

Dave: About a quarter of Americans don't get enough vitamin A in their diet. Vitamin A is essential for the human body and it's been shown to help with inflammation, immune system, maintaining strength and integrity of your bones, and it's part of having a healthy sex life. One of the best sources of vitamin A is a type of cod liver oil that Daria Imports called Dropi. Dropi is one of the purest cod liver oils on the market today. It's made exclusively from wild Cod that's caught and processed in the oldest fishing village in Iceland. It's cold processed, which preserves it's natural fatty acids including Omega 3 in vitamins A and vitamin D and it also, because of the way it's processed qualifies as a raw food instead of a processed food.

The people over at Daria are really passionate about wellness and peak performance. One of their guys, Ash, is now working on becoming a Bullet Proof coach, they're so passionate about being bullet proof. You might want to check out the new cod liver oil called Dropi and just in celebration of Ash's hard work becoming a coach, my friends over at Daria are giving Bullet Proof listeners 20% off any order. Head on over to dariaimports.com/bulletproof and check out all the cool products they've got in the cod liver oil space and you'll save 20%. Don't wait. This is a limited time offer. Just go to dariaimports.com/bulletproof.

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 that you can actually exfoliate from the inside out when you take something called vitamin A, which is something that you can use topically in some of the skin care products out there. When you take it orally, it can treat skin problems and it changes the physiology of your skin by promoting epidermal differentiation, changing growth factors, inhibiting the production of oil, and suppressing androgen formation, which means that if you have acne, eczema, psoriasis, cold sores or things like that, they can get better from vitamin A. But be careful because if you take too much vitamin A without getting your sunshine and taking your vitamin D, vitamin A will suppress your vitamin D because the cool thing about your body is it listens to the environment around you. The bad thing about your body is that when you do something, it can change something else. It's always fighting to have equilibrium and your job is to change the environment around you so that it has the right equilibrium so that it'll do what you want it to do, namely not have acne.

Speaking of skin, before we get into the show, if you're a long time listener you've probably heard about my history with toxic environmental mold exposure and the countless stories I've shared from friends, and family, and co-workers, and even in the documentary, Moldy, that I filmed. Hopefully you had a chance to stop by the Air Oasis booth at the 2016 Bulletproof Conference. What I found is that the Air Oasis technology provides the most advanced protection that I've been able to find against mold and other environmental contaminants that are airborne. Unlike a conventional air purifier, Air Oasis sanitizes the air and surfaces like door handles, countertops, and even your iPad screen. It neutralizes micro-toxins and mold spores in air and prevents mold from

replicating on your walls and surfaces and it removes about 99% of air allergens, odors, bacteria, and viruses.

The way it does this is pretty cool. It's based on the NASA technology that was designed for deep space missions. It's compact, it's really low maintenance, and it's energy efficient. There's about 10 years of university lab and field studies backing it up and they currently sanitize 100 million square feet of occupied space including the tallest building in the world, hospitals, and professional sports teams. It's not an ozone generator so you're not breathing ozone, which isn't good for you, although injecting ozone might be. It's made right here in America so you know it's the highest quality. Head on over to airoasis.com/bulletproof20 and you'll get 20% off in a special offer on an indoor air quality test kit. That's airoasis.com/bulletproof20.

If you haven't had a chance to try Bulletproof upgraded collagen protein, you need to give it a try. Here's why. It's a noninflammatory protein that helps your skin, your bones, your hair, your nails. It's one of the most important proteins you can get and it's one that's missing from your diet unless you make bone broth using the recipes that are in Bulletproof the Cookbook. Since even though I'm pretty dark bullet proof, I don't always have a pot of bones simmering at my house because it's actually a lot of work and so is defrosting little cubes of the stuff in my freezer so I just take Bulletproof Collagen Protein, which has no flavor in my Bulletproof Coffee and I put it in my coffee in the morning and bam, I've got 20 grams of the kind of protein that isn't available elsewhere. That's Bulletproof Upgraded Collagen on Bulletproof.com. I would appreciate it if you would check it out if you haven't tried it. You'll feel the difference. It's really cool, joints, hair, and movement; all that kind of stuff.

Since you're already sitting at your computer right now, maybe, or driving and you have iTunes running, if you just go to that thing at the top that says, "Leave a Five Star Review for Dave," and you click that and left a five star review, I would be amazed and grateful for that as well.

