## **Episode 97 Transcript**

Jaclyn (00:01.323)

Michelle Shapiro is a registered dietitian, a certified functional nutrition and lifestyle practitioner, and a patient advocate born and raised in New York City. to hear her accent. Michelle earned a bachelor of science and an RD degree from University of Delaware. She's delivered seminars to over 10,000 people and she's really passionate about helping others and provides her clients with the tools and the guidance they need to lead healthier and happier lives. So Michelle, thank you so much for joining me today.

Michelle Shapiro, RD (00:27.778)

I'm so excited to be here. And I don't know how to say this. I'm a fan of DUTCH and have been for a very long time. So I really am so excited to sit down with you, Jaclyn.

Jaclyn (00:35.469)

Awesome. Well, we're excited to talk with you too. And thank you for the, for the sharing your love for DUTCH. I'm a fan too. So, you know, whenever I talk with someone who has a more traditional, like you have a dietetics background and then you moved into more of an integrative and functional nutrition approach, I always love to start by just understanding how that transition happened. Cause there is this kind of culture against functional nutrition in your standard dietetics education.

Michelle Shapiro, RD (00:41.484) You

Michelle Shapiro, RD (01:01.912)

Absolutely, yeah. So like many of us, my health story led into my professional story. So I grew up in Queens, New York, one of the most diverse places in the entire world. My high school was actually the most diverse high school in the entire world. And in that, I had grown up always in a larger body. And then when I was going to college, I was going to the University of Delaware and realized if I wanted to fit in, people weren't gonna know me for my soul. They weren't gonna know me for who I am. They're gonna base who they...kind of think I am on first impression. So I went on a really radical weight loss journey and lost close to 100 pounds going into college. It was not in a way I would ever recommend. It was a strict vegan diet and severe calorie restriction. And then I spent the majority of college chronically ill. I had anxiety, I had a thyroid issue, acid reflux, severe IBS and panic attacks that were just so harrowing. And it really, my dietetics degree helped me to start not under eating, which was really good, but I didn't find any answers that I needed to why was I suddenly so sick? In reflection, I realized actually that rapid weight loss put my body kind of up against the wall, survival wise. And then it was actually seeking the help of a

naturopathic physician, Dr. Robert Kochko, who later became like my business partner and best friend. Yeah, that's like my brother. I literally was in my first session with him. It was a two-hour session and I

Jaclyn (02:20.781)

He's an awesome, awesome.

Michelle Shapiro, RD (02:29.646)

walked out and I first said to him, you think you're my doctor, but we're best friends and colleagues now, you don't even realize this. But I walked out and I was like, this is what healthcare actually is. So it was me clawing my way back to health after that rapid weight loss that actually led me into the functional space. And it was a naturopathic doctor who did that actually.

Jaclyn (02:48.001)

That's an amazing story. Thank you for sharing that. And I think, know, one, just to comment on your backstory, like I completely can resonate with that feeling like you want to be seen for who you are on the inside and that whenever there is some kind of physical noticeable part about you. People see that first and they can't get to the good stuff, which is so terrible. And I'm really sorry that you had that experience as a budding woman, really. As a teenager, it's just such a difficult time anyway. So I really appreciate you just being vulnerable and sharing.

Michelle Shapiro, RD (03:21.174)

I thank you for saying that too. And you know, in high school, like I was class clown in my high school. My high school had 5,000 students in it. I had the friends, I had the life. So I have to say, I'm so grateful for that experience. Some intuitive or spiritual part of me knew that I was gonna go into Delaware in this much more homogenous environment and I was going to need to not rely on the social support I had and the beautiful life I had. Because for me, growing up in Queens,

Jaclyn (03:49.623)

this.

Michelle Shapiro, RD (03:50.914)

We didn't hold me back from that much in my life, but it really would have when I went to Delaware. And I can tell you that it was in some ways a radical decision from a medical standpoint that I would never recommend, but socially it was maybe necessary, which is really devastating about the world that we live in. But it really did, I had that foresight somehow and I'm sure I needed it, which is terrible, but yeah.

Jaclyn (04:15.223)

So I wanna dive in, we have a couple of topics I wanna cover with you today, but this is really the first one that I wanna talk about because I think that there is this still, unfortunately, even with this rising, increasing awareness around good nutrition, there's still a lot of bad advice out there as well and a lot of fat dieting that can lead people to pressure. Like, can you share some of the, let's just say the dumbest fat diets you've seen out there?

Michelle Shapiro, RD (04:17.838) Yeah.

Michelle Shapiro, RD (04:41.87)

Oh, absolutely. I think, you know, the blissful part of this time frame is we have had in so many ways, body positivity, like at the forefront, which I think, sorry, if there's a little construction, this is the sounds I was worried about. Good. So I love the fact that body positivity has made its way to the forefront. And in some ways, I think that the morality of the body positivity movement, the social impact of the body positivity movement, the moral, ethical,

Jaclyn (04:55.223)

That's right.

