

# Functional medicine approach to anxiety

## **Guest: Evan Brand**

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#### [00:00:09] Meagen Gibson

Welcome to this interview. I'm Meagen Gibson, co-host of the Anxiety Super Conference.

Today I'm speaking with Evan Brand, a podcast host, certified functional medicine practitioner, and nutritional therapist.

He's passionate about healing chronic fatigue, obesity and depression epidemics, after solving his own IBS and depression issues. He uses at home lab testing and customized supplement programs to find and fix the root cause of a wide range of health symptoms.

His Evan Brand podcast has over 7 million downloads and counting. He's the author of *Stress Solutions, REM Rehab*, and, *The Everything Guide to Nootropics*.

Evan Brand, thank you so much for being with us today.

#### Evan Brand

Thanks for having me. That's like a super old bio because I have over 16 million downloads now. So I was like 7 million, that was a while ago.

#### Meagen Gibson

You're like, old news. Well, I will have to update that then. I'm glad your podcast has been very successful.

#### **Evan Brand**

Well, the main thing is that people are getting answers, because when you look at depression being the number one leading cause of disability in the United States, anxiety is probably up on the top five, you look at chronic fatigue on the rise, you look at autism skyrocketing, you look at obesity skyrocketing. We're in big trouble.

So my biggest number is still just a tiny dent in the epidemics that we're facing. And Big Pharma's not coming to save you. And even the doctors are not coming to save you. And on the topic of anxiety, the psychiatrists are not coming to save you either, because not once are they going to tell you to run a stool test to investigate your gut, which is one of the big smoking guns. The sources of anxiety are coming from the gut, which we can geek out on as much as you want.

## [00:01:48]

They're going to put you on a benzodiazepine, you have withdrawals, you have side effects, you have addiction, and it's not the root cause at all. And then you get convinced that it's in your head. So then your spouse fights with you and says you're crazy, you just need to take your medication, crazy woman, and then you end up in a divorce. And I see it every day.

It's frustrating because I suffered from anxiety tremendously for a long time, even through college, through business school. And luckily, I'm over it now. Knock on wood. I have minimal to no anxiety problems that I had for probably over 20 years. So I have a ton of personal experience.

But clinically, I work with people all the time that have anxiety problems, and it manifests differently for different people. So some people it is the gut, some people it's the brain, some people it's trauma, some people it's chemicals and toxins and immune system dysregulation and autoimmunity. So hopefully you and I can tease some of this apart today.

#### Meagen Gibson

Absolutely. And that was what I was going to say. I'm glad you named it. The medical community has made us think that everything that happens in our brains is controlled by our thoughts only, and that's separate from, medically defined, the rest of our body. For some reason, medicine starts at the chin. We've got optometrists and we've got dentists and then whatever happens in the brain, it's completely cut off from the body. And it's a complex system that's constantly working in conjunction with one another.

And so from a functional medicine perspective, I would love it if you can expand on what you were saying before about how complicated it can be to diagnose and treat something like anxiety, because there's so many different causes. And I don't think most people know that there can be so many different systems related to anxiety symptoms.

#### Evan Brand

Well, you have the gut-brain axis. That's an interesting thought. I never thought about that. That medicine starts from the chin down, the neck down. It really does. You get into the thyroid. They'll think about thyroid and anxiety.

So we could start there. We can actually go head down. This might be fun. It's the first time I've done this out of hundreds of interviews. So let me do this on the fly here.

So in the brain, we'll start there. So we'll start north and work south of all the ways that the system can dysfunction and create anxiety and other symptoms, too. Keep in mind, anxiety is just the tip of the iceberg.

So if someone says, "I'm anxious", usually there's fatigue, there's depression, there's hair loss, there's skin problems, libido problems, other mood problems, like bipolar disorder that may be diagnosed.

Or in children, it may manifest as ADD or ADHD. Or if it's autoimmune in nature, it may be diagnosed as PANS, which is pediatric acute neuropsychiatric syndrome, or PANDAS which is associated with strep, meaning that the child has a gut infection that then drives the immune system to attack that strep bacteria.

## [00:04:32]

What happens then, this is very similar to other autoimmune issues, is that the immune system tries to kill strep but by accident it targets the brain, and now this child has brain autoimmunity.

This will create OCD, obsessive thoughts and behaviors. It'll create some type of compulsion, a lot of sensory issues, the children will complain about their pants being too tight or they don't want to wear socks. Even me, I was a kid who wanted the tags cut out of my shirt when I was a kid. These types of sensory issues are usually related to brain inflammation, driven by something in the gut, some sort of infection.

So if we try to start north to south, though, the brain issue itself, you can have brain inflammation due to tick borne infections, which are an epidemic, under diagnosed problems.

So you mentioned before we hit record, you grew up in Indiana. Lyme and co-infections like Bartonella and Babesia, which come from tick bites, are extremely prevalent in Indiana. Same here in Kentucky. Really, east of the Mississippi this is a huge problem. I still see a fair share of people that are sick with anxiety problems that live in California, Nevada, Oregon, the whole Pacific Northwest. There's still tons of ticks, tons of Lyme disease, tons of co-infections there.

So please, if you live in one of these places where supposedly Lyme doesn't exist, it's not true. Lyme is in 50 States. It's in every state.

And because of the food supply and the way people travel and ships travel and products travel, we've spread things. We're even seeing now this new strain called Borrelia Miyamotoi that used to be an Asian strain. Now it's in America. We see people get fresh bites, they show positive from Miyamotoi, probably due to cargo ships bringing contaminated ticks over on them.

