooking.

PC orally. Well, obviously IV or push is going to be much more absorbed. When you spoke about amino acids, how do you discern is there lab work? How do, do know if someone is adequately sufficient level?

So, you can get amino acids through LabCorp and Quest. Most of the time, their reference range is so broad that everybody falls into the normal range.

So I like to use some of other labs. There's several labs out there that do it, I could name about. couple of them, but there's a couple labs out there that actually do amino acids and you can look to see if they really are falling in that reference range.

If they don't fall in the reference, then you need to give those ones that are below that range and they're a little bit low. So it really helps with a lot of that stuff.

So that's what I like to do is look at what people's overall health is. How are you? All of us, even myself, I do my stuff twice a year. I want to make sure I'm falling in the right category.

If you want age well, what are you going to do? You're going make you're falling into the reference range that's normal and where you are at. For me, I just try to be sure of everything.

Why? Because I am a little bit anal. Look and see where your falling. Where is your muscle mass falling? There are lots of peptides that can help you with your muscles mass too.

We can go on and on about peptides because there's a plethora of peptide for all these different things, but you have to start with these basics. The basic ones that I just mentioned first, those peptids are the ones I start.

No, yeah, we'll definitely get to muscle here in a minute. I want to revisit back in terms of stem cells because you mentioned, you know, a specific count.

Does more equal better? And in term of exosomes, where does that fall on your radar? Again, does more equals better. Okay. So, wow. No, more does not always equal better in stem cell counts because actually you have to look at the live stem cells.

You actually want good quality. Quality stem-cells are going to matter first above everything. Where do they come from? Are they coming from healthy young women that are delivering a baby?

and the baby is healthy and so you know a lot of times they harvest them and they don't utilize them until they know that the mom and baby are both maintaining health afterwards those are gonna be better quality.

Now, you know, sure you don't want like 500,000 stem cells. I mean, that's really not going to be enough to do much, right? You do want more stem-cells than 500 thousand, but when you talk about millions and then you get into the hundreds of millions, if they're saying hundreds-of-millions, they are probably counting debris or dead stem cell.

They're not counting live cells, That's just the facts of it. And it's been true left and right. And I do have to tell people it matters where you get your stem cells from.

The number of people with complications going out of the country to get stem cell is growing. There's several stars now that have had, they don't want to come forward because they are stars and they want people to know that they're getting stem-cells.

But they have gotten stem sales out-of-the-country and have been sick. And they got sick from it. And some of them really bad. They ended up in the ICU and several things.

So, you know, where you get your stem cells really does matter. How they're done in a sterile matter does matters. That's why you have to go to qualified physicians that know what they are doing.

You know? Like you. So we've done our due diligence. We've studied, right? Now, what about exosomes? I love exo-somes and I think ex-osome work for a lot of things.

These are little mini growth factors. There are products now coming out that are actually pulling out exosomes and being able to quantify what type of exo-somes they are.

Are they ex-osome that's are going to help with muscle? Are the exesomes that're going help circulation? Or the Exesome are gonna help nerve and nerve regeneration.

So there's exisomes now that becoming available. not readily available yet, but they will be within the next couple of years. Just keep your eyes out for that because that's the way exosomes are going to be going.

So I do like exasomes for a number of conditions. Exosome's usually are a little bit less costly than stem cells. Sometimes if somebody doesn't have the finances for stem cell, I'll use exostomes and combine them with different peptides for whatever the problem is, you know, and you can use them for a plethora of different problems.

But exosomes really are giving the little growth factors to help repair specific cells, specific things that are needed for that. So I like exo-cells as well and I've been using exocells.

For a long time you know the FDA kind of change what they wanted us to call them for a while they want to be calm growth factors and they wanna call you call him whatever and then something what whatever so but we went back to calling them exosomes again so.

Now, but the FDA has their regulations and what they want things to be called and how they wanna be done. So, we try to follow what the want, right? Keeping up with it is kinda difficult because it changes all the time, it seems like.

But it is there for a reason, but I wish they would kind of shut down some of these things that are selling directly to people things and then it'll say on it, not for human use.

And if it says that, it might be good for humans, and it may not be what it actually is. Yeah, that's how I started over a decade ago. Certainly it's evolved and I appreciate the legislation does come in because more regulation, it ensures quality.

