Introduction and Dr. Jockers' Background

Welcome back to the Reversing Mast Cell Activation Syndrome and Histamine Intolerance Summit. I'm your host, Dr. Meg Mill. And today I'm joined by Dr. David Jockers.

Dr. Jockers is a doctor of natural medicine and runs one of the most popular online health websites of DrJockers.com. He is also a bestselling author and shares a wealth of knowledge and his podcast and on all of his summit.

And we I'm thrilled to have him here because we're talking about one of my favorite topics today, because I think gut health is really one of the most foundational pieces to histamine intolerance, and also our major role player in mast cell activation syndrome.

So I'm trying to get into this topic. Thank you so much for being here, Dr. Jockers. Thank you, Dr. Meg. Just honored to be on with you. And thanks for doing this summit.

Yes. Well, I am excited to get into all of the details here. But before we get into it and dive into the information, could you just share a little bit about yourself and your background? And I know I love how we all have different unique journeys and that got us here.

Yeah for sure. So I grew up and, in a house where my mom was actually studying to become a massage therapist and then a naturopath growing up. And so she really embraced a healthier lifestyle of course, my dad was the opposite.

And as kids, we really rebelled. But my mom always relayed healthy eating to better performance, better skin health. I had an older brother, I had acne, I didn't want to have acne.

So she said, that's because he's eating all these, you know, all this process sugar, all this processed chocolate bars. So I was like, okay, well then I'm not going to eat those.

And I was an athlete growing up. And so she said, you know, you need to eat your kale because this is going to give you more energy, more nutrients. You're gonna have more energy.

And so I always linked okay, the food I put in my body to my performance and my overall health. And so later on, I, as I started college, I became a personal trainer.

I got really into that, but I was eating, you know, seven meals a day and 5000 calories a day to try to put on as much muscle mass as I could in my early 20s.

And, I ended up developing irritable bowel syndrome, and I would have intense cramping in my gut. I would have constipation, diarrhea. And I also started losing weight.

And even though I was eating, I was lifting weights, started losing weight because I wasn't actually absorbing nutrients. I was putting massive stress on my gut.

And that's when, you know, I came across actually a chiropractor at my gym told me about dr.mercola.com, and this is, you know, he had just kind of gotten this website go in 2004.

And, so I started, looking at that and I read his book, The No Grain Diet. And I took out grains and made a lot of nutrition changes. And I started to heal and started to feel better.

And I, I basically the diet I was on was an anti-inflammatory diet stabilize my blood sugar. And I noticed, you know, I also started graduate school at the time.

And I noticed that I had a lot of early classes, 7 a.m. classes, things like that. And I notice I just wasn't hungry in the morning. So I would drink a lot of water, and oftentimes I wouldn't eat until, I don't know, 1:00 2:00, 3:00.

And I actually felt great doing this. I felt really mentally alert. I felt, I was getting stronger, more stress, resilient. And I had never heard the term intermittent fasting at the time since 2004, 2005, somewhere in that time frame.

And, you know, I just felt significantly better. And I ended up gaining my weight back, healed my gut, reduced inflammation in my body significantly, and ended up becoming top of my class in graduate school and starting a clinic right after school.

And this is 2008, 2009. I started out as you know, I got a degree in chiropractic as well as functional nutrition. And so I was teaching community wellness programs and at chiropractic in my office, nutrition coaching, functional medicine.

And, you know, I started it at a time when the economy had crashed. And so I was actually living in my office. I was young, I was single, lived in my office, showered across the street at a 24 hour gym, and I was working like 70, 80 hour weeks, crazy stressed out, and I ended up developing some different health problems from that.

Gut Lining, Mucosal Barrier, and Leaky Gut

but eventually I was able to I bought a house, create a more balance, got some other doctors in, and, really just have been focused on teaching people how to get healthy and well and, you know, foundation of that is obviously nutrition, intermittent fasting has been, a key element for me.

And many of the clients I've worked with, as well as anti-inflammatory nutrition. I came across histamine, histamine intolerance, you know, as, as a root cause factor for many individuals back, I don't know, 2013, 2014.