So, please, if your doctors try to dismiss your concerns or the potential investigation of Lyme, part of it is due to their medical licensure. They're really only allowed to prescribe a couple of weeks of doxycycline antibiotics, and beyond that they may lose their license if they try to treat you further for Lyme.

And antibiotics are terrible for Lyme anyway. That's a whole other podcast, but the long story short of it is, Lyme can create brain inflammation. If you have had a history of tick bites or even if your mother had health issues similar to you, we often see the multigenerational illnesses like anxiety, your mother could have passed Lyme through the placenta.

Or if your spouse has anxiety or other health issues, the spirochetes, which is called Borrelia burgdorferi, this is a spiral shaped bacteria that causes Lyme, that is also transmitted sexually. You can find Borrelia in the sperm. So if you've had intercourse with your spouse, which you probably have, and they have Lyme, they could have given you Lyme as well.

It also goes through the placenta so we're seeing children 2, 3, 4 years old that are testing positive for Lyme that have never had a tick bite in their life. I'm seeing 5, 6, 7 year old children that have anxiety problems so bad the mother pulls them out of school. And it's not because they're getting bullied. It's because they have Lyme and they have brain inflammation that's driving the anxiety.

So I can pause there. But that's one big smoking gun. That's a huge one that most doctors ignore.

## [00:07:32] Meagen Gibson

And I'm glad that you also named the limitations of conventional medicine to treat, and that there's only so much that they can actually do, because that's important to name.

So moving down and brain inflammation. And I want to pause, actually, just for a minute. And I know that you'll get into this a little bit as well, but any amount of inflammation in the body can create systems of sensitivity in other areas.

So if we've got one infection, it's going to leave us a little bit less, tough is not the right word, but less resilient to other types of irritation or stimuli, whether it be, say... It's allergy season here where I am. We get it really early. And so if there's a ton of allergens in the air and I already have an exacerbated immune system because of some infection, then I'm going to be less tolerable of any other thing that's coming into my system as well. Am I saying that right?

## Evan Brand

This is true. An allergy should not exist. Everyone talks about, oh, outdoor allergies, seasonal allergies. Our ancestors, I don't think were dealing with outdoor allergies. They lived outside. They weren't hiding indoors, which is generally a more toxic environment with mycotoxins and VOCs and new paints and carpet chemicals and ink from the office printer and fluorescent lighting and Wi-Fi and other sources of electromagnetic fields, and dirty electricity and the wiring of your homes, and spray foam insulation and toxic paints and vinyl windows. Indoor air is toxic.

So we're hiding from the allergens in our homes and we're having this trouble when we get outside. The outdoor allergens, they're not the problem. Your allergist is wrong. The problem is your bucket and your mast cells in your immune system is already so dysregulated due to internal toxins.

So that could be mycotoxins, which are basically mold farts that come from water damaged buildings, also an epidemic under diagnosed problems. There's so many water damaged buildings in this country, even the CDC, Environmental Protection Agency, they're starting to talk about mold and saying that over 50% of all buildings have a mold problem.

If you breathe in these mycotoxins, it weakens your immune system. And mast cells are a type of white blood cell. They're full of histamine and tryptase and other inflammatory cytokines and mediators.

Now think of this mast cell like a little balloon. When you're exposed to mold toxin, and this also could be from placenta transfer from your mother. If she lived in a moldy farmhouse she could have given you mycotoxins before you were even born.

And if you were breastfed, you would also get mycotoxins through the breast milk, unless the mother properly detoxed, which is what I teach all my moms that I'm working with. Let's detox you before you get pregnant. Most of them don't because they didn't know about the problem. So then we detox them after which is fine, too, but it's far better because some of these issues cause birth defects and can create autism-like symptoms in children. But if you can catch it before the mom gets pregnant, you're better off. So that's a tangent, too.

But the long story short is, yes, these mast cells, these little balloons that are full of histamine, if they're leaky, this is called mast cell activation, MCAS. You may also just hear the general term histamine intolerance. So people talk about low histamine diets, like don't do leftovers, don't do chips

like corn chips, and tomatoes and peppers and salsa, because these foods, like avocado, pineapple, these are all high histamine foods.

## [00:11:05]

So the goal is if you eat a low enough histamine diet, you should be able to go outside and tolerate these outdoor allergens. But when your immune system is dysregulated due to an underlying infection like Lyme, mold, Bartonella, the system is already so primed, the outdoor allergens puts you over the edge, the bucket overflows you, then get allergies, you go get your allergy medication or your shot from your ENT doctor, all that is typically a histamine blocker.

And guess what that does? That blunts the symptom, but it's not the root cause. And a lot of these medications, they actually deplete and down regulate your body's DAO production. And DAO is the enzyme that actually helps you break down histamine.

So people that have allergies and anxiety, they're in a much bigger problem because guess what? I'm going to tie this back to anxiety because you're like, oh crap, we're getting lost.

#### **Meagen Gibson**

No, I believe in you.

#### Evan Brand

Okay, so here's how we're going to tie it back. Histamine is not just a neurotransmitter for allergy type problems. This is not just an inflammatory cytokine. We hear histamine, histamine, histamine allergies. But guess what? Histamine is a neurotransmitter in regards to anxiety too. So if you have excess histamine, you're also going to have more agitation and more anxiety.

