

Episode 112 Transcript

Dr. Jaclyn Smeaton, ND (00:01.774)

Welcome to the Dutch Podcast, where we dive deep into the science of hormones, wellness, and personalized health care. I'm Dr. Jacqueline Smeeten, Chief Medical Officer at Dutch. Join us every Tuesday as we bring you expert insights, cutting-edge research, and practical tips to help you take control of your health from the inside out. Whether you're a health care professional or simply looking to optimize your own well-being, we've got you covered.

The contents of this podcast are for educational and informational purposes only. The information is not to be interpreted as or mistaken for medical advice. Consult your healthcare provider for medical advice, diagnosis or treatment. Welcome to this week's episode of the Dutch podcast. Now, if you are a migraine sufferer, you know just how impactful migraines can be to your life. I personally not been affected by I have close friends who have been and it could leave them in bed for days. It's brutal.

Now I'm so excited because today's guest has so much experience looking at a functional medicine whole person approach to migraine health, particularly in women who have hormonal patterns to their migraines. She also uses a Dutch test to try to evaluate these and what I'm really excited about is to learn about the patterns that she sees all the time that are connected to those menstrual or hormonal migraines. Now we're gonna talk about all kinds of things from testing,

to the lifestyle factors that can influence migraines and also give you a little bit of insight as to some of the things that are happening in your body that you might think would never be connected to migraines but actually are. I think you'll be surprised with some of the things you learn. Today's guest is Dr. Meg Mill. She's a functional medicine practitioner and a pharmacist, a PharmD, who is passionate about helping people heal from the inside out. She's got a virtual practice and she focuses on

Gut Health as the foundation for balancing hormones, boosting energy, easing anxiety, clearing skin, and of course migraines. She's helped hundreds of clients experience lasting transformation, even those that don't have gut symptoms, through simple and effective healing protocols. Alongside her work with her clients, she also hosts a podcast called A Little Bit Healthier, and she's been featured in a lot of national publications. We're really happy to have her here today. Welcome, Dr. Meg Mill. I'm excited to talk about migraines with you today.

Dr. Jaclyn Smeaton, ND (02:20.47)

This is an area that you've really gained a lot of expertise. But before we do that, I always love to start when we talk to providers, especially people like you, where you've trained in kind of more of a conventional modality and shifted into functional medicine. I'm really hoping you'll share your backstory with our listeners today.

Dr. Meg Mill

Yes, yes, absolutely, because it is quite a shift. I have a doctorate in pharmacy and practice as a clinical pharmacist for years before making the transition to functional medicine. And there's really two reasons. I always believed in really the preventative care in general. And I was practicing, so I did a residency after

school and then I was working in hospitals as a clinical pharmacist in outpatient clinics. we're really starting to see, you know, I'm putting people on more medications. I know why. I know the protocols were saying, okay, now, you know, we need to add this medication now. And then, you know, you're seeing people on 10 medications at a time as they progress and progress and people are surviving, but they're just not thriving and really not getting the education and really the root cause of why this is happening and what we need to do to reverse it at

the same time that I was going through that professionally, I also was having some of my own personal health issues, which I know I think a lot of us in this space have had. Yeah. Yeah. So I was having a lot of GI issues. I was having a lot of anxiety. I was getting to the ... I had a few panic attacks. It got that bad. I'm jumping around to providers. I was going to gastroenterologists after gastroenterologists because it was getting to the point where

I couldn't even eat. I was young and people were saying, you're fine, you're young, you're healthy because my standard labs would come back fine. My colonoscopy or my endoscopy would show up normal. And I was like, I do not feel fine. There's nothing fine about the way that I'm living and I need to seek answers. So I'm a learner by nature. And so I started diving into my own research and started looking into like what's going on and started.

Dr. Meg Mill (04:27.382)

making connections and that's when I found functional medicine. So I actually went back and got certified in functional medicine and trained and then I completely left my career and actually opened a functional medicine practice. So now I have a virtual practice where I see people all over the world and can really get those transformations like we're gonna talk about today. I mean, when you have migraines, it's affecting so many aspects of your

life and you're told like, yeah, you just have the migraine gene or you just have to suffer and you really don't.

Yeah, it's really shocking because I think about that a lot and that was a fundamental kind of belief system that led me to pursue naturopathic medicine over conventional, which was the path I was originally heading on, where it didn't make sense to me that we could all just be victims of random changes that would lead to disease. Of course, that does happen sometimes, but there must be patterns or

behaviors or things that are leading to us developing or even genetic patterns, nutritional trends, all these pieces and elements that lead to us being more susceptible to experience a symptom or the development of a disease, right? So it did, it seems like with pharmaceuticals, we're working at the tail end, which sometimes helps and sometimes doesn't. As we know, some drugs get, I'm thinking about like Vioxx and like some of the things that seem like a really great idea.

