Introduction and Guest Background

Hello, everybody. Welcome to the Thyroid Pharmacist Healing Conversations podcast. I'm your host, Dr. Isabella Wentz. And today, I am so excited to have a really dear friend of mine, Steven Wright.

He is the founder of Healthy Gut Co. We're going to be focusing on building a resilient gut and reducing food reactions. Give you a little bit of background about Steve.

I'll give you his official bio first and then I will tell you all of the things too about him. Steven Wright is a health engineer, Kalish Functional Medicine Institute graduate, and gut health specialist.

Since 2009, Steven's been researching, writing, and building products around gut brain and immune-related issues. He's overcome a host of complex gut-brain immune issues himself and uses these painful and challenging experiences to help others.

Steven is the co-founder of HealthyGut.com and he lives in Boulder, Colorado with his lovely wife Shay and their two dogs. Welcome, Steve. It's so great to have you here.

I'm just happy to do this. This is awesome. Yeah, I love having you here. So for everybody listening, Steve has been a longtime friend of mine. I first stalked him online when he had the website SCD Lifestyle and I was on my healing journey with Hashimoto's and i was trying all these various diets and, i came across his excellent website, SCDDlifestyle, and then we had a chance to, And I used it on My Healing Journey, so I remember downloading your guides, you had a free guide on how to make a bone broth reset and how incorporate the intro diet of the specific carbohydrate diet, and that really, really helped me.

And then I had a chance to meet you at a wellness conference and fangirl and be like, oh my God, I follow you online. And we also had a chance to live in Boulder, Colorado at the same time.

We actually thought about starting a supplement line together, but eventually we ended up having a little bit of different visions, which I think worked out just fine because I love your supplement company and I loved my supplement.

And another thing about Steve is he is the person that my husband and said, if we are in a coma and nobody can help us, please call Steve Wright, because we know he will get us out of a comma.

Steve was actually one of the first people that I called when my husband was diagnosed with ulcerative colitis. And I was like, hey, what do I do? And thanks to your advice, we were able to get Michael and to remission from ulcerative colitis in less than a month and just really, really want to say how much I appreciate you as a friend and as brilliant gut expert that's just helped so many people over the last decade plus since I've known you.

Well, thank you for that. It's been an honor and you're an amazing friend. Yes, I will do everything I can to get you out of that coma. Yes, that's a guarantee.

The other thing I wanted to mention is I feel like you should sponsor this podcast because there have been so many people that have on the podcast talking about your gut supplements.

Yes. I think we're in talks where there's been text messages going on about that. That's, you know, I don't know. But I'm surprised, honored, and it feels good that the word is getting out that there are new opportunities, new possibilities for folks out there who are having gut, immune, brain, just associated complex conditions.

And if they haven't been getting the solutions they want, hopefully this podcast is going to help them. If our

products help, great. But if not, Yeah.

I know over the last decade that I've known you, my approach has evolved quite a bit. And, you know, spoiler alert, I thought for a while that elimination diets and just eliminating more foods were the key to my healing.

and I knew you kind of went down that rabbit hole as well for some time. You started off with utilizing the specific carbohydrate diet to heal yourself.

perhaps about your own healing journey and how you came to be, you know, Stephen, the gut health guy. Yeah, I mean, this is year 15. It's kind of crazy to say that, but it's year fifteen of writing and researching online and trying to help people with my own journey in their journeys.

And so I think during a healing, journey like that your career, my career. I think what you begin to realize is there's a lot of layers and levels to health.

And what works at one level doesn't necessarily work at the next level. It's one of those things where you have to transcend and include what to learn at each step of your journey.

there's this analogy where people talk about peeling back the layers of the onion to try to find root causes. It's almost like when you're actually putting the layer back on the union in order to kind of level up out of a health hole, if you will.

And so I had a pretty deep health pole. I was born with a birth defect. So I have some intestinal issues from birth. I almost didn't make it.

Steven's Healing Journey and SCD Diet

Luckily, Western medicine saved my life, and I was raised in the era for antibiotics for everyone era. And luckily, my parents were actually into cooking and into-cooking family meals.

So I didn t eat out a ton, but I you know, Costco and all the big box stores first were coming out with like frozen meals and easy things and foot long subs and $5 pizzas.

And so when you're, you It was a lot of that type of food. And throughout my time as a teenager, I just kept kind of getting worse. I had persistent acne.

It started being extraordinarily gassy. In fact, it was so gussy that my whole family, like my aunts and uncles and cousins nicknamed me the gas man. Like the stinkiest guy of all the stinky people, because we all have a family history of IBS, is what I would come to learn.

So as I went though, grabbing these new issues. Like, I was diagnosed with exercise-induced asthma as a junior in high school, and I kept gaining more and more issues until after college, um, was now having major depressive episodes, anxiety, panic attacks.

I still had the exercise induced asthma. Had to have an inhaler every time I exercised. Um, still have my GI issues, which were now worse than ever. And weight gain.

All these different types of issues at, like, 21, 22. And so, my boss one day called me into his office and said, hey, you're the stinky guy in the office, your coworkers are complaining, and you got to fix this if you want to keep your job.

And, so that was the big wake-up call. I mean, I kind of knew that I was embarrassed already. But that was the thing that drove me into the change mode where I was like, wait, do I want to do this the rest of my life?

Because the doctors basically said, hey, you have a family history of IBS. You do not have celiac disease. you can

have all the antibiotics you want, which I didn't want anymore at that point, any metamucil you wanted, and then eat all of the whole grains you could.

And none of those things were helpful to me. So now I'm looking at, man, Want to live my life like this? You know, can I? My boss is threatening me. The doctors are saying there's nothing really wrong with me and you know how am I going to build a family?

Who's going be interested in dating me? I was missing dates because I And so luckily I had a great friend from college, Jordan, and I called him and he was the one that first got introduced to the specific carbohydrate diet.

And he said, look man, I tried this after gluten-free and this is the thing that worked for me. I think you got to do it. And this is 2009. There's just Yahoo groups, there's barely anything on the internet.

And so it was kind of a big deal to do these types of diets back then, these type of interventions. But when I made that switch, the first week, probably 50% of my pain went away.

I had a type IBS called visceral hypersensitivity, which is a subset of Ibs that there is little bit more of your nervous system involved, and it feels kind like knives stabbing you.

If you've never had it, No offense, you can't really understand it. It's kind of like I could never understand the pain of childbirth. But it's pretty intense.

And so within like one week, 50% of my symptoms were gone as far as the paint of the bloating. wow, I could do something about this. There is so much more out there.

Also, my background is electrical engineering. It made me realize that all I have to do is reverse engineer this, so I just got to find other doctors, other people like me, and other scientists who've had these issues and just try whatever they tried.

I bet I can figure this out. That kicked off this next 15 years of Okay, the specific carbohydrate diet is a wonderful tool, but it's extraordinarily restrictive.

And it didn't even do the job. So I was immediately trying stomach support products and enzymes and all different types of things within the first few months of my journey.

Every time I would learn something, I'd go check the research journals. I'll go and check and see what else was written online about this. If there was enough evidence and it worked for enough people, I wanted to tell other people about it.

And so that kind of just led to this career of getting trained in functional medicine. We had a clinic for a little while. You know, it's led me down rabbit holes because I have a personality where I don't like to stop until I find out the answer, the solution.

like other people who want to live in a bubble and do everything perfectly, I want live life and not have restrictions on me. And so, that's led me to exploring all different realms of healing, from shamans to Western medicine to Eastern, Chinese, all types of things.

I love that about you that you've gone down all of these different rabbit holes. And I know if I ever have like a question of something that I'm trying to explore, I wonder what Stephen would say about that.

We've had some great conversations over the years about our approach to healing and One of the things I was hoping that we would talk about today was when people go through an elimination diet, this can be incredibly life-changing when they eliminate foods.

I know gluten and dairy were extremely life changing for me to eliminate from my diet. but sometimes like people

end up getting stuck and so they eliminate gluten and dairy, they don't feel better, so, then eliminate like a few more foods, They still don t feel and they start eliminating more and more food and then they go down this like rabbit hole of becoming Essentially, orthorexia is a term that's, I think, a recently created term where they become almost obsessed with healing diets and just following the perfect diet, and that can actually make them feel worse in the process.

