

Announcer: Bulletproof Radio, a state of high performance.

Dave: You're listening to Bulletproof Radio with Dave Asprey. Today's cool fact of the day is really exciting. It's an autoimmune condition that causes hypothyroidism. Actually it's about burnout because a low-functioning thyroid is something that happens when you push your limits for too long. It turns out Hashimoto's thyroiditis is the most common cause of hypothyroidism, which right now, officially occurs in about five out of 100 people in the US. But not everyone with Hashimoto's gets hypothyroidism. The reason this is part of today's episode, if you haven't guessed already, is that a surprising number of game changers, of high-performance people who are just out there to change the world, we're the ones who do things that cause autoimmunity because we like to push ourselves harder and not recover enough.

Dave: Hashimoto's is one of many manifestations of autoimmunity, which if you read my new book, *Game Changers*, I write a lot about how, I believe the numbers from memory, is something like 40% of people have one type of autoimmunity. This is when your immune system attacks your blood vessels, your nerves, your brain, your kidneys. In fact, autoimmunity of the kidneys killed my grandfather. What's going on here is if you listen to the show, you're burning the candle at both ends and in the middle, your odds of having that are way higher than the average odds, which are somewhere around 30, 40%. So, you've got to pay attention to this stuff because if your thyroid is what gets hit, guess what your thyroid controls?

Dave: It controls all of your energy metabolism. Not enough thyroid hormone, not enough mitochondrial energy, not enough electrons, not enough will power, not enough immune function, not enough protein folding. Basically everything goes to hell. I know this from personal experience. So what we're going to talk about today on the show is tied to that crazy Hashimoto's cool fact of the day, which is, how to avoid getting autoimmunity from burnout. The expert on today's show has been on Bulletproof Radio before. She's featured in *Game Changers* and is just a profoundly knowledgeable and approachable human being with a degree in pharmacology.

Dave: She's internationally acclaimed as a thyroid specialist and wrote her first book after she was diagnosed with Hashimoto's in 2009 and went from being this really smart, high energy pharmacist to, what the hell just happened to me? She's authored a couple books that are *New York Times* bestsellers about this and is an acknowledged expert in the field and the person I send my friends to when they say, "Dave, I have Hashimoto's. I don't know what to do." Her name is Izabella Wentz. Izabella, welcome to the show.

Izabella: Hi Dave. It's so great to be here with you again.

Dave: I put you in *Game Changers* just so I'd have an excuse to interview you again.

Izabella: Aww. Thank you.

Dave: No. Actually I put you in there because you're a game changer. You very intelligently and approachably put out these books about Hashimoto's. Did you think that they were going to be international bestsellers when you wrote them?

Izabella: I really didn't. I just was trying to get myself better. I had this awful, awful brain fog so I was spending all this time in PubMed and looking at these research studies, and then I was forgetting everything. I was like, okay, I need to write this stuff down so that I remember it and keep it organized so I know what to do. Eventually I was hoping that whatever I tried would make me better and that it would help other people feel better too. And it did. I was sort of an any one of ... Maybe this will work and this supplement or this diet or this intervention.

Izabella: My story was amazing. It just ended up resonating with so many other people who went through very similar trajectories with their symptoms, with what they heard from their doctors, with what made them feel better, with what made them feel worse. It was quite amazing with my first book. It was a self-published book. It ended up reaching *The New York Times*, which apparently was the first book to do that and unheard of.

Dave: It never happens. I've had a couple books on there, so have you. If you're listening to this, you go, "*The New York Times* is based on sales." It's not. It's based on some random thing where if you're somehow cool enough, but if you're not published by a traditional publisher, you just don't make it on the list. It is a hard rule, and Izabella was the first person that I know of to break the rule. So that means you didn't just sell a lot of books. You sold an incredible lot of books with a lot of credibility.

Izabella: The other thing too is it's all about if you're making an impact in society. So many people have Hashimoto's, and so many people don't get the answers that they need, that I feel like perhaps my book actually gave people some solutions. People started talking about it, word of mouth.

Dave: That's the reason you're a game changer, the reason you've been on the show a couple times. Plus, you're just an expert and so many people listening, way more than average, have at least one manifestation of autoimmunity just because if you're attracted to Bulletproof Radio, you're probably doing something big or you want to do something big or you have aspirations. You want to be better. Law number 13 in *Game Changers* is, don't push your limits for too long. The little sub-description is: the only time an animal pushes itself until it drops is when it's starving or being hunted.

Dave: When you push yourself without recovery. Your body believes you're under threat. A brilliant, automatic system kicks in and shuts down the less necessary systems in your body, the ones that keep you young, the ones that keep you happy, the ones that help you think. You must learn to be a professional recovery artist. Screw running a marathon. Sprint, rest, sprint instead. Massively create and then massively rest to keep your passion and your meat alive for the whole race.

Dave: Your story's in there. What happens, Izabella, when people don't sleep and they work all the time under high stress? Walk me through the cascade of biology.