Michelle Shapiro, RD (05:11.768)

background of it is completely correct. And then at the same time, there's kind of this intuitive eating model and this nutrition model that has been applied. And I don't know that the psychological model crosses over into the clinical model. So I've seen actually lot of people trying to still like lose weight doing intuitive eating, which is really interesting because it's so the opposite of the purpose of it. And then up against that body positivity movement has been even more drastic fad diets, it's almost like they're competing and getting more extreme as a result. So I've seen knee jerk reactions from both sides. I mean, obviously what's very popular right now are very restrictive pro kind of meat diet, like, you know, carnivore diets. It used to be that vegan diets were, you know, more socially acceptable. And now it seems like extremely low carb diets are more at the forefront right now. That's what I'm seeing a lot of.

Jaclyn (06:06.317)

Yeah, it's interesting because I've looked into some of the data around those and there's this whole criticism of calorie in, calorie out model, which is sometimes appropriate. There's a lot more of a good nutrition than just calories. However, calories do matter. And

one thing that's really interesting is when you look at a lot of the fad diets, they end up being calorically restrictive.

You can't, how much protein meat can like a person actually consume in a day? It's hard to overeat when you're only eating like chicken breast and steak and stuff like that. Yeah, there's studies out there, this is not my own personal opinion, is data that actually shows that most of these fat diets, not fat diets, like vegan I wouldn't consider to be a fat diet. think there's like people who want plant-based for nutritional reasons, other reasons, whatever.

Michelle Shapiro, RD (06:37.9)

And if we look at those studies, you know, those, no, exactly.

Jaclyn (06:55.367)

But I think a lot of these diets that result in weight loss, when you look at the research around how people practice them, you end up also in a calorie deficit, which is contributing to the weight loss too. So part of it is like anything that you can follow consistently for a period of time that doesn't disrupt your micronutrient status, probably is going to work for someone as long as it's sustainable for a long period of time.

Michelle Shapiro, RD (07:23.566)

100%, it's funny because what you're saying is almost sinful. Like we're not actually allowed to talk about calories anymore. And no, this is truth and this is scientific truth. And I think that people deserve to hear it because you know I've been seeing over the years, Jaclyn, is that people are coming to me and they've done intuitive eating and they've been engaged in the body positivity movement. And while again, the moral and ethical part of it is so true, like every person deserves to be treated.

Jaclyn (07:27.679)

I'm gonna get some bad comments on this.

Michelle Shapiro, RD (07:53.034)

equally and fairly, it's not even a question. It's silly that we have to have this conversation about it. Like, I hate that that's the way our world is. And at the same time, if I have a client who kind of works with a health at every size dietitian or engaged in an intuitive eating, and they come to me 40 pounds heavier than when they started, now they're at some level of kind of metabolic risk, potentially, not everyone would be, but if they are at more metabolic risk, I've had clients come in with pre-diabetes where they didn't have that before.

And when I start to engage the conversation of we have to actually change eating habits and yeah, at the end of the day calories is a piece of that puzzle. They then say, you know what, that's an eating disorder. If I try to change my eating habits, that's an eating disorder.

Even if they haven't been diagnosed with eating disorders, they don't have disorder eating. So it's hard because people do wanna lose weight, but they also like won't engage in the behaviors that cause weight loss because they've been hammered in to say any food change you make is disordered. And I don't believe every food change we make is disordered.

Jaclyn (08:53.963)

Yeah. Well, it's interesting because it's like food change or like tracking what you're eating because, I will say there is an element. I mean, we've both seen patients and clients that that becomes obsessive and it becomes unhealthy. Even if it's not an eating disorder, it becomes restrictive in your life, right? In an unhealthy way or it puts emotional strain on you. Or the other side of it is that it can be a super effective tool to learn more about

Michelle Shapiro, RD (08:58.423) Yeah.

Michelle Shapiro, RD (09:06.878) Of course.

Jaclyn (09:24.461)

what foods make up a healthy plate. And this is something I feel super passionate about. Like I'm not someone who struggled with weight, but I did, I like engaged in a program. Well, I did actually postpartum. My weight was like not coming down. was probably like, you know, like every mom's story. And I just wanted to get healthier. And for me it was because I was starting to get joint pain and like just not feel energetic that it made me want to commit to doing the things I already knew, because as a naturopath, of course, I knew things like whole foods and stuff like that. And then also, that's when I learned macro tracking through a program. But it was so interesting because I was part of a community where I was probably in the top 2 % of people who had education on that. But I got to hear the conversations of everyone in the group, which was hundreds of people. And like the first week, the only thing they taught was what is a whole food. It's so simple. And the only change people were to make

Michelle Shapiro, RD (10:13.484) Hmm.

Jaclyn (10:16.887)

were to move to a whole foods diet. People reported improved sleep, improved digestion, like all the things you'd anticipate. And then they start to layer on like, what's a protein? What's a carbohydrate? Just those basic pieces and then put in macro tracking. And it can be such a great tool. when I work with my patients on this, I usually think about it as a

temporary tool. This is not something that's lifelong, but like if you don't know what a serving size looks like, which most people don't, if you weigh it or you measure it or you're more intentional about it.

Michelle Shapiro, RD (10:33.868)

Yes.