Some people are like, oh, it's all psychological. so on and so forth but there's a lot of times there is like physiological things going on underneath the surface like there are a lots of reasons why people may be reactive to foods and eliminating more foods isn't necessarily the answer.

I know for my example I had protozoa called blastocystis hominis and that made me react to a ton of different foods and until I cleared that proto zoa I was just like constantly struggling with feeling like this is triggering me and this triggering and triggering.

What's been your experience with that? I mean, it's very similar. For probably seven years, I was one of the world's leaders in advocating for dietary approaches like this and exploring different dietary tools.

I think what happened is I have a natural, like I said, urge to not be restrained. As soon as I realized that back when I was really sick, if I took dairy out, I could smell again.

I didn't even know I would be spending so much of my life not smelling. um but i was able to like start smelling again like pressure and my sinuses was gone when i eliminated dairy but like literally within like a week or two i Was like but, i want some ice cream i, want, some cheese how, how why, why is this happening and so i would spend years trying to figure that out for myself What I didn't understand is that there's a lot of other folks who I think were gaining control over their body by eliminating foods.

And that felt like safety to them. It didn' t feel exciting like it felt for me to keep trying to figure out how to return to the foods that were taken away.

I have a big appreciation for different types of personalities and different people at this point. people are assigning too much value to food. Food is not medicine.

This is, not food is powerful. And how you interact with that food, how do you digest that, food how process that is equally as powerful? And so that was something that took, I think, both of us years to come to an understanding.

Because I have a I have a laundry list of people, like in the hundreds of, people who have come to me eating less than 10 foods because they're doing exactly what you said.

They start with gluten and they go to maybe autoimmune paleo and then they got to low histamine auto immune pale. And then, they discover FODMAPs and their low FodMaps.

What the research suggests is that every time you're eliminating one of these food groups, if you stay on that elimination for too long, you actually end up causing dysbiosis.

You cause worse changes to your microbiome, which has an impact to total systemic health because you lose the metabolites or the postbiotics that they give off.

And this creates like a downward spiral where you're trying to stop the bleeding, which I appreciate and I did. And I want people to be out of pain. So they're try to get out pain just using food.

But the assumption that's wrong is that if you just eliminate the very next one, if If you stop getting contaminated or cross contaminated, then you'd be fine.

And that's, I don't think the truth. The truth is, if you're able to process foods, barring eating margarine and gluten and like processed dairy every single day and sugar, you should be able break down most foods as a human.

Why Elimination Diets Can Backfire

Um, and I think where we need to move as an industry is in this a position that it's not just the food, because you and I both know people that have gardens full of organic food.

They get local meats, they do everything right, and they're still reacting to foods. So you can't say that the actually, what they need is they help with their organs, with the digestive process to break down that perfectly created food.

And now I'm not trying to say that all food is equal. Don't get me wrong. I just said cut out margin, gluten, you know, 80-20 this. There are really toxic foods out there.

Um, and as soon as you stop the bleeding with food with one of these diets, your immediate next step should not be Oh, thank God, I should rest right here.

It should be, how do I get back to a bigger diet? What will that take? Is that a parasite? Are my digestive organs not capable of doing their job? I need to support them.

What is that? Yeah. And I think something important to mention is you and I both lived in Boulder, Colorado, which is like a mecca for organic food. I would go into a restaurant and be offended if they even had gluten there.

Um, so we know a lot of people, and we've worked with a of a people who are already eating a clean, organic, wild-caught, grass-fed, um, meal on a day-to-day basis, but yet they still struggle with symptoms.

And, of course, on the flip side of that, I live in Texas now, And of, course you know, if you're eating tons of inflammatory foods and highly processed foods, that's a different conversation, right?

Like, then you do need to clean up your diet, your food quality, but a lot of the people that you and I have worked with and encountered are these people who are really eating clean.

They eat better than you or I do, and they're still struggling with symptoms. You've got that dialed in, my friend. Like you are already gluten-free and you're eating mostly organic, you should be able to go to a restaurant and not have to bring your own Tupperware with with you know your own food like you should be able to eat out every now and then without being in a ton of pain and you Should be to go out with friends for drinks and and indulge everyone now And then and hey if you're catching a flight you, should, be, able, to pick up a bag of chips and whatever and not be doubled over in pain then the people that you know, we've worked with or seen, are those people whose lives are really, really limited because their digestion is so challenged, right?

Yeah. Yeah, I think that's one place that we are, both trying to pioneer for the world, which is that… Number one, it's actually because we both tried it and failed.

Which is we tried to live in a clean bubble, like the Bubble Boy. You know, like no gluten, no nothing, and no sugar. And what I found trying to live the perfect diet, the Perfect Everything, is that, number one, it's impossible.

It's actually not. it is an ideal, which means it actually is not possible, by definition. Number two, you actually don't get a lot of health benefit from that style of living.

Because food is just macronutrients and micronutriments. Food is emotions. Food is connection, food is pleasure. Food this thing that provides so many nutrients for our bodies that it goes well beyond anti-nutrients and nutrients and inflammatory potential and that type of thing.

Yeah, I think I wanted to talk about some of the different trends that people talk But the research actually shows that it doesn't necessarily help SIBO.

It doesn' eradicate the SIBo. What low FODMAP does is it essentially reduces some of the symptoms because then there's not the foods available for the bacteria that are living in your small intestine to ferment.

And so you're not going to have those symptoms. But the issue is it can really shift your microbiome to a less positive one. And two, that darn SIBO is still there.

The approach to that isn't like, let's do a restrictive diet. Sure, if the diet helps you symptom-wise, then continue it. How about get rid of the actual SIbo, right?

Yeah, I mean, low FODMAP is a great one. I've actually been anti-low FodMap since it came out. And now there's research sort of proving what you're saying, which is that after eight weeks on the low-FOD map diet, your microbiome starts to shift towards dysbiosis.

Now I define dysbiosis as literally you have less amount of bacteria growing inside of you and you number of species, the community smaller. And so it turns out the foods you would eliminate on a FODMAP diet are a lot of the food that feed your microbiome, a very healthy microbiomes.

So it's almost like the PPI discussion. I hope people get angry about this analogy, but PPIs were actually only studied for eight weeks. They were only supposed to go on them.

and come off of them at eight weeks. That was all the initial data. And I'm not convinced that they're toxic if you use them that way. Like, I think there could actually be super helpful for folks who are in certain situations with ulcers and other types of situations.

It's the people that have gone beyond and stayed on PPIs for 12, you know, most, sometimes it's like 12 years. I was just on a show last week, and this person in the comments was like, my husband's been on PPI's for twelve years, That's a challenge, you know, getting off of that.

And the same thing is true with these FODMAP diets or a lot of the elimination diets. They're really good for a short window of time. But if you push beyond that eight to 12-week period without trying to actually deal with the underlying root cause, I think causing a prolonging of your health recovery.

You're going to make it harder in the long run to get the health you want by adopting that strategy. Yeah. So you were anti-FODMAPs before. It was cool.

I love that about you. Always the innovator. And I know with SIBO, this is very common in people with hypothyroidism. About 50% of people have it. One of the things that you need in order to clear the SIbo is good gut motility.

A lot of times, thyroid function getting that optimized is going to help you get rid of SIBo. There's also going H. pylori infections that make you more predisposed to having SIBO utilizing like either antibiotics or herbal protocols or elemental diet can clear the SIBo.

And then there's, of course, this like big elephant in the room. It's like low stomach acid. And if you have low stomach acid, then there's a chance that you're actually going to have SIBO.

And even if do all of the things that I just said you need to do, like the SIBo is going keep growing back. This has been my experience and I know for me, one of game-changing supplements when I was first diagnosed with Hashimoto's and trying to heal myself.

When I got past the point of I need to eliminate everything was actually stomach acid support. And that brought me back so much energy and so vitality that I'm like, wow, everybody needs to know about this.

Yeah. I mean, everybody should rewind that and just re-listen to what you just said. Um, I think what is, what really, really makes me mad, and I get angry on these topics, because for whatever it is I can't really get the world to see the way that I do, which is…

I like to approach things of, like, why, What conditions were in place such that this infection showed up or took hold.

And the world seems to want to know, how do we kill it and kill and it again?

And why does it keep coming back? It must be the wrong bullets or the bomb or whatever. If more people were asking the question, what conditions were in place for me to get SIBO?