Today's guest is a leader in the functional medicine community and like my wife, Dr. Lana, she worked for five years in emergency medicine and training in conventional medicine before cutting over from the dark side. Just kidding. Cutting over to the side where we're looking more at how our body is a system. She's helped a lot of people help reverse autoimmune disease and wrote a New York Times Best Selling Book called The Autoimmune Solution and The Thyroid Connection. If you're listening to this and you're saying, "I don't have auto immunity," I say I don't really know if you know if you have auto immunity and you say, "I don't have a thyroid issue the odds are actually higher that you do have an undiagnosed thyroid issue than that you don't if you're alive. That's why she's on and she's none other than Dr. Amy Myers. Amy, welcome to the show.

Amy: Hey Dave. Thanks for having me, very excited to be here.

Dave: Now, I just asserted something kind of big that most people listening, like if odds are higher that they have something going on with their thyroids than not. Do you believe that?

Amy: I do and most thyroid conditions are autoimmune in nature so the two books go hand in hand with one another. Most people with thyroid dysfunction don't actually know that their thyroid dysfunction is autoimmune because their doctor hasn't checked their antibodies. As I write about in the book, many people can have thyroid dysfunction even when their doctor has told them that all of their labs are normal. Of course, I know you've had other guests talking about the thyroid but we can certainly get into all the reasons why that is with the reference ranges being too large, with people not converting to Free T3, with people having high reverse T3's, and all the various reasons of how that can actually happen.

Dave: A lot of listeners might not know your Free T3 and all that stuff so I'd want to make sure we define all that stuff for them. But even just the concept of autoimmunity is something that all that means is that your immune system is attacking either parts of your body or compounds that your body makes. I did, actually jeez, going back til maybe 26, 27 so that would've been like 15+ years ago, I was diagnosed with Hashimoto's and I still take a small amount of thyroid medication, much less than I used to, although I have no antibodies anymore. I reversed that. The reason we're saying that many people have a problem with thyroid is that the thyroid is an energy thermostat for you, like it basically controls how much energy your mitochondria make.

Speaking of mitochondria, Head Strong is a book about mitochondria. That's why I'm so up to speed on all this and you should go to your favorite online book seller or just go to orderheadstrong.com and I'll send you, if you get this before April 4th, I'll send you a giant coupon for the Bulletproof website. It's a really good thing to check out that book on mitochondria. But since most people are out there and like, "Ah, I feel pretty good," but what you're saying, Amy, is that when someone feels pretty good but not like completely like amazing all the time, that thyroid and your own body's immune reaction to your own thyroid can be a part of the problem?

Amy: Sure, and one thing that I also like to say, I mean you mentioned that you're on a small amount of thyroid medication. I like to clarify that and call it supplemental thyroid hormone. That's how I refer to it in the book because a lot of people, particularly following you, following me you know, or seeing people reverse disease, they feel like they've failed if they don't get off this medication. When people think of it as supplemental thyroid hormone, that a lot of people with autoimmune dysfunction, particularly thyroid, takes 5-10 years to get diagnosed, six different doctors, they've had this for many years and if they've gotten beyond the inflammatory stage to the damage stage to where they have damaged the tissue, you can't regrow your thyroid tissue, right? You got your autoimmunity under control by getting the antibodies to go away.

Dave: You just said can't, which is like it's one of the weasel words in the Bulletproof lexicon.

Amy: Well, I have-

Dave: If I inject stem cells and hit it with a laser in a hyperbaric chamber, while spinning around 40 times a second, isn't there some way, like, can't we regrow our thyroid? There's got to be a way.

Amy: Well, I had Graves disease and before I knew about functional medicine and had mine ablated.

Dave: Okay.

Amy: I literally have no thyroid function. Can somebody, you know, sure but also, and maybe many of your listeners are doing things like that. You can see my hyperbaric machine in the back.

Dave: Totally.

Amy: But a lot of people don't have that opportunity and so-

Dave: You're right.

Amy: Even if that was possible, the vast majority of people don't have that accessible to them. I just want listeners to not feel that if they do need to be on some supplemental thyroid hormone that they haven't failed, that, you know-

Dave: Yeah.

Amy: That is replacing a certain amount of hormone that your body is missing because of the damage that occurred.

Dave: Let's face it, if you're over 40, nature wants you to die. I mean, like, "Get out of the way. You already had your babies. They're old enough to reproduce so it's time to clear out the field." I take supplemental testosterone. I've been really open about that for years because my levels were too low. When I'm 140, I'm planning to live to at least 180, so when I'm 140 I'm pretty sure that any hormone, including ones we probably have that we haven't identified yet, that is low, I will be completely using. I'll be dialing it in. There's nothing that's about surrender or weakness. That says you're taking control of your body's hormone levels. It's a very different perspective that says, "If my body isn't making the hormones of a 25 year old even though I'm 45, therefore something's wrong with me." Yeah, there's something wrong with you. You're getting old-

Amy: Right.