Jaclyn (10:46.399)

After a little while, a few weeks, a few months, you can do it without having to do all that hard work.

Michelle Shapiro, RD (10:52.654)

I completely agree. The tool itself is not inherently disordered or not disordered. It's the intention behind it, right? And if we're leading with fear around it, if you're leading with fear around something, my gosh, if I eat this, I'm gonna gain weight and it's gonna be dangerous to me. And you're having that kind of threat response around food. Yes, that's absolutely something of concern and potentially disordered. But if you're using it as a tool to further your health,

Jaclyn (11:00.159)

Yeah.

Michelle Shapiro, RD (11:19.232)

If it's something that's kind of just like you collecting data and you can separate the emotion from the science of it, I find that clients who calorie count or macro track end up having more intuitive relationships with food because they don't have the space in the beginning to listen to their body because the body and mind connection is severed. So sometimes following some structure actually then opens the pathway to those kind of internal conversations. So it's not that calorie counting is inherently bad or that macro counting is inherently bad as we've been led to believe. Quite the opposite. There's one client who can cause disorder, you know, eating issues with and the other one who can help them.

Jaclyn (11:57.547)

Yeah, now can you talk about intuitive eating a couple times? Can you describe what that is or like what you see people when you

Michelle Shapiro, RD (12:00.578)

Yeah. Yeah. Intuitive eating is a system. It's a set of 10 principles and kind of a guided stepby-step system. A lot of times when people hear what is intuitive eating, they think that it's like, I'm just gonna eat a hamburger because that's what I intuitively wanna eat. And it's not that at all. It's a beautifully intricate and sophisticated system of like step-by-step, how do you access your own hunger cues? How do you honor your body's needs?

How do you touch base with what you do need nutritionally? And it's really extremely helpful for people, but it is not ever supposed to be used as a tool for weight loss or really for health changes. That's not what it's intended to do. It's intended to support a healthy relationship with food. But it's been kind of co-opted to be like, yeah, then I'll just eat some cake because I want to eat cake. And that's so demeaning to what it actually is. Yeah.

# Jaclyn (12:57.037)

Is that something that you use with clients? It sounds like a little bit of like that mindset, like a mindset tool to support a nutritional plan.

## Michelle Shapiro, RD (13:04.33)

It is. It's definitely like in the, even though dieticians use it, it's definitely in the like psychological camp, I would say, of tools. It's definitely of the mindset. I use something called somatic eating, which is trademarked by Stephanie Mara Fox. And it's much more about touching base with like, how does your physical body feel? Like, let's say you have a craving or something, where are you experiencing that craving in your body? I think that intuitive eating is very cerebral. And I think a lot of people need to like touch base into what their body's experiencing. So I like to, if I'm gonna use intuitive eating principles, I like to use somatic eating first and for people to kind of understand what are the different voices that are telling me what's going on, especially like before, during, and after a binge, I really like to touch into that. And then really getting to know like if I have this voice that says I must binge, where are we experiencing that voice in our body? What color is that voice? What part of our body do we see it in? How does it feel? And trying to touch base again and ground into the body first.

## Jaclyn (14:07.789)

That's so interesting. I mean, it probably slows down the, you know, I think a lot of the work we do with mindfulness generally, this sounds like what we're talking about with nutrition here too, is actually putting more space between, let's say, reaction and action, right? So, you know, just creating more space. So this whole like somatic workup or intuitive workup.

Sounds like it does a lot of that when it comes to relationships with food, so they are less reactive, more intentional, more thoughtful, and it creates a little bit more space between I wanna eat that cake and eating the cake, you know, or making a different decision.

### Michelle Shapiro, RD (14:43.342)

100 % we call like introducing pause. Absolutely. I think all of healing comes down to that exact premise, by the way. It's everything, right? You're 100 % right. Yeah, it's amazing you

brought that up because in other realms of chronic illness and the clients that I work with, that comes up as probably being the most important thing is when we experience a symptom, what is our reaction to that symptom? And does that provoke other?

Jaclyn (14:46.252)

Yeah, relationships, parents, and family.

Michelle Shapiro, RD (15:09.974)

symptoms and that kind of cycle of chronic illness, this comes up so often. So I can't believe you just touched on that already. That's amazing. That's so exciting. Yeah.

Jaclyn (15:16.705)

Well, we can talk more about it. It's meant to be, meant to. So I want to move into some of these chronic illnesses that you work with a lot, because some of them we haven't talked about on the podcast, but I certainly think they have relevance across a wide variety of conditions and disorders and symptoms that people experience. So the first one I want to talk about is Mass Cell Activation Syndrome. Okay, this is something that it wasn't even around when I was in school, which is like, so, or I think I knew one person who had been educated and it was really early on. So can you just start by explaining what is MCAS, what are mast cells, why does it matter for health?

Michelle Shapiro, RD (15:55.182)

Yes, I'm so excited to talk about this. And I do think the first peer-reviewed journal and like massive publication around MCAS came out in like 2012, by the way. it is so, yeah, it is so new to us. We've understood that mast cells as an immune component since like the 1890s, we've known that they exist. But this understanding of mast cell activation syndrome is very new.