So these are why the people that have Lyme or co-infections or mold, which I've been through all of it personally, you have a higher baseline level of anxiety. It is the histamine driving it, which is why when you take a Benadryl, you get sleepy. When you lower the levels of histamine, you can calm down and relax.

So the people that are constantly stuck in fight or flight, this chronic state of anxiety, they often have elevated histamine levels at a baseline. And then if they do live somewhere where they have a lot of outdoor allergens, the allergens can literally be driving the anxiety even further.

That's the allergy brain anxiety connection. But if we go further south, if I may, then you get into the gut infections, which is like my bread and butter. This is what I've worked on over 1000 cases in the last 8 years. And I've had to branch out into the mold, the Lyme, all this other, more complex stuff because people started to, well, honestly, the population is getting more sick. Even in the last decade that I've been coaching people, people have gotten way more sick. They're way more stressed.

But let's keep going further south into the gut now. So if you have dysbiosis, some people call it SIBO, some people call it SIFO, this is small intestinal bacterial overgrowth, or this is small intestinal fungal overgrowth. You can have both at the same time. Most people do.

You can have parasites, you can have H. pylori, which I put in its own category. Helicobacter pylori, this is a bacteria that over 50% of the world population has. It's extremely contagious. You can pass it

to your children by kissing, sharing cups, sharing spoons. You can easily get it from your spouse and you can reinfect each other.

## [00:13:50]

H. pylori is a massive driver of anxiety. I told you before we hit record, I did a podcast on it this morning and one of the guys commented in the live chat and he said that when he did his stool test, he had anxiety and fatigue, he did a stool test, as we recommended, his calprotectin, which is a measure of gut inflammation. This is a widely recognized biomarker even in conventional gastroenterology. His marker was over 1000. Less than 100 is optimal. This guy was over 1000 and he had H. pylori and his anxiety was through the roof.

And that was my story too. When I lived in Austin, Texas, in 2013 through 2015, I lost 25lbs without trying. I thought I had cancer or something. I was anxious all the time, I was irritable, I was depressed, my skin was a wreck. I had H. pylori. I also had parasites. I had cryptosporidium, which we see a lot of, this is a waterborne parasite. And I also had Giardia.

So once again, if your tropical disease doctor says you haven't been to Bali or Mexico, there's no way you can have parasites. Once again, they're wrong. And the reality is we're all international travelers just based on our food supply. Look at your pineapple from Costa Rica, your strawberries from Mexico, your blueberries from Canada, your grass fed ground beef from Brazil, we're all international travelers now.

So this idea of you didn't go to this exotic place, there's no way you could have these parasites, completely incorrect. I see parasites every single day in the clinic. We do this via stool testing. So I work virtually. So we send the lab test to someone's door. They poop in the tray, scoop it in the tube, get it back to the lab, we look at the DNA of it and we get a report. I see parasites all around the world, so it's not rare at all.

Now, the reason that parasites and bacteria and worms and Candida and all of these drive your anxiety is multiple mechanisms. So Candida, specifically, women think Candida, they think yeast infection, but you can have Candida in your gut microbiome too. And you can also have thrush, or you have Candida oral. So you can have oral Candida, you can have Candida in the sinuses, you can have it in the vaginal tract. Itchy butt, itchy anus, that could also be Candida.

But what Candida does is pretty unique. It produces a toxin called acetaldehyde. It's very similar to an alcohol molecule. This is why a lot of women that have this, they may have yeast infections, they may have brain fog, they also may feel drunk, they may feel a little bit tipsy, or they get drunk really easily. If they have half a glass of wine, they're toast. Now, some of that is due to the histamine intolerance if they have gut issues, but some of it is due to the aldehydes produced by the Candida.

Then moving on to bacteria, these produce endotoxins, or what are called lipopolysaccharides. These create leaky gut that then opens up your intestinal tight junctions. Now undigested food particles can get into your bloodstream and create more brain inflammation, more brain inflammation creates more anxiety.

So you see how this whole thing gets out of control when you have a combination of tick bites, mold exposure from your college dorm, and you had a few sexual partners so now you've got H. pylori, and then you got put on birth control pills so your hormones are dysregulated, which also can cause anxiety. And then not to mention, let's say you had a virus and that threw everything off, too.

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When people are looking at this issue of anxiety, hopefully today, you and I are just showing this is a huge spider web. And it's not just go take the benzodiazepine. It's not just go take the anti-anxiety supplement. It's not go for the ashwagandha, the passion flower, drink a double bag of chamomile tea. That's cool, but you've got to uncover what the heck this actually is because it could be 4 5 6 7 8 different triggers. And if you fully want to beat this, you got to find them all, and then you've got to fix them all.

## Meagen Gibson

Well, I've got to tell you, just speaking for anybody at home, I'm a little overwhelmed, Evan. How do we start? Because I related to a lot of the different things that you said. I just anecdotally have been on a nightshade free diet for a year and a half, not related to anxiety, but have noticed anxiety benefits from it and for other reasons.

But I totally get it. And I know if I've been, what I call contaminated, I know immediately because my histamine level gets all exacerbated. So I know how sensitive that can be and how helpful it is to eliminate some of this stuff.

But for somebody at home who's listening and is overwhelmed, where do you begin? How do you even know where to start? Especially because a lot of people experiencing anxiety, if they let it go too long, can feel like they're in a real crisis, so where do you start?