How could I get rid of those conditions for the future, I think a lot of people would be a happier and healthier so much faster because nature, in my opinion, one of the truths that I've come to in life is nature just wants to live.

I don't think it's the SIBO's bacteria's fault for eating your food for you. They just happen to be allowed to occupying that ecosystem and getting that food.

So rather than vilifying them and trying to kill them with any sort of pharma option or herbal option, or whatever. I think the question is, how do we push them back into the ecological niche that we want them to live in, that's healthy for us?

And stomach acid is like this giant elephant in the room that probably 70 to 80%, not everyone, But according to my mentors, Dr. Steven Sandberg-Lewis, and Dr Jonathan Wright, who actually tested hundreds and hundreds of people, their data suggests 70% to 80% of the people who are struggling with these conditions do have low stomach acid.

And if you think through the layers on this, it would make sense on why, especially folks who have recurrent SIBO or recurrence Candida, recurrente anything in the small intestine, stomach acid is probably disordered in that group because what stomach does, other than like a bunch of amazing effects around detoxifying LPS and protein breakdown and nutrient liberation, all this stuff, what it does is it helps set the It's almost like the clock, the timing of your digestion and the waves, prokinetic waves coming out of the bottom of you stomach.

And if you don't have those waves. If you have that pro-kinetics movement, it's just going to create, like if your just throwing sugar on your floor in your kitchen, you're like, why do I keep getting ants?

But you keep putting food on the floor. That's kind of like Seabow. You keep the food there and we need to figure out how to get the foods into yourself and not for the bugs.

And I think stomach acid is one of the main ways, along with digestive enzymes, that you can make sure that YOU get the food, like you personally are getting that food inside of you, and you're not allowing the bug the opportunity to grow in the first place.

I think that's a great description of low stomach acid. I know that some people may not know they have stomach acids. They may have heard that they had excess stomach assets, especially if they've been diagnosed with something like acid reflux and then you get on proton pump inhibitors and H2 receptor blockers.

and so on and forth. And they're like, oh, this is caused by high stomach acid, where majority of people with low stomach, or majority people, with acid reflux can actually have low-stomach acid.

The research with people who have hypothyroidism and Hashimoto's show that most people have either no stomach or very low levels of stomach acids. So this like a really, really big game changer and one of the key things to consider when somebody has a thyroid disorder and you know a lot of times people say they start having acid reflux around the same time they have their Hashimoto's diagnosis and the two are absolutely connected.

I know personally for me when I was going through my own healing journey When I got the right dosage of betaine with pepsin, I ended up going from sleeping 11 hours a night and waking up tired to waking after six or seven hours bright-eyed and bushy-tailed.

Low Stomach Acid and SIBO

It made that big of a difference. And the way that I was taught, maybe you have a different approach of doing it, but

you basically start with one capsule at a protein-containing meal.

and then you see how you feel. If you fell nothing, then try two capsules at the next meal. if you felt nothing you keep going until you know you like a slight burn and if feel that slight burned then know that you went like one capsule too high and you would back down of the dose.

So if felt burning at five capsule then drop down to four capsul as your target dose and I know like, you know, most people will say don't go above like seven or eight capsules for depending on the formulation.

And interestingly, when I went to a functional medicine conference that was put on by the Institute of functional Medicine, they were giving it out like betaine with pepsin to all the practitioners to do our own testing on ourselves with lunch to see if we could benefit from this.

So I feel like this is a very widely used method to determine your whether you could benefits from that. If it's like you take one capsule and you're like whoa, I feel like I'm a dragon breathing fire, then that's probably not something you need.

Is that something that you've utilized, that dosing protocol, or do you do something a little different? Yeah, that's pretty much the same dosing protocol that I teach and that use.

The only change I would say is that there's a percentage of folks, 15 to 30%, I don't know what it is, who don' ever feel the burn. And so for those individuals, and for all individuals doing this test, what I'd say also is monitor your stool quality because burning and hotness and whatever that feeling is one indication you've gone too far.

But the other most common indication is a negative change in your stools, especially loose stoles. And so, if you're going up and you are at four, and then you take five the next day and have loose stool sometime in the 24 hours, go back down.

That's also an indication that you have sped things up a little too much. Then I would say the thing that is curious is if you take one capsule and you feel immediate pain.

I actually don't think that indicates that you have proper stomach acid. That indicates you may have mucosal membrane damage. You may want to seek out an endoscopy if want go that far.

Otherwise, you might want work with your practitioner to do a mucus membrane healing protocol for six to eight weeks and then try it again. Thank you so much for sharing that.

And yeah, that's another key caveat. If you have H. pylori, or if you some like erosion in your upper GI tract, like taking betaine with pepsin, you can feel aggravated from that, and so that would be an indication to do deeper investigative work, perhaps doing some testing with your practitioner.

You could still have low stomach acid, even if you have H. pylori, but you wouldn't necessarily want to just keep utilizing the supplements with that, or at least that's my take on that.

Yeah, I have a bit of a different take. I think you actually need stomach acid support if you have H. pylori, because I don't want to make my body more inhabitable to H pyrori.

The caveat is if it's causing pain, stop it. But I am saying that there is a group of practitioners, you might be one of them, who believe that they should treat H Pylor without stomach-acid support.

And I do not believe this is true, for the H. pylori to kind of hang around and be there. I think my experience has been that you can treat H pyrori and take Betaine HCL supplementation.

Interesting. That's definitely an interesting take. i didn't really consider H Pyloria as a factor, whether or not you should take betaine or pepsin or no, t but just when I've decided to set up my protocols, I typically will have people

go through an HPylora protocol.

I call it step three. But that's one of like the middle of the protocol is like, just let's get that H. pylori cleared. And then at step four, we would actually add in the digestive enzymes, Just to like make sure nobody, you know, like contraindication would be if you have an ulcer, and just to make Sure nobody like has a silent ulcers or something like that.

In my mind, I just kind of feel like peace of mind if I do that, if i do it, but perhaps you're utilizing different H Pyloria protocols than I am. So I would love to know What is your H.

pylori protocol? I can take some notes on that. Well, I'll have to send it over later. Again, my standpoint first is asking the question, how did this happen in the first place?

When we pulled out of Iraq, there was a power vacuum and then everything went to heck over there again. If you go in and you try to kill H. pylori or SIBO and don't have the necessary systems set up to fill that power vacuum in the ecosystem, I think it makes it extraordinarily likely that there'll be a recurrence.

And so I just like to support the stomach through the H-pylori protocol. I'm sure our protocols are very similar. You know, I think biofilm busters are an absolute must for H.

pylorii. A lot of people go wrong there. NAC actually has some really cool studies for h-pylorii, and so, Yeah, I just think that you can support both at the same time, but I think also if you have someone who is sensitive, if they don't have confidence in doing it, there's no harm in waiting if that's the way that want to go with it.

Yeah. Thank you. Thanks so much for sharing that. I feel like, for me, always love to have differences in opinion and different perspectives because it's just so fascinating and learning from each other is really great.

question that I think people are probably wondering about, like, what are some of the symptoms of low stomach acid that you might have? I know I already mentioned acid reflux, and I mentioned if you're hypothyroid, you probably have it.

Do you have other symptoms that might lead you to believe somebody might benefit from some stomach-acid support? Yeah, I would say dead ringers are burping after meals, like excessive burpings after meal.

It's like a 99% chance you have it. If you're someone who wants protein or meat or something, but like you had this story or experience in the past that it sits inside of you like Like it just doesn't, it makes you feel sludgy and stuck and you don't like it.

That's pretty much always low stomach acid. There's a group of women usually, and it's not because there's really anything different other than men are just not that in tune with their bodies.

But there are a lot of woman I've run into who are like, man, I would love a steak, but if I were to eat that much meat, i would just feel like blah for hours.

And normally that is low-stomach acid as well. I think bloating is a good sign that you should check. It's not always there in bloatting. Anybody with constipation is also a a thing to check, people who struggle with hair, skin and nails.

So let's say you are doing the high price serums and you're doing supplements like biotin and other supplements and your just not getting the hair strength you want, the nail strength, and the skin you protein breakdown.

Basically, what the acid does is if you were to take a microscope on a piece of meat or a walnut or something, our chewing takes it from a big version of that to a micro version, but it still looks the same inside of a scope.