I started looking at information for that, making some nutrition changes, developing some products, some supplement products that can be helpful, for people that are dealing with that and seeing great results, helping people overcome histamine intolerance.

And of course, you know, now a lot of us, a lot of people are just like yourself or talking about mast cell, which is even more significant than a lot of the histamine.

What I've seen is that a lot of these chronic health conditions have gotten worse over the years, and people are have worse symptoms. Their bodies struggle more like, when I first started practicing, it seemed like, gosh, if we made nutrition changes, we put people on a probiotic, got their vitamin D, optimized magnesium.

You know, a couple things on board with the nutrition and lifestyle changes. Got them sleeping better. they got better. Right. And then I would say, really, over the last five years, it seems like people are really struggling with a lot of these chronic issues.

You know, mast cell being kind of one of the core foundations for a lot of these people that just nutrition, you know, they're taking ten supplements that are all quality supplements and just not getting better.

and Mast Cell is is definitely one of the factors along with things like mold and you know, a number of other factors. And so, so I'm glad you're doing this summit and, you know, that's my story.

I started, a website drjockers.com putting out a lot of health content. and that's just really taken on a life of its own. I no longer see clients anymore.

I just am really passionate about creating online health content. I do have a naturopath that works for my website.

And she she sees people all over the world, because we get so many inquiries about health coaching.

But, you know, at this point, I just am really passionate about creating great health content summits, blog articles, YouTube videos, podcasts to really help people take back control of their health.

Yeah, well that's great. Well, thank you for sharing with us today. We're excited to dive in here. So I know, you know, we know and have talked about a lot on the summit.

And I brought to light that really when we're looking at histamine intolerance gut health is one of the key factors because we need, the diamine oxidase enzyme to be able to break down histamine.

And it can be a revolving door. We can also see underlying infections which stimulate the immune system, which causes mast cell activation. And if people can go in circles, I just wanted to actually start by kind of get talking about some of the dynamics here.

We haven't really gotten into the mucosal membrane, the gut lining and how that's relating to the immune system. So can we start there. Yeah for sure.

So our gut our intestines you know most people think of that as this tube and that there is a component of it where it's a barrier or a tube. And obviously we eat food.

The food goes down through the tube. But that tube is actually the it's a separation point between what's outside of our body and what's inside of our body.

So the way that our body and our immune system kind of looks at our intestines is it's going to try to do everything it can to get good stuff in the blood, keep bad stuff in the intestine, obviously moving it through the whole the whole tube, but not allow it to get into the blood and into the bloodstream.

Now with the intestinal lining, particularly in the small intestine, it gets a little thicker in the large intestine. But in the small intestine it's only one cell wall thick.

And it's all of these cells are held together by what's called tight junctions. And a good way to think about it is kind of like a cheesecloth. There should be very, very, very small areas where nutrients ideally can pass through and into the bloodstream.

The reason why it's only one cell, as opposed to, for example, our skin, which also protects us from the outside environment, protects our blood, which is very thick.

The reason why it's only one cell is throughout the history of mankind, we've had limited access to food at times. And so when we did get food, we needed to have maximal nutrient absorption.

Of course, in our society today, we all have pantries. Now, anybody that's listening to this, I'm sure, has a pantry full of food that can last some at least a week.

So we have plenty of food now. Now we have more chemicals and more toxins in our food than our ancestors had. So we actually ideally would have a thicker intestinal lining because we it's easy for us to get nutrition.

We want to keep toxins out, but it takes a long time for our body to adapt and and in a sense evolve with that. And so right now we're dealing with an intestinal lining that was built for times of famine and times where, you know, our nutrition was more pristine, but we just had limited access to it.

So what happens in our society is we're constantly eating, we're putting mechanical stress on that gut lining. And we are also consuming foods that have a lot of toxins in them.

And all of that stresses the gut lining. And so now those the the tight junctions start to rip and tear. Right. There's

more inflammation in there. And that creates structural damage to the intestinal lining.

Also right above the intestinal lining we have the mucosal membrane and the MUC. The mucosal membrane is basically where 70 to 80% of our immune system is is right there in the gut.