You turn out to not be such a great idea. And I also think today about all the problems with addiction. know, just this morning I was talking with a friend who had a family member that was prescribed Adderall for ADHD and ended up developing a dependency to it. And now that's a big part of her life is trying to kind of manage that. So, you know, there's a lot of problems with just polypharmacy, bottom line. And if we take a look at the flip side of the coin to say, well, what's driving the root cause of this?

you if we can fix it and eliminate the need for ongoing pharmacy, I don't get how that's controversial.

Dr. Meg Mill (06:25.518)

I agree. And I think with the subject that we're talking about today, it's really a great example of that because when we're looking at the pharmaceutical approaches, they're really to stop the pain. So it's like saying, okay, you have migraines. Let's just ignore why you're having the migraines and we're going to just give you medications to stop the pain of it when it happens or even some preventatives. It can have a lot of side effects, but we need to look at what's going on in your body that's causing this in the first place to really get to the root of what's happening.

Well, I'd love to so let's talk about migraines and I want to start with kind of the pathophysiology of a migraine in the brain, right? What's happening there? And then I want to talk about all the things that can trigger and cause that. So can you just start at the

beginning with what do we know about migraines? Why do they happen? And then I want to talk about hormones and diet and all the other things that may be influencing.

Yes. Yeah. a lot of times that my, so, you know, I, let's even go back a step and say, okay, what's the difference between a migraine and a headache? And I think we can approach them both the same way. we're, you know, I think that we don't have to distinguish because we're, you're getting a signal. We're getting head pain, but I think that's what some people will say, well, it's a migraine versus a headache. So when you have a my, like a headache is usually like a banded pain. comes and goes.

there's not a specific pattern. So when you have a migraine, you usually see a specific pattern. So often people will have the right side of like a throbbing pain on one side. Sometimes it can be both. You can get an aura before a migraine. It usually lasts from like three to 72 hours. So we can have nausea, vomiting, other things involved. It usually will also respond to being in a dark, quiet place. And we're seeing...

what's happening a lot of times is like there's an inflammatory aspect, but there's also vasodilation and constriction when it comes to the migraines. And so we need to go back and say, what's actually happening that's causing this to occur in our body. And when we look at that, can see one time I mapped it out, there's about 50 different things that we're looking at that can cause these dynamics to happen.

Dr. Jaclyn Smeaton, ND (08:40.278)

Yeah, I think a lot about the comparison of – I live in Boston, so we have cold winters here and I love to ski and be out. But if you've ever been outside in the cold and your fingers are white, you're not getting great blood flow and then you go back inside, you can get like that pain and throbbing in those areas that are reperfusing. And I always in my head, maybe you're going to tell me that's really not a great comparison, but in my head I think about migraines and like the impact of that happening on the brain. It's obviously not due to temperature, but...

with that vasodilation and vasoconstriction alternating that can lead to such a tremendous amount of discomfort.

Yes. And that's a good, you know, I always like that, how you're saying it's something people can see. So it's a tangible thing to think, okay, that's where you, know, it's simple. Some, because sometimes like we could get into very specific details, but sometimes even like just the simplicity of understanding kind of like, and being able to visualize what's going on in the basic aspect of what's going on. Yes.

Now let's talk a little bit about in your experience the impact that migraines have on women's lives. And of course migraines impact men as well, but we're really talking about kind of hormonal related migraines. We'll get there, but tell me a little bit about what your patients are reporting to you as far as like what's the impact that they have.

Yeah, I mean, it really can be life changing when we don't have these migraines anymore, because what we start to see is that you start to live your life often around your next migraine. So beyond the pain that you're experiencing, there's also an aspect of planning. you know, even I hear people say like,

Dr. Meg Mill (10:16.482)

Well, my vacation, my vacation's coming up and I don't know whether I'm gonna enjoy my vacation or whether I'm gonna spend half the time in bed while my family goes out and has fun and does stuff on our vacation. My daughter's birthday's coming up and I wanna plan a birthday party but I wonder is that gonna be a migraine day? So one of the most impactful things, I know there's so many things that are life changing but one time someone just said to me,

I just don't wake up anymore wondering if it's gonna be a headache day. And I think really that was just such a simple way to think about it because every day is a fear of is it gonna be a headache day? What do I have going on? So you're not only thinking about what you're feeling, but also how it's going to affect your life. it's often, we do find patterns, but for many women, it feels very unpredictable.

It makes me think one of my teachers had this statement where he'd said, disease is dramatic but health is mundane. And it is, it's like we want the mundane, we want our brain space to not be occupied by thinking about how crappy we feel, basically. If you can get your mind off of that and onto things that matter more to you, that's completely a win.

Yes.

Tell me a little bit more about and maybe walk us through the connection between hormonal shifts and migraines, specifically in women. Like what's going on hormonally behind the scenes?

Dr. Meg Mill (11:35.53)

Yeah. And I love this question on this podcast because we can actually, we can get into some of the nitty gritty. Yes. Because, you know, really the Dutch test is like my friend when it comes to migraines because- we love hearing that. Yes. I mean, really we start to see, so like, I actually would like to do a study on this because I see some very common patterns. So, you know, for let's-

I think it's radion hormones.