## Evan Brand

Well, and the trouble is, too, that it's like this vicious cycle, because now the anxiety is creating stress, that stress is creating a cortisol response, cortisol is a catabolic hormone, all that's going to do is further weakening your gut barrier, the cortisol is further going to impact your brain.

There's been studies done on cortisol in the brain and the impact on the hippocampi. So technically, you have two hippocampus, so they call it hippocampi. This is the part of the brain that's responsible for the conversion of short-term to long-term memory.

So now with this anxiety problem, now it's spiraled into something else because of the stress and the fear of that illness. Now you don't remember your best friend's name. Where did you put your keys? I lost my phone, I lost my wallet. And then your scatterbrain. So then you start worrying about your work performance. Now I'm going to lose my job because I can't focus anymore. My boss is going to fire me because I forgot this or that.

So I want people to understand that finding and fixing these causes is not just important for the symptom, but it's going to make you a better mom, a better wife, a better spouse, a better worker, a better boss, entrepreneur. I work with a ton of high level people, lawyers and doctors and dentists and other people that want to be on top of their game and they can't because they're held back by this.

So first step, well, you've got to get the proper testing done because I'm fine to give you a supplement recommendation. I've got a professional product we have called GABA Chews. So GABA, that's your calming neurotransmitter. Many people may be familiar with synthetic GABA. It's not very good. The molecule is too big to get across the blood-brain barrier. So you'll often see high doses, like 750mg of GABA is generally what you'll see on the capsule.

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You shouldn't need that much. GABA is pretty potent at low doses. But if you're using a naturally fermented product like we use from probiotics, and you make GABA from that, you can use a less dose. So we have 100mg or 200mg version and it works far better.

So you can chew it up and it's like a chill pill. Within 5 minutes, it's going to settle you down because GABA is basically the brakes of the nervous system. People think of dopamine this go, go, high energy lifestyle. They're doing caffeine, they're doing stimulant medications. That's one thing we'll mention, too.

Side note, if you're on Adderall, Vyvanse, any other sort of methamphetamine derivative, duh, that's going to cause anxiety, you've got to get off it. We can find other ways to support your brain. We can find other ways to stimulate brain function and work on acetylcholine and support some of the other brain chemicals that are involved with the mood and the memory and the cognition.

But if you're on a stimulating medication like Vyvanse and you've got anxiety, I'm sorry, but that's low hanging fruit. What the heck are you doing? You've got to get off of that. Maybe your doctor didn't educate you on this, but my God, if you're doing a cup of coffee and a Vyvanse as your breakfast and you're not eating a good protein to stabilize your blood sugar, holy crap, of course you're going to be anxious.

So where do you start? Well, testing is step one for me because I'm generally working with people that have been the 5, 10, 15 practitioners before they see me. They're desperate, they're at the end of the rope, they're begging, pleading for help. And I could give guests some check recommendations like the GABA chewables that I make, but at the end of the day, I've got to figure out why have so many other people failed? Why are they still suffering? What got missed?

I'm not doing a ton of labs, but I am generally running at least an organic acids, which is a urine test where we can look at your mitochondria, we can look at your gut bacteria, we can look to see if you're colonized for mold. Meaning are you growing mold or did you just have an exposure? We can determine that based on your mycotoxin test, which is run via urine. Do you have the mold farts, the mycotoxins, or do you have the mold growth? Some have one or the other. Some have both.

If you have both, it's a harder situation because now you've been exposed to so much mold for so long, now we have to squirt antifungals, I use herbs, I don't use drugs, but we have to use antifungals and squirt those up your nose to treat the colonization up in here. Because look how close your sinus cavity is to your blood-brain barrier.

This is why with the virus, people lose their sense of smell. It's because of the inflammation in the sinus cavity goes into the olfactory nerve. Same thing with mold colonization. If you have colonization of fungus or Candida in that area, you're going to have a lot of brain fog.

So we've got to measure that. We can do it with urine. We measure the metabolites in the urine. So that's step one. It sounds like a lot, but it's easy. You wake up, you pee in a cup.

So we can get the OAT test, and we get that on one cup of pee, and then we do a stool, and we use a DNA based stool company. It's one sample. Poop in the tray, scoop it in the tube, get it back to the lab. Done. That's easy, also.

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With those three pieces of data, you can uncover hundreds of different possibilities of dysfunction, whether it's deficiency in glutathione, low amino acids, low dopamine and serotonin, which could also create anxiety. All these gut infections. We're talking about parasites, worms, you name it. It's all there. So that's a very simple starting place.

Now, in the meantime, hopefully someone is doing things like you. They're already on autoimmune, a paleo-ish diet, they're doing no grains, they're getting rid of nightshades, hopefully they're eating good animal proteins with each meal. At least doing maybe some eggs or some collagen or some ghee or some organ supplements. You've got to do something.

The most suffering clients that I've seen that don't get better from anxiety are vegetarians and vegans. And this is not even up for debate. I'm not dogmatic about it. I just tell you straight up what I've seen. I've worked with over a thousand people in the last 8 years. The people that get better from anxiety are the people that have some sort of animal protein.

Now, the people that come in and try to supplement with pea protein and avocados, and some of that, they can do a little better because you are still getting good protein and fat to stabilize the blood sugar, but overall there's something special about the animal proteins, even if it's just some good organic pastured eggs that we can get in someone. If they can at least work with us and do that, they're generally going to get better faster.