Dave: And you didn't do anything about it. That's what's wrong with you. I'm a little, maybe over pretending-

Amy: No, for sure.

Dave: That's what I believe.

Amy: Right but I mean replacing it to 20 is a different thing than just replacing it and then we have people who've completely burned out their adrenals and everything and they're

just burning the candles at both ends and always trying to find the root cause of what's going on.

Dave: You talked about having a hyperbaric chamber and having had Graves disease. Why did you get Graves disease?

Amy: Why did I get Graves disease? Well, I talk about in both books kind of five factors that I believe lead to pretty much all chronic disease and I pretty much had them all. I was a vegetarian for 27 years. I was in the Peace Core so I had SIBO and Candida. I was in the Peace Core and every Wednesday was shot day. I'm MTHFR Homozygous so I had lots of mercury overload and I'd spent time in China.

Dave: We've got to pause for a second there.

Amy: Okay.

Dave: MTHFR Homozygous is actually not something that lives under a rock and bites you, if you haven't heard it. What that means and this is something where probably what, I'd say a third of people listening have genetic shifts that mean that they don't process some compounds the way others do like folic acid for instance. We just launched a Bulletproof Methyl Folate supplement that we're manufacturing, which everyone can use instead of something that poisons third of us and the other two-thirds can use.

Amy: Can use it, yeah.

Dave: If you're like you, or me, or like a lot of people listening, some environmental things just jack you up kind of permanently. You had that and you were getting shots every week because of your Peace Core stuff.

Amy: Right.

Dave: Okay so those are some pretty big things and those shots do affect you. If people say vaccines don't affect you, my wife had to take a semester off her internship. She was going to do Doctors Without Borders in the Himalayan Rescue Association stuff and when she got all the injections they required, her brain went away. Literally she couldn't work in the ER for quite a while because of brain swelling from these. Yeah, vaccines, some of them are useful but good God.

Amy: Yeah.

Dave: That was big.

Amy: I look at diet so I was a vegetarian.

Dave: Yeah.

Amy: I was eating a lot of gluten. I'm gluten intolerant. I look at leaky gut. I had leaky gut from Candida, and SIBO, and toxins, infections, Epstein-Barr, a variety of other viruses.

Dave: You were trashed. Wow.

Amy: Then stress. My mother had passed away the year before I got Graves disease. I came back from the Peace Core, was readjusting, taking all my post-vac, premed classes and then my mother passed away very unexpectedly from pancreatic cancer so I had like kind of the perfect storm of everything of how I think that I got Graves disease. There was an uncle who'd had diabetes type 1 so there was some history of autoimmunity on my dad's side but no first degree relative with autoimmunity.

Dave: Talk about Graves disease just to let people-

Amy: Sure.

Dave: Who don't know what it is know what happened.

Amy: Yeah, sure.

Dave: By the way, I love this level of detail because this is why you know what you know because you lived it, not because you sat behind a double blind study-

Amy: Right.

Dave: And decided and judged. But anyway, what is Graves disease?

Amy: Well, I think that's one of the reasons why patients, when they come to me, really feel comfortable because I've experienced it. I've been trained as a conventional physician. I've been trained in functional medicine and I've personally experienced all of this. There's very little somebody sitting across the table from me that I haven't experienced and you can see by seeing my infrared sauna and my hyperbaric that I practice what I preach in living the lifestyle. Graves disease, most people are more familiar with Hashimoto's, which is what you said you had, which is, well it can go hyper and hypo but ultimately a burnout of the thyroid where you end up with a lower metabolism and hypothyroidism. Mine was hyperthyroidism. The autoimmune form is Graves so I was having, my second year of medical school, panic attacks, insomnia. I eventually had a hand tremor. My leg muscles were so weak that I was holding the banisters going down the stairs.

Of course I get the doctor finally and she says to me, "Oh, it's medical school stress. You just think you're a medical school student learning everything that we're teaching in med school," and I knew that there was something really wrong with me. But it's the opposite of the hypothyroidism. Everything revs up, which is what all my symptoms were, anxiety, panic attacks, insomnia, weight loss, tremor, fast heart rate. In conventional medicine as opposed to Hashimoto's in conventional medicine, "the

treatment" is the same. They give you supplemental thyroid hormone, right? But in conventional medicine with Graves, it is medication to shut down-

Dave: Okay.

Amy: The production of your thyroid hormone, PTU is what I took, to blow your thyroid up like Hiroshima or to surgically remove it. I actually went into medical school know I would do what I'm doing but I didn't know how to get there. My father was a Professor of International Studies with China being his specialty so I went back to my roots of Chinese medicine. That didn't work for me. I then tried the PTU and I got toxic hepatitis so within about a month I was feeling even worse. My liver enzymes were very elevated and so I had to get off the medication right away. The internet was just coming about. I spent a lot of time researching for alternatives and couldn't find any and ultimately had my thyroid ablated with the radioactive iodine so I don't have a thyroid now.