Dr. Meg Mill (12:02.804)

step back and we'll talk about kind of the basics of what's going on. And then I'd love to get into some of the patterns that we're seeing specifically on the Dutch tests. So we often see hormonal migraines happening when we're having an estrogen dominant. So we're seeing estrogen higher than progesterone. So one of the dynamics here, there are several dynamics, but one of the dynamics that we see here is that estrogen actually has receptors on mast cells.

So mast cells are part of our innate immune system. You have two different immune systems. You have your innate immune system and your adaptive immune system. The innate immune system is the front line. So it's saying, okay, we're looking for what's going on. got to defend ourselves. so mast cells are, estrogen can trigger mast cells. Mast cells release histamine. So histamine creates...

a lot of different dynamics, but one of those dynamics is to actually increase inflammation. we see this, I see so often this estrogen promoting histamine, which promotes estrogen, which promotes histamine dynamic in, so they kind of go hand in hand a lot of times. another thing about estrogen being high is it also actually affects your ability to

Digest histamine so to be able to be digested we need diamine oxidase to digest histamine in our GI tract So whenever we're seeing high levels of estrogen, we're seeing an impairment of the diamine oxidase ability to break down histamine So we have two different things going on where we're signaling more histamine We can't break it down to compound that if we're having low progesterone at the time progesterone actually helps diamine oxidase work, so

when we have low levels of progesterone, we're also seeing that compounded inability to break down histamine. And that's one of the reasons why women, when we enter perimetopause, will have a lot more symptoms sometimes. So sometimes we start to see this where you're a little bit more controlled. Maybe you get migraines here or there, and then your hormones start to shift and we start to see more estrogen dominance over progesterone and some of these symptoms get a lot worse.

Dr. Jaclyn Smeaton, ND (14:15.217)

Yeah, it's interesting that you talk about the histamine connection. We had a guest on that, talked about MCAS, sorry, mast cell activation syndrome, which is really common and it sounds like could be very much connected. But just for our listeners, what are some of the

other signs and symptoms of histamine intolerances or imbalances that might be connected or they might see pattern with their migraines? Do you see things like allergy symptoms or anything like that, rashes?

Dr. Meg Mill

Yeah, so it's really interesting because there are, and that's what we typically think about when we think about histamine, but there's four different types of histamine receptors. So we actually can see histamine as a widespread issue in the body. you know, lot of women too will say, do I, you know, when you're talking about allergies, you know, do you have congestion? Do you have post-nasal drip? Do you have sinus pressure? All of those things can be.

histamine symptoms, but we can also see we have H2 receptors in our GI tract. So when we have IBS type symptoms, those can also be something that we commonly see. You can also see rashes. Another one that might surprise you is anxiety, like not you but listeners, but anxiety because there is a, you know, we do have receptors and there's neural, the effect neurotransmitters there too. So we start to see that. We can see fatigue.

We can see pain. So it's kind of like when we're looking at full body symptoms of like, okay, you know, are you getting migraines? Are you getting, you know, do you have congestion? you don't necessarily have to have all of these. Do you have some GI symptoms? Are we seeing fatigue? And it crosses with a lot of other, you know, when you're hearing me say these combination of things, it can cross over with a lot of other things. So that's why it's good to really drill into some of.

you know, work with someone who understands it from this perspective.

Dr. Jaclyn Smeaton, ND (16:02.454)

Yeah. Do your patients find it surprising, like if they come in with headaches, with migraines, that you're doing a more comprehensive assessment? Or are they expecting that? That's why they come to see you.

Well, I think they know functional medicine, we're going to look at that. I think, yeah, if I'm saying like, oh, I'm coming with migraines and we want to do a test or whatever. like they'd be more likely. They know when I say like, oh, we want to do the Dutch test, like, okay, they get the hormonal component because many women have these cyclical hormonal migraines. But yeah, stool tests or something like an organic acid test. And you're like, okay, why are we doing these things? I have a headache. And that's where I think that we have to

really take a step back and say, okay, that's where you're seeing the pain, but that's not necessarily where the root of the problem is. So we have to like look at the whole body and say, okay, what are all the things in you that are contributing to you getting this head pain? usually like, yeah, we think, I think because conventional medicine buckets into different categories. So it's like, you see the GI, or you see neurology, or you see endocrinology, or all of the different.

specialties, it's like, wait, we're flipping the switch and we're saying, we're going to look at you as a whole person and what all is connecting.

Yeah, that's a really interesting point because I think now that our – even from our parents' generation to now, the specialization in medicine has really deepened where a GP used to be who you saw. But now, if you go in with a complaint, you might be referred to three or four specialists from your GP to go treat those specific conditions. So we do have these kind of like subconscious beliefs from these messages that

Dr. Jaclyn Smeaton, ND (17:42.114)

You would see a GI specialist for a GI complaint or a neurologist for a headache versus bringing it back together in that crossover. That's a really nice takeaway for people to think about because you're absolutely right. mean, our systems are all connected, especially when you think about gut health, where the gut is like the entry point of everything into our body and there's so much immune function around our gut.