So sourcing, as you said, matters, but also kind of the detail, the order, their process, what you're considering. I appreciated the level of depth you go to to ensure a very predictable outcome.

when we create this checklist, then we can kind of understand what is the likelihood of success. In terms of the exosomes, have you seen exoomes now in drops that are reversing blindness or restoring vision?

I have. I haven't used them myself because I've never had anybody that really needs them. But I do have a good friend of mine who's really close to me here, that you use those eye drop exosomes for somebody with macular degeneration, but really didn't see any good results.

So, it doesn't mean that your going to have great results even though you can see it. That's the thing is sometimes we see some good results in a few people, but not in everybody.

And you don't know who's going to have the great results and who are not going have those great result. But I do love Exosomes for that case. Um, we have had somebody, I had, somebody here that used, uh, some topical

exosomes for some psoriasis and saw great results.

I couldn't believe it. Um. And I wish I have pictures I could show you right here. Cause I actually have the picture somewhere, but I was like, oh my gosh, look at the before and after this psoriasis.

It really worked. So, you know, if some of these things really work. So exosomes can help with an inflammatory process, decreasing inflammation. They can't help getting what the cells need to repair and restore.

Now, do you want to give that before or after? I always like to get exasomes after somebody has used some senolytic peptides, because I think you're gonna get a better result.

That's just me. Again, I appreciate it, you being you and how detailed you are. What synolytic peptides are you typically suggesting? My favorite synoletic peptide is FOX04.

FOx04 is a little bit difficult to get right now, but you can still get it. It's not on the do not compound list or anything like that. I do like FOXT04 because it really does help.

uh, to break down those senolytic cells and help you to restore. So then if you're going to give exosomes, then you have that, you know, so I do it for two weeks before and then I'll give the exostomes.

Exosomes, Senolytics, and NAD Therapy

That's how I. I'm not saying it's perfect. Somebody else might have something that's a little bit better. together. And when you just mentioned psoriasis, I'm getting a lot of more referrals for DERN patients.

So if you can somehow share that source, that would certainly be helpful. It's interesting because when I look in terms of efficacy, what I think about is, because you mentioned heavy metals, right?

The impact how that's going to degrade stem cells. Stem cells don't work as effectively. What does their heavy metal load look like? What is their environmental toxin load?

What is their pathogenic load look like, which then again would prevent degree of, of efficacy. What about V cells, mu cells adipose derived stem cells?

Um, how are you looking at all those three in terms of additioning or adding them into your lineup in the future, if any? So, um. V cells. I used for a while.

Um, I didn't see great results, but there's other people that have great. Results with them. So I don't want to really put them down. They might be good.

The V. Cells. so I have some people. That use them and they have. Great results with. But I just never saw great result with him. As more muc cells become available, I'm definitely going to be using more mu cells in with my regimen.

So the mu-cells I love. Why? Because they really differentiate better than the traditional just plain mesenchymal cells. Now those mesenchymel cells will have some mu cell in them.

Just remember that. So they will work. And then I forgot what the third thing was you said you were asking about. Oh, adipose. I used to do a lot of adepose derived stem cells.

So I use to that all the time. Would either do bone marrow or I would do adapose and I loved adopose because, you know, number one, I'm sucking a little fat out that they didn't want to have.

and then we would differentiate that and, and spin it and get what we needed to. had a machine in here that did a of that. And then if we wanted to expand them, we could send them to a lab in South Florida that would expand him

and then send him back to us.

And, then we can use them. So, I like adipose stem cells. I think adepose stems cells really work for some conditions, not for everything. Remember, if you have an autoimmune thing, you don't want to use their own stem cell.

That's one thing you do not want do is if it's an outer immune case, don' use your own stems. So that's my big thing there. Well, that certainly makes sense.

You're not kind of reinjecting the problem, right? Right. recirculating the damage. If we're allowed to do fat for stem cells in Florida again, I'll start doing that again.

Right now I can't, so I won't do it, but when it comes available again I will because I love it and it's cost effective. Are you doing any senolytic testing now?

So, so everyone can understand looking at senlytic cells, the kind of what's colloquially now known as zombie cells. Kind of dead cells that just hang around in the body.

It doesn't clean up. And so FoxO4 not only helps to clean that up, but also helps clean-up lytic cells uh, that are not functioning and jumpstart new ones.

In conjunction, we'll use that once a part of the time with kisspeptin, which retools a signal to, to the ovaries and the lighted cells for, for um, the testicles to continue to output.