Jaclyn (16:04.365)

That's it. it. You're right. It's new.

Michelle Shapiro, RD (16:20.594)

And we needed to learn about it really quickly because mast cell activation syndrome relates tremendously to long COVID. So I kind of cluster long COVID as a combination of a couple different syndromes, mast cell activation syndrome, Ehlers-Danlos syndrome, and postural orthostatic tachycardia syndrome, POTS, MCAS, and hypermobility. And we'll talk about those. So MCAS, we have, I'll just talk about what our mast cells are. They are an immune cell. They are, they're to basically help us prevent threats from happening and to mobilize resources when those threats happen. Much like other members of our immune system, they're a type of white blood cell. Mass cells, I think of on a kind of visual basis, it's almost like if there was a war that happened in your body and mass cells are like the guards

on top of the watchtower and they watch the whole thing happen. And they're like, my gosh. And once the war is over, they see all the debris on the battlefield.

They see the disaster that happened and their goal is let's never have this happen again. So just in case a war is going to happen again, we are going to fire first and we're gonna fire strong. So what mast cells do is they'll have something attached to their receptor and inside of them they have these sacks of chemical messengers and then they'll release those messengers to help with different tasks in the body. So what can signal a mast cell to release those messengers and I'll give everyone a hint, one of them is histamine which I know everyone talks mostly about histamine when we talk about these roughly 1,200 chemical messengers that can be released. So they will then mobilize and send out those messengers to different parts of the body to perform different tasks. So mast cell activation syndrome happens when those mast cells are constantly activated. And COVID has a very special and unfortunate relationship with mast cells because there's a receptor on the outside of mast cells called the ACE2 receptor and COVID attaches to and attacks that receptor. So long COVID is this chronic perpetuation of symptoms. There was one study that showed, it was like state by state surveys, and it showed that about roughly 30 % of Americans had experienced long COVID in 2022.

So we're talking about millions and millions and millions of people who had experienced this, which is when you basically have symptoms three months after the COVID virus. So normally with a flu, we get a flu, it makes us feel absolutely awful and then we kind of recover. But what people were experiencing with long COVID was these like tremendous and massive unexplainable symptoms. And I think that our mast cells are at the basis of that. And we can definitely talk more about histamines, but I just wanted to kind of give context for what a mast cell even is and mast cell activation syndrome being the constant activation of those cells because they're scared of a threat to come or they experience a realized threat in the body.

Jaclyn (19:13.781)

Yeah, it's helpful for you to kind of lay the landscape like that. Because like you said, this is a new condition. I think a lot of people may not know just the underlying science behind it. So I'm so glad you covered that.

Michelle Shapiro, RD (19:18.882)

Yes. I think some of the doctors who post about it don't understand the science behind it, by the way. think, yeah, yeah.

Jaclyn (19:27.085)

You're absolutely right. Yeah, I think you're right. And part of it is like a velocity of data and

part of it is just, it's complex. Our immune system is probably the most difficult and complex system, other than hormones. That's why we love Dutch. But it gets very complicated when you're looking at immunology and trying to understand the way this all pieces together and fits in with other systems of the body. So what are some of the symptoms that you see in patients who've been diagnosed with MCAS?

Michelle Shapiro, RD (19:36.718) Exactly.

Michelle Shapiro, RD (19:54.306)

Yeah, so MCAS is really fascinating because when we hear of histamine related issues, we're automatically thinking of seasonal allergies. We're thinking of rashes, we're thinking of congestion. And I almost never have clients who have MCAS who experience those symptoms. Those are like more rare actually. Since histamines are, and I'm gonna talk about histamines even though again, there's 1200 chemical messengers that come out, but histamine seemed to be a driver of some of the biggest symptoms. So, some of the tasks of histamines is to make us be alert and awake. They're very like arousing essentially, and they want to make sure we can maintain hypervigilance in dangerous situations. So they act on literally with the hypothalamus, they're released from the hypothalamus as well, and they act with the nervous system very directly.

So what I notice a lot of people with histamine issues have is like untreated insomnia and extreme anxiety, and anxiety that is like ants under your skin, like, severe tremors, like really like nervous system rattling anxiety. I noticed people with histamine issues have, and we'll talk about the cycle aspect of it, because it's fascinating with Dutch, of course. But they'll have really bad symptoms at the end of their period and then around day 21 of their cycle, which is literally when you're testing with Dutch, right? So.

And it's interesting because most people experience PMS symptoms, but because estrogen and histamine have a direct relationship, people actually notice their worst symptoms in their month are actually when their estrogen's rising and as a result, histamine is rising. So I notice a lot of symptoms around those times and I know we'll dive into that. Acid reflux is very common histamine symptom. Really like any urinary frequency.

The is that mast cells exist in all the connective tissue in our body. So that's like our joints, bones, organs, every single part of our body essentially has mast cells. So our symptoms can show up anywhere. Very, very common with histamine symptoms is rapid heart rate tachycardia. Dizziness is very, very common and kind of this like constant feeling of fatigue, malaise and kind of nausea. Those are very common histamine symptoms.

