



Episode 204: The Rise of Autoimmune Disease (& How to Thrive Even If You Have It) With Dr. Guillermo Ruiz

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Katie: Hello and welcome to "The Wellness Mama Podcast." I'm Katie from wellnessmama.com, and today we are going delve into all things autoimmune disease. And I know I get a lot of questions from you guys about this, and I am here with an expert who's going to answer a lot of these questions.

Dr. Guillermo Ruiz is a graduate medical student from the Southwest College of Naturopathic Medicine. His aim is to use his research to advance naturopathic medicine using an evidence-based approach. And he focuses on finding evolutionary connections between our modern and traditional healthcare systems, which is a balance we so desperately need. He currently practices at Integrative Health in Scottsdale, Arizona, where he specializes in endocrinology, and he is a wealth of information. Dr. Ruiz, welcome and thanks for being here.

Guillermo: Thank you for having me. Just, you know, super excited to be here. You know, I have a lot of patients that follow you and follow your blog, so, think they're gonna be very, very happy to have me here.

Katie: Oh, I'm so excited. And I know that you have so much wisdom and information to share. So, I wanna jump right in. I hear from a lot of people who have various forms of autoimmune disease. I myself have Hashimoto's. So, before we jump into the deeper science, I'd love to start by just defining a few terms and kind of explaining what they mean in reference to the body. So, even though that's a simple question, can you give us a general idea of what autoimmune disease is and what's going on in the body when there's autoimmune disease?

Guillermo: Well, you know, in the simplest way to explain autoimmune disease, I would say that is when your body is not really well-aligned and it's not really recognizing your tissues as being part of you and it starts

attacking them. And I actually started going into the literature last night just reading about what causes autoimmune disease. And there's, like, three big things that cause autoimmune disease.

The first one would be molecular mimicry, or when your immune thinks that something is attacking you. And molecular mimicry usually happens after a viral or bacterial infection, so, then your body starts attacking these viruses and bacteria. And then it gets confused, and it starts attacking you, too.

Then the second thing that could cause autoimmune disease would be excess inflammation. So, if you, for example, a person that has Celiac disease or Crohn's disease, they have a lot of inflammation in their gut. And then eventually, all that inflammation begets more inflammation, and you end up attacking yourself because you're so inflamed, and then you start developing antibodies against your own tissue.

And then the third one, and this is the most unfortunate one, is when you have a genetic predisposition for your immune system to not be well-balanced and your immune system starts attacking your healthy tissue.

Katie: Got it. So, that's why, for instance, we hear people who, after something like Epstein-Barr virus or severe viral illness, might eventually start showing the signs of autoimmune diseases. Their body basically is trying to find something that's important to fight, but it's getting confused basically?

Guillermo: Yeah, you know. And even other disease processes, you know, like, for example, type-1 diabetes, type-1 diabetes, you know, the one that you acquire as a kid, it's usually preceded by two things, a little bit of intestinal permeability, having a virus from your intestine leak out into your bloodstream, and then the second thing is that molecular mimicry we were talking about, you know, so, then your immune system starts attacking that virus, and then it creates immunoglobulins against that virus, and then those immunoglobulins happen to fit your pancreas and it starts destroying the beta cells in your pancreas.

And that's the thing, you know. Sometimes in this health space of functional medicine, we talk about, like, "Oh, you know, you heal your gut, you can heal, you know, Hashimoto's, you can heal lupus, you can heal diabetes," and people roll their eyes because they don't understand and they think that we're making things up or overselling something. But in reality, if you follow, you know, the story and you see that all disease can be traced back to inflammation, you can understand why healing the gut is such an important part of any autoimmune condition.

Katie: Exactly. So, you use the word intestinal permeability, and I think most people probably have a passing familiarity with what that is. But can you just kind of give us a broad definition and explain what's going on in the body when there's intestinal permeability?

Guillermo: Yeah, you know, and that's the medical term, you know, intestinal permeability. A lot of, you know, bloggers and, you know, or if have you been in this space for a while, you probably heard it as leaky gut. And in the broadest of terms, what happens is that whenever you have inflammation in your intestinal lining, whether it's from, you know, something you ate, and even stress, so, you know, having a very stressful event happen in your life, there are studies where they compare the intestinal permeability of people in a trauma accident and they match the intestinal permeability of someone that just finished running a marathon.

So, if you think, you know, that, you know, the stress from even working out is not affecting your gut, you know, it is. But, you know, I digress that. So, what happens is that, if you have a lot of inflammation, you know, certain proteins go into the intima of your intestine and it starts, you know, creating little tiny holes. And if you compound things like bacteria, if you compound things like fermentation, you know, from bad bacteria, those holes tend to open up. And that protection is the protection of our body for pathogens, for different proteins to not get into our bloodstream.

And if you have all these tiny little holes leaking proteins, or leaking bacteria or viruses into the bloodstream, now your immune system has to prevent these things from spreading and making you sick. So, that creates this effect where your immune system is attacking things that shouldn't be there, and you're literally getting, you know, stuff that should be inside of your intestine, you know, namely poop, poop is leaking literally into your bloodstream. And that's not good. And that's why, you know, eating very healthy things that are gonna repair those cells in the intestinal lining is gonna be very important for you to prevent this intestinal permeability.