And I haven't fired many, but I've fired a few clients because they keep coming back and scheduling calls and saying, hey, I'm not better, I'm not better, I'm not better. And what did you eat for breakfast? It's beans, it's rice, it's bananas. I'm like, okay, you can't live on bananas and rice. You got to have some good quality protein.

So you can look at Weston A. Price's book, Nutrition and physical degeneration. He traveled the globe in the 1920s via ship. He looked at many of the tribal hunter gathererish societies. All the people with healthy teeth, all the people with no chronic disease, no anxiety, no blood pressure, nothing, they all had these animal meats.

So these are a very key foundation in my life, my kids. And it's a significant help. So I'm sure some vegetarian, vegans are listening, they're pissed now. Their like, everything Evan has already educated me on goes out the window now because he's pushing animal protein. If you're highly biased right now and you don't have clinical experience, just put your biases aside right now and just put that little mini pro meat rant I gave, put it aside right now because there are still other things I'm going to educate you on.

#### Meagen Gibson

Now I want you to keep going because I feel like they're all waiting with bated breath.

#### Evan Brand

Sure. So let's get into some of the solutions. So we talked about stabilizing blood sugar, we talked about some of the testing, so getting your stool, getting your urine looked at.

#### [00:25:52] Meagen Gibson

Actually, I don't think we did talk about stabilizing blood sugar, unless that's the organ, meat, egg part of what you're saying. I just want to make sure we're explicit.

#### Evan Brand

Sure. So there is an adrenal component to your blood sugar. And I know when I went down to Texas, my wife was down there with me, that was before we had kids. It was a new job, tons of stress, new environment. That adrenal stress alone significantly dysregulated my blood sugar, even though I was eating three meals per day.

So I want people to understand that there is a connection between your adrenal stress, that lifestyle, day to day hustle bustle stress, and blood sugar. I'd wake up 2/3am in the middle of the night, some argue that's a liver symptom, some argue it's adrenal, some argue it's blood sugar. It's probably a combination of all of it. Your liver and your adrenals are involved in blood sugar regulation.

And so many people may have been to naturopaths or other practitioners, they may have done adrenal salivary testing or other hormone testing to measure their cortisol function. And they may have been treated with specific adaptogenic herbs like licorice or Holy basil or Cordyceps or rhodiola, which are all amazing adaptogens. I've used those for a decade. Those are great, but you can't just supplement your way out of that.

If you're working 60, 70 hours a week, you're going to be screwing up your adrenal system and your blood sugar. You're just not designed for that. When you look in hunter gatherer societies, tribal cultures, on average they worked about 18 hours a week.

So we're not designed for 60, 70 hours. That's just not what we've done in human history. And we certainly didn't eat our meals in a rush with AirPods blasting us with radiation while we listen to a podcast, while we're chewing our chipotle bowl as fast as we can so we can hurry up and get back to work. It's totally not natural.

And we're designed to be in a parasympathetic mode the majority of the time. We'd have these sympathetic stressors, you're going to go try to kill a bison, a Wolf is coming to steal your child. These real survival instinct adrenal stressors were a real thing, but they were limited compared to what we experienced now in the chronic form of stress, where at any moment right now you could get a text message, that's why you've got an Apple watch on, any moment, which I think is a bad idea due to the EMF.

If you measure those with an RF meter, which is another driver of anxiety, an Apple watch puts off about 2 million microwatts per square meter. Compare that to a cell phone tower. If you're looking face to face at a cell tower, they're putting off about 900 to 1000, depending on your distance, around 1000 microwatts per square meter. An Apple watch is around 2 million.

So I have some clients, all we do is tell them is quit doing wireless technologies. Get rid of your Wi-Fi, get rid of your Apple watch because it still emits RF, even on airplane mode, I've tested it. And get rid of your AirPods. And sometimes anxiety goes away there because they've had mast cell activation. We talked about earlier how the mast cells get activated due to Lyme, Bartonella and mold. Well, these mast cells, these are basically environmental regulators.

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So these mast cells, not only do they react to histamine from your food, they also react to other pollutants and toxins such as electromagnetic radiation.

So I had one woman in London and she was very histamine intolerant, extremely limited, she could only eat about three foods, and she was so sensitive to WiFi, she was basically on the verge of a divorce because her husband worked in the city, she had to live in the countryside where there was no cell phone service, basically. There were no towers or anything nearby.

And once we fixed her gut, all the SIBO we talked about earlier, those bacterial infections, those bacteria produce all sorts of different toxins, but they also can elevate your levels of histamine.

So here we are back to the allergy thing again. If you've got gut dysbiosis, your histamine bucket is already so full, you can't handle the outside allergies.

So anyway, we fixed this woman's gut. She did have mold toxicity as well, so we treated that, we fixed her home, and now she could go back into the city and she could tolerate the Wi-Fi and the cell phone towers. I'm not telling her, hey, go do Apple AirPods and do an Apple watch now, but she could at least tolerate the city to save her marriage and travel with her husband again.

So there's many canaries in the coal mine out there right now. And there's a lot of people that are not sick enough to believe what I'm telling you. And they have to hit rock bottom to believe the things I'm telling you.

I've had some clients that are so sick, anxiety is part of their, I guess you would call it a sequelae? Is that the right word? Sequelae of symptoms? Anxiety is part of it, but as I told you earlier, it's the tip of the iceberg. And underneath that is the mast activation, it's the histamine intolerance problems.

