

Chronic Inflammation: An Underlying Theme in Many Health Conditions

Brendan Vermeire, FDN, CPT



Rebekah Kelley: Welcome to the Humanized podcast, all about personalizing your health. I am your host, Rebekah Kelley. We have a great guest today, Brendan Vermeire, and the subject is Neuroinflammation: Why the Uprising Mental Health Pandemic and What You Can Do About Neuroinflammation. But before I introduce Brendan, I want to remind everyone to subscribe, to get all of our variety of casts in audio, video and transcription at HumanizedHealth.com. I'd also like to thank our lead sponsor, Village Green Apothecary, at MyVillageGreen.com.

A little bit about Brendan. He is a functional medicine consultant, clinical researcher, board certified holistic health practitioner, master nutrition coach, master personal trainer, USAW Sports Performance Coach, and CrossFit Certified Trainer. Brendan is regarded as one of the top leading experts in metabolic health and holistic education. He is a proud owner of the Metabolic Solutions Institute, dedicated to educating health professionals and clinicians with cutting edge strategies to best serve their clients and patients.

Brendan, thank you so much for being with us.

Brendan Vermeire: Thanks for having me, Rebekah I love having these conversations to educate and empower people so they can take back their health. And I really think that's never been more needed than it is today, so it's really a privilege to be here.

Rebekah Kelley: I'm going to jump right in. When we hear the term inflammation, of course, most of us think of joint pain, right? But please explain what you mean by neuroinflammation.

Brendan Vermeire: Absolutely. So I think inflammation is a very, very misunderstood topic. The word gets thrown around a lot. And in reality, inflammation is an extremely complex immunological mechanism that the body uses to heal itself, period. The analogy I always like to use is that inflammation is a mechanism that the immune system uses, and we can think of it as kind of a prescribed fire, a controlled fire that the body uses to fight off infections and pathogens, different types of offensive antigens and toxins, as well as help to remodel tissues. We have to clear out some old, damaged cells so that new ones can take root and grow. So it's really no different than, let's say, some farmers, that they do a controlled, prescribed burn of the field to burn down the waste, so that way it recycles the nutrients back into the soil, so then new life can grow through.

So that, under normal physiological circumstances, is really what inflammation is. It's a mechanism by which the body heals so that new life, new cells, can take its place. So

when under normal circumstances, it's acute, it's controlled, it will ramp up as needed to fight something off and clean up the tissues, and then it will self-resolve on its own.

But today, in today's modern world, the toxic environment, the very stressful lifestyle that we all live, the excess of pro-inflammatory diet and lifestyle choices, our bodies, our cells, our immune system is getting overwhelmed and bombarded by so many pro-inflammatory input signals.

It gets really confusing when you try to dissect stress and bugs and microbes, infections and food sensitivities and toxins, and what's good nutrition or bad – but if we just think about this as, they're just input signals that your cells and your DNA, your genes are listening to.

So the question is, how many anti-inflammatory input signals is your body getting versus how many pro-inflammatory? And if that's balanced, we're in health, we're in homeostasis, we feel good, we're thriving. But the reality is, with the modern lifestyle, the standard American diet, the standard American lifestyle, the toxic environment, the high-speed stressful life that we all live – these are all pro-inflammatory input signals that are ramping up this chronic meta-inflammation. And part of the problem is, you go to your doctor, you do a basic, basic, minimal (so they can keep their expenses low) blood chemistry. You don't have any pronounced acute inflammation that would really justify any pharmaceutical or medical intervention.

And so this is where the chronic disease pandemic, the mental health crisis... it's really due to this underlying [inflammation]... it's a lower grade, but chronic. You think about the difference between a fire in your kitchen versus a slow cooker. And everybody, their bodies, their brains, included – it's like a slow cooking effect. And this might present down the road as cardiovascular disease, autoimmunity, depression, neurodegeneration. The list goes on and on and on. We see all of these chronic conditions are often comorbidities of one another. And the underlying theme is that chronic inflammation.

And the thing is you have different types of inflammation in different tissues of the body. So neuroinflammation is referring to excess inflammation of the neurons of the central nervous system of your brain cells. And the previous theory of mental illness was what we called the mono immune theory of mental illness, which is basically referring to... well, mental illness is due to imbalanced brain chemicals. So the pharmaceutical focus has always been on how do we balance and modulate the activity of all these neurotransmitters, like serotonin, GABA, norepinephrine, dopamine, so on and so forth.

But what we now know through more modern and up-to-date research is actually those neurotransmitter imbalances are downstream from upstream inflammation and oxidative stress. And so what we now understand is all these pro-inflammatory input signals, through our psychology, our lifestyle, our environment – this is really driving the chronic inflammation of the brain that then causes the breakdown of your brain cells, the degeneration long-term, the brain chemical imbalances. And so now, you know, sometimes I get trolled. People think I make this up. But big pharma has already put about a billion dollars into creating a new drug and its mechanism of action is by blocking pro-inflammatory cytokines. Now, the problem with these drugs is they're immunosuppressive. They are blocking the immune system's ability to communicate with the body. So yes, it might reduce the symptoms of neuroinflammation – like depression, anxiety and mental illness – but it's coming at the cost of reducing your immunity. So the problem that they're going to run into is how do you release an immunosuppressive drug for a mental health crisis during an infectious disease crisis? And that's what's happening.

So the reality is we have to take all of this information to empower ourselves on how can I naturally and holistically reduce my inflammatory load and inflammatory burden through my psychology, through my environment, through my lifestyle, through my diet, through my supplementation, and using medications responsibly, as needed, on top of that. So it's a really complex issue and something I'm horribly passionate about because this is not common knowledge, unfortunately, even though all the science is at our fingertips all day, every day.

Rebekah Kelley: Wow. That's really amazing. Thanks, Brendan. Those are really valuable insights. Brendan Vermeire can be found at www.MetabolicSolutionsLLC.com.

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