Katie: Yeah, that's such a good point. And when I was first researching this, one thing that, like, really blew my mind to understand is that the digestive system is actually biologically not considered internal to the body because it's basically this track that runs through us. But there shouldn't be, other than what the body specifically allows through with nutrient absorption and the normal digestive process, there shouldn't be things physically traveling back and forth through that liner because the body uses that barrier to protect us from all the things that we don't want to take in from our food or from our environment. And that was really, like, a novel concept for me, but it helped really to understand how we need to protect that and not get to that point of permeability and really protect our gut health.

And I'm sure this is a component of it, but why do you think we're seeing such a rise in autoimmune disease right now? Because across the board, from Hashimoto's to lupus, like you mentioned, to skin problems, all of these are on the rise. Why do you think we're seeing such a rapid rise right now?

Guillermo: Well, you know, unfortunately, our food is not what it used to be, and it's not as clean. It's not as...you know, you hear this term, farm-to-table, and we are getting away from that, you know, that utopia of being able to go into...you know, in harvest and maybe get that, you know, fresh food. And with distance, and because of modern living, you know, we have to process our food way more than we used to, even 20 or 30 years ago. I'm not even talking about thousands of years ago. I'm talking about, like, you know, 20 or 30 years ago. And when we process food, we change its structure, and we change, you know, the way that it's going to be assimilated into your body, you know. The number one most inflammatory thing, the most oxidative thing that we do is breathing, you know, taking oxygen and creating ATP or energy out of oxygen.

The second most inflammatory thing we do, and this is something that we don't think about, is eating. And when we eat, you know, we are basically taking proteins from exogenous substances and incorporating those proteins into our body. It's so, intimate. It's such an intimate thing that we're doing. And we're doing this thing three times a day, you know, sometimes more if you're snacking. And if you're eating processed foods, the body doesn't really know how to handle them properly, and certain foods can activate different proteins within our body.

Like, for example, certain proteins and wheat can activate something called zonulin, and zonulin is a protein that modulates the permeability or the tight junctions or, like, the glue that sticks all over the different cells in your intestine. And if you activate zonulin, you're basically just opening up your intestine. And when you open up your intestine, you know, sure, all the good things that are in your food are gonna be traveling faster but also, bad things can leak.

So, just, you know, if you start thinking about this, the more that we eat processed foods that are not going to be...that are going to have a physiological effect on your intestine, the more we're putting ourselves in this situation where we're having to have our immune system take care of things that maybe shouldn't be there. And the more times you do it, the more chances that your immune system gets confused and then it starts attacking you.

Katie: Yeah, that makes perfect sense. And as you're saying, that I'm thinking of, you know, you mentioned people, like, even eating, even in an optimal scenario when we're eating good quality food, it's still creating oxidative stress in the body, and that's its purpose. That's natural. But when you think about most people, statistically, are actually eating not 3 times a day, but if you count eating every time, we put something in our mouth, I think last average I saw was 17 times per day. We actually are never giving ourselves a digestive break. We're just putting food in our mouths at random intervals all day long. And probably not most people listening to this, but statistically, in the U.S., 90% of what we put in our bodies, our body doesn't even recognize as food, because it's not actually nutrient-dense. It's taking nutrients from the body.

And I think of that in contrast to visiting Italy recently. And there was a family there. There was three generations. They were all living on one farm. And they grew everything they consumed with the exception of they bought flour, sugar, and coffee. But everything else, all the produce, all the meats, all the olive oil, they made their own olive oil, and just seeing the difference in the quality of what they consume and what probably many of our grandparents and great-grandparents consumed versus what we consume now, it makes sense that our bodies just aren't designed for what they're having to face.

And so, when it comes to autoimmune disease, I feel like it can be a really tough illness, because with so many things, if you have the flu, you know you have the flu. With autoimmune disease, it isn't always that clear-cut, and it seems to be a cascade. So, how could someone actually even know they have autoimmune disease, because it's not like we can track that zonulin in our gut on a daily basis. So, can you kind of delve into that? Like, what's the process that's happening in the body at the early stages? And how can you even know if you have it?

Guillermo: You know, in the things like...it can get really complicated, or it can be very easy. Like, for example, in the case of Celiac disease, we can actually...we have lab tests that can test you to see if you have those antibodies that destroy your intestines. So, when you have Celiac disease and you are allergic to wheat, your immune system creates these antibodies that they destroy your intestinal tract.

We have finger-like projections in our intestines that allow us to absorb as much nutrients as possible from food. And if we haven't antibodies against this, you know, finger-like Celiac projections, they get destroyed, they get blunted, and now your intestine can't absorb nutrients, and then you have diarrhea, and then you start, you know, you can have bleeding, and things like that. So, those are usually Hashimoto's thyroiditis. We have different tests that we can test for, you know, antibodies and all of these different antibodies that we can test for when it comes to Hashimoto's.