Then eventually met Mark Hyman and found functional medicine and kind of realized that even though conventional medicine solved my disease so to speak by blowing up my thyroid, if I never really got down to those root causes, I was leaving myself wide open to some other form of autoimmunity. You're three times more likely to get another autoimmune disease once you already have one and if I didn't deal with my diet, and my leaky gut, and all those heavy metals and toxins, and infections, and stress that I was just leaving myself open to something else. I then really spent the next several years diving into myself and then eventually opened my own functional medicine clinic working with people from all over the world with autoimmunity and thyroid dysfunction.

Dave: It's an impressive path you've gone down and you mentioned Peace Core and vegetarian and you didn't say parasites. People eat a lot of vegetables. Actually vegetables are a bigger way of getting parasites actually, at least if they're raw vegetables, than eating meat, which is a surprise to a lot of people. But did you ever look at parasites from all that Peace Core time?

Amy: I did and it's so surprising. I mean, I totally was for sure thought I was going to have a parasite. I've done so many stool tests. No parasites. In fact I'm now taking the parasite treatment to try to help bolster my immune system, the HDC treatment.

Dave: HDC, it's cool.

Amy: Yeah, from Sidney Baker but no I didn't. It's like totally surprising. I had SIBO of course because I was eating lots of grains, and legumes, and carbs and I had Candida but on no stool test did I have parasites.

Dave: Wow.

Amy: I know, pretty incredible.

Dave: I had a brain eating amoeba that I just got rid of two weeks ago. That was really irritating. Fortunately-

Amy: Sure.

Dave: Because I have a highly resilient fault tolerant system at this point, it was unable to penetrate my gut lining and move into my brain, which would have-

Amy: Well, that's good.

Dave: Really, really pissed me off.

Amy: That would have sucked, yeah.

Dave: I had it for four months with all sorts of GI symptoms but my immune system-

Amy: Wait, how'd you get it, from vegetables?

Dave: At a restaurant in Phoenix probably from vegetables.

Amy: Yeah.

Dave: It was someone from a third world country probably just working without clean hands.

Amy: Right.

Dave: They're not really sure but it was actually pretty darn disruptive to have something like that. I do see a lot of people who go down this path, they get a blastocysts or they get another parasite.

Amy: Absolutely.

Dave: But you didn't even though you really had like-

Amy: Yeah.

Dave: All of the warning signs for parasites. You also mentioned toxic mold.

Amy: Yeah.

Dave: What's your experience there?

Amy: Well, I think I've been exposed to mold my entire life. I grew up in New Orleans, old, you know-

Dave: Yeah, that's one of the-

Amy: 100 year old houses, all kinds of stuff. Yeah, for sure.

Dave: One of the moldiest cities in North America, right?

Amy: Yeah, I'm pretty sure that Austin has it beat but New Orleans is definitely up there. I've lived in only moldy places but I didn't realize. I mean, where it tipped my immune system was about four years ago in an office. It was in Austin. In a little house was my first office and there was a rainstorm and it was very clear that it kicked something up because several of us were starting to have symptoms. That was my first foray into it and it was very interesting. I used to think, if something wasn't this sort of set of diet, leaky gut, infections, I definitely thought everything was heavy metals. Then once I got exposed to toxic mold and got into that world, I now see so much. Of course now I've also learned about Lyme as well and it's amazing just how prevalent, well, the two overlap but how much Lyme and toxic mold there is that I see in my clinic in all of those people who are just not getting diagnosed.

Then got, really in the midst of writing my second book, The Thyroid Connection, was having, just I, probably like you, I check- I'm like a kid in a candy store. I have a lab in my office and so I check labs all the time and so I was seeing some autoimmune markers creeping up. I thought, "This is really weird because I'm doing everything like to a tee. This doesn't make sense. I had gotten married, and moved into my husband's house, and it was new, and so it was off gassing and I thought it was that, and the stress, and the first book coming out. You know you always kind of think, "Oh, it's this or it's that." Finally there's a woman that can feel mold anywhere. I had her come over to the house and she literally nearly died. It was so bad. In the midst of my book I just jumped out of the house and got in an apartment. This year I've been in eight different apartments trying to find somewhere safe to live in Austin.

Dave: Austin does have a problem because it's so humid.

Amy: Huge.

Dave: Any time indoor humidity gets too high or sometimes too low, you can get a mold problem. By the way-

Amy: They're building so much so quickly here and wrapping everything.