The acid actually starts to open it up like a flower from the sun at a 3D level. And so without that process, It makes

it really hard for you to actually open your protein structures up into amino acids and peptides, which you actually need for absorption later on in the small intestine.

And so those are all things. Then the last thing would be anybody who has ongoing inflammation and they can't figure out why, There was actually a study done in 2022 where they looked at people's stomach acid.

Stomach acid is really weird because of the pH scale, but basically you want really low pH, which you a two on the ph scale or less usually, and then people with high stomach People with low stomach acid have a higher pH, so they have like a four or a five.

And what they found when they sampled the gastric juices of these individuals and then checked the pH is that people above a 4 had like many multiples of concentrations of LPS, lipopolysaccharides, inside their gastrict juices.

It got so bad as the individuals at like 5 and 6 had up to 2,000 times more LPs than the ones at three and under. And that's not percent, that times. So what that saying is essentially, you have an oral microbiome.

Inside your oral micro biome, it doesn't matter what toothpaste you do, what you gargle, which you pull, or what don't do. You will always have gram-negative bacteria in your mouth.

you will be swallowing those bacteria. Part of their cell wall is this LPS. But don' worry, a healthy body, healthy stomach is set up to detoxify almost all of that.

If that's not happening, however, you're actually having ongoing inflammation subtly all day long. And so that why it's absolutely critical, in my opinion, to check for this, especially if you are one of these wellness warriors or nutrition nerds who've been at this for a while, and you've never gone into the stomach acid realm.

Yeah, that is really, really fascinating. I know reflecting on my own healing journey, Like, I couldn't eat steak. Like I could eat burgers, but like if I were to eat a steak, like not to give you TMI, But I would have like digestive distress within, you know, an hour or two of that, Like i would Have diarrhea and that was like a really big IBS trigger for me.

And it's so fascinating because I feel like some people are like, I'm vegan because i don't do well with animal protein. And It's kind of like you are right like but you probably have low stomach acid, right?

And then we have people like who are, like I am carnivore because vegetables are evil, Yeah, this to me is kind of like, okay, people that are like very anti oxalates.

And I'm like okay oxylates, I have been doing the organic acid test for I don't know seven plus eight plus years now when I see people with oxalate issues, there's going to be like key drivers of that.

And a lot of times it's like, they're colonized with aspergillus mold or candida, and that's causing an internal oxalyte production in their system. It's kind of like they overflow the bucket, right?

Or they have low levels of P5P or B6 so they're not properly detoxifying the oxalates or they might be taking something like glycine supplements that that hijack their glycoxalate pathways or maybe they are, you know, citrate deficient.

And I just think like it's interesting because people will I think they discover nutrition and they're like oh my god I feel so much better with this eating approach versus this feeding approach and then like I could look at them and look their symptoms and be like okay you probably have low stomach acid or you probably have an internal oxalate burden that we need to address.

Let's talk about these things. Absolutely do the diet that you feel best on, but let's really talk on how to optimize your process, your whole digestive capability.

It's again, it's transcendent and include like I believe that everybody's experience Whatever they tell me if they told

me like if I eat kale I feel bad or if i eat onions I think I'd believe you I Believe that you react to whatever foods you rack to you However, we are meaning making machines and we're really good at it the meaning that You make from that signal from your body can be absolutely incorrect in the case of like say someone with low stomach acid saying I don't do well on meat, therefore my body does not want the meat." That's just a story you made up, and that's probably absolutely incorrect.

And if you look at the research data, it would suggest that long-term avoidance of that meat without supplementation will lead to different diseases. The same thing is true for the carnivore crew, who are like, if I avoid these foods, these vegetables or whatever, I feel better.

I'm going to blame it on lectins. Again, I believe that that is your experience, and that was a true experience. But the meaning you're making of that as absolutely incorrect.

We were definitely born and created to digest plants. And in fact, all the research is very clear that if you avoid plants for too long, you cause a dysbiotic microbiome.

That dysbiotic microbiomes causes extra leaky gut, causes more inflammation, it leads to a whole host of diseases. So we're back to the same thing of the same coin, two different sides of the coin where you're making the wrong meaning from the signal you are getting from your body.

And I think, unfortunately, people don't like to hear that they're wrong or that their way they've built their influencer crowd or their whole network might be in the right direction.

But I looking around and being like, how many other humans have to be carnivore to live? It's like barely any. How many humans can subsist on a vegan diet forever and not have issues?

Like barely. So to me, that's pretty clear that we need to ask better questions about how come we cannot tolerate these foods. And I think that's, you know, what we're talking about here today, because I Think those better Questions are actually what people want.

People want to feel good. They don't want To have to question every bite of food they take, is this going to give me a headache? Is this gonna lead me to run into the toilet?

And i think if we are able to break down the process of digestion and learn about like, for instance, if you have a vegetable issue, you're pretty much guaranteed to have digestive enzyme issue.

Like I like I'll put all my life savings on that as part of your problem, not the whole thing, but a part. And so if we can learn these things, I think the other side, the transcendent include of this is like you're going to end up with like your own new, you know, supplement case or medicine case at home.

And you can actually work through these issues live with your body and live the life you want. That's like anti-inflammatory and you have awesome skin and a great brain and like literally you are not worried about food on a regular basis.

I'm curious if you like preferred things that you utilize to support vegetable digestion. Well, yes. So the stomach is doing a lot of stuff around killing incoming microbes, it's detoxifying LPS, its opening up protein structures, is liberating all kinds of minerals like iron and calcium and magnesium.

It's doing lot a work there. But then when you jump into the small intestine, you get your pancreatic enzymes. You get you lipases in your amylases. There was some amyloids from your mouth, hopefully, and some other things are already going on.

But I think one of the reasons why the specific carbohydrate diet works so well, one the reason why low FODMAP diet work so, well is because unintentionally, I you're eliminating a lot of foods that require brush border enzymes to really finalize the digestion process and avoid the bloating slash feeding of other bugs your food.

And so somebody who can't tolerate vegetables, there's an extreme case, right? There's people out there who have polyphenol digestion issues. They have some real complex And that could be related to the fact that their microbiome is also dysbiotic and those bugs are not making these specialty enzymes that can help with breakdown.

But the general starting place is brush border breakdown and brush board or enzyme breakdown, and I think One of the ways you can test for that is get a supplement that has a large amount of brush border enzymes, as well as pancreatic and other specialty enzymes and just dose it up.

Enzymes are extraordinarily safe. They've been used for decades and they've like there's some divisions of medicine, especially in cancer, where they use like 160 capsules a day.

So you taking six or eight at a meal is like not even, it's nothing, just swallow them, you'll be fine.

Digestive Enzymes and Vegetable Tolerance

I mean, don't start there, but slowly work your way up just in case you do have some sort of gastritis or something that might be aggravated. But my point being is that you might so broken down in your enzyme structure that, that your might need a period of recovery six, eight weeks, maybe longer, of high-dose brush border enzymes and other specialty enzymes to basically restart the proper breakdown of vegetable and fruit matter such that the rest of the machinery gets used to that different process, and then that will change the microbiome, that'll change availability for something like sivo or candida.

It causes this cascade that is really good and it actually increases the possibility that in the future you will tolerate these plant matter. Mm-hmm. Yeah, I feel like, you know, enzymes are going to be the key to digesting good foods.

I know with protein foods, betaine with pepsin, and you have that in HCl guard, then you'll have holozyme, that has more of like the veggie digestive enzymes.

Is that how you would utilize that? Yeah, yep. So HCL Guard is our BTNHCL with Intrinsic Factor. Intransic factor is like the bouncer for B12. It grabs B-12 and helps it across the small intestinal barrier.

And so that's our HCl product. Our whole design, we licensed a patent and we have a lot of minerals in it. One of the reasons that I was kind of given up on enzymes.

And I think a lot of people, like, it's crazy, but like actually, enzymes are actually agreed upon by like Chinese medicine and Western medicine, and everybody in between.

They all agree that digestive enzymes were important, they all have their various tools. But I thing a a of us when we go into practice, when implement them, people don't tend to like report awesome results all the time from enzyme therapy or enzyme replacement or whatever.