And I mean, obviously that's where that histamine piece comes into play. Like when you activate the immune system, 70 % of our immune system is in our gut, our gut associated lymphoid tissue. So a lot happens there. Even with neurotransmitters, like you were talking about, serotonin, dopamine, there's so much happening in the gut.

Yes, and the gut brain connection is huge. And it's another interesting kind of fact that kind of will go along with the histamine component and something that you can actually do, people can do at home to see. When we're looking at it hormonally, we're saying, okay, when you go through a cycle, we're going to see the increase in estrogen at ovulation, and then we're going to see the drop and then we're going to see it increase in the luteal phase before your period.

When we're looking at foods, foods can impact migraines. So we're looking at histamines as one of the food groups that we also look at tyramines, we can look at salicylates, we can look at different foods that can trigger some people. And it can be really confusing here

because it all depends on all the things that are going on in your body right now. So if your estrogen level is higher,

you may not be able to tolerate as many histamine foods, let's say during ovulation or during like in the window right before your period because you're, as we're saying, estrogen can promote the release of histamine. So that's why I like to use wine as an example because sometimes, you know, that's a big migraine trigger.

Dr. Jaclyn Smeaton, ND (19:38.497)

Like that, I guess, for sure.

And some people will say, okay, well, I can have a glass of wine sometimes, but other times, you I'm going to get a migraine. But it must not be the wine because I don't have a migraine every time I have a glass of wine. But it could be the wine on top of where your hormones are, on top of maybe something else you ate that was histamine, you know, had a histamine component. And so it's all about the full load, like when we're looking at some of these things. And I think that that can be tricky because the load's going to change at different points.

Absolutely. Now, what are the times in the cycle where you tend to see the most migraines show up for women who get these patterns? Are they different or do you see the same types of patterns of women?

Well, the most common migraine pattern I'm going to see is the week before your period. So usually people will have, it can be different. Some people will have it on their period. Some people can have a spike in ovulation, but the most common time is that PMS window that we're going to see. And if we're like, when we're looking at hormones, I mean, I know this is, you talk about all this, this all the time, but we'll go back to kind of the basics of the estrogen metabolism.

when there's three phases of the estrogen metabolism. And what I like to tell people when I'm talking to them, estrogen, want to have use it and lose it. When we want estrogen to do what it needs to do in our body for all the great effects, but we need to be able to clear it. And a very common pattern that I see with women with migraines is that the CYP3A4, they're actually getting high levels of the 16 metabolite.

Dr. Meg Mill (21:17.996)

And that's why I was like, okay, if I just saw this, you know, I just look at hundreds of these tests that come back with very similar patterns. So it's very common that you're not clearing your estrogen out. so if we go just down the CYP1A1 pathway to the 2H metabolite, we methylate it out, we package it in bio and excrete it. But if that's not happening and we're getting stuck in these metabolites, you're getting this estrogen.

that is hanging around. And the 16 metabolite in particular is one that I see very commonly associated with migraines.

Well, the 16-OH metabolite is really potent. I mean, this is one thing I think it's a new paradigm to think about and a lot of conventional docs don't think about it as well where when we think about parent hormones, we care about the levels because we know they have impact. But sometimes the metabolites can actually bind to receptors and have even greater activity. Like one of the things I think about, we're talking a lot about is 5-alpha-andro, androstatin-dial, which is a testosterone. It's actually a DHT metabolite.

But it really, you know, have DHT activity inside the cell, which is three times as potent as testosterone. you know, they're the same with estrogens. You can get estrogen metabolites that add to that total impact, total estrogenic impact. It's not just the parent hormone. So I'm so glad you're bringing that up. And 16-OH we know is very estrogenic. It's a very potent metabolite. So you're right. If you're not moving it through phase two, which methylation is such a common issue for people.

It's probably that part of the estrogen metabolism pathway and other pathways we see kind of gobbled up pretty frequently that it can lead to symptoms. I'm glad you're sharing that pattern. Thanks for bringing that

Dr. Meg Mill (23:02.35)

I think another thing that just because if you're not having a Dutch test, if you're just going in getting your blood levels of hormones, they're usually not going to test the metabolites. So

you're going to see an estradiol level. I can see low estradiol levels with the high 16 metabolites still. So I think that's confusing because people can think, my estrogen's

normal or my estrogen's low and that doesn't mean that you're metabolizing estrogen the way you should even if you're seeing those blood levels.