Izabella: Sure. I like to call this the safety theory of thyroid disease, of how it develops. One of the things I like to think about, if we can go back to caveman and cavewoman times. As you said, when would a caveman or a cavewoman really push themselves? It would be in times of famine or war or some sort of a threat. What really helps a person when there's a famine? How do you survive a famine?

Dave: You basically digest your own tissues, and then you kill your friends and eat them.

Izabella: Well, that's one way to do it.

Dave: I don't know how you do it, Izabella.

Izabella: I've got recipes for that. Did I say I have a cookbook coming out?

Dave: You do actually, *Hashimoto's Food Pharmacology*, which I was going to talk about. But that was the worst introduction to your own cookbook I've ever heard in 600 episodes. So thank you for that.

Izabella: When I think about a famine, one of the really great ways to survive that is to be able to survive on less food. When you have a slowed metabolism, you don't need to eat as much food. When we look at people with an underactive thyroid, the thyroid controls our metabolism. The thyroid, when it's underactive, is going to slow down our metabolism, therefore we're going to be able to survive that famine.

Izabella: Thyroid conditions also lead us to not be super energetic, not be super ambitious, maybe not have all of these big abilities to complete our goals. So a caveman or cavewoman would be most likely to spend more time in their cave resting, napping, hibernating to get through a rough time when they had low thyroid function, right?

Dave: It's sort of like if you don't have enough money for your electric bill. You turn down the heat because you're going to run out of money, and then you'll have nothing.

Izabella: Exactly. It's a brilliant design that our body has, its adaptive physiology. Great example of that, of how under times of stress our body just knows to shut down or slow things down to help us survive. The challenges in our modern world, we don't get those breaks. We're pushed to our limits with all of these different things in our environment. One of them is just an example of processed food. Generally a caveman or a cavewoman probably wouldn't be eating grass, right?

Dave: Probably not. I guess if you're really hungry, you could make soup out of it.

Izabella: Yeah, yeah. When we look at our modern diet, we look at the big source of a lot of our food is going to be wheat, which is grass, and it's going to be highly processed for us to actually make it ... I use quotations, but "edible." So a lot of times when we're eating foods that aren't working for us, that we're not digesting properly, that's going to lead us to send that signal of famine stress to our bodies. Our body's going to say, "Holy cow.

There must be a famine. Otherwise, why the hell is this person eating all this crap that I can't digest properly?"

Dave: That's awesome. You eat stuff that isn't compatible with your biology. It tells your body there's a famine, which slows down your thyroid. Is that kind of the chain of events?

Izabella: Yeah. I mean just in very basic terms. That's how I like to explain things. You can explain this to a little kid or a caveman or a cavewoman. That's what happens. I could cite different scientific studies with different damage associated. Molecular proteins and patterns that get released when the thyroid gland senses these things in our environment, when it senses that there's something going on, whether that is famine or damage or some sort of a stressor. It helps us by turning down its metabolism. One of the ways is by attacking itself or getting the body to attack the thyroid gland.

Dave: How does that ongoing stress, whether it's from not sleeping, emotional stress, or eating food that's not compatible with you even if you think it's a good diet, eating healthy, you read it in a book somewhere, but it wasn't right for your body. How does that make the body attack other tissues? You have brain autoimmunity and you have, clearly, the thyroid stuff. What's going on with that, that inherent self-immune dysregulation? Do you have any thoughts from your pharmacology perspective?

Izabella: Really, my perspective is there's something within the body that's telling the immune system that it needs to be fixed or that it needs to be regulated. The different things that could set off an autoimmune response, in my experience, they're going to be food sensitivities, foods that are not compatible with us. They're going to be nutrient deficiencies. So for whatever reason, we don't have that one nutrient. There's this imbalanced system and there's some inflammation happening within that part of our physiology, and the immune system tries to go in and fix it. It might be an infection. It might be a toxin.

Izabella: Very interesting line of work is figuring out which infections can be triggering the immune response. We know that, for example, the infection, H. pylori, if we have that in one part of our stomach, that could lead to a condition known as pernicious anemia. This is an autoimmune condition.

Dave: This is the same thing that causes ulcers.

Izabella: Exactly. Exactly. It can cause a whole host of different issues. When the immune system sees something that's not supposed to be there, it's causing inflammation, my theory is initially it goes in to try to fix things. But what can happen is one of the theories is called the bystander effect or molecular mimicry is another one. But with the bystander effect, it's like the immune system goes to attack the infection, and it accidentally attacks its home as well. It attacks the tissue that the infectious organism lives in.

Dave: What if you just have a really mean boss? Your significant other is a total mean person, and you don't have enough money, and your house was just destroyed in a flood. I'm talking about lifestyle stress.

Izabella: That would suck.

Dave: Yeah. Well, that would suck. What does that do to your risk of autoimmunity? Do we know why that happens?