And really all of our mucous membranes, like in our in our respiratory tract, our sinuses, most of the immune system is actually right there in that mucous membrane.

We have a immunoglobulin that's called Secretary IGA. Okay. And Secretary IGA, it's kind of the first immune component that comes in contact with pathogens, with bacteria, parasites, yeast, fungal species that could could potentially be problematic.

And so we need to have a good strong mucosal membrane. And we need to have very stress resilient intestinal cells with stressors and tight junctions keeping them together.

Stress resiliency is really the key. I'm gonna use that term a lot in this presentation. The more stress resilient we are, the more stress we can handle.

Okay, in order to have stress resiliency, we need to obviously take good care of our body. We need good times of rest and recovery, but we also need times actually of some level of stress stressors to help in a sense, prime them kind of like any sort of muscle, you know, if you want to have, you know, a strong lower body, right?

If you don't have strong legs, you can't just sit around all day. You need to do some squats from time to time, but you also need good recovery and good nutrition.

And so it all goes together. And same with the intestinal lining. The more stress resilient our intestinal lining, the healthier our mucous membrane, the better our quality.

Our overall quality of life is going to be, the less overall inflammation we're going to have now. As intestinal lining starts to break down because of stress, because of bad nutrition, because of toxins, infections.

Right. Those are kind of some of the root cause factors. Now that intestinal lining opens up. And now bacteria and other microbes, as well as their waste products start to seep into the bloodstream.

And when the bacteria and the waste products start to seep in the bloodstream, the body, in a sense, there's an alarm that goes off in our body. And that's because systemic infections, that means an infection that gets into our blood spreads into vital organs like our brain, and causes meningitis or our lungs and causes pneumonia.

Those are that systemic infections have killed more people throughout the history mankind than anything else. Our ancestors, they might be hunting, they might be fighting each other or they, you know, whatever it was, and they would have some sort of tissue damage, you know, they would have, some sort of wound.

And it wasn't the wound itself off most of the time that killed them. It was actually the infection that came into the wound, because now they had this flesh wound. The blood was exposed.

you know, they didn't have modern medicine back then. And so, that infection could spread wildly, get into their their nervous system, cause meningitis into their lungs, cause pneumonia, and that's why they would die.

And so the body knows that that's a risk. That's a risk to dying quickly. So it creates this chronic inflammatory response. It drives up inflammation. Inflammation is the buffer.

Inflammation is designed to protect us from dying quickly. And ideally inflammation should be turned on for a short period of time. Get the area under control.

Make sure that you know we're not at risk for an infection, and now allow the body, to to go into heal and repair

process. However, if every time we eat, if we have a leaky gut, right, or in what's called intestinal permeability, in layman's terms, we call that leaky gut every time we eat now food, large, undigested proteins, as well as bacteria and bacterial end products.

One in particular, called lipopolysaccharide LPs.

Histamine Intolerance, Mast Cells, and Lab Markers

They also call that endotoxin. When that gets into the bloodstream, these these undigested proteins, bacteria and endotoxins all drive up inflammation in our system.

They they actually turn on once they get beyond a certain threshold in our blood, they turn on these inflammation amplifying systems, tumor necrosis factor alpha, nuclear factor kappa, beta that what's called the inflammasome.

they they cause this massive inflammatory reaction and it's like a alarm that goes off throughout our whole body, which creates whole body inflammation in our system.

And so one of the key elements of healing, whether it's history and mast cell, any sort of auto immune type issue is we've got to heal and seal the gut and create more, more stress resilient gut lining and a strong, healthy, stress resilient mucosal membrane with with, adequate amounts of Secretary IGA.

yeah, that that is so important. And I think it I think the term leaky gut, it's becoming more well known. So people now know, okay, leaky gut is a thing, but they don't exactly know what it does, how to heal it, what it means for the body.

And I don't know about you, but I find that people aren't sometimes able to associate. Okay, well, this leaky gut is causing your muscles to become more activated.