Unfortunately, it can get really, really complicated in things like lupus because lupus, at its core, is an autoimmune disease. But in order for you to actually diagnose someone with lupus, it is a conglomerate of different disease processes that you have to, you know, put together. And it's basically a disease of exclusion. Something that, you know, that we don't understand what's going on, and you have, you know, 10 of these 21 things, and then you can be diagnosed with lupus.

For example, those symptoms can be, you know, hair loss, rashes, dryness, ulcers, anemia, fatigue, and, you know, pain with breathing. You know, the conglomerate of symptoms can be so difficult. And people can get really, really frustrated, because imagine having all of these different symptoms and not being able to say, "Yeah, you have strep, or you have, you know...and this is the one medication that takes care of this one thing that is going to cure everything." Because your immune system is part of your whole body, and once it's trained, it's really hard to un-train. It is very difficult to have resolution of symptoms if you don't know what is the root cause.

Now I can tell you this, the root cause of autoimmune disease is not that your immune system is overactive. Because that's the first line of defense that we have right now, that, you know, we suppress your immune system whenever you have an autoimmune disease like lupus, like rheumatoid arthritis. And I think that's the wrong way to go about it, because we have to identify why is your autoimmune system overreacting.

And if we look at this, you know, scenario in that way, then now we have hope. Now we can say, "Okay, sure you have the genetic predisposition for your immune system to react to you. Sure, there is something making and react the wrong way." But now we can start investigating and we can start delving into different things that can be activating your immune system in the wrong way rather than just suppressing your immune system." And then that puts you at risk for cancer. It puts your risk for super infections. There is a reason we have an immune system, and if it's upregulated, we have to figure out what's making it be upregulated, not just shut it down.

Katie: Got it. That makes perfect sense. So, really, like, someone, many of us, and probably long before I got my diagnosis of Hashimoto's, had a lot of these biological things happening, and you don't necessarily feel them until they kind of reach that critical mass, or there's a lot of them. And that's a great point, too, about some autoimmune diseases are not as easy to diagnose as just doing a single test. Even for me, with Hashimoto's, my antibodies, that was one test that they ran, but they also, looked at...they did an ultrasound of my thyroid, and they looked at other markers as well.

And I think that's the benefit of naturopathic medicine, is that you guys are looking at a holistic approach, not just one marker. That was my frustration with a lot of doctors for so many years, is they would only test, like, T3 or T3 and T4 and not antibodies and not look at my thyroid and then conclude that I was fine. And there was this underlying process that they weren't picking up on because they weren't testing all of those things.

And another thing I hear a lot from people who write in to me, and also, from my own story when I was in, really, the rough part of Hashimoto's, was the fatigue. And to me, that's why autoimmune disease is such a silent and really difficult illness. And my heart goes out to people who have it, because you can look fine on the outside and have this debilitating fatigue or these struggles that don't present themselves clinically like a lot of other symptoms. And so, people think you're fine because you look fine, but you definitely don't feel fine. So, can you explain the connection of how fatigue relates to all this, and what's going on when you have that just whole-body debilitating fatigue?

Guillermo: Well, you know, I'm gonna have to credit Ari Whitten with this one. But, you know, one of the things that happens with any fatigue syndrome, and especially, you know, with Hashimoto's, it's easy to understand that, you know, your thyroid controls every cell in your body. Every cell in your body can be affected by thyroid hormone. And what the thyroid hormone does is it helps create proteins, and these proteins can do anything from, like, making you grow, to help in the production of different hormones, and, you know, it upregulates things.

And I like to tell my patients that your thyroid is like the accelerator. And the accelerator, when you press the accelerator, your car goes faster, you know. Imagine your thyroid, you know, if you have good thyroid levels, that car is just gonna be cruising. If you have hypothyroidism, you're not pressing that accelerator hard enough, so, you're not going to have that energy, that natural energy. You're not gonna have to rely on things like caffeine.

Secondly, and one of the things that I was...you know...showed me, or, you know, taught me was that whenever you have an infection, bacteria are very opportunistic, viruses are very opportunistic. And they're,

like, almost parasitic where they take over, they hijack cells, and they use the mitochondria out of that cell to steal energy from your body, so they don't have to create.

So, what the mitochondria does is, like, they shut down to prevent this ATP or energy steal. It's stealing from that bacteria, that viruses. So, whenever you have chronic infections, or whenever you have chronic inflammation, your body reacts in that way. It starts shutting off mitochondria all over your body. So, now, imagine, you know, if you were, you know, if you operated with batteries, and each mitochondria is a battery, and now half your batteries are shut off. Now you're not utilizing this energy.

And this can happen with infection. This can happen, you know, as an autoimmune attack on your mitochondria. It can happen if you stop using your cells because you're tired, because your thyroid is not optimal, and then you're not, you know, you're not having enough motivation to go and exercise, and, you know, go out for a walk and get, you know, some fresh air. So, then mitochondria start to shut off.

And then your body creates this danger response, you know, system where it says, "Oh, mitochondria is shutting off. We must be under attack." And it keeps shutting off more mitochondria. And the mitochondria are not gonna come back in line up until your body starts noticing that, "Okay, we are out of that danger zone."