Izabella: With any kind of traumatic stressors, there's a whole host of studies that have shown that early childhood trauma, even trauma in adults, recent trauma, trauma that's been unprocessed or is undigested, as I like to call it, all these things are going to be increasing rates of the autoimmune response. How can I put this in very simple terms? Basically, whenever we have trauma that we're living through or living in or reexperiencing, that's going to set off our immune system and our whole body to go into more of a fight and flight response rather than a rest, digest, and heal.

Izabella: So we're going to be sending out these chemicals to break down the body instead of build it back up. So we might be putting our bodies into more of this catabolic process where we're not utilizing our nutrients. Nutrients are going to be shunted to produce these stress hormones instead of fixing the body. Everybody has inflammation happening in it every single day. It's a matter of how our body internalizes that inflammation and keeps things in balance. When we're in a traumatic, stressful state, we're producing more of the break yourself down kind of chemicals rather than the build yourself back up chemicals.

Izabella: Anabolic, catabolic are some of the terms you may hear thrown around. That's essentially what we do when we're in a high-stress state. We're breaking ourselves down to create fuel to get through that time.

Dave: So that emotional stress, it basically leads to all these disaster responses in the body that turn on the autoimmunity.

Izabella: It's real. Yeah. Norepinephrine can leak the gut. There's just so many intricate ways that this can happen.

Dave: Let's say you're in school and you're studying really hard and working a job like I did in my undergrad. Or you're working to start a company. It's your side gig, but it's taking all your time, which is how I started Bulletproof. I've lived this. That's why I'm asking these questions. What could people do to not get Hashimoto's or some other autoimmune thing when they're under times of real serious stress?

Izabella: A really, really big part of it is self-care. I say a lot of times, just kind of doing the basics. What are the very basics of self-care? It's making sure that you're getting enough sleep. That's going to be huge. Making sure that you're getting a healing, loving touch, whether that's from your partner or from a massage therapist or somebody-

Dave: Or a dachshund.

Izabella: Yeah. Or a little cute, sweet dog that sits on your lap and is blind and loves to do podcasts with you. Yeah. Just getting some of that love. Sitting in an infrared sauna. This

is a really great way to relax yourself, detoxify. Yoga, meditation, anything like that that puts your body into rest and digest calm state are going to help.

Izabella: I also recommend doing a lot of nutrients and digestive enzymes when you're in that high-stress state. We know that stress shuts down our digestion, so we're more likely to not produce enough stomach acid. When we don't have enough stomach acid, that means we're not digesting our foods properly. That means that we're not extracting the nutrients from them and that we could become more sensitive to the food, even the amazing kale juice smoothies, which I know you love kale so much-

Dave: That was just mean.

Izabella: I know, I know. But even the healthy foods that we're eating, we can become sensitive to when we're under a lot of stress. Another part of it is going to be cleaning up our diet and figuring out what's working for us, what's causing us ... what's soothing for us versus what's causing us to be more stressed out and more inflamed. Those are really the starting points is nutrition, self-care, self-love, trying to figure out how to make yourself feel better and more calm in the storm.

Dave: Okay. That sounds really good. Now I'm working really hard. My company might not succeed. I'm still working my day job slinging coffee at the local coffee shop. I still have a mean boyfriend or girlfriend, whatever.

Izabella: I'd get rid of that mean boyfriend or girlfriend. I mean that's-

Dave: Okay. Yeah. Jettison that baggage. I hear you there. But it's really easy to say, "You need a lot of self-care." But self-care is really expensive. It takes time, which is the biggest expense. And it takes money, which is the other biggest expense. What are some of the most effective self-care things that you have found for the hundreds of thousands of people who use your work?

Izabella: Just really basic things like doing a foot soak with Epsom salts. You can get Epsom salts for a few dollars at any store. Soaking your feet with the Epsom salts can be tremendously game changing. It's kind of like doing the float tank, but at a smaller level. You get some of that beneficial, relaxing magnesium into your system. It's a very nice ritual that can help you. That's a really great place to start. Doing an Epsom salt bath, if you want to take it one notch up, maybe putting some lavender essential oils into that. That can be a very, very cheap thing that you can do in very own home.

Izabella: Some of the other things I found to be really helpful are getting that massage. One way to hack that is to go to a massage therapy school where you're going to be worked on by a student massage therapist. They might not have that perfect bedside manner quite yet, but they're going to help you get the massage. Getting one of those massage chairs in the Whole Foods. If you're creative, you can really work to make this happen for yourself. Another thing I always tell people is, you are worth it. You're worth the time. You're worth the money. You're worth the investment to get yourself better and on that path of self-care.

Dave: This may sound a little bit ridiculous, but when I was working on losing that 100 pounds of weight and succeeding in Silicon Valley, in my early 30s, I'm like, "Wow, actually this whole massage thing it turns out, does have an effect." Some personal development retreat or another somewhere convinced me of that. I said, "All right." Massage is like 250 bucks in Palo Alto. That's a lot of money. So I went down the street and found the little strip mall massage joint where they were \$45. I'm like, okay, I'm getting a massage there. All was really good until the very end of the massage where I realized it wasn't that kind of a place. I'm like maybe I should go to the other kind of massage place. That actually did happen.