It's causing you to get migraines. It's causing, you know, these other symptoms because sometimes people don't even have gut symptoms. So it's it makes it harder to see that correlation.

Yeah. I mean, histamine intolerance, basically the way to think about that is immune dysfunction. The immune system is going haywire. Right. It's not accurate.

It's kind of like, you know, if all of a sudden, you know, a whole bunch of criminals came into a city and just started causing massive destruction, and all the police came out, but they were all blindfolded.

So now the police come out, there's an alarm, and the whole city, there's criminals all over the place, but there's also innocent people all around. And the police are blindfolded and they feel threatened.

What are they going to do? They're going to start shooting and they're going to. They might kill some some other criminals, but they're also going to hurt a lot of innocent people, right?

They're going to cause a lot of structural damage throughout the whole thing. And that's basically what's happening. The immune system's coming out. It knows that there's a threat, but it's it's blindfolded.

It's efficiency. And effectiveness is not is going to be it's hampered and it's going to cause a lot of collateral damage as it's trying to protect us.

Yeah. And we also see these actually some of the specific microbes when we're looking at some of these tests that can actually be histamine producing, you know, you have the leaky gut, you have the deep freeze, I mean, oxidase.

And then you can have the overgrowth of the enzymes, sort of putting a trifecta of issues going on. Yeah. What are some of the big bacteria you say? I know klebsiella, which that you can see that overgrown.

I know that's more of a histamine producer where some of the other ones they use. So Morgan Ella is another one that I see being a big one. I'm working. Ella.

You know, it's it's interesting in I had someone who had had this intense itching to the attack where they had to take hydroxylase in every day for about 20 years.

I mean, and as soon as the hydroxy and not just, you know, strong in a histamine causing drowsiness. And as soon as that would start to wear off, you would start to get it would just be like full body.

You had no guts. And don't you know, other, you know, no congestion, no no other symptoms other than that she felt perfectly healthy. And we saw the Morgan Ella and in the stool test and we healed that.

And it was like he he was so shocked. And this was years ago, but it was just such a pinpointed thing where we found this and the actual outcome was so different than what they would expect.

You not no idea that it could be coming from the gut. So that was just like a one that was like, you don't usually see such clear issues. As you know, it's a lot more complicated than that.

Yeah, it's a value of a good stool test because sometimes you can you can spot some of these bacteria and, you know, and you know that they're going to be producing, they're going to tend to push the body in that direction towards histamine intolerance.

And so what other I know that I've heard you talk about some of the other lab markers you use. So what if you're dealing with someone with hips? Samantha Arne's when we do the stool test, I think is a foundational one to use.

And then what are some other lab markers you like to use? Yeah. I mean, you can get actually, a blood test that looks at, like, I think it's histamine deo, levels that it will look at.

It will look at LPs in the blood, lipopolysaccharide in the blood. So there's actually one I think it's Dunwoody Labs that I haven't run it in a long time.

I pull it up real quick. let's see. Yeah. It's got some really good markers, but I think that's key. And then of course, you know, looking at inflammatory markers, high sensitivity C-reactive protein is a good one.

erythrocyte sedimentation rate or ESR, which is kind of like clumping in the blood. So we know that when we have inflammation, that a lot of times the blood will stick together, the blood cells will become glycated, in a sense.

And, they'll start to become more sticky. And so the blood will kind of be more, more, viscous. Right. And oftentimes we'll see that when there's a lot of inflammation in the system.

So I think that's key. Also, there are certain markers, for example, histamine part of histamine metabolism. Vitamin B6 is key. And so you might see markers that could be indicative of a vitamin B6 deficiency like low liver enzymes, low AST Alt and Jaegeetee.

All those liver enzymes oftentimes can be low, sometimes are high, right. Because the person has a lot of liver stress. And that's one of the main factors.

and they've got maybe an infection that's damaging their liver. So sometimes we'll see them high like up over 25 and sometimes really high. But also you might see them really low because they're not they're B6 deficient and they're not able to produce enough liver enzymes.