So when you mentioned, you know, hormones or muscle, obviously that all coincides, but are you doing any sort of synthetic testing? Cause I know there's a couple of companies, do you, put any stock into that?

I have, I don't know what to believe with it. Especially, especially after this conference, because we had one of the ladies from the World Health Organization.

She's she's been on their board before and she said, you know what? That lab testing is not accurate. So now I'm like. Oh my gosh, you know, it's not accurate.

So I don't know what to think about it. I was doing it for a while, when it first was coming out and kind of available and I kind looked at it, but I, I.

Don't how to take that into context. Is it really going to matter for me doing that? And maybe it just a cost in getting that, that maybe its taking away their ability to afford other treatment modalities.

So I'm kind of reassessing all that. Okay. I am just honest. Well, that's completely fair. Again, trying to stay at the bleeding edge of where things are going.

Sometimes it is too much and maybe we get a heart attack ourselves. So I'm doing some scintillating testing with Jfinity and looking at intracellular NAD.

And I was doing that too. I still think I will probably do some of that because I think that is key for that. Looking at your intracellular, NAB is really, it's a whole different branch now.

But looking at the Health is Hell and the mitochondria, obviously going full circle, high degree of relevance. Again, do you think IV NAD is going to be around for the next decade?

Is this hype? How much of this? How much of it are we doing wrong versus, you know, NMN or NR and some of these other much more cost-effective solutions?

I think you can use the cost effective solutions rather than doing just the high cost dollar IV NAD. Now, do I use

IVNAD? I do. I don't use it in the volumes or the amounts that everybody else is using because it's really causes a lot of headaches, nausea, it takes four hours to six hours, to infuse and it's just really too long and they don't like it.

They don' like sitting there that long, number one. Number two, they do like how they feel the next day from the NAD, but not everybody because not everyone is transferring it appropriately to where they need to.

But I just think that we're going to have other forms come about that are going too. There is a product out there right now that is different form that you can give IV wise that cuts down the time by 75% and it helps with A whole lot of those things.

So it helps with different aspects of it. That's the key for all of that. Um, you know, but I think there's other less expensive forms when you'd really test that.

So you've probably tested your patients and I saw that, if I gave some cheaper forms, precursors for NAD, that they actually had just as good a results, uh, in getting their intracellular NED up.

So, but it also depends on peripheral because of the research articles on showing that how the mitochondria use a lot of NAD, right? So it happens with the mitocondria really restoring or repairing and helping that mitochondrial health.

But there's research articles that they pull from the peripheral NAD to pull it intracellular to be used by the mitochondria. There's several research article on it.

I don't know if you were in my last conference when I spoke on that. Uh, I didn't think you where in that class. But I actually had those articles available for people to look at.

I love that everything, your decisions are predicated upon research. And more often than not, a lot of the research that's coming from abroad is ahead of kind of what we're able to achieve here.

But looking again at the health of this cell and obviously the mitochondria, when you lose the NAD to NAH ratio, the Mitochondria should be severely damaged and they lose their capacity, which drives metabolic disease, such as cancer, cardiovascular risk factors, diabetes, to name a few.

Going back to the, um, the discussion of stem cells. You mentioned, you know, your doing yours twice a year. Does more equal better sometimes two, three, four times a.

How long does stem cell last? When should people think about, uh, changing their oil, I guess, or, and healing. How, like, what is the minimum effective dose?

I think really annually is fine for most people, an annual basis of stem cells. One thing I think is kind of key is, which I probably want to initiate here, I don't do it yet, but I've just been looking at what they're doing in Switzerland.

They do apheresis prior to stem cells. So that's kind of an interesting model. And it's because they found that removing all those toxins and all the antibodies beforehand and then introducing the regenerative side of things really helped with people's overall longevity.

So they were finding that when they do that, doing that once a year worked really well. Now, I've been doing a lot of time stem cells twice a year. Why?

Because I really saw that it was really helping with a of the people, especially people with chronic diseases. People with the chronic disease is doing it twice.

A year was helping them to have a better life. And better things, but there's no real science behind that. Okay. So I have to say that there is no science.

Behind that now, how long the stem cells usually last in the system when you're giving them peripherally or IV. Most literature is saying 30 days, there are some articles that are saying up to 90 days.

Now, I don't know if they're lasting 90 or not. So I just can say what I found in research on how long they are lasting. Just because they only last that long doesn't mean that the work is not going on longer than that.