Jaclyn (22:13.247)

It seems like a difficult, it would be difficult to of like pin it down because the symptoms are pretty general. And it makes sense because you're looking at an underlying like dysregulated physiology that affects the whole body.

Michelle Shapiro, RD (22:26.552)

Exactly, yeah, this is the most fascinating and terrifying thing about MCAS is that if my heart is pounding out of my chest, Jacqueline, where am I going? I'm going to a cardiologist, right? The problem is you're gonna go to a cardiologist and they're gonna say your heart looks beautiful because mast cells are an immune and a nervous system like interfacing cell, right? They're like the most interacting with those things. So I think of mast cell.

Jaclyn (22:36.449)

Right.

Michelle Shapiro, RD (22:53.502)

as being very related to dysautonomia as well. And so it's like, you kind of need a neurologist, not a cardiologist. So the symptoms don't line up with the practitioner you would go to because they're not the root cause. So that's what's really scary and frustrating about it is that like, you can go to these doctors, but they'll say your organs look really good. And it's really hard to measure histamines. And we can talk about testing as well. But it's,

Jaclyn (23:08.961)

Mm-hmm.

Michelle Shapiro, RD (23:22.326)

really challenging also because most people end up in the ER because it can affect your autonomic nervous system. So it can affect, you can have fevers, you can have like high blood pressure, low blood pressure, high heart rate. These are vital signs, right? These are like really scary things to be happening to someone. And if they're happening all the time, people often don't have places to go because you can't understand where the heck it's coming from.

Jaclyn (23:44.939)

Yeah, and it seems like it could be easily missed, you know, because you're looking, you're typically working with specialists who may not be thinking in this more general sense. That's so challenging. So when people, as a dietitian, like people are coming to you for nutritional support, when they want to address this, what are some of the approaches that you recommend for patients who've already been diagnosed with MCAS?

Michelle Shapiro, RD (23:48.472)

Yes. Absolutely, yeah. So what we're gonna be looking for is the root cause ultimately, but

MCAT is a little bit different than other conditions because if you are having such severe histamine symptoms, you often pretty aggressive intervention to just get the histamines down. I wanna just tell you about like this client I had briefly. She was on eight psychiatric medications for sleep. She had severe, severe insomnia, trazodone, Ambien at the same time.

SSRI, Xanax, like any combination doctors could not treat her insomnia. It was impossible. And I had like a session with her and I said, I think this is a histamine issue because your sleep is so much worse when you have healthy foods like tomatoes or fermented foods. And we kind of pattern tracked and saw where it was coming from. I gave her Pepsid as a recommendation. And this is funny coming from like an integrative dietician. And I was like, just take Pepsid, and let's just start there. I had seen a study where they were testing Pepsid with people with long COVID and 14 out of 16 of the participants had an 80 % reduction in symptoms with the intervention of famotidine. And she has slept every single night, eight hours for the past three years since we put her on Pepsid. She does not need any of the psychiatric medications. They were all for sleep and is now off of them and literally just takes Pepsid. So if there is a histamine issue, you can't not treat the histamine issue.

Jaclyn (25:32.662) Yeah.

Michelle Shapiro, RD (25:32.696)

That's the problem because the histamines are not going to be not released, even if you calm the nervous system down. Once they're in your bloodstream, they're there for months. So oftentimes I'll have to use some level of like anti-histamines over the counter. Even Pepsid actually, by the way, not only an acid blocking drug, it's also an anti-histamine drug. So Pepsid, Zyrtec, some combination in the beginning, and then we're doing a lot of nervous system work.

The problem with these, think what I see in functional medicine doctor's offices and ND's offices, as much as I love both so much, is that people wanna treat the root cause. So the reason why your immune system might be hyperactive is because you had a parasite, you had mold, but what happens is when you try to rapidly eradicate parasites or mold, your body mounts a new immune response on that because it's like, what is that? I don't like what's going on here. I don't understand. I don't have the resource to deal with this and this is scaring me. So a lot of my clients come from functional medicine doctors offices after doing parasite protocols, mold detoxes, detox protocols because they create these huge histamine reactions. So the first step is you have to bring down the histamines, whatever means possible. Yeah.

Jaclyn (26:43.551)

It's yeah, there's this like visual, I'm not even sure where I first heard it, but I use it all the time. But I didn't invent it. But we talk about it with like inflammation and histamine response where I say imagine a football field covered in mousetraps. Okay, just bear with me. It's a weird one. And then on every trap, there's a ping pong ball sitting there. And then you take one ping pong ball, you're sitting in the stands and you throw it into the field. And that's like mold illness, COVID, whatever the instigating factor is. Then what happens? That ping pong ball lands on the field, sets off a mousetrap, then you have two, then you have four, eight, 16. And within 30 seconds, you have a storm happening of flying ping pong balls. Now reach in and take out that one ping pong ball that you threw in that triggered the whole thing. What happens? Absolutely nothing. No improvement. Nothing happens. And that's because when you have those systems of the body and you have those chemical reactions, you get this storm happening. I completely have seen that same thing clinically. You go in and you treat the initiating factor. I'll call it a trigger. You treat the trigger. But at that point, the trigger doesn't even matter anymore.