So, you know, it's a very delicate process, because, A, it's not like I just tell my patients, "Yeah, you just gotta, you know, tough it up and you're gonna have to go outside and jog." Because I know that, physiologically, if they have Hashimoto's, they don't have...you know, they're not pressing that accelerator to where they need to be in order to have natural energy. But, B, they also, need to start moving and they need to start with a little bit of exercise to prevent this shutting off of the mitochondria.

So, you know, you have to create this balance, and you have to be very open with the patients about how, "Yeah, you know, I understand that this fatigue is chronic and this fatigue is very debilitating, and I know you wish you could, you know, get up and be a little bit more productive." But if we don't start somewhere, and we start, you know, incorporating even if it's just around the house and, you know, Dr. Alan Christianson says that when he first started exercising, he would run around the island on his kitchen.

So, even if it's just walking around and taking your kids to the park or, you know, going for an extra, you know, long walk with the dog, you know, you need to start signaling to your body that, "Okay, we are taking care of you so, your body can start getting back in line in activating the mitochondria." But that can be completely impossible if you don't have that hormonal balance, you know. So, it's a very delicate balancing act that we need to perform in that we need to be aware of. It's not that you're just crazy or just lazy. You know, it's both physiological, and to a certain degree, even at the cellular level.

Katie: Got it. And to echo what you say, I love Ari Whitten's work. He's been on this podcast as well. Such great research and work that he does. And I think you're also, still right about the autoimmune fatigue and exercise connection, because, for years, I thought I'll just, like, fight through. And really, like you mentioned, you can do more harm than good if you're trying to jump into more than your body's hormonally ready to handle. In fact, there's actually a program called Autoimmune Strong, which is a workout program specifically designed for those with autoimmune disease to be able to get back to movement without creating that harmful cycle.

And also, I wanna say, because you mentioned Dr. Christianson, who is the doctor who actually diagnosed my Hashimoto's and helped me find recovery, so, his journey is amazing and incredible in its own right. But you talked about him running around his kitchen island. And just to paint a picture, I want people to understand that, now, he is extremely, extremely fit. He's the picture of health. I believe competitive mountain unicyclist, which I can't even imagine. I can barely ride a bike on a mountain. So, just he's very much the picture of health

and a testament to the fact that it is possible to find recovery and to heal the body, but it just is a slow process.

And so, I think that's such a good point that you made about taking it slowly, making sure you have the gut process in place first and the hormone process in place, and moving but not jumping into that extreme exercise until your body is ready.

And another topic in the same vein that I know you've written about quite a bit is the iron connection and what role iron plays in autoimmune disease, and you had a really great explanation of this. So, can you delve into that and explain that?

Guillermo: You know, first and foremost, you know, let's start by defining anemia, you know. How many people out there have been told, "Oh, you have anemia." And then they'll ask the practitioner, "So, what does that mean?" "Oh, you're low in iron." Okay, cool, so, that's it? So, anemia. So, for anyone listening that has ever been told that they have anemia, anemia means that you do not have enough oxygen-carrying capacity to your cells.

So, for example, you can have, you know, anemia of, like, if you have a trauma and you start losing too much blood, you can have low-volume anemia, you know, you don't have enough blood to take oxygen to yourself. If you have anemia of chronic disease, this is a very interesting one. So, you remember when we're talking about viruses and bacteria being, like, parasites? Well, they take over and hijack your mitochondria, but they also need iron in order to divide and multiply. So, your body is so smart that it starts hiding iron in different places to prevent your bacteria and viruses from dividing and from invading you.

So, if you have a certain type of anemia where you're low in iron and you eat, you know, red meats or, you know, you've been taking supplements, whatever, and your iron doesn't go up, you could have anemia of chronic disease, where your body is hiding that iron to prevent the replication of pathogens. You can have macrocytic anemia, and macrocytic, macro meaning big, cytic, meaning cell, that's when you don't have, you know, enough folate or B12 to make, you know, regular-sized red blood cells. And if you have macrocytic anemia, the problem is that they're so big because they're not dividing properly that they get stuck in the arterioles and the venules. And they can't actually reach your cells in order to provide yourself with oxygen.

So, you know, in each one of these different cases, the solution is not just taking a red pill that is gonna make you constipated. For example, if you have, you know, anemia of blood loss, we need to identify where is that blood loss happening, you know. And it can be, like I said, like a trauma accident where you're just bleeding, and they have to give you a transfusion. Or it could be, you know, maybe you have Celiac disease, and that blunting of the villi in your intestines is causing this low-grade blood loss that is...where you're losing the blood that is going to feed your cells. And the anemia of chronic disease, if you, sometimes, in some cases, if you get iron to that person, you actually exacerbate infections.

And so just think about this, you know. Like, there was an awesome paper coming out of Africa where a couple of good Samaritans, you know, decided to go to Africa, and they start testing kids for iron deficiency. And, you know, this good Samaritans started giving, you know, a little bit of iron to all these kids that were iron-deficient, and the kids start to get sick from malaria, because the body was hiding that iron from the malaria to prevent an, you know, overblown infection.