And so I think one of the things is that some bodies need a lot more minerals to activate those enzymes and get them to work. Then people are underdosing on a regular basis.

If they were to updose, they would get the results they want, and then they could slowly bring it back down. Yeah. I appreciate you sharing that. It's also figuring out like, what part needs support, because we talked about protein digestive issues, and that could be very much supported with HCl and betaine with pepsin.

But the other veggie digestive issue, sometimes you might have vegetable fibers in your stool, you have a lot of bloating, somebody that just doesn't do well with a lots of vegetables or even FODMAPs.

And I feel like knowing what kind of a digestive enzyme to utilize just because some people might just do like a very broad spectrum one and that doesn't address their particular needs, right?

Yeah. Yeah, there's specialty enzymes out there. Like, for instance, some People have issues with polyphenols and poly phenols are like the brightly colored pigments in fruits and vegetables.

And they're, they are actually extraordinarily complex. I don't think we actually understand them completely. They are very valuable to our health into our microbiome.

And because of their complexity and everything, some people have a struggle with them. And an enzyme called xylonase is like a specialty enzyme that can help some of those individuals.

So if you know that you're having issues with a lot of fruits and vegetables, maybe look into a brand that puts xylonase into their product because that could be one of the missing links for you.

Hmm, that's fascinating. I haven't heard of that before. So thank you. Thank you so much for sharing. probiotics and paraprobiotics than prebiotics. So I didn't realize that, but our microbiome is actually what's helpful for fiber digestion.

And so some of the people, they actually have some other digestive distress comes purely from the microbiomes. Can you chat us through maybe some the differences of what those things are and what they do?

Yeah. So let's set out some definitions. The definitions that I would set is, let us call fiber generalized food for all different types of microbes. Let us called prebiotics specialty food, for good bugs, basically.

And let is call probiotics good bug. By good, I mean bugs that have been studied to have health benefits for humans. So we have fiber generalized food for any sort of bug, and that includes also your vegetables and fruits.

Then you have specific parts of those vegetables, those fruits, also supplements called prebiotics, which are specialty foods for trying to feed those good bugs.

Good bugs are the probiotics that have been studied to have health outcomes. Paraprobiotics are those goods bugs, but then we heat kill them, so we kill him, they're not alive, and we take those in.

Those do different things for our immune system than the live bugs do. We'll get to that. And then postbiotic are actually the poop or the metabolites of the probiotics.

This is a very big umbrella that we're still unpacking when I say still, I mean, the world of science is still trying to understand. Of those metabolites, there's things like short-chain fatty acids and butyrate is typically the post-biotic that most people are referring to.

And if you wanted to boil the last 15 years of my career down to starting with Why is it that everyone says to eat your fruits and vegetables? Like, why would that even be healthy, right?

I would say after 15 years, the reason you should eat fruits or vegetables is they create butyrate. And butyrate is needed everywhere. It's needed in every single system in the body, from your brain down to your toes, and a bunch of it is need in your gut for the gut to stay resilient and healthy over the long run.

So if we kind of back up from there, we can kind work through those at whatever pace you want to. I will just say with like butyrate, I first learned about it when I was having like severe sulfur reactions and I couldn't even eat eggs and then I had these constant rashes on my face.

And this was at the point where I like, huh, these food sensitivities don't have to be permanent. This was kind of one of those steps. It was Hydroxy B12 to help absorb some of the sulfur molybdenum as a sulfur help process the sulfur and then butyrate to help up bind the Sulfur in the gut and at the time I got like these butyrite capsules they were like impossible to find and I had this like really hot pink travel bag that I loved so much I bought it in Amsterdam it was my carry-on everywhere I went and i packed these lovely buterate and this was a big game changer for me so like my sulfur issues went away I could eat eggs again my skin became beautiful and clear The

problem was the darn butyrate capsules like exploded in my my carry on bag and then like my carrying on bags smelled like rotten eggs.

forever. I try to keep it and off-gas it, and clean it for five years before I finally just gave up and threw it in the trash. And I can't get it anywhere, that same kind of bag.

There is no other bag on the market that is as good. But I digress. So butyrate has so much research behind it. In reversing food sensitivities and food allergies.

Holy cow, it's such a powerful Substance and it's kind of like, you know, the beneficial bacteria can create it and we can also like supplement it. And then it becomes food for the Beneficial bacteria and what I love about tributrin X and everybody that's been like so many people on the show have talked about it is that one it works, but also it doesn't smell disgusting like where I'm like.

This is one of the key things about this is it actually helps to restore your gut microbiome. It helps reduce food sensitivities, and it will not destroy your favorite bag.

That is… It's true. The first generations of butyrates were very difficult. And the results were okay, but they weren't where they are today. Yeah, Butyrate is My prediction, as we look back on this interview in five or 10 years, butyrate is going to be talked about at the same level as vitamin D.

If you do not have enough butyrite, it is linked to every single disease that's ever been studied. It also is directly related to your microbiome dysbiosis, your leaky gut, histamine-related issues.

Like it's so critical. And the craziest thing to think about, like if you really want to like go to the outer space and think about something is you cannot make it.

I cannot. We must feed the right bugs and then those bugs make. One of the reasons that this is crazy is our colonicytes, so our large intestine gut cells.

they prefer, and the healthy way for them to have metabolism is through butyrate and oxygen. So, their mitochondria, they pull in butyrite and and they have this oxfos process that they that prefer.

And all the research suggests when this is happening, the gut is healthy, that mitochondrial healthy that sends off anti-inflammatory signals throughout the body.

when butyrate is not present, the body will try to live, nature will to try live. And what it will switch to is glucose, glucose metabolism. But this makes the oxygen build up inside the gut.

If the oxygens starts to go too high inside, it's the healthy bugs, that the good bugs that probiotics in general, not all of them, but in the majority of cannot exist in a high oxygen environment.

They are called anaerobic bacteria, meaning without oxygen, they exist. With too much oxygen. they literally die. This is not a negotiable thing. It's like us on the moon.

Like it's not negotiability. We have to bring our oxygen with us. At a certain level of oxygen they die, or they go dormant and they're laying there waiting for the right environment to show back up in basically.

And so one of the reasons why I think the probiotic revolution has failed, also long live probiotics, but the robotic revolution failed just like the genetic you know, the human genome project failed basically, but long-lived genetics is that probiotics are really good at a few things.

But this idea that they're a panacea or that everybody should take them and they'll fix your gut is actually not correct because if you're injecting them into an environment where they can't actually do their job, You're kind of, I don't know, it's almost like wasting your money.

And for a lot of folks, you're actually aggravating the situation. This is a long-winded way of saying that if you think about it, You are in a symbiotic relationship with the bugs inside your gut.

You cannot make butyrate yourself. Without that butyrate, there's asthma, there's Parkinson's, osteoporosis, muscle loss. There's all kinds of studies out there that you can go and Google, and you could read about how butyrate is needed for your brain, for muscles, bones, lungs, all these places.

The only way to get that is usually through either prebiotic supplementation of the right microbes or eating plenty of vegetables and fruits with the Yeah, it's just been really, really fascinating because I feel like a decade ago it was all about probiotics and then we realized like they are not surviving inside of the gut.

And so these days I'm focusing on like utilizing probiotic with butyrate.

Probiotics, Butyrate, and Microbiome Resilience

also like resistant starch and other things that can help with growing like the beneficial flora because it's kind of like, you know, You drop them off you drop off workers at a job site, but you forget to feed them like they're, they are locked in there like you're not going to be able to let them do their job if you are not properly feeding them.

So I love that you have this available to us. It's also related with Does it help with histamine issues? I would love to touch a little bit about histamines.

Another trend is you need to avoid histamines. I personally think histamine are super interesting. They can have a really big impact on so many of our symptoms, not just digestive symptoms.

Not just bloating, but also mental health. Histamine can act as a neurotransmitter. Some people will see they have agitation, that they might have issues with learning.

A lot of kids with developmental issues might actually have histamine issues. In some of my experience, I've been like, not necessarily reducing histamines foods, yes, temporarily reduce them, but what can we do to help with supporting?

Why do you have so much histamin in the first place? Oftentimes, it's like mold exposure, parasitic infections, or it could be like not having enough B6 on board.

So I typically will be, like, OK, let's do some P5P and sometimes methionine or sometimes SAMI to help clear that. But there's also enzymes that you can utilize.