And I think that the repair and what happens at the cellular level, we can't really quantify how long that effect really lasts. But if they last for 90 days, I would say that if you look at that, then what happens for the overall growth of the cell, the lasting effects on the cells would be probably four times that amount.

So that's just my thing. It's interesting because I'm actually going from my first one, so when you said my 1st CPE next week here, and then I was contemplating doing the stem cells early in Q1 next year, kind of in conjunction to overlap in timing or maybe toward the end of this year to enhance the efficacy and reduce the the impact obviously of any sort of toxic burden, which we monitor.

Are you doing a lot of total toxin testing? Do you put a lots of stock in that? I do. I look at total toxic burdens and I always look that. Now, I don't know how accurate that is, but some people believe it's pretty accurate.

Muscle Health, Lifestyle, and Closing Thoughts

The total tax burden test that I've been using is now in 27 countries. So there's other countries using it quite a bit, and they are using in Europe quite bit because they really believe that it was pretty accurate.

And if you test a European versus an American, you're going to find a lot less tox burden in the Europeans versus the Americans, especially when it comes to glyphosates, herbicides, pesticides, different plastics.

Because they don't use quite as many plaques. I noticed everything was in a glass. Everything was a in glass, they handed you a real glass you know. It was so nice.

Oh my gosh, I want to move here. Not totally. There's pros and cons everywhere, but certainly our plastic culture, our convenience culture has just been degrading our health and we see that within our patient population.

Whereas our European counterparts, I think it's not to ask for forgiveness is first to ask for permission. So you're really testing, there's a high rigor of testing.

You're not just allowing two billion pounds of chemicals in circulation every year, which is crippling, unfortunately, our youth. And then you mentioned six kids, I didn't realize it's remarkable.

I have half of that amount. How have you been able to balance that? Um, well, you know, it's really good. Most of my kids are a little bit older now because I'm kind of ancient.

So, um, my oldest is, is 34. She has three children of her own. And, uh, but you, know really what we see as far as our, our children and our kids is.

You know some of them, Our last one's 18. so, You, they're a, little, bit, older, now. I am able to go and do a lot more with this traveling and with all of that.

And that's what I love to do is really, I like to educate and I loved to hear other educators and what they're doing because you grow from each other.

We all can't know everything. You know things I don't. So we grow form each and we grew with all of that stuff. Couldn't agree more. And if you're open to sharing your sources of kind of where you are sourcing some of this stuff, we'll definitely highlight all of that in the show notes all the way from glutathione up to the stem cells and everything in between.

I know we're approaching on time here and this has been very enlightening for me. You had referenced one peptide which was kind a novelty but in terms of muscle, as we now understand muscle movement is medicine, muscle being kind the largest organ of longevity.

What are some peptides that you really like? Certainly the CJC, Primeral and Combo, Ceramerolan, Testimeral, and the Growth Hormones. What what are you doing or seeing a lot of progress with in muscle medicine?

So, yeah, well, muscle is the currency of aging, right? So that's why I do my weightlifting at least three times a week. But I think it's really, really key.

So one thing that I'm seeing really great results with. And we've been trying to test it in different ways. So I have an RGL system in my practice. Some people have different systems that they can kind of quantify the muscle and you can do it with an ultrasound, which is probably a little bit more accurate.

but I have seen more muscle growth using OS01. So OSO1 is a great one that I've seen great muscle-growth with. Now, I'd been using that in conjunction with semerelin.

I was using semirelin and the OS01 together, and I saw great muscle gains in a lot of people and decreasing their fat volume and increasing muscle mass.

And that's really what it's about. You can notice a resistance or a change in their insulin resistance. When you increase muscle and decrease some of the fat mass, you're going to see insulin resistant really reverse.

And a lot of people can come off their, um, medications for, uh, their insulin resistance. Yeah. Muscle being a sink for glucose disposal. Oh, so one, where are you?

Uh, that's been compounded, I presume, or. Well, yeah, right now I'm, getting it from PD labs. So that, you know, a little bit from, but you can get it, from other compounding sources too.

You don't, You know. But there's different ones. And that's nice because it's available orally. So they don't have to give themselves another shot. They're doing a shot of semerellin, you know, five nights out of the week, they didn't want to get them two shots five night out the weeks.