Dave: Yeah. For listeners, if you haven't seen Moldy, the documentary I made, I spent a couple hundred thousand dollars out of my own pocket to make a documentary about toxic mold. It's at moldymovie.com and the reason I did that is this stuff trashed my biology and roughly 28% of the population has genes where mold will cause almost permanent changes including Hashimoto's is directly linked. It's not the only cause but a direct cause of Hashimoto's, as well as adrenal dysfunction, is toxic mold. The worst exposure is in the environment when you breathe it. When you eat toxic molds, i.e. one of the reasons I go after moldy coffee is when I am exposed to coffee with mold in it, it knocks me out because my immune system is ready, it's alert for the stuff so I had to give up coffee for five years before I invented mold-free coffee that now is very well know. The

Bulletproof coffee, people can drink it who can't drink normal coffee sometimes because I don't get the jitters and the shakes that came from the moldy stuff.

Amy: I see it with all kinds of autoimmune conditions.

Dave: You do? Okay.

Amy: There is a link but yeah, all kinds of autoimmune conditions, particularly a lot of the neurological autoimmune conditions.

Dave: It'll trigger the demyelination of the nerves so the nerves lose their insulation, which is tied to MS and Parkinson's. One of the more interesting studies, since we're talking about autoimmunity, and mold, and because you are someone who's had mold just like me, and if you're listener's going, "This doesn't apply to me," guys, watch Moldy, the documentary. I've got Daniel Amen, Mark Hyman. These are big physicians who've done this, talking about how this is one of the most important problems out there and also-

Amy: It's huge.

Dave: At least half and one of the experts in the movie who does mold inspections for a living says 70% of structures have water damage so think about it like this. You may have a thyroid problem. You may just not be at the top of your game but you're doing pretty good. If there's a water stain on your ceiling, you have this whole new level of performance that you can unlock just by getting the crap out of your environment. It's like kryptonite that will grow when it's too wet in your house.

Amy: There's so many people, I mean it's just like people with Lyme, 90% or more of the people that I find have Lyme don't remember the tick bite.

Dave: Yeah.

Amy: There's so many people who don't have the stain on their ceiling. there's so many people who had, I mean, I actually was just at a friends house and I could tell it was molding and was asking. We started talking about something and I was asking, "Well, have you ever had any leaks," and they say, "No." Then later they're talking about how right before they moved into the house, the plumber came and did a test to the water and all was fine. Then they came back the next morning and there was two inches of water in the entire house but people don't make the correlation of a leak. They think, did something from the roof leak? People don't. It's just amazing the number of people that I ask and I really have to dig down to ask very specific questions for them to understand what I mean.

Dave: One of the things that I often wonder, most of my hormone levels have been off since my mid twenties and there are a couple studies that show environmental mold can cause autoimmune hypopituitarism and your pituitary gland controls most hormones, including thyroid, adrenals, your sex hormones. We actually know which part of the pituitary gland will be attacked by our immune system if you're exposed to which

species of mold. It's that specific so that there's no woo-woo science about this. This is just happening. It's just invisible and it's not well known. I don't want to make this a podcast about mold because we're talking about a broader autoimmune thing. It's just for listeners, this applies to everyone.

Amy: Yeah, well it does apply to everyone that it is everywhere but not everybody's affected by it. My husband had no symptoms whatsoever. He is, and his levels, actually we did a urine test and his levels were 10 times what mine are. Immunologically at least, he was able to tolerate it and not affected by it. It is present.

Dave: I've got to stop you for a second there.

Amy: Yeah.

Dave: He was able to tolerate it but when you say, "And was not affected by it," his cancer risk is through the roof.

Amy: For sure. That doesn't mean-

Dave: He was affected by it. He just didn't feel it, right?

Amy: Right.

Dave: There's a difference.

Amy: Right. Right. It doesn't mean that, I mean so here's the catch 22. The work of Richie Shoemaker, he'll tell you, you have to have this certain set of genes to be predisposed to it, 28% of the population, yet even if you don't have the genes, just like Celiac. We're seeing people with Celiac-

Dave: Yeah.

Amy: Have Celiac who don't have the genes. Even if you don't have the genes, if you're living in a moldy place, that's not good. Even if you are not currently being affected by it, it doesn't mean that I didn't go through detox with my husband and get him out of the environment for future risk.

Dave: Yeah. Well, Dr. Shoemaker's on kind of the radical fringes.

Amy: Yeah.

Dave: It's only an immune response that matters. The preponderance of evidence, I've got more than 2,000 studies on the Bulletproof website, which I would call a lot. I was showing that the toxins made by the mold have a set of effects that are bad for all of us including cancer and a bunch of other things and the immune stuff that Shoemaker focuses on really matters. I find it disingenuous to say it's only one or the other. It's a

combination. I interview one couple in the documentary, in Mold, where they're both physicians and she got sick when they moved into a moldy place.