So I think that's a key one. Xinyi Lin. So there's yeah, this test right here that I'm looking at, trying to think are they may have changed the name of it, but it's done in Dunwoody Labs.

oh. Yeah. They changed their name to Precision Point Diagnostics. so I need to update this on my website. but

anyways, with that said, they'll look at the Dow to histamine ratio, which you had mentioned.

Dow is an enzyme that helps metabolize, histamine. So they'll look at that to see, you know, how well you're metabolizing it. And then they'll look at ZoneAlarm.

And so Zenia Lin is actually a protein that is associated when it's at high levels associated with intestinal permeability. So putting out a lot of Zani Lin that's a sign that the intestines are very permeable.

Now we'll also look at LPs which is known as endotoxin which is a really strong promoter of inflammation. And oftentimes people with histamine intolerance mast cell.

They have very high LPs. LPs is basically the outer membrane of certain types of bacteria. And so the bacteria LPs is is basically comes from dead bacteria.

So these bacteria aren't even alive. But the body has become so sensitized to that. I mean, it's just really it's it's kind of a micro evolution of our body where these types of bacteria have caused so much damage in the past, throughout human history, that even just the outer membrane, once it gets to a certain threshold level, it's going to trigger this major inflammatory response.

And, and so that's a protective protective mechanism of the body. So anyways, that's basically what that test will look at I think that's really helpful.

You know, just on general blood work, looking at your white blood cells. are they high? You know, typically your your white blood cell should be between 5 and 8.

Are they real high or low? If they're real high, we're typically dealing with some sort of infection. Right. That that the body's trying to work through.

And if it's real low we have kind of an immunosuppression that's taking place. Maybe the body's been dealing with some sort of a, some sort of infection for a long time, and it's wearing down.

We're not able to reset. Or we may have protein, malabsorption. Right. Because we need proteins to actually create white blood cells. And so some people, they have hypochlorite area where they have low stomach acid, they're not able to break down, metabolize protein.

Well, they have celiac disease. They have irritable bowel. They have some sort of a disorder that does not allow them to metabolize protein effectively and get the amino acids they need to produce white blood cells.

So we kind of have to rule out certain things. And a lot of times it's a combination of things that people are dealing with. We'll look at like neutrophil to lymphocyte ratios.

Diet, Blood Sugar, and Digestive Testing

You know, neutrophils you know, should be like in a sense, I can't remember I think it's like 1.5 to 1 or something like that. The actual ratio, the neutrophil lymphocyte ratio.

But neutrophils should be under 60%. Right. Lymphocytes usually somewhere in like that 20 to 40% range. And and neutrophils 40 to 60% of our immune cells.

And so when we see inflammation a lot of times we'll see the neutrophils jump way up. Right. A lot higher than 60%. Lymphocytes sometimes go down. Or sometimes we'll see the lymphocytes jump up especially with like a viral active viral infection.

So there's a lot that you can see just off regular blood work. I mean I could go all day on just all these different markers on regular blood work. And then there are specific markers that you can find, for, for histamine and

histamine intolerance as well.

And I think that's a great point because every most everyone is getting a CBC and a CMP when even when you go to your primary care doctor for your regular yearly physical, you're going to have those run in some of those basic lab tests.

Can the blood work, can show us indicators exactly like you're saying to, okay, maybe we do need to run a stool test. Okay. Maybe, you know, so it's you can even get that from your like, you may not think you've not run this test or how do I get this test, but there's clues we can get from even I.

I love how you brought this. Yeah, I forgot to mention eosinophils. So when you're looking at, they'll break down all the white blood cells I mentioned. Neutrophils, lymphocytes.

There's also one called eosinophils. And when he sniffles it should be under three. When they're elevated we start to think allergy parasite a lot of times parasite infections will drive that up.

Parasites can be an underlying root factor of Marcell histamine intolerance as well. and then especially with histamine. And this is definitely there's a lot of false negatives with this.

But if you see basophils like any basil feels pretty much I mean, they're almost always zero. when you look at a blood work, if you see basophils one to right or above, pretty much always some level of, you know, mast cell histamine activation going on there.

So that's another really good one to look at. Same with monocytes. You know, monocytes. if they're elevated oftentimes there's a histamine like response taking place there.