Izabella: No.

Dave: I'm not joking. I'm like, wow.

Izabella: You'd think that'd be a more expensive massage.

Dave: You'd think. It was right here in El Camino Real. Who would have imagined? So I'm like, all right, not my gig. But that said, \$45 for a massage, there are a lot of places, a lot of bigger cities where there are reputable places where you can go. They just don't charge as much as a spa. There are services where they'll send someone to your house, kind of like Uber, for a massage, which is-

Izabella: \$60.

Dave: Yeah. You look at that and you go, "That's too expensive." Then you say, "Well, how much did you spend the last time you went out and had five drinks at a bar?" It's about what a massage costs. It's one of those things where I actually did do this even as I was becoming as successful as I am now. That kind of advice, it's real and it's not just for the ladies, except for the lavender. I mean, come on. Just kidding.

Izabella: What's a more manly essential oil?

Dave: Yeah. What's a manly essential oil?

Izabella: I don't know. Clary sage?

Dave: That sounds very manly.

Izabella: Musk. I don't know. Yeah.

Dave: Musk?

Izabella: Man musk.

Dave: Beaver pelt. I don't know.

Izabella: But one of the things when I was in Chicago, I was working a job where I had to do the reverse commute in the winter. So it was uphill both ways in the snow in Chicago traffic, and trying to figure out my health and trying to live a normal life. It was very tough because I didn't have a ton of money to spend on things. What I ended up doing was using things like Groupon, and I ended up getting those 30-day passes to yoga. I would go to hot yoga every day for \$5 or something. Then I would utilize the different coupons for massage. I just found a way to work it into my lifetime.

Izabella: Even on my stressful drive, I would listen to relaxing, motivational things and just really try to put my body into that relaxing state whenever I had the opportunity. There's ways you can multi-task in a positive way. If you currently have a horrible commute on the way to work and you hate it, listen to Bulletproof Radio every day.

Dave: Nice plug, very subtle. Thank you.

Izabella: Yeah, very subtle. But no, you can definitely listen to things that make you feel like you're growing as a person and putting yourself in a more happy, motivated state.

Dave: One thing that I used to do during all the incredible stops on my commute back when my commute wasn't through a garden or, by the way, I'm on airplanes all the time so I'm sort of exaggerating. But I'd come to a stoplight and I would do box breathing, which is something I think it's in all of my books at this point. You breathe in for some number of seconds, hold for some number of seconds. Breathe out for some number of seconds, hold empty. I got to the point where I could do one breath per minute. Just breathe in real slowly. But you're sitting at a stoplight, you might as well do something that relaxes your nervous system.

Dave: And then while you're waiting for the light to change or whatever, then you want to kill people a lot less because, well, you're doing that Navy SEAL breath thing that makes you more relaxed. That helps me anyway.

Dave: Izabella, I want to switch gears a little bit. You and I both care a lot about food. I fundamentally think food is the single biggest tool you have to increase your performance, to change how you look, to change how your brain works. But there's a lot of other stuff out there as well. You came up with a concept called food pharmacology. You actually wrote a cookbook based on this that just came out, and a cookbook that I recommend. What is different about food pharmacology versus, hey, I've got a bunch of cool paleo, Bulletproof-inspired recipes, go eat them?

Izabella: With food pharmacology, one of the theories that I came up with and this being a nerdy pharmacist ... The reason I went to pharmacy school is because I was so fascinated with how a tiny little substance can change a person's physiology. When you look at LSD, it's micrograms. You can have this 300-pound man hallucinate off of this tiny amount.

Dave: It's plant-based. I just want to point that out.



Izabella: It is plant-based. And whether that big man is hallucinating might be a good thing or a bad thing, depending on what's going on in the world.

Izabella: But tiny, tiny substances can have profound effects on our bodies. When I first got diagnosed with Hashimoto's, I was like, okay, great. I can just take a little bit of thyroid hormone. Perfect. Going to be great. Everything's going to be solved. Here's my cure. But it didn't really work that way. That's because these tiny healing medications, they were just sending one message. My body was receiving dozens, hundreds, if not thousands of other messages from other sources that were saying, "No healing for you. Let's cause inflammation." One of those messages was coming from food.

Izabella: I just realized that you could take medications, and these were substances that you could take internally. They would be sending these signals, messages, to your body. But the other things in your life also send signals. These could be foods. The foods we were taking had a profound effect on our physiology, on our biology, just as medications did. That's how I came up with food pharmacology. It's not just about the foods that we eat, but how are we digesting those foods and are there other nutrients that we may be missing when we're changing our diet?

Izabella: For me, my goal with this book was to help people become their own nutrition gurus when they read. So they would know not just what foods to eat and not eat and have some great recipes, which are all in there, but also figuring out, okay, if I have this symptom, what do I need to modify? Is there a digestive enzyme that I need to take? Or is there a nutrient that can really up-level my response to nutrition?