Right. Now, another thing that I think about that I've learned about with migraines, which I'm not a migraine specialist, so I'm hoping you can kind of fill in the gaps here, is that the hormones can absolutely be normal and you can still have migraines because a lot of it is like how you adapt to changes in hormone pattern, which when you think about that premenstrual phase, you have a dropping of progesterone and estrogen during that phase as your hormones kind of come down to their lowest point during the first days of your period.

that it can also be, this happens with neurotransmitters and mood change like PMDD, PMS, where you are getting kind of an abnormal reaction to a normal hormonal change. Is that something that you see too where you have women that are, maybe some are sensitive to the levels and others it's more just that they're having trouble tolerating the change?

And they can get, yeah, some women have that rapid drop, like that rapid change. And that can also be another trigger. Yes, I do see that too.

Dr. Jaclyn Smeaton, ND (24:30.222)

I know like estrogen patches are sometimes prescribed to women with menstrual migraines as well to try to like even that out a little bit.

Yeah, that's another, you know, another pattern. There's just, you know, there's so many different things individually. And that's where it is very individual. mean, I think that there, again, it's like not the one size fits all for this. And when you're saying like, we can see not only that where we're saying, okay, we have a rapid change, but the hormone levels are okay. But then we could see that it's not even a hormonal component. And you know, really this comes down to.

your gut health or your detox pathways or your neurotransmitters or your blood sugar or all of these other things that are going on that we need to look at and really bring your body back to balance in a different way too.

Could you share a bit about your process with patients? Because you're right, I can hear you saying there's all these different things that might be contributing. Can you share a little bit more? Because I think patients would love to know too. We get a ton of patient listeners and providers to learn from your experience. What kinds of questions are really important that you ask women when they come in experiencing migraines? And when you look at testing, there's standard serum testing and then there's this whole range of expensive functional lab tests. How do you choose?

How do you know what path to go on and what are the things that you're kind of considering that help you hone in on a woman's specific root cause?

Dr. Meg Mill (25:53.634)

Yeah. So, you know, I like to say we become detectives. So I really want to look at patterns when it comes to, you know, people looking at themselves or as a practitioner. So I often will, you know, when I'm first meeting with someone, I will actually will look at a calendar. And this is something everyone can do is just print out a blank calendar. And you want to look at for you individually. If you have a migraine for the 24 to 48 hours before the migraine started.

What did you eat? What time of the month was it? What did you, know, how much hydration and sleep are independent risk factors for migraines. And it's, aren't necessarily even thinking about those, their basics, but we need to make sure we're hydrated. We need to make sure we're hydrated at a cellular level, that we're detoxing, all of these things. So we want to look at an individual pattern and see, okay, let's look at for you. Now,

We also want to look at our nutrients. So we know there are some common nutrient depletions when we're looking at migraines. So we want to look at magnesium. We want to

look at B2, riboflavin. We want to look at CoQ10 and cellular health and make sure that you have good cellular health. So we're looking at making sure that we have the right nutrients. We want to look at diet. So we want to say, and that's the thing. When everyone's a little bit different, we could

I don't like to do a migraine diet long term, but I will use that as a tool. So we're saying, okay, let's do this for two to three weeks. If we pull out the histamine foods, if we pull out the tyramine foods, the salicylates, the nitrates, know, aspartame, all these things, and we pull them out for two to three weeks and it makes a big difference for you. Okay, let's see what, let's evaluate that and you know, your nutrient levels here too. So.

We're kind of using all of these tools. We'll look at a stool test. You can, as you know, but you can have GI symptoms or you can have underlying gut issues without any GI symptoms. So we're looking at that. So it's actually coming in and saying, okay, what is your history? I'd like to get the story of when the migraine started. I actually had someone who in getting the story,

Dr. Meg Mill (28:13.358)

in second grade, she's like, I've had migrants forever. Well, she was getting bullied on a bus at the same time and she had a tick bite. So getting the story at that time, those two things are very important because there can be, you know, when we're looking at the nervous system, there can be a nervous system component. And then the fact that like, okay, we need to look into, is there an underlying Lyme issue that was unaddressed in all these years?

It's like even getting those stories or important pieces to say, okay, where am I going to start in looking at this person? But I'm always looking at them as a whole person.

Yeah, absolutely. I'm trying to do that investigation. So let's talk a little bit more about the hormonal migraines. And I love that you brought up the Dutch test. Thank you. We love talking about the Dutch test on hearing. We love hearing that it's helpful for you to help unlock the relationship between hormones and hormone change. Can you talk a little bit

about how you utilize the Dutch test to create like a more targeted treatment plan with the most common things that you see come up?

Yeah, so without that test, I can't see how the hormones are being metabolized. And that's where I think like we were talking earlier about, I'll get a lot of times people have come to other practitioners before they come to me. I'm not always the first stop. So it's like, okay, well, I've done this, I've done this. I've had, you know, I've had just hormone tests, which are usually just a blood test. And my hormones were in, you know, like we're saying in range and they didn't look out of range or.