Yep. That's all great information and something everyone pretty much has access to. Yeah. Look at. And now your your might not have a practitioner that's looking at it that way.

So you just have to make sure you're finding someone who actually is going to look into some of these and look into the optimal ranges and really look at it in a functional perspective to someone shows up and you're suspecting leaky gut, you're suspecting gut and balances.

You're expecting histamine intolerance. Where do you start? Yeah. So you have to look at their diet. You gotta look at nutrition and just overall lifestyle and stress factors.

So there could be an environment where there's mold right. That that's a factor. So these are questions that you want to ask. you know any any recent water damage things like that.

you know is there are you thinking that there could be mold? Is there, you know, like start asking questions like that. Usually they fill out a questionnaire so you don't even have to ask the questions.

you'll see a lot of things jump out on the on a questionnaire. However, you know, from a nutrition perspective, I always recommend trying to get a diet that's, that has maximal nutrients and minimal toxins, and it's very blood sugar friendly.

And what that means is we want to get the most nutrients less toxin. So we're trying to find organic, grass fed pasture raised, food products. So organic food is going to have less toxins, chemicals, pesticides, herbicides.

We know that these pesticides and herbicides, strong links with, intestinal permeability, with autoimmune conditions, with chronic inflammatory conditions.

So we've got to reduce our exposure to that. We can't get rid of them all together. Unfortunately, so many in our society. But more we can reduce our exposure to the better.

So trying to go as organic as possible with the diet, you know, there's the dirty dozen, there's the clean 15, usually the general rule I say is if you're going to eat the outer layer, like if that's something that normally even if you're somebody that like shaves a cucumber, most people are eating the outer layer of the cucumber.

If you eat, if most people eat the outer layer, it's it's going the pass will as well. So therefore they spray it more. So those things you want to make sure that you get organic.

So what do you not eat the outer layer. I've never seen anybody, you know, eat the skin of the avocado. Right. So, maybe you could, but that in general, that's really hard, especially on unripe avocado.

Pests are not going to be able to penetrate in that. There's less chemicals used on that. The, bananas. Right. Things like that. So, you know, you can find that the Environmental Working Group has kind of the the clean 15 dirty doesn't, help you understand what things you absolutely do everything you can to get organic as possible.

all your animal products, grass fed, organic, as much as possible. That's going to have a lot more nutrients, a lot less toxins. And then from a dietary perspective, it's you really want something that's stable, eases, is your blood sugar.

That helps take stress off your body. When your blood sugar is unstable, it's very stressful on your body. And that stress elevates stress hormones, which create intestinal permeability when they're elevated for long periods.

And so blood sugar friendly diet I recommend, you know, with with your meals trying to get 30 at least minimum 30g of protein. You know, if somebody is dealing with leaky gut, things like that, we might, we might that might be all they need because of, you know, from a, from a, perspective, they're they're not trying to build muscle and whatnot at that stage in their health journey.

But typically I recommend 30 to 50g of protein. I recommend 15 to 30g of healthy fats, depending on how well your body tolerates fats. So for some people, like myself, I can eat 50g 60g of healthy fats in a meal and feel great.

You'll feel fantastic in other people. They eat 30g and you know they feel nauseous. They have diarrhea, right? Because their bile ducts are very congested.

They're not getting good bile flow. and so and sometimes they don't even have a gallbladder. Right. So I don't have the storage point for bile. So most people from my experience can do okay with 15g.

So trying to get those macros right, actually trying to make sure you get your protein, make sure you get your healthy fats at least 15g. It's going to be from like extra virgin olive oil, grass fed animal products, avocado or avocado oil.

coconut oil. Right. So I'm trying to get at least 15, 15 to 30g, usually a good range. And then lots of lots of colors in your in your meal. Right. So lots of colorful fruits and vegetables.

And the other element is just kind of if you do that that right there, you should notice with your meals that you feel better obviously taking. Maybe some digestive enzymes can be really helpful in some cases, maybe some stomach acid support, things like that.