Dave: I'm actually really glad you wrote the book because this is what's missing. I just spent so many years where something's wrong in my gut. I have no idea what's going on with this. I will do anything. So in my case, I will do everything. I would just research the crap out of it. And then I would go out and spend stupid amounts of money on every single thing that might work and try them all. The practice of biohacking has evolved over the last 20 years. Heck, it even has a name now.

Dave: But we're getting to the point where we can now say based on these symptoms, based on these genetics, based on this poop test or whatever, this is more likely to work than something else. So it's much less of a shot in the dark. That's happened with pharmacology and certainly with supplements. It's getting better in those, but with food, there are so few people who are talking about things that I wrote about in 2014, The Bulletproof Diet. Hey, did you know the nightshade family contributes to rheumatoid arthritis in a substantial number of people? These are potatoes and tomatoes and eggplants and bell peppers and spicy peppers and things.

Dave: Now finally a few years later, there's a whole book about that that came out. Steven Gundry was on the show about it. But it's one of the many plant compounds that can either be good for you or trash you. What is one of the things that isn't a lectin from nightshades that you find is a particularly troublesome thing for people who are dealing with autoimmunity?

Izabella: There's a lot of different foods that are going to be problematic. One of them is going to be gluten and dairy. Those are probably the two biggest foods. So I just want to throw that out there. For a lot of people, that's going to be highly reactive. Another food that I think people are surprised about because it's generally going to be a pretty healthy food is going to be eggs. We find that, unfortunately, some people will be very reactive to eggs, and eggs might cause eczema. They might cause cystic acne in one person. They might cause horrific digestive issues. Generally, eggs are a beautiful food. They're a natural food. They can be organic and all that. That's going to be another thing.

Izabella: Not everybody's going to be sensitive to it. My goal is to give people ... kind of establish a communication pathway for them between their bodies and the things that they're ingesting. They realize, okay. Perhaps eggs don't work for me. Or for another person, the eggs might work for them just fine. That's, I think, a lot of people that are health-conscious may be surprised about.

Dave: Those were something that were really difficult when I was doing The Bulletproof Diet Roadmap. Eggs, especially egg yolks, they're so profoundly beneficial. But there's also some incidents of allergies. So I'm like, do I put them in Bulletproof foods or do I put them in suspect foods? I would want people who are doing the Bulletproof two-week thing, when they first get going, to have the benefits and to feel the goodness that happens when you get enough egg yolks. So I was always torn on that one. I don't know that there's a correct answer one way or the other, where unless you know from a lab test or from eliminating them for a while whether they're going to be a superfood or Kryptonite.

Dave: But thank you for pointing that one out because I think it's a big thing. If you have eczema and then get rid of grains, it doesn't work. Well, the next thing is you might want to look at that dairy protein and eggs.

Izabella: It's all about you and doing what's working for you.

Dave: Let's talk about that other non-food item, toxic mold, environmental toxic mold, or even in your food as a storage toxin that grows when it's sitting in the mill or something. What is your experience with that being a trigger for Hashimoto's or other autoimmune conditions?

Izabella: I think mold is a highly unappreciated trigger. One of the challenges that we see a lot with people who are super health conscious, even they'll be like they're eating this great diet. They're exercising. They're on a great supplement regimen. But they have mold in their homes. They end up just being, I want to say, destroyed by something like this toxin. I would say for people to really understand what diet can and cannot do. Nutrition is fundamental to our health.

Izabella: But if you've been on a clean diet for two, three months, and you're still struggling and if you're doing digestive enzymes and nutrients and all the things that we talk about in our books, but you're struggling, there's got to be something else that could be happening.

Whether that's having a toxic relationship or toxic mold in your home, you can't necessarily eat your way out of that.

Dave: I certainly never could. Long-term listeners know that this is something that affected my health greatly as a child and again as a young adult, just living in a house that had had water damage before I moved in. Where you didn't even know but, wow, why do I have sinus infections all the time? Why do I keep gaining weight? Why am I pissed off all the time? You're breathing psychoactive chemicals that also piss off your immune system. I have two suggestions for you if you're listening going, "Wait. What? What did he just say?"

Dave: One is I filmed a whole documentary. It took a huge amount of time and, frankly, money to do this. It's free. It's [moldymovie.com](http://moldymovie.com). You can go there and watch interviews with leading names, Daniel Amen, Mark Hyman, just a huge number of people, as well as people who have been affected. This is real. It can affect only one person in the house and the other person doesn't feel it. So you're not crazy. The second thing is, because this is such a passion for me, I actually started a company called Homebiotic. Homebiotic makes a probiotic spray that I spray around my house because it eats toxic mold before it can grow. It's what happens in soil.

Dave: Those are actually my personal practices and things that I've started to be a game changer, you could say, even though my main focus is on Bulletproof and all the big things we're doing here. Anyway, you should do that. That's [moldymovie.com](http://moldymovie.com) and [homebiotic.com](http://homebiotic.com), like probiotic but with home. Izabella-

Izabella: Amazing.

Dave: What are the other triggers besides mold and certain foods and emotional stress? Anything else we should be watching out for?