Michelle Shapiro, RD (27:34.594) Nothing.

Jaclyn (27:55.679)

It can be so hard to reach a state of calm and reach a state of resolution and that gets missed all the time.

Michelle Shapiro, RD (28:02.4)

It's exactly right. I'm stealing this visual from you, Jacqueline. Like I'm totally stealing this. Exactly. But it's really powerful. because of... It's not intentionally negative that people do this, but there are so many practitioners online who obsessively post about parasite cleansing, mold detoxes, gut cleanses. You know, it leads people to believe that doing these things are going to... heal the mast cells or heal the nervous system. And it's just not the reality. Oftentimes people get more sick from doing protocols when your body is not prepped. And you know, a lot of functional medicine doctors will say, you know, it's a Herx reaction. It's just a Herx reaction. If you have histamine issues and you are getting sicker and sicker on a protocol, you are literally getting sicker. It is not a Herx reaction. It is not your body needs to detox and you have to get sicker before you get better. You are just getting sicker.

So that's just really important for people to acknowledge and for practitioners because I have put like all of my faith into functional and naturopathic practitioners. think like they have what it takes to like really, really help people. But for all of us, I hold us to a very high standard and with a lot of accountability, I would say that if you have a client who's getting

sicker from these protocols, walk it back and see if they really are herxing or if they're just getting sicker potentially. And that's just something I see all the time every day I have clients coming into the practice.

Jaclyn (29:31.085)

So we've talked about, you mentioned COVID, so let's talk about we have a viral trigger for this histamine overreaction in MCAS. What are some of the other categories of triggers that might lead to this for patients? there environmental toxicities, hormonal imbalances?

Michelle Shapiro, RD (29:47.372)

Yes, absolutely. Yeah, hormonal imbalances, so estrogen dominance, absolutely. I think of histamines, much like we think of inflammation or stress, there's a bucket, right? Once the bucket gets overfilled, anything can be triggering. even heat changes, weather changes can be very triggering to histamines. And one of the main functions of histamines is this act of vasodilation, which we'll talk about if we talk about POTS. We'll talk a little bit more about that.

Jaclyn (29:57.74)

Mm.

Michelle Shapiro, RD (30:15.978)

heat changes, environmental toxicants, honestly eating a high histamine diet, which is like unsettling because it's so frustrating. foods that are high in histamines are some of the healthiest foods in the entire world. Like it's fermented foods, amazing gut healthy foods, citrus fruits, like lemon water, know, like these are the tomatoes, spinach, avocados, bananas, like foods that we know are so objectively healthy.

Jaclyn (30:24.685)

It's frustrating. We don't like this part of it. Right.

Michelle Shapiro, RD (30:45.464)

but the body in a highly, I call it a highly sensitive body, perceives these signals incorrectly. So it'll see a histamine as a problem and it'll cause an overflow. So even eating a high histamine diet can trigger an MCAS flare. Yes, absolutely, like pressure changes, like airplanes, vibrations, and weather changes, of course, mold toxicity, viral illness, and then really any aggressive nutrient protocol anything that is going to push the liver into further into detox which we like doing a lot of the time can trigger histamine issues So I've seen clients getting IVs And those causing massive massive flares and I know that I've experienced that myself as well Because there's a relationship with our connective tissue things that can also trigger mass cells are excessive exercise and any kind of exhaustion or exertion that is too much, I would say, as well.

Jaclyn (31:48.353)

So tell me a little bit about the nutritional approaches now as you are working with patients with?

Michelle Shapiro, RD (31:52.088)

Yeah, absolutely, yeah. So we kind of phase it out. The first step is gonna be lowering the histamines, addressing the nervous system, bringing the nervous system into coherence as much as we possibly can. After that, we can start to have a little fun by filling back in the nutrients that might be missing, especially nutrients needed for liver detoxification. That's where we can add that in and then focus on kind of reconditioning and re-strengthening.

In the earlier stages, we probably will do something along the lines of a lower histamine diet that will never be permanent, but it might be important because, Jacqueline, if I have a client who comes to me and they're sick for three weeks from eating a tomato, they're out of work sick. I mean, they feel like they have the flu sick. It's worth it to not eat the tomato for a little bit. You know, yeah, exactly. And then we might be introducing supplements or herbs that can help with detoxing histamines, preventing histamines.

Jaclyn (32:34.775)

Yeah.

Michelle Shapiro, RD (32:47.688)

like from hanging, I guess like hanging out in the body, I would call it. So that's something we might do then and some nervous system supplements. Once we get into the renourishing stage, we then, when the body is stable and we're symptom free, then we can have fun with the root causes. If there is a root cause like mold or a gut toxin, gut parasite, leaky gut, if there's something like that, then we can address it, but it's just later on. And that's where we would use those really supportive gut nutrients.