But if you're noticing that when you're eating a lot of, for example, fruits and vegetables, things like that, you're just getting more bloated, you have more cramping. You're like, I'm eating healthy diet.

I eat broccoli, you know, bowl of broccoli every day, and I feel worse. and, you know, there's a lot of people that will say that. And then they're like, I eat, you know, I eat chips, and I feel good.

And so, that that's a sign that you probably have a bacterial overgrowth in your small intestine, and you need to reduce highly fermentable foods. Okay.

And broccoli is healthy food, but highly fermentable. So you need to reduce, in a sense, overall fiber. Everybody has like a fiber threshold. There are some people that do great on a very high fiber, high fermentable diet.

Fiber is something that we don't digest. We eat it and the bacteria in our gut digest it. Good gut bacteria will eat it and produce nutrients. Vitamin B vitamins, right?

A lot of different post biotics that, you know, have anti-inflammatory benefits for our body, short chain fatty acids, all kinds of good stuff. Bad bacteria, bad microbes will eat fiber, and they'll also eat other carbohydrates and they'll produce toxins.

And those toxins can be very inflammatory for our system. So if we have a dysbiosis we have bad gut gut microbiome. We may need to actually reduce the amount of fermentable carbohydrate traits in there for a period of time.

That means reducing a lot of healthy foods. So we have to kind of find a threshold. So there's something called a low Fodmap diet. A lot of research on low Fodmap diets being beneficial for people with histamine intolerance.

Now that's not something we want to be on long term, but for a period of time, that's what we want to do while we start to work on the gut. Right. So kind of finding the fiber threshold is key.

Optimizing stomach acid, getting good bile flow. I think those things are important. And, you know, one thing that I'll do is actually do three different tests.

So I'll tell people, okay, do the steak test. The steak test, you eat six ounces of steak. That's it. Right. You might have salt on it, but you know, no other food with it.

And then see how you feel for the next 2 or 3 hours. Write 2 to 4 hours. Basically, if you notice more acid reflux, if you notice you're bloated, if you notice your brain fog, low energy, probably not producing enough stomach acid.

Normally six ounce steak, you should feel great. Very blood sugar stabilizing. Got the protein? Healthy fats. You should feel fantastic. You shouldn't have cravings.

You should just feel really, really good and energized. Okay, if you have a lot of these digestive symptoms or energy brain fog, you're not producing enough stomach acid.

So we want to support that. You might just try something like, chewing on some ginger root before a meal. Okay. Some people will use apple cider vinegar is a histamine summit.

Some people apple cider vinegar has a little bit more histamine. Some people don't do as well with it, although I don't I wouldn't say that's across the board.

I've had people with histamine issues. They did great with apple cider vinegar actually really helped them on their health journey. However, there are people that do react poorly with it.

but if you do, what do we do well with it? You could do like a tablespoon apple cider vinegar and four ounces of water. Drink that before you eat your meal and see how you feel.

and you can actually just repeat the steak test with that and see if you notice a difference or chew on some ginger root, take some ginger root. Chew on that. It's very strong and pungent.

I mean, it doesn't taste good. you know, it's spicy, but that will actually stimulate your vagus nerve. And your vagus nerve is Latin for wanderer. Travels from the brainstem into all the digestive organs will stimulate stomach acid production.

Bile. Pancreatic enzymes can help with your digestion. So see if that helps it. If you notice, hey, you didn't have any

of those symptoms. You actually felt really good. Repeat that.

Just keep doing that with your regular meals right now and that will be very helpful. you know, you can also do a baking soda test. You take about basically a quarter teaspoon of baking soda, put it in some water, drink that.

And this, this is something you would do first thing in the morning okay. And the baking soda is a base sodium bicarbonate. It should connect with the hydrochloric acid in your stomach and create carbon dioxide.

And then you're going to release that. So normally somebody with adequate stomach acid will burp within let's say three minutes of drinking that okay.

Somebody that doesn't have good stomach acid, it might take longer than three minutes or they might not burp at all. And that's a sign that not producing enough stomach acid.