We had one client in Greece, it was a woman, and she had major anxiety. She was housebound because of the anxiety. Her EMF sensitivity was so strong. I'm using wired everything. This is an air tube headset. So this is a rubber tube that goes to my ear. This is a hardwired microphone that goes to a USB, which is hardwired to the Ethernet, which is hardwired to the wall with a hardwired mouse. So completely no RF in this house, there's no wireless anything except for the phone. We do use a cell phone.

But anyway, this woman in Greece, she was so sensitive, but the anxiety was being driven once again by EMF.

And I just did a new podcast recently with one of the, probably the top medical docs in the world for this type of sensitivity, EMF, mold, Lyme. He's written several books on it. His name is called Dr Neil Nathan, but we did a whole podcast on it.

And for years, he's been saying mold and Lyme are the drivers of these types of issues, but now he's believing that EMF alone can be a single causative factor in these types of disorders.

And this client in Greece, her husband, had to make a wooden keyboard with little pegs on it. And that wooden keyboard had to sit on top of a real wired keyboard. Even the wired keyboard was too strong for her. She had strong reactions. It would crank up her anxiety and she would have burning sensations in her hands. It was almost like a neuropathy.

## [00:31:45]

So she showed me this setup and it literally made me cry because here she is trying to type her emails to me to reach out for help, and she's got little Sharpie markers written on these little pieces of wood that are pegging on the physical keyboard.

So there are countless people like this in the world right now when we're recording this in 2022, they have no answers to these problems. And the unfortunate part is, in general, they're being dismissed.

So I encourage people, if you are suffering from anxiety, I want you to take this seriously. And I want you to try to start investigating this now because you don't want to end up like the people that I'm seeing where they're literally knocking on death's door, they're on their deathbed or they're bedridden or they've lost their job or they've lost their marriage because of their illness, because their spouse thinks they're crazy.

And if you're listening to this and, it's generally men that are the problem. So women usually come to me. It's probably 89% of my practice is women. 10% of men admit there's a problem. The other 90% are usually in some sort of denial or maybe they're lucky and they truly don't have an issue.

But so many marriages I've been able to save if I can get the husband on the call. Because he's Mr. Macho man, he's going to do his alcohol and his pizza and he's fine, and the wife is crazy, and your little stupid diet thing with your salads and organic this and organic that, it's a joke. And I don't need to do that, I'm fine, I'm Mr. Tough Guy. And then he'll die of a heart attack at 55 years old and he was perfectly "healthy" up until that point.

So those men, if they are listening, I want you to know your wife is not crazy and the issues she has are not in her head. And so if you're going to continue to believe those things, then maybe you need to live alone. Maybe you need to just separate if you just can't get over the fact that it's not in her head, she's not crazy.

Because then I'm the emotional support. I'm trying to do the functional medicine, but then part of it is like me being a therapist. Because now the women are crying to me, hey, my husband thinks I'm crazy. He's not supportive. I have some women that are opening up separate credit cards, this is also driven by anxiety. How is this all tied into anxiety? I promise I'll make the connection.

They're getting separate credit cards just to buy these lab tests and supplements because if their husband finds out, they're going to get in a huge fight. So here they are trying to get themselves better. Think about how much anxiety that is to have a spouse that doesn't support you or doesn't believe you.

You talk about something that makes me mad. That's something that makes me mad because you have people that are desperate trying to get help, seeking answers, trying to fix their diet, trying to get better sleep, go to bed early, get rid of blue light, reduce EMF, fix the gut infections, treat the mold, treat the sinuses. And here they are living with someone that doesn't believe their issues are real. That's crazy.

So I'll pause there. I know I've been on a long rant.

#### [00:34:28] Meagen Gibson

That's alright. And I do want to touch on IBS specifically as well, because I know you have personal experience with it. And I have a family member who's suffered from IBS for the better part of 30 years. And a lot of that, 30 years ago when that started, there was basically no understanding of it and a lot of it must be in your head and downplaying of all those symptoms, which can be incredibly isolating and still is, for that matter.

And so if you could speak to the anxiety loop that happens with that as well. That you're trying to manage your symptomatology, and then it's affecting your ability to work and your ability to socialize and all of the things that come in with that and exacerbate one after another. And if you go to a doctor, they're going to definitely throw medicine at it first and foremost.

#### Evan Brand

Yes. I was diagnosed with IBS over a decade ago. That was one of the first diagnosis that I was given based on my gut issues. I had stomach pain, I had alternating constipation and diarrhea. When I was in business school, the first thing I did when I would enter a new hall is figuring out where is the bathroom because I might have to run and go poop in the middle of class.

And I just changed my lifestyle to accommodate my illness. And many people do that. They'll stop exercising because they have post exertional fatigue. Or maybe they'll stop having sex because every time they have sex, they get a UTI or they have some other issue. Or maybe they stop hanging out with people because the anxiety is so great.

So a lot of people, they do, they modify their lifestyle to accommodate their illness. And I don't want them to do that. And you shouldn't have to do that.

So when it comes to IBS, once again, just like allergies it's a bad diagnosis, really. And what I mean by that is IBS is like, it's idiopathic, hence the word idiots built into the word idiopathic or idiots, we don't know. We don't know what the heck it is. We're going to label it something because legally, at least here in the US, legally a constellation of symptoms has to have a term so that you can legally prescribe a pharmaceutical.