Amy: They're from Austin aren't they?

Dave: No, Santa Barbara.

Amy: Okay. There was a couple from Austin.

Dave: Yeah, this is Jeanette Hope.

Amy: Yeah.

Dave: Yeah, there was a couple from Austin. That's right. But it was interesting because the husband is a physician. He's like, "I've got nothing. Maybe my wife is crazy."

Amy: Right.

Dave: She's this doctor. She goes, "I have 42 symptoms. I must be crazy," except she had a fever so she biopsied every organ in her body and eventually they realized it is an environmental problem. The environment is making her weak but not him weak yet when you go to those 2,000 studies about cancer and essentially every chronic illness you can think of is made worse by this exposé. Her husband was at higher risk but felt fine. That's the scary thing. If something knocks you out and you have like a sense of it, then you're a canary and you know. But the reason you have a canary in the coal mine is that it dies before everyone else but they're going to die even though they don't feel it. You and me, we're canaries.

Amy: Right.

Dave: For everyone listening, there are things that trigger, like if someone in your house suddenly just completely goes bonkers, you might want to look at the house. It doesn't have to be mold. It might be many other things but it's just the environment is a major trigger. As a functional medicine doctor, you're trained on that and that's what you're writing about in your books rather than these are crazy people.

Amy: Yeah. No, I see it all the time. The wife, I typically see more women than men just because of autoimmunity is more present and of course the husbands kind of think their wives are crazy because they're fine in the house and the wife is not. It kind of goes down that path but back to your hormones going low in your 20s, when I see a young man in his 20s with his thyroid, and his adrenals, and his testosterone off, certainly Lyme and also toxic mold are two things that I absolutely think about.

Dave: I did have chronic Lyme. In fact, my wife and I started Malaise Diagnostics in the US, which is a test so we could run species specific. I could run my own labs because we were in a lab company but I am to the point I do not believe that there is a single case of chronic Lyme without an exposure to either toxic mold or similar toxins from algae or

things like that. That's a pretty radical thing and it pisses off all the Lymeys but this is- 98% of people listening to this have Lyme in their pee. We can get the DNA from your pee. You have Lyme. It just doesn't do anything.

Amy: Right.

Dave: Then you walk into a moldy building and two days later you have chronic Lyme. This is what's going on.

Amy: I had this conversation-

Dave: Do you agree?

Amy: With another functional medicine doctor because he's in the Northeast and he's talking about all his Lyme patients and I'm down here talking about all my mold patients and I'm like, "They're one and the same."

Dave: Yeah, they are.

Amy: There's so much overlap.

Dave: Now, let's get out there, Fibromyalgia and chronic fatigue, those are mold people as far as I can tell and occasionally Lyme, and occasionally mitochondrial dysfunction at a big level but I would say 80-90% of those things are misdiagnosed. They're just mold illness.

Amy: Yeah.

Dave: Do you agree with me there?

Amy: Well, I think that's huge. Thyroid, I mean some get misdiagnosed.

Dave: Sure.

Amy: It's thyroid, it's hard to say but absolutely it's one of the things that I think about.

Dave: It's frustrating but it's also kind of enlightening because as a former 300 pound person who has lived these low energy states, to be able to write a book about how to turn energy back on, you don't know how to turn it back on until you know what it's like when it's off and you've felt the same thing. You know how to deal with your patients because you have the training of a Western physician, which is incredibly valuable and you're actually qualified to treat people. I'm absolutely not. I don't treat anyone. I just know how stuff works and it's like, "Maybe you should look at that." I find the most effective functional medicine people are people who are trained and practiced in Western medicine and got really sick so you nailed it.

Amy: Yeah, unfortunately. Somebody asked me if I could have my thyroid back or be doing what I'm doing and as much as this is my passion and I love helping people, I'm like, "I actually would just take my thyroid back."

Dave: Yeah, that's a fair thought. I wouldn't-

Amy: Not having a thyroid is a very, you know, it regulates everything but I am here and at least I made the best, you know, made some lemonade out of lemons.

Dave: Give us 10 years, we'll grow you a new one. We'll 3D print it, stick it right back in. You won't even miss it. You may not believe me but you can bet on it. I'm looking at the rate of change. It's the coolest time ever to be alive. We're gaining more control and more understanding of these systems than we ever have had, even though you might have to go to Mexico to do it.

Amy: Yeah.

Dave: Now, let's talk some more about autoimmunity because-

Amy: Sure.