Jaclyn (33:14.827)

Now, is there a role of leaky gut? Like when you think about histamines in foods, is gut function a core underlying piece for most patients? Okay. Is that because you're absorbing more histamine through a leaky permeable gut?

Michelle Shapiro, RD (33:17.421)

Yes. It is. Absolutely. Yeah, because. Yes, and also because any, will cause immune activation, as we know on the gut lining. So if something is where it's not supposed to be and leaks out of the gut, the body will mount that immune response and histamines may be involved in that immune response in mast cells as well. We also have mast cells lining like within our parietal cells of our gut too. So that's why we have that acid reflux relationship with mast cells too. You also have to think about like muscle contraction and the nervous

system and mast cells all being very interrelated as well. Because of connective tissue is gonna align the organs, it's going to be a part of muscle contraction, it's gonna be a part of how our brain communicates with our gut. So there's this nervous system, muscle contraction, blood flow, and immune system conglomerate happening around digestion.

#### Jaclyn (34:18.495)

It's like, you don't think about, we don't talk very much about like connective tissue in our organ systems, but it is critically important because even like moving blood or moving food through the gut, your intestines, they're a muscular organ because they, you you don't think about it. You're not flexing. You're not like, yeah, let me go ahead and flex my intestines right now. But they're constantly moving to move food. So that's interesting.

# Michelle Shapiro, RD (34:39.69)

Exactly. Yeah. Hugely important. The blood flow piece around histamines is very, very huge. And it drives a lot of what the symptoms are. So one of the actions of histamines is to enhance vasodilation, cause vasodilation in the body, which is widening of our blood vessels. So I want to give an image of someone who is taking a shower, and this is a lot of my clients. They have to get out of the shower rapidly because they get really dizzy and feel like they're gonna faint, their heart's pounding really fast, they look down at their feet and their feet are red. And they're like, I have splotches all over my legs from the shower, I can't, and then I'll get the comment, I can't even shower. Like what's going on? know, it's so frustrating for people and scary. I mean, when your heart's pounding and you're dizzy, it's like the scariest thing in the world. What's happening oftentimes is that heat also enhances vasodilation.

So if you're in the shower, your blood vessels open up because histamines are also, act in the same way, they open up your blood vessels. It's almost like gravity works against you. All the blood drops to your feet. Your heart goes, my goodness, I need blood up here, help me up here. And then your heart starts pounding really fast to get blood flow up. The reason we feel dizzy is because there's a lack of blood flow going up to the brain. So histamines cause that constant vasodilation. So you can feel those symptoms of not getting blood flow to the brain, not getting blood flow to your heart, which are the scariest symptoms you can ever experience.

A lot of the times I see MCAS leading into POTS, postural orthostatic tachycardia syndrome, because of this lack of appropriate blood flow. This also happens with our organs. So same thing when we're eating and sitting, people will get really lightheaded after they're eating because the blood is pooling in their gut and going away from their heart and brain.

Jaclyn (36:25.259)

Yeah, that's fascinating. Yeah, when you think about POTS, you were generally thinking about like the lying down to standing, that postural element of it, but I'm hearing you describe other times where you might get changes in blood flow like food, when you add more to your gut, more blood flow to your gut or in the shower with heat. It's really fascinating. And then talk a little bit about the connection with EDS.

Michelle Shapiro, RD (36:30.22)

Yes, postural. Yeah. Yes, EDS Ehlers-Danlos syndrome is a connective tissue disorder. We know it as, it is a collection of connective tissue disorders that are a form of hypermobility, as we would say. We often think of hypermobility as being like hyper extension, hyper flexibility. I'm very not flexible, but I am, I do have Ehlers-Danlos syndrome, but I am not flexible. So it is not a necessity, but it's your body's inability to build connective tissue properly.

So since connective tissue lines our blood vessels, our bones, our joints, and our organs, that can lead to structural issues and blood flow issues, right? Because it's lining your blood vessels as well. So that's why we think of these conditions, MCAS, POTS, and hypermobility as being not related, and they are so related because there's this blood flow piece, this nervous system piece, and this connective tissue piece that ties all of them together. Because if we remember, mast cells live in our connective tissue.

So if you have a connective tissue disorder, there's going to be involvement with your mast cells as well. oftentimes also our nervous system, again, is being so important here. We think of our nervous system as being like, I know, this is like the new thing. used to be like my cortisol is high. Now everyone's like, my nervous system's dysregulated, which I think is very cute. Yeah, exactly. Our autonomic nervous system is essential for like every vital

Jaclyn (38:03.671)

My nerve is over-simulated. Yep.

Michelle Shapiro, RD (38:13.026)

body function that keeps us alive. So what one of the things that our nervous system does very importantly is it directs which muscles should contract and where we should send blood flow. So if you have a nervous system dysfunction, your body will not know where do I send blood flow and where do I, what muscles do I say to hold me up? If you have a connective tissue disorder like Ehlers Danlos syndrome, your body's kind of like a bobble head, right? So there's not a lot of structural support.

The reason why strength training is so important in those with Ehlers-Danlos syndrome is because you'll get muscle and the muscle will literally hold you up. It will give you structural

integrity in your body. But it's not just the external that's important with Ehlers-Danlos syndrome. It's again, this blood vessel piece that's really important, this blood flow piece and how the nervous system's involved.