Izabella: A really, really big trigger is going to be gut infections or infections anywhere in the body. I feel like that's very highly unappreciated. A lot of times I'll see people who are pretty much eating ice chips because they can't tolerate a billion different foods. Things that people should know is, generally if you have really good gut health, you should not be sensitive to a ton of foods. You might be sensitive to one, two foods maybe. But everything else should be pretty well-tolerated.

Izabella: One particular pathogen that I found very commonly in people with Hashimoto's is *Blastocystis hominis*. It sounds kind of out there. It's actually a very tiny, tiny protozoa so it's not one of those giant worms that swims in your entire gut. You're not going to see it in the toilet. It's not going to jump out of you or anything like that. But it's something you could find on a stool test. When you find that you have it and you treat it accordingly, you'll be able to find that you can get a lot of the foods back that you were once sensitive to. It's so under-appreciated.

Dave: It's awesome that you mention that because back when I was testing out the Bulletproof Diet before I wrote the book, I had it dialed in. I could just keep my ... I was

never hungry. I could keep my weight right where I wanted it to be and everything worked. And then suddenly over about six weeks, I gained 15 pounds. I've thrown away my fat pants three years ago. What the heck is going on here? I was kind of freaking out, going, maybe all this research and all, maybe it doesn't work. What's going on?

Dave: I did a bunch of gut tests with experts and all that. I actually had Blasto, what you just talked about, which is what triggered it. I took something. I don't remember what. This was, I don't know, seven, eight years ago. I took some nice pharmaceutical that killed-

Izabella: Alinia?

Dave: Probably. It killed the little bastards and magically, I lost the 15 pounds the next month. I was back working perfectly normally. But it was just that one little protozoa. God knows where I got it. But it does make a big difference. I mean it's hard to say whether it caused additional food sensitivities for me or not because I think my three months of zero carbs at all probably caused the food sensitivities where I was like, hey, let me try ... This was early days of keto, before it was talked about the way it is now. Bulletproof the blog played a pretty big role in saying, "Hey. Keto's a performance enhancer not just for epileptics. It also makes you not hungry and lose weight and all."

Dave: But so I said, "I'm going to try the Inuit-style thing where it's all just fat and some meat."

Izabella: Did you eat whale blubber?

Dave: I tried to catch a whale, but they're really fast. No. Of course I didn't eat whale blubber. But I could I suppose. They swim right past my house. The big problem I had though was, towards the end of that, I would wake up 12 times every night and I wouldn't even know it. My sleep monitor told me. I was just a zombie all the time. I was kind of angry and just really felt not so good. When I was done with that, I had an allergy to eggs that I had not had previously at all. I got another allergy that I hadn't had before. I've mostly worked through the egg thing. I still don't eat them on a regular basis, which is really painful because a lot of my favorite recipes are egg-based. But I had to back off of them for a little while.

Dave: I still think they're a superfood if you tolerate them. What I think happened, maybe it was Blasto, but it was also just your gut bacteria can start to eat the lining of your gut when they have no food over time. If you're eating no carbs, but you're eating fiber, those green vegetable things, at least they can eat that. So I think I just gave myself really bad leaky gut. This is one of those reasons that I keep telling people, look. Being ketosis all the time forever is probably not a very good strategy for you. The Bulletproof Diet is a cyclical ketogenic diet where you can go in and go out of ketosis. You can have ketones present all the time using exogenous ketones in the form of Brain Octane, which just turns up your ketones.

Dave: But I'm really opposed to zero protein or extreme vegan, low-fat perspective or a keto all the time perspective. You can vacillate between the two all you want. But if you do

just one for long periods of time, it seems like it wrecks you. What have you seen in your patients?

Izabella: I agree. I feel like when you're extended ... When you're just eating the same foods over and over again, you're going to be depleting nutrients because you're not going to be getting the nutrients and, I guess, the material to have diverse gut flora. And then you're also going to be depleting your digestive enzymes. The biggest thing I see with people is when they, let's say, they first go gluten-free and dairy-free and then they're just, Okay, let's just have rice or soy for every meal. Then they end up sensitive to rice and soy.

Izabella: There's a few things I actually recommend. I talk about them in the Food Pharmacology book. But one of them is going to be focused on making sure that you're eating a variety of foods and rotating your foods. What you're doing with the eggs is the right idea. If you were to eat eggs for breakfast, lunch, and dinner every day, there's a chance that you might be depleted in digestive enzymes, that you might just not be getting the right kind of fuel in your body. So you might become sensitive to them.

Izabella: I generally recommend food like that to be rotated every four to seven days when you're trying to get it back into your system. The second thing is making sure that you're digesting foods properly. The fastest way to develop food sensitivities is by not digesting your foods properly. Going through and getting digestive enzymes for protein and fat would be in the case of eggs because that's what they contain, would be a really good thing to do. Probably the third biggest thing I would recommend is looking into systemic enzymes.