And every time I look at butyrate, I'm like there is even more information on what it does. I'd love to know your approach for histamine. Yeah, yeah, so you know me.

I order stuff from literally around the world without any safety data, and I'm always trying crazy stuff that I find deep in the bowels of the internet.

And I am a perpetual optimist that this next thing I found is going to be the solution. It is gonna be like, Acai Berry is make me lose weight or whatever it is.

When I got into tributerine, which is a different type of butyrate, I was like, this is going to be the thing. And it actually is one of the only supplements out there that I have seen that is literally oftentimes a game changer for people that they start to say fantastical things.

That if I were to see them, you'd be like oh, he's just pimping his supplement. But one of the things with butyrate is it can be a mast cell stabilizer.

Mast cells are these immune cells. There's a lot of them in your gut. They're actually everywhere, but there's lot in

them your cut. And one the main things mast cells do is they release histamine in the presence of almost anything, frankly.

An issue about histamine and mast cells is that what you said is true. You actually need a certain amount of histamines to be healthy and live. Histamine is not a bad guy.

Just like testosterone's not bad, estrogen wasn't a good guy all these years, turns out. Histamine's almost like a hormone. Some people would say it is one.

In the right amount, but not too much of it. Mast cells inside of your gut can get over expressive. They can get vigilant, over vigilant hyper vigilant to the world at large and they can just start spitting out histamine because they're getting almost poked too much.

It's almost like if you were to sit beside me and just keep doing this to me all day long, at some point, I'm going to react to you, right? And if our gut starts to break down, we start to lose our mucosal membrane, our microbiome, and then we started to get down where the food and the outside world and pollens and stuff are interacting with our guts well too much, the mast cells will just start kicking out histamine.

And what butyrate can do is it can be a mast cell stabilizer. The best way to visualize this is like a weighted blanket. It's just a big hug. like for your mast cells.

And they're just like, oh, okay, I don't have to be so aggressive with all my spouting about this histamine. So butyrate is a very potent mast cell stabilizer.

There's a lot of other mast-cell stabilizers, and oftentimes, it works best with other mass- cell-stabilizing compounds like quercetin, or PEA or Bakelin or Luteolin, and these are all different types of compounds that are mast cell stabilizers along with butyrate.

I would say I was anti-histamine and I'm was wrong. I think I Iwas anti FODMAP early on andI was right. Iwas antihistamine earlyon and waswrong. Histamine is a real issue.

The histamine intolerance or the overexpression of histamines and the inability to clear it out is affecting a lot of people. And people are blaming other things for this issue because the symptoms are so generic, right?

Like one of the systems of histamine intolerance is food sensitivities and food reactions. One of those symptoms of his me intolerant is like bloating and diarrhea and brain fog.

So you can be like, oh, it was the lectins. Well, maybe it wasn't. maybe it was your body expressed too much histamine and you did not have enough of DAO, diamine oxidase, the enzyme that breaks down histamines in peripheral tissues, maybe you didn't have that enough.

And then that histamin went systemic to your brain, to wherever, and it gave you flush face, it gave you itching, a rash, hives, brain fog, tachycardia, racing heart.

All these different things are signs of too much histamine. And you basically have an intracellular enzyme that breaks down histamines, which is HNMT, and then you have extraceller enzyme, DAO.

DAo is expressed in your brush border. We talked earlier about brush board enzymes being the reason why people don't tolerate carbohydrates or food from plants usually.

And one of these tangents is histamine intolerance. I would say the overlap is really strong for a lot of gut conditions, thyroid conditions. The research suggests ADHD, fibromyalgia, so you're thinking, brain, you're thinking pain pathways, migraines and headaches, which again, neurologically, those are only studies where they actually gave DAO and saw improvement in those patient populations.

And so I guess my starting point is that I was wrong about histamine early on. This stuff is legit. I actually, turns out, have histamines intolerance from time to time.

If I get too stressed and I have a little too much wine or something and I'm just not taking care of myself, I will start to sneeze. And then I'll start get some skin stuff that'll show up kind of like rashes.

It's pretty much guaranteed that if I just start taking some more DIO, it goes away. Or if i would just relax and go outside and take the dogs for a walk, that also helps.

Yeah, I did a deep dive on histamine when my son had eczema as a baby, and he was also very, like, non-sleepy. Like, people, whoever said, know last night or whatever and they meant it as like oh i slept really well like clearly they never had a baby because they didn't have my baby like most babies like don't sleep that's kind of a thing they wake up multiple times throughout the night but that tends to go away with time and for my son it didn' like he was just very like everybody's like that the most alert baby i've ever seen i'm like uh-huh That's a very alert baby.

Then he also had some eczema. I learned about the histamine intolerance connection with exima, as well as asthma, ADHD, focus issues, and not sleeping at night.

The DAO enzymes were really a big game changer for us in mitigating all of that. They can be very, very helpful with mitigated the too much histamines because Obviously, histamine is something that we all have, we need it, but when we have too much of it again, that becomes an issue.

The enzymes can help with breaking it down. For us, it was also figuring out what was going on in his gut that was driving that histamines response. It was incredible when we were able to balance out his histamine levels, the skin issues went away, and then he was just so much more chill after that.

It just was like, wow, where I think I fully began to really appreciate histamines for all that it is. And I know like a lot of children like on the, you know, with neurodevelopmental issues, and they'll have like, asthma, eczema and autism.

And it's kind of like okay, what's, What's the common denominator there? And a lotta times, it s like Okay, this is like lot going on, but histamine could be a part of that puzzle.

and addressing that histamine issue can be really, really big game changer when you do the right kind o things. I kno a functional doctors love utilizing DAO for that purpose too.

Yeah. I mean, I like to describe it almost, and I don't think it's actually that much more complex than this. It's literally an equation of how much histamine do you create in response to the world?

And that's the food you eat, that the air you breathe, it the home you're in. And then how many DAOs basically do make to break that histamines down? If you make too much for the DAO that you are able to make, you're going to have symptoms and you can have issues.

Or if you accidentally do something, and some people actually do have a genetic deficiency of DAOs, but if not just genetically low, if your damage due to inflammation in your small intestine, If you're stressed, if there's other things going on, you are drinking alcohol, these things, there are certain pharmaceuticals that will actually block the creation of DAO and you can basically just have this mismatch where you just making too much histamine without the equivalent DAOs to break it down and then you have motion sickness.

Then you have car sickness. Then, you know, headaches or you PMIDD. There's a lot of things around cycles and hormones that are related to histamine. It's not the whole picture.

I'm not saying that this cures everything, but I am saying, that histamines does seem to be a driver of a lot of different symptoms and conditions that people are trying to understand.

And they've done a lotta work in that area, but they're not seeing the results they want. Histamine is usually the missing piece for those folks. Yeah, it's been really fascinating.

So definitely there are things that can cause this. I think I already mentioned mold exposure and H. pylori, different protozoa and stuff that could internally drive histamine production.

For me, I love black tea and green tea. You can take it out of my cold, dead hands, but I will still drink it. And that sometimes can actually block the DAO enzyme as well.

There's different lifestyle factors. I like Rosé. wine, you know, my guilty pleasure every now and then, like, I will get these like really pretty bottles of rosé and like nobody is allowed to touch them.

Sometimes my husband will be like ooh, what is this? And I'll have like a glass of wine every Now and Then. And i love to utilize like DAO at that time too, where I'm like okay, i just overdid it with a with the tea or, or with The Rosé, and this can be a really big game changer, even though I don't necessarily have a quote unquote, genetic deficiency, right?

Yeah, yeah, I mean, everything is in flux, right? Like our bodies are always aging, we're getting older, our digestive organs are getting Okay.

Histamine Intolerance and Mast Cell Support

Well, everybody that's not a superhero like you is aging. And my wife, of course, she's a super hero as well. She doesn't age either. But the rest of us, we go through period seasons, just like the seasons change around you.

Go through, like maybe your kid's going through something, so your extra stress, maybe you're job, may be your business, Maybe you are taking care of your family, Like a family member or something as a caretaker.

As you go though these seasons of stress microbiome shifts and your intestinal health shifts, and you can do things that end up putting you in this histamine intolerance bucket.

For instance, maybe you were having some health issues and like, you know what, I'm going to take charge of my health this year. And you listen to some shows or somebody online or something, like I need bone broth every day in sauerkraut.