Jaclyn (39:02.125)

Yeah. And the nervous system is so critically important. And you mentioned cortisol, like cortisol and nervous system stimulation go hand in hand. It's like one is through communication to the nerves. The other is communication through hormones, but they all have this kind of similar structure and function. And it is interesting because you put that in light of hyper stimulation that we have today, whether it's light dysregulation, the stress we carry at the type A lifestyle. We've talked about this on other podcasts. It really can influence everything in the body.

Michelle Shapiro, RD (39:35.342)

Absolutely, yeah. And when we think about these conditions in this conversation, POTS, very interestingly, again, we think of POTS because people get dizzy and their heart pounds when they make postural changes. They think I have to go to a neurologist or I have to go to a cardiologist. POTS is a form of dysautonomia. It's a form of dysfunction of the autonomic nervous system. So what is the actual treatment for POTS? What it looks like conventionally is, I call it kind of making your body like a go-gurt tube.

So you wear a binder around your gut, you wear compression socks, and you squeeze your body so that the blood flow can come up. It helps to increase the blood volume and pulse, essentially. And then eat drinking excessive amounts of electrolytes. To give context for POTS, the recommendation is 10 grams of salt per day, sodium per day. So think about, if any of us use Element, like Element T, the electrolytes, that's 10 Element packets per day.

Jaclyn (40:31.277)

And those are like, I mean, I can't imagine that function, that many electrolytes

Michelle Shapiro, RD (40:33.88)

Salty.

Michelle Shapiro, RD (40:37.994)

Exactly, exactly. That's to increase blood volume. what that's the kind of like interventions we might use it to for symptoms in pots, just to everything's just get blood flow back to your heart and brain, right? We need to push it. We need to increase blood volume by adding sodium. And then in the long term, what is the real treatment for pots? It's nervous system work. That's the it's it's a form of dysautonomia. It's not a cardiac condition by nature. It's a it's a neurological and nervous system based disorder.

Jaclyn (40:47.181)

Mm-hmm.

Jaclyn (41:06.881)

Are we talking about like mind-body medicine? there studies?

Michelle Shapiro, RD (41:10.328)

Sure, yeah. I would say my favorite pathway for POTS and MCAS and ways of nervous system work is limbic system work specifically. Like I love like DNRS, Primal Trust, Gupta program. Those are fantastic, but it's really about like on a simpler or even spiritual note, slowing down, listening to your body, like being so in tune with what your body needs and really just finding safety. I think like we wanna just do like.

I'll splash water on my face for my vagus nerve, but I think nervous system work is all about finding safety and then consistently, every single time you have a symptom, in whatever way you can, either through formal programs or at home, becoming non-reactive to those symptoms because with MCAS, POTS, it's a cycle. So we get a symptom.

Jaclyn (42:00.006)

This is going cause stress. The stress triggers the nervous system. This is what you're talking about. That it becomes. Okay.

Michelle Shapiro, RD (42:03.872)

Exactly. Exactly. that's the limbic system or different like brain structures that we title as the limbic system together, which is our amygdala hypothalamus and hippocampus. And all of them together, you know, they're there to help us with memory threat response and again, protect us. So if they notice, my gosh, she just felt so scared from that panic attack, whatever that's from that dizziness. I never want this to happen again. Let's fire early. Then the mast cells become involved and it's kind of this cycle again of these symptoms becoming anxiety, the anxiety becoming symptoms, and that's what makes these syndromes chronic.

Jaclyn (42:39.437)

Well, this has been a super eye opening conversation. This isn't a topic that we've talked about before, but your expertise really shines through and it was so fascinating. So I'm really thankful for you joining us today. If people want to get evaluated for this, you you'd mentioned you work with Dr. Kaczko and with yourself, how can people find out more about how to work with you?

Michelle Shapiro, RD (43:02.636)

Absolutely. So I have a team of myself and four other practitioners. So if someone wanted to work with us, we all specialize in MCAS. I can give you links. It's Michelle Shapiro

Nutrition LLC is our company. I have a lot of, what'd you say? Sorry. perfect. I have a lot of episodes of my podcast, Quiet the Diet, about MCAS and POTS as well. If there are also, I created an information center called the Highly Sensitive Body Hub.

Jaclyn (43:12.759)

We'll drop them in the show notes for everybody.

Michelle Shapiro, RD (43:27.874)

because when I was really sick, Jacqueline, the only place I could find information was Reddit. Like I could not find information with any practitioner. So I basically meet an information center and you can search based on symptoms you have or conditions and it's centered around MCAS pots and hypermobility. So you can check out the highly sensitive body hub. And then I also have, honestly, I've sent so many clients to Dr. Kachko's team at NYC Integrative. They're really fantastic in working with these conditions as well.

Jaclyn (43:53.729)

Fabulous. Well, thank you so much for joining and spending this time with me today.

Michelle Shapiro, RD (43:57.144)

Thank you so much for having me. Thank you so much.