So, now the WHO has very specific parameters for people that open up clinics in Africa, that if you notice that a lot of kids in a population are anemic, you know, they have low levels of iron, you, A, better have really good anti-malaria protocols. And if you don't, you are not to give them iron supplements.

So now imagine, you know, how many hidden infections do we have here in the United States? Maybe we don't have a lot of malaria in the United States, but we do have things like Lyme disease. We do have things like EBV, and we do have things like intestinal dysbiosis. Is your anemia, is your lack of iron because you have a pathogen in your gut and your body is being super smart by hiding that iron, you know.

In the case of macrocytic anemia, you could be missing a couple of micronutrients such as B12 or folate, or maybe you are missing things that are higher up in the chain where you're making these red blood cells. Things like creatine, things like choline, things like glycine, you know. Are you eating bone broth? Are you making sure that you're eating leafy greens a couple of times a week? And it's funny because, you know, you can think, "Oh, you know, I'm eating a lot of greens." But in the case of folate, folate is very fragile. And if you freeze, you know, vegetables, that folate becomes obsolete and it deconstructs. So, you actually have to actually eat fresh leafy greens.

And then there's other things that you have to do because, like, there's a lot of fat-soluble vitamins in greens. So, if you're just eating your greens but you're not putting a little bit of olive oil, or a little bit of, you know, fat, or eating it with some sort of fat, you're not going to absorb those fat-soluble vitamins.

So, in a big picture, you know, if you have ever been told that you have anemia, and the only thing that they tell you is that, "Okay, take this little red pill that's gonna make you constipated," you need to investigate why you have anemia, you know. Is it because you have a nutritional deficiency? Is it because your body is protecting you from a pathogen? Or, is it because you have some sort of injury?

And, you know, when I say injury, you know, I say it, you know, as a caught, or a trauma accident, or as an injury in the blunting of the villi in your intestines, or maybe polyps in your colon, or maybe you, you know, in really extreme cases, even cancer can have a little bit of blood loss. So, we need to identify why you need this iron. In most cases, you know, I can tell you that just giving iron is not the solution. That's just patching, you know, or bandaging the problem. But in reality, there is something underneath that needs to be fixed.

Katie: That's such an important point. And I think, in my own life, So, I've had a couple instances with anemia that line up with what you just said. So, in pregnancy, especially, which can exacerbate autoimmune symptoms and all the gut problems, I would have mild anemia. And that, of course, was the doctor's recommendation, was to take more iron. But understanding it in light of the autoimmune connection, it makes so much more sense to go deeper. Whereas with, like what you said, acute anemia, so, my third child, I had placenta previa that was not diagnosed, and I hemorrhaged, and then had a C-section which I lost a whole lot of blood. So, I was rightfully anemic after that because I had had a lot of blood loss. And that's a completely different scenario, like you're explaining, than someone who has this chronic low-level anemia and what that could actually mean.

And I'm so glad that you are shedding light on this. Because I think that's gonna be the future of what we learn more and more in medicine, is it's not just a one-to-one cause-and-effect ratio when you're talking about the human body. Even things like genetics and understanding MTHFR, there's more going on than just we need to take methylfolate. That very well could be a huge part of it and obviously, we all need our leafy greens, but there's usually a reason the body has had that mutation. And understanding what that is and how it's working in the body as a whole versus just trying to, like, think of natural medicine just like regular medicine, treating one symptom with one supplement or one pharmaceutical doesn't address the entire body.

And I know a question I get a lot, and I can't wait to hear your take on, is can you ever fully recover from or be in remission from autoimmune disease? Because you've made a really compelling case for all the gut problems

that go along with it, the immune system dysregulation that happens. Once that process has occurred, is it reasonable to think that we can actually get then, eventually, get to remission?

Guillermo: You know, that's a question that I get asked a lot. And it really is, you know...you want to give hope to people. And at the same time, you know, once your immune system is trained in a certain way, it's very, very hard to un-train it. Okay? So, what is remission from Hashimoto's? I think that, you know, when you took kind of...you know, I wish I was like in "Men in Black" and have one of those lights that saps your memory. And we need to re-educate people and show them that taking a little bit of maybe a supplement, maybe a medication, maybe, you know, something to help you be a more productive member of society, doesn't make you sick, or it doesn't mean that you are sick.

There's a saying, you know. "It's not the years in the life. It's the life in the years." And that's what I want to provide my patients. I want to provide them with life on every single day, you know. I want them to have energy, and I want them to be there for their family, and I want them to be there for their friends, and to help each other, and to help and spread this message. If being able to do all those things means that you have to take a little bit of thyroid every morning, does it really matter? You know, does it really matter that you are in remission or not? Does it really matter that you have a diagnosis?

I know it can be very confusing, and it can be, you know, sometimes the feeling to think that, "Oh, I'm going to have to take thyroid medication for the rest of my life." But think of this thyroid medication as your power up, you know. You know, like before, when we played, like, Nintendo, and would play Mario and you ate that mushroom and you got bigger, you know, you just think of it like that.