And so I'm like, well, I actually want to see how the hormones are metabolizing. And without that, like we can sometimes see a low estrogen dynamic. And so yes, if you have high estradiol, you're going to be flagged, you know, from that. But if you don't, it's going to look like, wait, you actually have low estrogen or normal, you know, your hormones are normal. So I want to see particularly, I want to see how everything's metabolized. But when we're talking about

Dr. Meg Mill (30:16.634)

Myogaine specifically, I want to see how estrogen's being metabolized and what we need to do individually for that person to optimize estrogen metabolism so that we can have a balance. Now, we also want to see progesterone. How is that being metabolized? Do they have enough progesterone? We can look at testosterone and is that aromatizing into estrogen? What are the dynamics of this person? Then I can, with those,

I can make a targeted approach and to say, okay, we're really looking at balance. We want to balance these pathways. Do we need to look at methylation? Do we need to look at shunting estrogen to a different pathway? Where do we need to target you to get the balance? And honestly, for some people, there's so many components. For some people, that's just the component that we can do that. They can do a Dutch test, but particularly ones that have that hormonal migraine pattern.

and we just get it and it's like they're gone. And they're amazed because they've been living with this for 20, 30 years and they're like, how in the world did they go away?

can't imagine the feeling of relief of having suffered with something like that. That's so impactful on your life and then having it disappear so quickly.

Because it is, it's just balancing. And once we get the balance, then their bodies back, it was just being triggered by this.

Dr. Jaclyn Smeaton, ND (31:41.768)

Right, right. So tell me a little bit about like lifestyle changes, dietary changes. You mentioned the migraine diet before. What are some other like fundamentals that you feel comfortable sharing in this kind of public forum that are generally good ideas for most women suffering with migraines?

Yeah. So I think the one thing that you, like one of the first things that you need to do is look at hydration. And I think that one, we have to really consider cellular hydration when we're talking about this. So a lot of times we'll drink like, you know, are you keeping a glass of water by your desk or with you daily? And are you sipping it throughout the day? Because if you're chugging water, and a lot of us are like, wait, I have to get my water in and then you chug your water bottle and then you move on.

we could be eliminating a lot of the water that we just drank. So you wanna make sure that you're actually sipping your water through the day so you get good levels of cellular hydration. might also wanna add some electrolytes depending on your health history and if that's something that would work for you to make sure that we're actually getting the water in the cells. So I think that that's just a basic thing everyone can do. Sleep, like I said, is another independent risk factor. And so are you prioritizing sleep? So, you

that's something that a lot of people struggle with. want to, you know, I'm fatigued, I'm tired, but are you sleeping? Well, I like that time at night. You know, I like to have maybe moms that kids go to bed and it's like, that's my time. Exactly. Yes. It's like, but are, you know, are you actually prioritizing sleep? Do you keep your room cool, dark and quiet? We can have, you know, even then if we get into hormonal shifts where you're having

What do I want to do now that my kids are sleeping?

Dr. Meg Mill (33:20.984)

hot flashes at night or those kind of things can keep you up. So what's your sleep environment and are you getting enough sleep? So that's another thing. Really just starting, if you're looking at diet and you're not ready to go into more specific foods, bringing down inflammatory foods. So are you eating a low inflammatory diet? I would say start to evaluate your food and start to evaluate your food patterns when you're getting headaches. There is a connection.

something that's worth it to do if you're someone who has migraines.

I mean, I think about shifting just to whole foods even as a start, you know, to try to clean it up a little bit. I think one of the other things when you talk about migraine triggering or high histamine foods, one of the things that I learned that I think is hard for patients to wrap their head around sometimes is that a lot of the foods that are really good for you can be migraine triggers. Also, anything that tastes good like aged cheeses and wine, right? Things that are fermented tend to be high histamine even.

things like sauerkraut, kombucha, even some of those healthy fermented foods. Is that right?

It is. I have a lot of people that also come to me after, so there may be someone who doesn't understand that they have a histamine issue. So like if we're talking about the, you are someone with migraines in particular, that will actually go to functional practitioners and do these gut healing, like actually protocols that make them feel a lot worse. And that's because the things that we have to be really careful. So we have to heal the gut.

Dr. Meg Mill (34:56.843)

but in a framework of histamine issues because probiotics, certain probiotics, like high dose probiotics, kombucha, like bone broth, kefir, all the things, all the fermented foods, all the things that are in like the standard gut protocols when you're thinking about it actually are high in histamine and they can trigger you more. So we have to really think, okay,

we want to do the underlying root cause, but we have to do it in a way that's gonna work for you and not actually trigger more symptoms. And so it's very confusing and disheartening. I actually was with someone today that actually before this, that's like, I did all of this, I was doing, and it just like everything got worse. And it's hard to understand that because you are doing things that are good, if every, you have to just remember like your body's unique and that might not work for you right now. It might work for you in the future, but

Just because it works for someone else doesn't mean it works for you. And there's a lot of people out there talking about things because we're sharing information and that's great, but you're an individual and what's working, like you have to go with what works for you. So when you're pulling out even avocados, strawberries, tomatoes, bananas, I mean, so you're eating a healthy diet and it could actually be causing symptoms without you realizing it.