So you can't just come in and give the antispasmodic and the acid blocking medication, which are the two most commonly prescribed meds for IBS. You can't do that unless you name it. So you can't just come in with diarrhea, constipation, stomach pain, burping, belching, bloating, fatigue, anxiety. You can't come in with that constellation and just go home with a drug. It's got to have a name, so you got to give the diagnosis. So Big Pharma is part of the problem, too.

And once again, you take the acid blocking medication, guess what's going to happen? You're going to reduce your stomach acid levels even more. So if you came in with IBS, and part of that IBS was heartburn, you're going to take what's called hypochlorhydria. Hypo meaning low, just like hypothyroid means low thyroid. Hypochlorhydria means low stomach acid.

Dr Jonathan Wright did a book in the 80s called, *Why Stomach Acid is Good For You*. He did what's called the Heidelberg Probe, where you can measure the levels of stomach acid. They decrease with age. By the time you're 40, you're making maybe half of the HCL that you made when you're 20. When you're 60, you're making hardly any.

## [00:37:43]

Now, hydrochloric acid is very important. This is why a turkey vulture can eat a dead deer on the side of the road and not get sick. It's because they have an extremely acidic, one of the most acidic stomachs on planet Earth. They can eat anything and not get sick from it. That is what our gut is supposed to be, is highly acidic.

Not saying your body. All the alkaline water drinking people are saying, oh my God, he's so wrong. You want to be alkaline. No, this is not what we're talking about. We're talking about the gut. We're talking about the stomach. It's supposed to be highly acidic around a PH of 1.5. So much that if you could open a hole in your stomach and pour it on your shoe, it would melt your shoe. That's what's supposed to happen.

Now, what this HCL does is, it's a protective mechanism. It's a natural antimicrobial. So what it does when you go and you eat sushi with your friends, it's going to kill the parasites, the bacteria, whatever is growing. It's hopefully going to kill the pathogens that you get exposed to from the water. Like for me, when I had parasites, obviously my HCL levels were lowered.

Now, if you already have an infection like we spoke about called H. Pylori, the mechanism is it damages your parietal cells. These cells secrete stomach acid. And so if you have that infection, your stomach acid levels are already low. But guess what? It causes heartburn. So you go to the GI doc for heartburn, they put you on the PPI, they take your low stomach acid, they lower it even more. Now you've got this very alkaline gut. Next time you get exposed to something, it has nothing to kill it off.

So now you're going to develop a more systemic infection like staph, strep, klebsiella, Pseudomonas, Morganella, blastocystis hominis, cryptosporidium, Dientamoeba fragilis. You've got all these others, protozoa and worms and bacteria that can now thrive in your gut because your stomach was not acidic enough to kill the infection off.

So then what happens is you get nutrient deficiencies. Because now, think of it as a digestive fire. That digestive fire has been turned down, maybe not turned off completely, but it's been significantly turned down by the combination of infections and medication.

Once the stomach acid levels are low, now you go and you eat that grass fed steak I told you to eat, but you're not going to be getting all the ribose and the carnitine and the B vitamins from that because you don't have enough power to digest that.

So then these are the people they claim, well, Evan, when I eat red meat, I feel worse. Or when I eat meat in general, I feel worse. Well, it's not the meat that's the problem. Humans, we've been eating meat for hundreds of thousands of years. It's not the meat that's the problem. It's your reaction to the meat that's the problem. That's happening due to your gut. So don't blame the meat. It's your gut.

So if we fix that, you're going to be better. But let me tie it back to anxiety. So you see this recipe of IBS diagnosis, proton pump inhibitors, gut infections. Now you're trying to eat nutrient dense foods, but the malabsorption is happening. So now you don't have enough amino acids that are being cleaved off of the protein. So proteins, like an animal protein, that's broken down to amino acids. These are the raw building blocks that help build neurotransmitters.

So when we talk about dopamine, we talk about serotonin, those come and are created in conjunction with vitamins like B6. We mix amino acids with vitamins that are produced in our gut, like

your intestines make B vitamins. People think you need a B complex to get B vitamins. No. If your gut is healthy, you're making your own B vitamins in your intestinal tract. Of course, that gets disruptive with what we're talking about. But hang in there. I'm almost to the point. I'm almost to the kicker.

## [00:41:06]

The malabsorption creates nutrient deficiencies, so now you don't have enough nutrients to actually make brain chemicals. So now 90 plus percent of your serotonin is made in your gut. So now you're not making adequate levels of serotonin. So guess what? Now you're anxious.

So then your GI doctor refers you back to the psychiatrist who put you on the benzodiazepine or the other anti anxiety med. Now you're on proton pump inhibitors, antispasmodic drugs for the diarrhea, antidepressants and antianxiety medications and you wonder why you feel so bad.

#### Meagen Gibson

Absolutely. And I'm so glad that you named the serotonin made in the gut. Anybody who ever says that gut problems are in somebody's head is not understanding that delicate system at work and how much one has to do with the other.

#### **Evan Brand**

Yes, the gut-brain axis. It's called the gut-brain axis. It's this two way communication.

#### Meagen Gibson

Yes.

#### **Evan Brand**

So everything that happens in the gut communicates to the brain. The brain communicates to the gut. And the anxiety can affect the gut, too. So if you have this constant negative self talk, you're doing this monkey brain stuff, that can also influence the gut, too.