Think of it as that little pill is what's helping you not have to move to an island and get rid of all your electronics, get rid of your, you know, all of your hobbies, and just dedicate yourself to health. That tiny little pill is what's giving you the latitude to maybe be able to go to a restaurant and eat some gluten-free pizza every once in a while. That little pill is what's letting you, you know, go out with your friends, you know, a couple of times a year and stay up late and have fun and laugh. That little pill is what's letting you have that latitude to live life.

Sure, you know, if you live a perfect life, you can probably get off of that medication. But you would have to sleep like 10 hours a night, get up with the sun, harvest all your food, eat perfectly raised animal products. You would have to take, you know, maybe other supplements to supply you with the stuff that the soil doesn't have. You know, like magnesium is super depleted. And then, you know, maybe not have any kids because those could be sources of stressors. And maybe quit your job and, you know, all of these different things.

If you have a perfect life, sure, maybe you can un-train your immune system to attack yourself. But let's be realistic, you know. We want to be part of society. And we want to be able to grab our headphones and listen to "The Wellness Mama Podcast." We want to be able to do all those things. And in order to give us the latitude and to give us the best of both worlds, sure, we need to try to eat as close to natural as possible. We should try to follow a good circadian rhythm with our sleep. And, you know, we are waking and go outside and get some sunshine. But we can use technology in the form of, you know, a little bit of desiccated thyroid to give us the latitude to deal with traffic, to deal with deadlines for work, to deal with, you know, with fun, you know, to be able to go out with friends.

So, you know, I want to liberate everyone out there that's listening, and I want to tell you that it's okay. You know, it's okay that you have this autoimmune condition. It's okay that maybe, in the past, growing up or maybe later in life, you weren't so kind to your immune system. And maybe by some coincidence, you got an

infection that triggered something. Or maybe you weren't eating the best food. Well, let's leave that in the past.

There are ways that we can help you regain your strength, regain your energy, and you don't have to be sick all the time. And we can help you be the best person you can be, whether it's taking a supplement or taking a prescription medication, it really doesn't matter. What matters is how much life we can have in our years.

Katie: It's a really important point as well. And I think also, hidden in what you just said that's so important, just to highlight, is, especially for those of us who have struggled with or are struggling with autoimmune disease, those things like you mentioned, like lack of sleep, or just deadlines at work, or completely normal parts of life, at times, are an additional stress on the body that's hard to handle.

And just like you said, using technology in the best way and also, giving ourselves permission to do what we need to do in our own lives to get enough sleep and to get enough sunshine and to get enough stress reduction that we can tolerate these things. And increasingly, this is more and more of a problem for all of us, not just those with autoimmune disease, in today's world, with just the constant stress and busyness of life. And I think that's an important thing that we all address.

You mentioned supplements as well. So, what's your take on supplements? I know they can be controversial at times. Do you think with our depleted soil quality and all of the negative inputs we face on a daily basis that supplements are necessary at this point? Or what's your take?

Guillermo: I think that supplements are something that can be cyclical, you know. And, you know, the one supplement that I take, you know, religiously is magnesium. Magnesium, you know, I take...and I know, like, the studies show that magnesium, chelated forms of magnesium, are the best forms of magnesium to take. I take a magnesium citrate. I just like this magnesium citrate. I love how it makes me feel. I've tried the oils, and I've tried, you know, but magnesium in powder form at night, it relaxes me, it helps me sleep, and I feel better.

I think that there are different things that we need to acquire at different times of the year. Like, for example, if you live in places that have very long winters, you might need a little bit of vitamin D. You know, if you don't eat red meat, you know, getting a little bit of copper would be important. If you live in a food desert and you don't have access to fresh leafy greens, maybe taking a little bit of preformed folate might be necessary.

But more often than not, I see patients coming into my practice, no lie, taking up to 60 different supplements a day. Like, imagine taking 60 different supplements that have to be, you know, taken at different times. And I really don't agree with that. And most of the time, my patients actually get a little bit less supplements after coming in to see me than when they came in.

I think that supplements used properly can be sectioned into different time periods. Like, for example, one thing that I do once a year is, I take a little bit of DIM. DIM helps you detoxify your estrogen by making it more water-soluble and being able to get rid of it through your liver. So, it's not like a hormonal supplement. It's actually improving the capacity of your liver.

And once a year, for 30 days, I take them, you know. If I feel that my digestion is not perfect, you know, I take digestive enzymes with my meals. But always, you know, with curiosity of, "Why is my digestion not optimal? Is it because I'm drinking too much cold tea with my meals? Am I eating too fast? Am I not chewing enough?" And by doing the triage process, then once my digestion is good, then I can stop taking those digestive enzymes.

There can be polypharmacy, you know, within supplements. Where you're taking supplements that contradict or exacerbate symptoms or they counteract the effects of other supplements. So, we need to be very careful about a couple of things. A, who is making the supplement, what is the sourcing of the supplement? B, is it the right form?