I'm really grateful for the way that you frame that because I think that a lot of patients blame themselves when they're doing all the protocols right and not getting better. It can feel so out of control, right? Like, I'm doing everything right. I'm making all the good choices. I'm exercising. I'm eating right. I'm doing all the things and I'm still not getting better or I'm feeling worse. I'm so glad you framed it that way because it's really more about the individualization and we're still learning, right? We're still learning more about...

triggers and root causes for all these conditions. So just if you're listening and that's you, don't give up hope. Don't blame yourself. It's just a matter of unlocking the right information to really help you get on the right path.

Dr. Meg Mill (36:59.682)

Yes.

Yeah. Great. Those are great suggestions. I know you'd mentioned from a supplement perspective, B2, riboflavin, and magnesium. Magnesium I'm particularly curious about because I mean, I went to med school like 20 years ago, which is shocking to me when I think about that. But at the time, magnesium was like the core therapy that we recommended for people with migraines and deficiency of magnesium, which is very common, particularly in women. was thought to be a big connection. In fact, there had even been studies at the time

where magnesium was used as a treatment head to head with amitriptyline and had like pretty equivalent benefit for people with migraines. Is that something that is like connected to hormonal migraines or independent? And the other question I want to know about that is with magnesium, now there's so many forms out there, including some like magnesium 3 and 8 that can cross the blood-brain barrier. Does it make a difference? Is it worth the more expensive magnesium?

Yeah, for migraines, I particularly like the threonate or the glycinate. Those are the ones that I'm going to go to if I have someone. There's different reasons that we would use different magnesiums, but I would say if you're someone who has. Now, with one caveat, we also need to make sure it's all these things.

We also need to make sure that you are having a daily bowel movement because if we're not moving our bowels daily we can actually not excrete toxins and So sometimes for some people who are constipated are really focusing sometimes. I'll try to move the bowels first Because if if the bowels won't move like if you're constipated some of the other things that we need to do Won't be as effective because we're absorbing things back into our body

Dr. Meg Mill (38:47.628)

So sometimes we'll use citrate then. And so I'll go with that for a specific reason, but I generally will go with the glycine, those two would be the top for migraine. I would look for those. you know, it's different than hormones. So, I mean, yes, because we can use magnesium for hormone metabolism, but we also can use it for vascular regulation, for

serotonin function for platelet and blood flow for neuronal excitability. Magnesium acts as a natural NMDA receptor blocker. So there's a lot of reasons that we use magnesium.

Magnesium is like magnesium and zinc or like the two nutrients that are just co-factors for so many different processes in the body that we're always uncovering new applications really. And the other thing I think about with magnesium is it's so supportive for sleep as well. We use it a lot for people who have trouble sleeping. And this is actually, I'd love to pull it back to sleep because I do think this is another piece that people...

Don't always understand the true impact of it. And it's not just about getting rest. Like the brain, like your cerebrospinal fluid clears at night when you're sleeping and inflammation has calmed down. Like, can you talk a little bit about that sleep connection?

Yeah. And we also, yeah. you know, there we are immune, like you're saying, our immune system resets at night. We detox through our sleep. so we need that. When we're looking like at studies, actually, we a lot of times we're some of the studies look at REM sleep too. So, you know, what kind of quality of yours, like, are you getting? We also look at cortisol levels because we need melatonin to increase at night and we need cortisol.

Dr. Meg Mill (40:41.528)

to be down. there is also, sometimes I call it the chain of pain with cortisol and migraines too, because when we're seeing the high cortisol levels all the time, we're also seeing more pain. So that can increase your pain receptors. So we want to make sure that we have glutamate also, lack of sleep can increase your glutamate, which is a excitatory neurotransmitter. We can see inflammation. So there's a lot of things that are going on in your body.

underlying that you just think about sleep and tie like exhaustion and energy, but there's actually processes that are happening in your body.

Yeah, it's such a critical time for healing, even like tissue healing if you had an injury. We know that people who don't get enough sleep, it's like you can't recover. And if you look at

elite athletes, when they strain their body so much with exercise, you have to balance it with sleep and rest is like such an important priority for them too. So it's just, it's so critical. I'm glad we're talking a little bit more about it because you're right. It's not just about avoiding fatigue. It's about whole person health.

having longevity and if you think about our body during the day, we do all this like little micro damage. It's that night when we're sleeping that the majority of that healing takes place and I think about the brain especially as being such a critical time for that.

And I think some of those things like sleep, even nervous system regulation when we mentioned cortisol, and sometimes we want to really bring our body back into that parasympathetic nervous system. So breath work and things like that. We want to do this because in some ways, because we are taught in a drug focused world, that's kind of our baseline. I do see people who can go for supplements.