And then we didn't even mention chemicals. So glyphosate, if you're not eating 100% organic, you're doing yourself a disservice. Now, we're even looking at this in bees. We're finding that, of course, bees that roam an average of 3 to 6 miles from their hive, let's say the bee goes to your neighbor's yard who they just treated because they want it to look so pretty and they don't want any weeds in it, like dandelion, which is a very important first food source in the spring for the bees.

If that field was treated with glyphosate, which it probably was because that's what all these commercial companies use, you'll see things like weed and feed this grass seed where you're feeding the grass, but you're weeding it. And that's a combination of extremely toxic pesticides and herbicides like 2,4-D and dicamba and others.

Formulas change and different brands have different ones, but any of these pesticides, even if parts per billion, they damage, not only the bees microbiome, which is why we're seeing 50% to 70% of our bees dying every year due to colony collapse disorder. Part of that is due to the insecticides.

And Albert Einstein said, when the bees all die, humans have 4 years left because they pollinate roughly 70% of our produce. So we're seeing the damage to the bees, somehow we're not

recognizing the damage to ourselves. But the point is, even parts per billion of glyphosate has been shown to damage lactobacillus and other strains of beneficial bacteria in the gut.

## [00:43:44]

We just talked about a minute ago how beneficial strains of bacteria are required to manufacture B vitamins. And B vitamins are a key co-factor in the Krebs cycle. The Krebs cycle is one of the ways that your mitochondria, which are the powerhouse of the cell, you probably remember that from maybe a long time ago, but the mitochondria require adequate levels of B vitamins to produce ATP, which is your energy currency.

So think of that old laptop you had that had to be plugged up all the time because the battery was shot. That is the modern human. We all have weak and damaged mitochondria due to many things. Chemical toxins is one, heavy metals is another, mycotoxins is another, gut infections is another. But some of it is simply due to these nutrient deficiencies.

And guess what? When you're stressed on top of all this, you're burning up those B vitamins. So even if you're making some B vitamins, if you're super stressed and working 60 hours a week, you're going to burn through all of that.

So I know I've said a lot, but hopefully people are starting to grasp the picture of how this domino effect happens. We didn't even get into when the stomach acid levels are low, now your gallbladder doesn't release stored bile.

And think about all the people listening that have had their gallbladders removed. So now you can't digest your fat soluble vitamins. So now you end up with skin issues, you end up with immune problems, you end up with osteoporosis now because you've got low vitamin D, you've got low vitamin A so your skin is a wreck. And so people go and get emergency gallbladder removal surgeries and they're not warned about the downfall of the digestive system.

Your liver can still make bile, so your liver makes it. And then your gallbladder concentrates it by a factor of about 10 X. So if you get your gallbladder removed, you can still survive, but you're not going to thrive. Now, this isn't, for the people listening don't freak out if you don't have a gallbladder, you can supplement. We can try to replicate that system, but if you can save your gallbladder, that's a far better situation.

#### Meagen Gibson

I think we could talk for hours, but I'm conscious of the fact that I want to keep time limited and respect people's time as they're watching. So how can people find out more about you and your work?

#### **Evan Brand**

You could just look up <u>evanbrand.com</u>, that's my primary hub. I've got a podcast. I've put out an episode every week for over a decade. So there's over 400 something episodes there. It's all free content. So if you want to dive in.

I have these exact conversations. If this went over your head or blew your mind, just replay it and then check out other ones. Because I talk like this every week. So eventually this will be your language. If I'm not speaking your language yet, this will be your language soon enough. So hang in there.

## [00:46:20]

I do work clinically. I'm usually booked out for several months. I do have another functional medicine practitioner on my team, but either way, we can help. We do worldwide consults if you need help.

The best place for people to get help is probably the functional medicine training courses that I've created. Acupuncturists have taken these, medical doctors have taken them.

I had a medical doc, GI doc of all docs, for over 20 years. And she told me that the Better Belly, which is my flagship gut health course, she learned more in that course and she learned in practicing gastroenterology for 20 years. And that's actually cool, but that's actually scary.

#### **Meagen Gibson**

I was going to say, what a compliment but at the same time yee.

#### Evan Brand

That's pretty scary because I'm not a medical doctor by form of training, I went into functional medicine, and so for me to hear that from someone who's been treating patients for 20 years, it's like, my God.

So if people want to learn how to run labs, how to interpret their labs, how to take back the power, there's this power structure where people just bow down and do everything the doctor tells them. I think that the tide has definitely shifted. I think people are fed up with the conventional system. But people can still do so much more.

So if you want to learn this stuff you can take my course. It's called Better Belly Functional Medicine Training. It's for regular people but it's also for practitioners. I've had acupuncturists take it as well and integrate it into their practice.

I'll show you case studies. Here's Sarah, she had anxiety for 20 years. Here's what her stool test looked like. Here's the problems. Here's her urine test. This is why she has anxiety. Here's her brain chemistry. Does your brain chemistry look like this? Oh, it does. Okay, so here's the protocol we did for her and this is her result and this is her follow up labs and look how much better she looks and here's how much better she feels.

So if you want to see that, check out the courses. Those are on my site too. I have a business course too but it's not out yet.

So there's a Better Belly course, there's a Better Energy course about chronic fatigue and then there's a Healthy Home course where I give you a glorified house tour, teach you about mold, proper building materials, safe paints, safe flooring, why you should get rid of carpet, why you should get rid of Wi-Fi, why you need a whole house water filter. That's all in that too.

#### Meagen Gibson

All right. Evan brand, thanks for being with us today.

# [00:48:27] Evan Brand

Thanks for your time.