Well, guess what? If you have a histamine related issue due to maybe some infections or some mold or just stress or inflammation, those gut healthy ideas will really exacerbate your condition.

And so there is a role, I think, for cutting out some high histamine foods. Especially when you're, again, trying to stop the bleeding, you are trying get this under control and feel better.

Those foods include all fermented foods, those foods includes bone broth, it includes random vegetables, but just look it up. There's things like eggplant and tomatoes and things, like this.

And some people can't even do leftovers because the leftovers start to grow bugs and those bugs cause histamine. So I think the thing about histamines intolerance that I've observed is the healthier your gut is, meaning The healthier your mucosal membranes, your microbiome, you're butyrate production, all that, the less reactive your mast cells are to the same pollen the rest of us are breathing in or the dander or whatever, or same foods.

That's really important. But then also, as you go through phases of life, you may want some DAO to help you, go-through-whatever. Whenever I fly, I take extra DAOs.

Actually, by taking DAOS, enteric-coded DA, another other one's work, but this new enterocoded work for me. I'm able to cut back on my caffeine because I do have ADHD and I use stimulants, not Adderall or not a prescription level, but I didn't even realize it.

I don't know how I got this far into nootropics. didn't know what I was doing, but I clearly was helping my brain focus on the task at hand. And through using DAO in the afternoons now, I've actually cut back on my stimulant usage.

I cutback on caffeine usage, and I'm still able to get work done. So I think learning about your body, not making it right or wrong whether or not you need some DAOs, or will I need DAOS forever, will need to avoid histamine foods forever.

Again, these high histamine foods are bad foods. We're talking about like tomatoes, we're taking about eggplant. There's nothing wrong with these foods, in fact, you could argue they're superfoods.

Chocolate, things like that. I love me some chocolate. One other thing that came to mind about histamines is actually like in perimenopause, And in menopause, as women become estrogen dominant, they can actually have more histamine issues at that point.

There is like a very interesting relationship between the two. And while you were speaking, I was kind of thinking like, a lot of women say they struggle with ADHD.

symptoms worsening during perimenopause and menopausal. I'm just like, huh, and even like that pregnancy brain like postpartum when you're estrogen dominant.

And like I wonder if this is related to like a histamine issue too. Yeah, 100%. So Shay, my wife, who's on bioidentical replacement cyclic hormone dosing, she was getting headaches.

And it was like, not migraine level, but like annoying enough that she would have to like change her life. basically on and off the week before her cycle and then sometimes during her circle.

I try to get obviously everybody in my family enrolled in all the supplements I make, but of course they are resistant to many of my suggestions. Anyways, I got her taking the DAO and lo and behold, she doesn't have headaches at all around her And we've been testing that internally on the team.

We have a lot of customers now who are reporting that. And I think there's such a crazy interplay between estrogen dropping and progesterone increasing and the fluctuations of perimenopause.

I mean, the definition of most people starting at like 36, 38, you could have these random spikes of estrogen or progesterone at any point in time that you're not really in control of.

And when that spikes and then drops is when you can get this crazy histamine production or this reduction in DIO creation. Yeah, it's just been fascinating.

I know going through perimenopause myself, I'm like, wow, this is quite intense and how many different hormones and pathways and things downstream that it impacts.

And also quite impressive that you were able to get a family member to follow your advice. Right. That's always a challenge too. Or I think I shared a little bit real on Instagram today.

It's like Essentially, like sometimes my husband will hear health advice from somebody else. And I've been like trying to tell him to do that for like many, many years, but like he hears it from like you or Dave Asprey or somebody and he'll be like, Oh, I'm gonna do this and you know, blah, and I'll Be like Okay, yeah, good.

Yeah. Tell me more about like You know. Okay. We talked about all of these different pathways, elephant in the room, dress response. So one story is I was making dinner once for myself and my husband.

And we got into a huge argument. It was the trash out. He wouldn't do it exactly. But I can tell you that he was so mad. Like, he didn't even eat the food.

I ate the, food but then I ended up sick from eating the foods. there was nothing, I believe there, was actually nothing wrong with the food. I believed it was my intense emotional state where if you have that emotional, if your under a lot of stress this could really affect your ability to digest food, this can really effect your stomach acid, your secretory IgA levels so then you end up sensitive to a whole bunch of things, you're more likely to catch some of these virus or some I also was resistant to the idea that the nervous system really mattered.

Even though I had mentors like Chris Kresser telling me 10 years ago, dude, I think you should meditate. I your stress. You should read some books about emotional distress and trauma.

And I'm like, whatever, man. It's just nutrition. This is just supplements. you know, actually, when we were kind of talking about creating our supplement company together, I was sort of at the height of my version of functional medicine at that time.

Like I could speed dial almost anybody in the industry. I had access to any lab, any supplement at a time, it's like 2016. And I still having these random visceral hypersensitivity attacks, having random issues like you're talking with like a meal gone wrong or something.

And no data was upset inside of my body. Like there wasn't a marker to focus on. And yet I was having these issues and I kind of wiped my hands of this industry of supplements in general, of food and nutrition.

I'm like, obviously the answer is this stuff is limited. It doesn't work. And it was only when I went on a walkabout into trauma, into the nervous system, um, in to all different modalities around, uh, you know, our mental states, or emotional states or spiritual states did I make massive breakthroughs in those issues and actually have legitimate, durable results that lasted well beyond some of these things.

uh experiences that that physically changed my my health for the better for a long time like still to this day and it really was the missing piece for me, where I was like, oh, that's why 10% of the people that I used to work with who were doing everything, like they were everything right.

Their entire day was around biohacking and health, but they still struggling is this nervous system component. And what's kind of crazy is that there's actually some research on this.

There is some on whatever your emotional state is when you eat a food. It actually contributes to better to better digestion and better health. I think most of us have probably had an experience that's, like, much more relatable, which is, there's probably a time you can relate to in your life where you had a really good time with your family or your friends, and you have alcohol.

You had toxin, a nasty toxine named alcohol, And you woke up the next day, you were fresh, good to go, not hungover. Most of have an experienced where we had one or two drinks, we woke the day like oh, my gosh, I don't ever want to touch that stuff again.

And I think in most of those cases, you have one state where you're in a very heightened, lovey, compassionate, connected state, and you had this experience and then you woke up fine the next day.

In this other state maybe you were not in that elevated state with those elevated people and he woke feeling worse the And so I think that's just one small relation that most humans have around the state in which you ingest food matters.

And that state could be related to your nervous system. So we can get really nitty gritty and technical like vagal tone and parasympathetic tone. and what's your HRV say on your devices, which I think is a measure of those two things, and how dominant are you and you can't make enough stomach acid if you don't have enough parasympathetic tone.

But you could also just back up and just be like, wow, when I consume food and drink, if I can get into a grateful place or a compassionate place, or like a good place.

Do not be surprised if you have worse symptoms in the following six to 12 hours. Yeah, it's so fascinating. I remember I was just hanging out with one of our mutual colleagues and we were talking about gut health and some things like that.

And I like one the first things you want to do is you wanna make sure you're not like standing and walking around while you're eating your food. And he just happened to be doing that at that time.

It's just one of those foundational things where we need to in that parasympathetic state to really help with digestion. A really big part of what I do for women with thyroid disorders and digestive issues is really focus in on their adrenals.

We focus on, how do we do relaxing activities? How do do things we enjoy? What do to really be in that parasympathetic state? My book, The Adrenal Transformation Protocol, is based entirely on how to get into that state if anybody is looking for some suggestions on that.

A big part of what I do, and I know it's been interesting, we both went through the Kalish functional medicine training, Dr. Kalich had always talked about you need to support the adrenals before you can heal the gut.

I think I've hacked the system because we can actually support the adrenals and we can utilize things that raise secretory IgA, for example, sarcomyces boulardii and, you know, utilizing adrenal adaptogens to start like kick off the gut healing process.

Nervous System Stress and Adrenal Support

Like you don't necessarily need to be on like adrenal replacement hormones for months and months before you heal the guy. I just got be serene. Can you talk about it?

Yeah. Yeah, so, I mean, like you said, we have, let's say that, You're struggling with food reactions, you're struggle with some of these food groups we've talked about throughout this entire show, and you are on a really, maybe you on healthy-gut supplements, your on root-cology supplements.