You know, for many, many, many years, people were taking cyanocobalamin for B12 deficiency. And cyanocobalamin actually binds to the B12 receptor, but it inactivates it. So, it's like the key that fits into the keyhole, but it doesn't do anything. It actually prevents B12 from activating that B12 receptor. So, your blood levels, if you take cyanocobalamin, look like you have higher levels of B12 but it's not doing anything. So, that's the second thing that we need to make sure, we're taking the right form of the supplement.

As a side note, more and more research is coming out, you know, to tell us that, sure, you know, undermethylation is a problem, and not having enough methyl donors for your detoxification pathways can be really bad for you. But just as there's people that are undermethylators, there are people that are overmethylators. And if you just randomly give people methylcobalamin, you know, the activated form of cobalamin or B12, you can cause symptoms of mental fog, fatigue, you know, the same symptoms that you would see with someone that has undermethylation. You can see with people that you overmethylate by giving the methyl donors when they don't need them.

So, like you said, even people have problems with MTHFR, which we really need to be a little bit more careful and not just go to your friendly natural store and pick up the latest supplement that people are talking about.

And then the last thing, dosing is so important. Some people, you know, it is in our nature here in the West to think that more is more. And with a lot of supplements, with a lot of vitamins, with a lot of minerals, more is not more, you know. For example, vitamin D, we know that the sweet spot is somewhere between 35 and 60, and anything above that causes pro-calcification and causes, you know, bad effects of having too much vitamin D. So, we gotta be very, very careful with supplementation. And we gotta be, you know, more aware.

And just like you said, you know, that it's not just, oh, you know, you have diabetes. I'm not going to take my metformin. Instead, I'm going to take cinnamon. You know, just like you don't have a metformin deficiency, you also, don't have a cinnamon deficiency. And we can use these, you know, different extracts and we can use these different plants and minerals to help us get through some disease process, but they are not the solution. The solution is usually habit-forming and better lifestyle. And though that's hard, it's easy to pop pill. It's easy to take a supplement. It's hard to change your life.

Katie: I wholeheartedly agree. And like you, there's very few things I take every day. Like you, magnesium, I take every day. And also, a really high-quality spore-based probiotic just because, knowing Hashimoto's and gut health, that's something that really, I feel the difference from taking.

This episode is brought to you by Desert Farms Camel milk. Never heard of camel milk? I hadn't either until I stumbled across some studies about its unique properties and decided to try this as an alternative to regular dairy for my baby at the time. See, camel milk has some unique properties that make it easier to tolerate, even for those who don't do well with traditional dairy and some evidence suggests that it may help support the immune system and be beneficial for those with auto-immune disease. Desert farms is the highest quality camel milk source I've found, and I love that they really love and take care of their camels... in fact, I even recently had a chance to meet the founder and to meet a couple of the camels! Right now, they're offering Wellness Mama listeners four free extra bottles for life with any subscription. You can learn more and grab the free bottles in the show notes, the link for this episode, or go to wellnessmama.com/go/camel-milk/ to grab the free bottles or find out more.

This episode is sponsored by Just Thrive probiotics. I found this company a couple of months ago and I was blown away by the difference in their products! They offer two cornerstone products that are both clinically studied and highly effective. The first is their probiotic, which has been clinically studied to help with leaky gut and to survive up to 1,000 times as much as other probiotics or the beneficial organisms in something like Greek yogurt for instance. The difference is, their spore-based strains work completely differently than other types of probiotics. Also, this probiotic is vegan, dairy free, histamine free, non-GMO, and is made WITHOUT Soy, dairy, sugar, salt, corn, tree nuts or gluten—so it's safe for practically everyone. Their probiotic contains a patented strain called Bacillus Indicus HU36®, which produces antioxidants in the digestive system – where they can be easily absorbed by body. Their other product is a K2-7, and this nutrient—you may have heard of it—is known as the “Activator X,” the super-nutrient that Weston A. Price—a dentist known primarily for his theories on the relationship between nutrition, good health, bone development oral health. He found this prevalent in foods in the healthiest communities in the world. Their K2 is the only pharmaceutical grade, all-natural supplement with published safety studies. Like the probiotic, this is also, gluten, dairy, soy, nut and GMO free. You can check out both and learn more by going to <http://wellnessmama.com/go/probiotic/>

Katie: But one thing I learned last year studying in Switzerland at a biological medicine clinic is they, like you, they don't recommend taking anything all of the time. Basically, we should cycle things with the seasons with what our body needs. And also, even if there are things our body needs, just take a break from them once in a while so the body doesn't just get so acclimated to that and either downregulate or upregulate or stop the body's natural mechanism of creating whatever that is. So, I think that's such a good point.

And you're right, in America, we tend to take an all-or-nothing approach of more is better. And if one is good, five is better. And that's definitely not always the case with supplements. And you've provided so much amazing information on the roots of autoimmune disease and addressing it both naturally and using technology. So, I'd love to hear, as kind of we start to wrap up, your approach if someone comes in to you, how you go from taking them to that fatigue and just barely surviving day to day to thriving using kind of all of the tools you just mentioned?

