

Episode: How Inflammation Can Impact Migraine and What You Can Do

Lindsay Weitzel: Hello everyone, and welcome to HeadWise, the weekly videocast and podcast of the National Headache Foundation. I'm Dr. Lindsay Weitzel. I'm the founder of Migraine Nation, and I have a history of chronic and daily migraine that began at the age of four. I'm excited to be here today with one of our repeat guests who we know and love.

This is Dr. Amelia Barrett. Hi, Dr. Barrett, how are you today?

Amelia Barrett: Hello there. So good. Thank you for having me here.

Lindsay Weitzel: Well, thank you for being here. Dr. Barrett is a board-certified neurologist and the creator of the Migraine Relief Code, which is an online course for people with migraine. She knows a whole lot about things having to do with the natural treatments of migraine, and we love having her on. She always has very exciting things to say. And today we're going to talk about the link between leaky gut, probiotics, prebiotics, and things we can do for our gut and why on Earth that has anything to do with our migraine disease.

So we have lots of questions for Dr. Barrett. So let's just start with what is leaky gut Dr. Barrett?

Amelia Barrett: So, leaky gut refers to changes in your intestines that allow inflammation to come into your body. And we all know that inflammation is part of the problem in migraine. So when we have more inflammation coming into the body, that can actually increase our migraines.

So what's happening in leaky gut is that there is something that changes the inner lining of your intestines, some kind of damage. And there are many, many different things that can cause that damage. But the end result is that instead of being a tube like this, with cells lining the tube that are right next to each other, that internal damage makes the cells become leaky like this.

So then substances can leak out from inside the intestines to outside your body, and your immune system is very smart. It knows that stuff does not belong there. So your immune system reacts. And when your immune system reacts, it creates pain generating chemicals. And those chemicals go to the head. They're taken up by the trigeminal nerve, transported back to the migraine generating centers in the brain, flips the switch, and there you go. You've got a headache or a migraine.

Lindsay Weitzel: I love that explanation because I think so many people just sit there and wonder when we see things coming across online, etc., or someone's telling you to take better care of your gut or do this or that for your gut, and you really wonder, what on earth does that have to do with this constant head pain that I have. And so an explanation is really great. And I think we can't hear it often enough.

So, if someone with migraine has a leaky gut, can this affect the absorption of like our headache medications for example?

Amelia Barrett: Yeah. It does. Leaky gut is known to affect our ability to absorb not only our headache medications, but also the vitamins, the minerals, the nutrients that our body needs to perform the way it's meant to. So let me just show you an image here real quick of what is going on in the gut, so you can really visualize how that would impact the absorption of both medications and nutrients.

All right. So here is a normal lining of the gut on the left and leaky gut on the right. So what we've got here is that these cells on the left that look like they have fingertips on them are connected to your bloodstream. That's what the red thing is with the cells in it. And so you can see those cells are right up against each other, functioning the way they should.

The nutrients, the medications come in through those cells and then are transported to the bloodstream. Now what happens in leaky gut is we have these abnormal food particles. That's what these little brown bits are. They're food particles that aren't digested the way they should be. And they cause damage to the lining. That is where these little fingertip-like extensions are.

There's a lining in the gut there. When that lining gets damaged, then these food particles can come right through in between the cells. Now your immune system will react to those food particles, but you can't absorb nutrients directly through those pathway. So all of that absorption has to come through these little, the epithelial cells, they're called with the little fingers on them.

And so when that doesn't happen, that's when the nutrient absorption is impaired. And then because those food particles are getting through, then that's where you can see how easy it is for the immune system, which is in the bloodstream there, to fire off the pathways that result in pain.

Lindsay Weitzel: Okay. That is a great, great visual. Thank you for that. I think that's very helpful. I think we can all remember cartoons and visual things to help us understand what's going on. There are a few things we can do to improve this problem. Some of them are more accepted by conventional medicine. Some of them aren't. Can you talk to us about one or two of them?

Amelia Barrett: Yeah. So, for many people figuring out which foods your body is reacting to is incredibly helpful. You can get these kits over the counter these days. So I really feel like that's incredibly empowering information for people to have access to, because they can figure out what their body is reacting to in the here and now. Food sensitivities don't stay the same over time. So getting updated information about where your body's at right now can really help.

And then the second thing people can do is take probiotics. Now this was actually studied in a randomized double blind controlled trial that was published in 2019 in Cephalalgia. And what they showed is that people who took probiotics actually had fewer migraines and less severe migraines than people who did not. So I find that to be incredibly empowering information too, because probiotics are widely available both in food and supplement form. And, you know, if we can help fix one of those

hidden causes of migraines in such a simple way, that really has the potential to change lives. So really good information that we got from this study.

Lindsay Weitzel: So when we read about probiotics, we read that there's prebiotics, probiotics. What are prebiotics and how are they different from probiotics? And do we need them?

Amelia Barrett: Yeah, that's a really good question. I love that. Because the words sound so similar it's confusing, right?

So probiotics are basically good bacteria. We have heard of good bacteria and bad bacteria in the gut. Probiotics are the good ones. They do several things that help maintain that healthy lining in the gut and have other effects on our body as well.

Now, prebiotics are basically food. It's food for those good bacteria living in your gut. So that's why prebiotics are an important part of taking probiotics. Because as you can imagine, if you put a bunch of new bacteria down there and they starve because they don't have any prebiotic food, then they're not going to do nearly as much good.

Lindsay Weitzel: Okay. Is there anything else you would like to add? Anything, other advice having to do with leaky gut so that we can help fix this one particular problem related to making our migraine issue worse?

Amelia Barrett: Yeah, I think that I just want to reassure people that there is a lot of data that this process actually exists. I feel like there's still, you know, there's still some skepticism. There are differing opinions in this field, but I just want to really reassure people that I personally, in my practice, have seen this be an absolute game changer for people.

I was just working with somebody recently who was having headaches every day. We fixed her leaky gut, and then we had a follow up phone call, and she was almost annoyed at the inconvenience of having to have the phone call because she was doing so great, you know? Oh, I'm fine. Don't bother me. I'm good. I got my life back. Things are great.

So I just want to really reassure people that for the right person, if this really is one of the bigger causes of your headaches, treating can be a game changer.

Lindsay Weitzel: Wow. Okay. Well, this is a very interesting episode. Very different from a lot of the stuff we talk about, and I hope that everyone found something interesting to listen to. Thank you for joining us, Dr. Barrett. And thank you for listening in everyone. And please join us again next week on the weekly videocast and podcast of the National Headache Foundation.

Bye bye.