Dave: Probably I'm guessing half of listeners know they have something going on. Maybe less than that. For the rest of us there are things that are risks because even if you don't have this, you don't want to do things that are going to stupidly increase your odds of getting an autoimmune condition. You think, "I'm doing fine," and then all of a sudden you get fired, your house burns down, stress goes up, a tick bites you, and then you go into a toxic mold cave somewhere. All of a sudden you're like, "Damn, now I understand what that crazy Asprey guy was talking about." The idea is minimize but don't be obsessive about removing triggers here. Let's talk about gluten. My take is gluten doesn't have a place in your diet if you want to live a highly functional long life. You might not feel it but it's never the best food you could get. What's your take on gluten?

Amy: 100% agree. I am so black or white about it.

Dave: What about people who have zero Celiac, zero autoimmune stuff, they eat it and they feel great?

Amy: I just feel like the way, you know, one, if it's not organic then it has Roundup on it, which we know-

Dave: Of course.

Amy: Leads to leaky gut. It's, for the most part, processed and so it's refined and dealing with your blood sugar. I just feel like it's just not a good food. It's, like you said, even those people who don't have a problem with it, the way that we've hybridized it, it has more gluten in it. It's being sprayed with Roundup. It's just there's nothing really good about it and there's not a lot of nutrients in it.

Dave: There's also this problem and I follow on the agricultural side, there's global mycotoxin incident maps.

Amy: Yeah.

Dave: Different countries have different species in different amounts. There is no crop of grain that is not substantially contaminated with mold. The longer it's stored, the worse it gets and we tend to feed the worst of it industrial cows and then we eat the rest of it. But depending on how it was stored, whether it was in a bulk bin, the batch of wheat you're getting has a very substantial chance of containing [trichostathines 00:32:52] and all these other things that directly effect mitochondrial function and for some people you're really going to, like it tears up your gut. 85% of people with Crohn's disease have higher than normal levels of aflatoxin in their blood. There's all these pieces to it so eating foods that are likely to be sprayed by us with our poisons and fungus makes more of its poison, it's just not a wise food choice.

Amy: Now, can you tell if you eat, I mean, I know obviously you're eating mostly grass fed or whatnot but if you travel like I do and there are just situations where you can't, can you tell when you eat meat somewhere that has been fed conventional grains?

Dave: Yeah, I don't eat conventional meat on purpose anywhere but sometimes they lie to you at restaurants. Yeah, I can feel it. There's all sorts of things like I get an inflammatory response from it. I actually can feel it in the tartar build up in the back of my teeth. I don't get any tartar on my teeth but your kidney's get stressed when they get the toxins like that and then that changes the deposition of minerals in your mouth from these two ducts under your tongue. All right people, I told you I was an event correlation machine. This is repeatable. I can tell you which joints are going to get sore if I'm eating conventional meat.

The bottom line is I don't want to do that because I think it's bad for the animal, it's bad for the planet, it's bad for the soil. There's an ethical thing to it but also I don't like feeling that way. I just like my brain working effortlessly and I like my body to not have any pain at all and to be able to just focus, and never lose my train of thought, and never open the fridge and try and remember why. I just never had that when I was fat and when things weren't working well. I'll do just about anything to stay in that state. I'll be at a restaurant, I'll say give me a bowl of your steamed non-organic veggies if that's the lowest harmed food and I'll just be a vegetarian for a meal versus I was hungry so I ate the nice looking steak that made me inflamed the next day. Maybe I'm radical there but I'm cool with that. What about you? Can you tell?

Amy: No, that I can't tell.

Dave: Okay.

Amy: I can definitely tell dairy, gluten, sugar, corn so I will, I mean we obviously eat everything organic in our house and we take snacks when we're traveling and things like that but I

was just, my dad was in ICU for a week and I was out of town and had to eat in restaurants.

Dave: Wow.

Amy: You do the best that you can. Obviously if I felt that way, I would make a different decision but since I don't get those symptoms, my philosophy is trying to control your environment in your environment. Then when you're out, making the best choices you can and not freaking out over it because the stress of freaking out over it is-

Dave: It's worse.

Amy: Yeah.

Dave: People can get orthorexic on stuff like that and that's scary. Orthorexia is almost like anorexia. It's this idea that you have an emotional shame, or a guilt, or a fear response when you eat foods that aren't perfect. That's why the Bulletproof diet's a spectrum so that you're like, this is how you gracefully degrade so if you're not going to get grass-fed beef, fine I'll get the fish or I'll go to vegetables. The other thing that I do, and I'm curious if you do this, I use the Bulletproof Activated Charcoal when I go out to restaurants because there's always crap in the food that I didn't want. The charcoal tends to bind the toxins in the gut. It's sort of, when I do that with conventional beef, I'm way more normal the next morning. Do you bother with that or do you not need to?