Guillermo: Well, you know, it's funny. Because when I was in school, when I was still a student clinician, people would come to the clinic and they would say, you know, "I am fatigued." Then, you know, "All the symptoms of maybe Hashimoto's or some other autoimmune condition." And then I would run labs, and then I would find out that they are anemic and their TSH is through the roof. And I would create a plan. And I would sit in front of them and say, "Okay, you're gonna need to stop eating gluten." And then my patient would be like, "Oh, why?" And then I would draw the board, and I would tell them, you know, about intestinal permeability and all the things that happens.

Now, you know, because I work with Dr. Alan Christianson, and all of my patients are super educated, I sit in front of them with my labs and I tell them, "You're going to have to quit gluten." And they look at me and they're like, "I haven't had a gluten for the past five years. I don't know what you're talking about."

You know, so, it's a very different environment, which makes me so much more excited about being able to uncover what the underlying cause of their disease process is. Most of the people that I see have already started doing a nutritionally-dense diet, have already tried, you know, Nigella, or they have tried the, you know, maybe had, you know, don't try this, but maybe they have tried using iodine to fix their Hashimoto's, or maybe they've already have, you know, their circadian rhythm, you know, they're going to bed at 8, and they're waking up, and they're going outside, and getting those 10 minutes of beautiful sunshine.

So, it makes me a better detective. Because now, I'm not starting, you know, with the low-hanging fruit, you know. I need to really dig and need to figure out why are they still anemic. Why, you know, is their thyroid

medication not serving them? Is it because they're only taking T4 and their body is not converting that T4 into T3? Is it because they're taking so many supplements that they are fighting against each other and they're not getting good response or what we expect from certain supplements? Or is it because that they were misdiagnosed, and what their previous doctor thought was SIBO is actually constipation from being severely hypothyroid? Do they have a chronic infection?

And because of the training that I've got, and because of the ability to see these really complicated cases, I've been able to just, you know, I got rocket fuel, and I've become, like, this very keen health detective that is able to help...I've been able to help a lot of people. And I'm really thankful for Dr. Christianson, who is my mentor, and for people like you who are putting this information out there for patients to become more savvy, and they're taking all the practitioners to task to make sure that we, you know, keeping us on our toes, you know, to make sure we keep up with the literature and we keep up with what trends, to make sure that we are actually making a difference.

Katie: Yeah, exactly. Like you, I'm so excited for this evolution of medicine, natural medicine, and the wonderful researchers like you guys who are on the front lines working with patients, like you said, being health detectives. And also, exactly like you said, for all of the people, like you guys, who are listening, who are willing to really put in the effort and the research and the time and the lifestyle changes to really being the front lines and making the changes. And I truly have hope that together, we're gonna start seeing, hopefully, a reversal of some of these trends. And I think, like, that complementarity is super important.

I also, cannot believe we have already flown through an hour, because I could literally talk to you all day long. And one question I'd love to ask toward the end is, if there is a favorite book or books that have really made an impact on your life, they don't have to be in line with your expertise, but I'm just an avid reader, and I'm always looking for new ideas to read.

Guillermo: Well, you know, one of the books that really changed my life was "On the Road" by Jack Kerouac. And it's funny because I picked it up as a recommendation from a "Rolling Stone" magazine. And it was like this book has influenced more rock stars than any other book. And it really is just this adventure of, you know, becoming free and going against the grain, you know. And I think that book piqued my interest in going outside of the norm. And I think because of that book, it actually opened me to question authority and literally going against the grain with my own diet. So, that's, you know, that was a very forming book me.

Now in the health space, I think one of the books that has had the most influence on me was "The Paleo Solution" by Robb Wolf. Probably one of the first health book that I ever read was "Good Calories, Bad Calories." And when I tried to share it with people, people would be like, "Okay, yeah, this is too dense." And, you know, what good is a book if you can't read it? But then Robb wrote this book that was so simple to read, you know, the concepts were so easy, and it's actually enjoyable. So, when I was handing it to other people, you know, they would actually read it and follow the instructions because it was so easy to follow.

But now I think the science has changed a lot, and the recommendations from that book have aged a little bit. And I'm really excited for a new book that's coming out in January, and that's Dr. C's new book, "The Metabolism Reset Diet." And I think that's going to be one of those groundbreaking books where we, once again, revisit the topics and we actually make a move forward, not a side-stepping into the same ideas. I think Dr. C captures something that it's gonna be the next step in health and dieting.

Katie: I agree. I got to read an early copy of that so that I could share testimonial about it, and it was so well-written. I'm really excited for that one to come out and to be able to share it as well. Dr. Ruiz, this has been wonderful. You are so well-spoken. I've loved all that you've shared, and I really appreciate you giving us your

most valuable resource, your time today, and for sharing all your wisdom. So, thank you so much for being here.

Guillermo: Thank you for having me. You know, nothing but love for you and what you do because it really has touched so many people, and it...you know, even though it makes my cases tougher, it makes my life better to know that I have warriors with me in this fight against disease.

Katie: I love it. Thank you. And thanks to all of you for listening as always and for sharing your most valuable asset, your time with both of us. And I hope to see you again next time on "The Wellness Mama Podcast."

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