That's what we're actually doing with a lot of growth hormones for you guys. Are you pulsing, are you cycling OS01? Yeah, I do cycle that. So I'd usually cycle it in a six-week interval, so I'll do six weeks on.

Anywhere from two to four weeks off depends on what they are, what their doing, where they're at with all that stuff. It depends if they an athlete or they just an older patient wanting to maintain some muscle mass or if the have muscle wasting disease process.

I have such a wide variety of people that I see that, you know, just like you, have a variety variety people who we need to address each individual. You can't have one protocol for everybody.

No, and that would be a disservice because we're not all like, oh, we didn't even touch the interplay of kind of the microbiome, how that's our genetic signature, if you will, our blueprint that really will enhance, or again, what you alluded to, right?

If the foundation isn't met, then we realize we are more bacterial than we human in many respects. So optimizing microbiomes, which has been my area of expertise for almost the last decade now, And then being able to leverage going full circle the BPC, the KPV, lorazotide.

I don't think you need to discuss that to heal the tight junctions, which I use very, very effectively in kids because we're kids now with atopic derm.

You mentioned psoriasis, allergy sensitivities. neuroinflammation, you name it, ADD, neurodivergence, et cetera.

So it starts kind of going back to the basics, but I appreciate the detail and depth that you brought today's conversation, both in terms of helping me rethink, okay, the order of operations, what's absolutely essential, adding in some new things and just staying on the precipice of what to come in the future.

We're excited. What is the kind of any final takeaways for our audience to kind wrap things up? Number one, make sure you're drinking enough clean water.

Clean water's critical. Diet is critical and make you sure your moving. People, we're not moving, you know. I realized over when I was just over there, just coming back from it and I've been over before, but realizing how much they walk.

in Europe versus we're riding in a car all the time and we don't, we ride in our car, walk five feet to our desk and then we plop our butts down and sit there all day long.

We do not move in America. You know, and there's, there're lots of literature on that. So we got it, so overall lifestyle matters, especially, you know if you're going to try to do plop very expensive protocols and you are not changing your lifestyle, they're really not going work that well.

You now really for them to work optimally, You need to your life style as well That's my closing point. I think that movement is medicine. You don't use it, you lose it.

We're looking for that pillar, the shortcut, but we negate the impact of simple things like walking. There was a brilliant study that just came out of U of I looking at preserving hippocampus in an aging population.

brisk walking three times a week, they were able to arrest degradation and even further grow great matter. So something as simple as walking, you mentioned resistance training.

To me, the minimum dose is two times Plumlee's had a garden in the 1900s. Now it's non-existent and we're sedentary. We're not drinking water. It's not structured, it is devoid of minerals.

Its dead water, which we have to drink because of all the chemicals here, is served in plastic and the cell can't absorb it. You're flushing out the toxins, you're getting the nutrients in and now you are stuck in this unwell cellular dysfunctional state.

Yeah, exactly. You just said it. That's a good wrap up of my beliefs right there. Ha, ha, you're the man. Share the same philosophy. I genuinely appreciate your time.

The last question that I ask every episode guest is, if you could have one superpower, what would it be? One superpower? You know what? To really see into the future.

A man ahead of its time. Gordon, I absolutely love seeing you in person, connecting you on here. I'm sure we're going to do a round two in the future because the feature is fluid and people that pursue comfort to me become dinosaurs.

So change is inevitable. I appreciate how you're constantly staying current. That's my goal as well. Thank you again. Where people find you, visit you do any of the things that you Well, drcrozier at crozierclinic.com.

That's my, my email and you can find me. I have a website and I do have, I'm on social media and. Yeah, I will include anything and everything in the show notes.

Check out Gordon's clinic. He does things at a very, very high level. So a lot of my learning tools has been directly through what you publish. I remember speaking offline in a former conference.

And you said, stay tuned, you're redoing the whole peptide course with AFRAM and regenerative medicine. And it's constantly changing, constantly evolving because things are coming out.

So the goal for us as practitioners is really to stay current, right? It's going to help them. not only outcomes for our own health and family, but for certainly our patients as well.

So I appreciate everything you do. I look forward to connecting here probably in Vegas soon enough and we'll keep the conversation going. But again, thank you so much for your time.

This has been a genuine pleasure. For everyone listening, like, subscribe, leave a review. It helps us grow and definitely continue to check out Gordon and what he's doing.

Until next time, stay healthy, and stay wealthy, my friends.