You are like practitioner-grade, really solid formulations, And you really not getting the benefits you want. I think nervous system and parasympathetic tone is probably one of your missing pieces, because like you said, when you have good parisympathy or vagal tone, You gonna have a good The downstream effects of that are less cortisol and better adrenals, but also better immune function and things like secretory IgA.

We can use supplements to do that. like, boosting those things. But for some of us, like myself, I am sympathetic dominant. Like, when stress happens, i thrive.

When a crash happens or a situation happens time slows down. I'm like my version of a superhero movie. And not everybody's like that, but I think there's a lot of who are sympathetic dominant.

And I think one of the things that's been very helpful for me is just admitting that. Admitting that I'm wired this way. In order for my to work on my sympathetic or my parasympathetic tone, I have to do a lot of things.

I gotta make sure I am exercising, either be meditating or neurofeedbacking or saunaing, or doing these things my body into parasympathetic states, because my natural, my dream state, and my awake state—every state I am in—my body knows and likes sympathetic dominance.

And so B-serene and the B serene products were products created by a friend of mine, Dr. Borgenkamp, who's a pretty awesome functional medicine guy in his own right.

And he went down to Brazil, he had panic attacks, even though he has access to everything that I had access too, and he thought he just needed to do some psychedelics.

And the shamans took one read of him energetically and they said, look, you need this plant malungu. And malungu is this bark from this tree in Brazil, and it's been used for insomnia and pain and anxiety down in Brasil for centuries.

But we don't really have, like, it doesn't grow here natively in North America or any western country really, so it is not really on the menu around here.

Anyways, he brought that knowledge back and together we've iterated on be serene line up and really what it really is is a product of all herbs that are all down-regulation herbs.

They are all trying to drive the body into parasympathetic tone versus a lot of other adrenal products, which there's nothing necessarily wrong with ashwagandha or rhodiola.

It's just that for some individuals' constitutions, in other words, their nervous systems, those plants can actually be uppity. or they can be stimulatory.

And the Be Serene product lineup is specifically designed for sympathetic dominant hypervigilant folks like myself, who have a hard time just being in a sympathetic state, or I mean, sorry, being a parasympathetic state on a regular basis.

using herbs like this is one way to kind of drive the balance more towards parasympathetic as you're going through life and you are dealing with, you know, a sick dog, sick kid, the world, whoever.

I love that it also includes Shatavari, which is kind of like one of my favorite herbs for women, like postpartum or perimenopause, because this is like, the name is, women of a hundred husbands or something, right?

So it's like, you've got to be intensely stressed if you have a hundred husbands. I love that it includes that and then Holy Basil and Romania too, which are, there's so many different adaptogens out in the world and they all have different personality types as I like to think of them.

And some people will say like, well, I tried adaptogens and I didn't feel good. And it's like there's so many different blends and things to utilize. Some people can't do ashwagandha.

So this also doesn't have ashwa gana and it doesn' have the Panax ginseng, which can be activating for some ppl. This is a really fantastic option. I think I know I have made a post on Instagram and I had the Rucology Adrenal Support and the Bicirine and Holy Basil and Reishi as some of my favorite formulas and different ones might work for different life cycles.

Maybe if you're somebody who's super, super sensitive, you just do a little bit of Tulsi Tea and that's all you can handle. If you are somebody that is more in that sympathetic dominance, then that's, you know, be Serena is going to be your jam.

It's you, know I love that you said like you kind of just had to admit that. um that's who you were i i know i have personally have struggled with like i'm i Have a lot of ideas and i.

Have like a Lot of energy and thoughts and things i want to do and you know motivation and all of that and sometimes i'M like oh i need to chill more but then like I miss all Of that, and one of my mentors who's in her like 80s said she's like you just have to sometimes you Just have, to be yourself right and You have you know, admit that this is who you are, and then support yourself properly versus trying to be somebody else, right?

Yeah, I think it's really helpful just to learn about how you were brought up as a kid, learn your tendencies inside your nervous system, because your system is present regardless of what you want it to.

Like, it is before you're. In other words, you can't just be like, -"I'm relaxed now." Like it doesn't work like that. Um, I have no chill and my mom has no Chill and you know, we're very productive my Mom, you, know was a medical

doctor and Single mom and she just you Know did all the things and I I just my now I see my son has No, chill, and i'm like, okay.

This is like Kind of like a wiring and like how do we support ourselves with that? Right? Yeah, i think that's that that is the compassion. That's the beautiful thing is that You know, you can spend 24-7-365 for the next five years being mad about a lot of things.

You can be mad at the Wi-Fi and the blue light and GMOs and 88,000 toxins we've released into the environment since 1980. And whatever else you want to be made about, But all that does is actually trigger your nervous system worse into a state that's going to make you less capable of dealing with food, it's gonna make your histamine issues worse, is gonna your immune system more compromised, It's Gonna make higher cortisol, more adrenal issues, you're probably gonna, there'll probably be some studies on the microbiome and how that bad for the micro biome.

And there's this other way, which is like, just acknowledging that like look, We have tools like this, like we're doing the show together. You know, you're near Austin, I'm in Boulder, this is so cool, we get to share this kind of stuff.

This was not around even five years ago. And yes, our world has a lot of problems, and it has lots of toxins that necessarily weren't there for our ancestors, but we also have a lots supplements and products and cool options, even pharmaceutical options that can help us just be healthier and live a longer life.

Just acknowledging what is like some people just genetically and nervous system wise and everything they just have they struggle with blood sugar and there's almost no amount of dietary changes and Everything they Just might need to be on metformin or berberine for the rest of their life and that you shouldn't feel bad about that.

I will probably always take digestive enzymes because of all the damage that happened to me for the rest of my life. And I'm not going to be like, oh, something's wrong with me because I have to take some pills.

The other thing that I'll probably do is I probably will always have some nervous system tonics, whether it's B-serine or something else. I don't go anywhere without B serine IR because the way I am wired to go through this world is a little bit more no chill.

And so, if I can live longer, healthier, and be around for my family a lot longer because I take a few supplements that help me chill, that's way better than choosing a a of alcohol, a lo of sugar, some sort of extreme something else.

And, so I hope that… I know there's a l of people that have a ot of idealized versions of health and, like, I want to be someone who doesn't take any pills.

I think that' like the boomer. That's like my parents. They really hate that. that I'm like, you should take some supplements now. I think it's gonna help.

But I hope that our generation, the Gen X, millennials and onward are gonna start to realize like hey, supplements are actually like if you just acknowledge that this world has changed and maybe not always in the best way for our biology, there's some really cool products out there that could give you another 10 to 15 years of good health span if start taking them long enough.

I love that. And that's so well said. I feel like we really need to take care of ourselves and meet ourselves where we are and do our best. We have so many tools at our disposal these days that, like you said, they haven't been around.

This has been a really fantastic conversation. First, I'd love for you to share more about where people can find you. Then I'm going to put you on the spot with some rapid-fire questions.

Yeah, just healthygut.com. If you use some of the coupon codes like healthy gut. com forward slash like Holo or

Wentz Holo, or just use WentZ on our site, there's a coupon 15% off for folks, for listeners.

And we try to make supplements more fun and more enjoyable for everybody with things like that. So that's the main site is go to healthy.gutt. I love that.

So I'm going to post the healthy gut dot com slash ones. If you guys use that link or use my last name Wentz for the coupon code, you'll get 15 percent off.

Thank you so much for passing that on. I appreciate that my my bestie is back from school right now. But we have question for what just one question. For you, what's a wellness hack you refuse to participate in?

I refuse to participate in this. We should live in a bubble and we should avoid all these toxins and everything is attacking me. So I'm not going to get upset if I stumble into a room with mold.

I am not gonna get up set if the only option happens to be cross contaminated with some gluten. thinking about the prevalence of pesticides and GMOs and Wi-Fi because I'm not going to focus my entire life on lack and fear and away from energy.

I want to be more in resilience. How do I build a body that's capable of being in this life? I love the focus on resilience. I think that can be a really, really big game changer.

So thank you so much for your time, for coming on the show, and for everybody listening at home, I hope this has been a healing part of your journey. Dimitri, do you want to say something to everybody?

Bye. Bye!