Izabella: Systemic enzymes are going to be enzymes that are taken when you're not eating, so on an empty stomach. They break apart the circulating immune complexes that we create against foods and against our own bodies. What's very interesting is that they can reduce food sensitivities and they can actually reduce and eliminate antibodies to our own thyroid gland and other parts of our body that are present in autoimmunity. Those are probably the biggest things that I recommend.

Izabella: To your point about people being on diets and sustaining these diets long-term, I do see people ending up feeling better on a vegan diet at first and then feeling worse eventually because they become depleted. Same thing with keto, they feel better on keto at first and they're losing weight. Their brain's working great. And then all of a sudden they're like, "Oh my God. I can't ride a bike. I'm so tired." Yeah. There's a balance in there. Hopefully all of what I said made sense.

Dave: There's something called dirty keto, which is going back to the year I was born. Robert Atkins came out with this book. It was like, hey, don't eat any carbs. But it's okay to eat fried pork rinds, margarine, soybean oil, corn oil, and soy protein and fake sweeteners as long as you don't eat any carbs. What happened to me back then is what happens to people who go on the dirty keto approach today where they're eating industrial feedlot meat and all that stuff. You lose half the weight you have to lose, then you plateau, and then you get tired and cranky. Then you become one of the angry keto ranters online fighting with angry, depleted, vegan ranters. And then it's a whole wasteland of dietary warfare. None of which is necessary.

Izabella: Just sip some tea and watch that happen.

Dave: Exactly. Or bone broth if you're on the other side. I'm just kidding. But you said something about systemic enzymes that is worth mentioning. The most common ones are serrapeptase and nattokinase that I'm familiar with. Going back, geez, almost I want to say 18 years ago, I went through a period where I got to know the manufacturer of one of the brands of those. They talked about some off-the-record stuff. They had people taking 200 capsules of systemic enzymes a day, 300 capsules a day on an empty stomach. So being who I am, I'm like, "I'll do that." For about six weeks, I think I spent four or \$500 a week on systemic enzymes. I mean I was just eating them like a meal.

Dave: What they had found is that when you get very high doses, they break up scar tissue throughout the body. I did see a softening of scar tissues from the surgeries and injuries I've had. All the muscle adhesions where your fascia gets adhered to things, those break up, which blew me away, in addition to all the circulating complexes. Now, you might think that's a good thing, and it probably is. But it's also a bad thing because if you have an adhesion in your movement pattern, it's there to protect you from something. If you don't correct the movement pattern with functional movement and you break up the adhesion, you end up with a less stable system, which I probably did do.

Dave: But to this day, when people do a really aggressive Russian-style electrical screening where they'll run a current to see where it hurts, they're like, "You only have six. Most people have hundreds of these." I did the Russian, it's a kind of traditional shamanic Russian healing they do where they take these things that look like drumsticks and stick them under your tissues and then they hit you with this big whip thing. I swear it was healing. That's what they told me.

Izabella: Huh?

Dave: It actually comes from the Altai people. Anyway, the same thing. This advanced Russian master, kind of broken, he's going, "I do not understand. His body is like sand." In that it didn't stick the way he expected. I think that was the systemic enzymes. That's why I'm kind of going off on that story. I think they can be incredibly powerful. But you're talking about normal doses for, what? It's like six pills a day on an empty stomach before bed kind of thing?

Izabella: The standard dosing is about five, maybe three to six, on an empty stomach three times a day. What I will generally recommend is about five to 10, three times a day on an empty stomach. So a little bit more, but not quite 300.

Dave: You had to drink lots of water. By the way, I'm not recommending that anyone go out and do that. This is what a manufacturer of these was saying, "Look. We've done this with a few people and you should try this." There's been some guys on the show, the [inaudible 00:44:21] guys, talking about systemic enzymes as well. But the idea here is taking some of those might prevent a problem from happening, or it might make a problem get better. If you take even those same ones with food, they digest the food.

You take them on an empty stomach, they digest the parts of you that you don't want. Good way to put it?

Izabella: Yes, unless you don't take too many of them. We have had people who've been able to eliminate food sensitivities and thyroid antibodies using systemic enzymes, which has been pretty cool to see their lab results with that.

Dave: That's a big hack. How long did it take for them to achieve that?

Izabella: Well, with one person it was just a month.

Dave: Wow.

Izabella: With another person it was three to four months. I generally tell people if after three months you don't really see any results, then move on to something else. I would say, what's interesting is people will notice less joint pain. That's one of the big things that they're known for. And then people that have any kind of swelling in their bodies, they'll be able to notice. They'll say, "I can look in the mirror and my face is, I could just tell, it's less swollen." That's how you'll know that it's working. It is like a full-time job because you have to take all of them multiple times a day on an empty stomach. So you really have to be mindful about that.

Izabella: For some people, it's one of the things that they find it's challenging to incorporate into their lives. But it can be a huge game changer.

Dave: Izabella, do you have any other major pieces of advice for people who probably are at risk for turning on autoimmunity, but just don't know it? I don't think people who are saying, "I feel pretty good right now. I don't think I have this. I'm not going to go do a lavender Epsom salt foot bath, and maybe I'll get a massage every now and then, but really I'm going to go skiing." Give me some real actionable things for people who have not gone down the path that you and I have gone down because we're such ass kickers.