So that's another test you can do. There's another one called BTL and HCL test. challenge test where we're actually taking a supplement, kind of seeing what your dosage you need for optimal stomach acid.

So that's something you can do to kind of test your system. You can also do the broccoli test to see if how your, how well your body's dealing with, with fermentable carbohydrates.

So you take broccoli, you steam it. That's key. Don't do it raw. Steam your broccoli to where it's nice and soft. You can add salt to it okay. But you're not no fats.

You're not adding anything else. You eat that okay. And then see how you feel for the next 2 or 3 or four hours. Right. Should feel good. Overall. You shouldn't have gas bloating.

The big thing you're looking for there is gas, bloating, perhaps an increase in your histamine symptoms, maybe a headache. skin reaction. Something along those lines.

If you notice that you're not doing good with those fermentable, carbohydrates. Right? So you need a lower Fodmap diet if you do fine with it. That's not the culprit. Okay.

and so that's key. And then you can also test your bile flow as well. So you can you can make something called a fat bomb. If you just go on Google and type in fat bomb.

I've got recipes on my websites basically like coconut oil and chocolate. Right. Oftentimes. And you can just you even could just do coconut oil. You just take like a big tablespoon of coconut oil, put in your mouth and then see how you feel.

And I've had people do that and they're like nauseous. They're gonna have to go and throw up or they have massive pain in their upper right quadrant. Right.

Or they have diarrhea right away or something like that. And oftentimes these are signs that they're not there. Their bile flow is really poor. They have very clogged, congested is the term actually I like to use bile ducts in their, in their liver.

A lot of people think about they only think of the gallbladder, but the liver is actually what produces bile and, and is constantly flowing through the ducks, almost like blood vessels in the liver.

And then, of course, it comes out into the intestine, into the small intestine. And then any extra just drops out right in the gallbladder. And the gallbladder is like a storage point for that.

So when you take a larger a higher fat meal like our ancestors is why we have the gallbladder when our ancestors eight they feasted. And so they would take in high amounts of fat, oftentimes with their meal.

They needed that extra bile. There to help emulsify the fats, break them down so they can absorb those fat soluble nutrients. So if you with the fat bomb, you should feel fine after you eat it.

Or the coconut oil should feel fine, right? If you're having a lot of unwanted symptoms, an increase in your histamine symptoms, that's a sign that that there's an issue there with viaflo. Right. So, so that's one way to kind of at home, kind of check these areas and then you prioritize.

Right? There's bile salts that you can take, things like taurine, choline. There's different supplements that support bile flow.

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there's dandelion root ginger root. Like a lot of these types of things. There's teas, herbal teas that you can drink. There's tinctures a lot of different, herbal remedies as well as, you know, supplemental remedies that people can take.

Today is another good one to support bile, to support pancreatic enzymes, to support, stomach acid. And I think getting those digestive mechanics right is super key.

So the right macronutrient ratio sticking with real, real nutrient dense foods and then trying to get that the digestive system functioning better, I think as a whole is key.

And then of course, you know, focusing on good sleep, stress management, keeping stress down, I think that's kind of like a foundational component. And then obviously there's a lot of nuances depending on each individual.

Yeah. Thank you. That's so helpful. And I love that you gave tips that people can do right now. Those are easy. And then lightning. So it gives you some clues.

And I was smiling because I love the fat bombs. After dinner like the like sweet treat or something. Yeah. They're really. Yeah. It's like it's like coconut oil. Chocolate.

like a cow powder and stevia. Right. And the reason why I said the coconut oil is some people with histamine intolerance like, oh, chocolates, high histamine.

So, yeah. You don't want, yeah. You know, if you're doing chocolate, you might notice a histamine reaction just from the chocolate. So, so just try coconut oil or try olive oil.

Right. That's another good one that you can just try, you know. So. Absolutely. Well, thank you so much. You've given us great information and can you just share with our audience where they can find you when they want to learn more?

For sure. You can find me at drjockers.com is my website. I'm on YouTube and I have the Functional Nutrition Dr. Jockers Functional Nutrition podcast as well.

Thank you so much. Thank you for joining us today. Thank you. Appreciate it.