Dr. Meg Mill (42:33.554)

and want just like I want now I want to replace drugs with supplements and I want to take all of these supplements, but I don't want to do the basics. Like I don't want to have, you know, am I going to sleep and prioritize sleep? Am I going to, you know, regulate my nervous system and try to get some of that in my life and be able to do those kinds of things? Let's just put supplements and it has to be a balance. You know, you really, you can get a long way with some of these foundational things. So you just don't want to ignore them.

love that you're bringing that up. it is like the longer you're in practice, the less tools you want to use. You want to just shift people back because you do it's like there is this deep realization that when you can't out supplement anything really. when you think about the beneficial impact, and this is not just speculation, this is like data driven science. We know that sleep, stress management, good nutrition and movement in

love and relationship, if those things can be in place, that will have a far greater impact probably than most medications or supplements, really. I mean, the data is amazing around that. But it's not like biohacking fun. It feels too basic and boring. But it is the more

that you learn and the more research we do on most conditions, chronic disease conditions, it all comes back to those.

boring basics. So we need to find a way to make it fun.

Yes, yes, to get those in. Yes, because it is. like if you're not doing those and you're taking all these other things like we're saying or doing all the biohacking, you're just... I don't know. Sometimes I'm actually taking people off supplements because it can be just so overwhelming and you're taking so many things. You want to look at them of like, are they actually doing for my body? So let's target and do the things like that are unique to you, not just because someone said, yeah, you should take this. This is great.

Dr. Jaclyn Smeaton, ND (44:33.006)

I remember sitting with people that – I'd always have people bring in what they were taking and they'd bring in these bags of supplements and I'm like, vitamin E, why are you taking this? And it's like, I can't really remember but I – read this article. I can't even remember what it was about but I remember when I read it, I thought, oh, I should take that. And it ends up becoming this massive stack where you're right. actually with migraines, a lot of supplements can be triggers as well. So excipients or the nutrients themselves if there's too many.

People can be so sensitive just generally. Yes. The last topic I wanted to ask you about and really make sure we covered because we've talked about hormonal impact and some of the lifestyle stuff, but there are some external environmental triggers that can impact migraines too. Seasonal change is one of them, like pressure changes, weather changes, seasonal changes. Can you speak a little bit to what you've seen on how those impact women as well?

So I think it's the overall load. So there are some women, know, sometimes I'm like, I wish we could just change the weather, you know, because that can be an uptick. But there are women who are very sensitive, you know, people who are very sensitive to pressure changes. But what I see is that while we can't change some of those weather impacts, we

still can get the, like, we're looking at the overall load in your body and what is getting you to the point that it's triggering the migraine.

So when we bring the other things down, so you know, let's say we have a hormonal imbalance and your mitochondria aren't functioning as well and we have an underlying gut issue and we have, you know, food sensitivities and neurotransmitter imbalances and all of these things that can be happening. When we balance those other things, your threshold comes down and your body's not going to react as much. So it really is like what's putting you over that threshold.

I see that pattern I often see is that first migraines will become less severe. So we'll have the decrease in the severity and then the decrease in the frequency. Different for everyone, but that's the, like when I'm working with people that like that's the general pattern. So we're saying, okay, we're getting these things down so that they're not as severe. So there's not things putting you over the edge. So if you do have a storm or a weather change or things like that, then we also

Dr. Meg Mill (46:56.93)

won't get the migraine because we're not getting over that threshold. So it's kind of looking at that in that way. You know, when we're talking about seasonal changes, we're also, know, I have come back to histamine a few times, but that also can be a factor. So if you're someone who is more allergy prone, the weather changes, you're more congested, you have more allergy symptoms, that could be something that's also picking up the migraines. It's something that's worth paying attention to.

Wonderful. Well, this has been awesome. I've learned so much and really deepened my knowledge on migraine. So thank you. And we're really grateful for you sharing your experience as someone who sees this all the time. So thank you so much, Dr. Mill. If people want to learn more about you, about your practice or your work, what are the best ways for them to do that?

Yeah, so I actually have a podcast too. It's called A Little Bit Healthier. So I'm over there talking about all ways we can be healthier. Yes. So join me. We share a lot of great

information there. My website is megmill.com. It's just M-E-G-M-I-L-L.com. And there actually is a work with me button on there, which will give you more information if you're interested. And then I'm over on Instagram at Dr. Meg Mill. It's just D-R-M-E-G-M-I-L-L. So.

I'd love to, I love sharing information. love connecting with people. So I'd love to hear from you.

Dr. Jaclyn Smeaton, ND

Awesome, wonderful. Thank you all for joining us today for listening. If you're interested in learning more about hormones, we do release a Dutch podcast every week, every Tuesday. remind you to just listen in and you can also follow us on all of the socials at Dutch Test and subscribe to our podcast wherever you're listening today. Thank you so much, Dr. Mill, and thank you guys for listening. We'll see you next week. If you're wanting to learn and really expand your expertise in hormones, you're not going to want to miss our podcast. So make sure you tune in each and every week for our new content.