Izabella: Honestly, it would focused on making sure that you're taking that time for yourself when learning to say no. Learning when to say yes and when to say no. There's a lot of times where we can really, if we're high achievers or people pleasers or both, we can really push ourselves beyond the limits of when we should be pushed. I would say, one of the biggest things for me has been learning just to say no and that it's okay to say no. Maybe don't do the black diamonds if you're not feeling 100%. If your Oura ring is not telling you that you're at above 90%, don't do the black diamond.

Izabella: It's okay to do the bunny slopes sometimes even when everybody else is doing the black diamonds.

Dave: It's a little bit of self-kindness there. All right. One more thing for you. You told everyone earlier in the episode that they should sleep, but you're a new mother. Congratulations by the way.

Izabella: Thank you. So I don't sleep.

Dave: Special advice for moms because, by the way, moms are more likely to get Hashimoto's, right? Post-pregnancy?

Izabella: Having a baby, I don't know how every mom doesn't get Hashimoto's after pregnancy. That's where it becomes really hard or, what's the word? That's when it becomes actually really important that you take care of yourself. There's a lot of research that shows that whatever the mom is going through, the baby will go off of. We talked a little bit offline about heart rate variability and how calm you are and how you present yourself. I can tell even with my baby. If I'm having a stressed-out day ... We had a bunch of visitors for Thanksgiving. It was wonderful, but we were kind of stressed out.

Izabella: I had some adrenaline that I think I gave through my milk and through just holding him where he was kind of like, okay. He was high energy then too. So it's extra important for new moms to take on more of that self-care. Any moment that you can find when your baby's napping, I know this is so commonly overused. But take a nap with your baby if you can possibly. Get other people to help you out around the house. One of the things I did before I had the baby and not just setting up the nursery and doing all those fun things where you shop for really cute baby clothes. But I really looked at things I was doing in my life that were taking a lot of my energy and effort.

Izabella: I really cleared the decks for myself. Making sure all of your bills are on automatic pay, that you have good systems, good organization, that you've got people you could count on to help you out because it's going to be a trying process. Sleep deprivation is something that is challenging in so many ways. It's a great time for our bodies to restore. So you want to sneak in times where you can nap. You don't want to be worrying about all these other non-essentials like cleaning your house, cooking, or paying your bills or walking your dog. Whatever it is that's the duties that you have.

Dave: I think that's really fair advice. Your comment that you don't know how every mother doesn't get Hashimoto's, it is an extra-stressful time and one that I think a lot of people, if you haven't had kids yet, or maybe you just blank it out because it's such a trying time for those first couple years. It's something that can establish long-term food allergies. It is another stressor and one that is really good. But it's also stressful, so you want to manage those stressors as best you can, just like you do in the rest of life.

Dave: The point in *Game Changers* is that if you manage those enough via all the different tools like that, that your resilience and your performance in the short-term and your performance in the long-term over decades will be much higher than if you just sort of like, "I'm just going to lean in and just smear myself against the wall at 100 miles an hour." Eventually, this kind of hurts and maybe isn't the long-term strategy.

Izabella: Absolutely. Yeah. I feel like new motherhood is a prime time to be extra kind to yourself and really eat great foods. Take your supplements. Try to get a massage. Try to get that hot bath in whenever you can. Just enjoy that time with your little person.



Dave: It's also a good time to practice what you write about in *Food Pharmacology*, your cookbook. Eat good stuff. My first book was on fertility. I care greatly about that for kids as well as adults. I think it's time to revolutionize and rebuild our entire food supply for humans. I'm working hard on that one. But in the meantime, I do think you have some new and noteworthy things in *Food Pharmacology*, which is the reason I wanted to have you on. Just to tell people listening, if you're looking for some new food ideas, looking for some new recipes, ways that'll save money versus going out to a restaurant, and also taste really good and give you some more control over your own biology, check out *Food Pharmacology*, Izabella's new book.

Dave: Izabella, thank you so much for being on Bulletproof Radio. Thank you for being in *Game Changers*. I appreciate you.

Izabella: Thank you so much, Dave. I really appreciate you.

Dave: If you liked today's episode, you know what to do. Head on out there and pick up your copy of *Food Pharmacology* if you like to cook. And then practice gratitude. If you've read *Game Changers*, you know how important gratitude is. If you haven't read *Game Changers*, pick it up already. You listen to the show all the time, you're going to get more ROI on reading that book than you just did listening to this show.

Dave: For both books, here's how you practice gratitude. Go to Amazon. Click the review button. Click five stars if you think the books merit it, which I promise you they do. And then leave a little comment because it does two things. It lets Izabella and me know that our work matters, which we care about a lot. It also lets other people figure out that it's worth their time. So you're totally doing a solid. It takes you 10 seconds. So, leave a review for *Game Changers*. Leave a review for *Food Pharmacology*. Thank you.