Amy: Well, I don't do it for the reason of the food. I do it more of most of the places that I travel are moldy so I'll either use your charcoal or a product called GI Detox that has both the clay and a charcoal in it and that seems to do, as well as a lot of glutathione is magic for me. That's one of the things that turned my brain back on and that's why I make it.

Dave: Yeah. I'm assuming you do intravenous?

Amy: Actually we have one, an acetylated one that I feel works really well with patients. I've had just incredible results with it so most, 80% or so of my patients fly in from out of town so we don't do a lot of IV's in my clinic because people aren't here to be receiving IV's. They basically come for the first visit and then do everything else by phone.

Dave: Okay, cool. That makes good sense. You do talk about nutrient deficiency is linked to autoimmunity. What are these nutrient deficiencies that you've looked at? There's a high correlation, by the way, with the Bulletproof, just general stay well so I was pleased but just walk through your list of six.

Amy: Yeah, so I think that you're also probably looking at, in reference to the thyroid-

Dave: Yeah.

Amy: Vitamin A is a big one for people and immune as well. Iodine, there's a whole iodine controversy with they thyroid if you want to talk about that. Zinc, selenium, B vitamins, a lot of people, as we mentioned earlier, have MTHFR methylation issues. Even if they're getting enough, they're not able to necessarily utilize it. Am I missing something? Magnesium's typically there as well.

Dave: Vitamin D.

Amy: Vitamin D, yeah, of course.

Dave: Awesome. That's a fantastic list. Yeah, actually let's talk about the B vitamin, a thing with [crosstalk 00:38:17]

Amy: B vitamin or iodine?

Dave: Actually let's talk about iodine. What you're talking about there is, there is a group of people who say that if you have autoimmune problems you shouldn't take iodine. But I manufacture an iodine supplement from kelp. I take iodine and I have autoimmune conditions. You can kind of guess where I am on this argument. What's your take on taking iodine?

Amy: Yeah, for sure and I have a section in the book about this. How much do you take, roughly?

Dave: Well, my supplements are the 150 micrograms.

Amy: Yeah.

Dave: Relatively conservative but for a while I did the Brownstein 15 milligram protocol.

Amy: Okay.

Dave: I did just fine.

Amy: Yeah.

Dave: Just for people listening, 15 milligrams of iodine, there's a technical term for it which is, I don't want to swear to much but technically that's called a shitload.

Amy: Yeah.

Dave: You take a very high dose of the stuff and I wouldn't recommend that you start there. If you're going to play at those levels, you need to do a lot of research but at a low supplemental level, it seems safe. But you might totally recommend some other thing.

Amy: No.

Dave: I have no idea what your thoughts are.

Amy: In the book, you know I formulated a multi-vitamin to go along with my program for the thyroid book and I have 300 micrograms of iodine. I feel that we are iodine deficient.

Dave: Yeah.

Amy: Then you add in all the other halides, the bromides, chloride, and fluoride and we're really deficient. Really, it's kind of replacing back. Now, what you were talking about, the Brownstein, there's something called Iodoral that's 25 milligrams, which is a thousand fold what I'm recommending. Some people even take up to 50 milligrams. Now, I don't personally subscribe to that with people. I've taken those high levels but I also don't have a thyroid, just more for breast health and stuff. I, like you, pretty much try everything on myself just to see what in the world is going to happen before I start giving it to other people. I've never prescribed that to patients. Just being a physician, I didn't feel that, that was prudent.

I've had 50% of the people who've come in from somewhere else on that swear it cured them and 50% of the people come in and swear it is what ruined their thyroid. For me, I think the jury's out. If you're going to do something like that, you really need to be working with a practitioner that really gets it and is following you and monitoring you. I think taking it in the microgram dosages, most everybody should be doing that. I've never seen anybody react to iodine at those levels.

Dave: It's such a fundamental part of the way our enzymes work. You've got to have some of it. The other interesting thing about iodine, which is maybe less autoimmune, it's an old trick but when women have really painful, tender breasts from fibrocystic breast disease especially, you can paint iodine on the breasts, the Lugol's iodine solution and sometimes within minutes the pain goes away. It's kind of ridiculous how sometimes your body is just begging for it.

Amy: There's a whole theory out there about breast cancer and iodine right? I mean there's a lot less breast cancer in Japan and is that because they're eating less meat, they're eating more soy? Is it because they have a much more iodine rich diet? Our thyroid is the place that takes up most of our iodine or has most but then our breast tissue and our ovaries are the other areas and testes in a male where they're the most iodine receptors.

Dave: The other place that a country doctor would paint iodine would be around the vagina for the same reason and for treating all sorts of strange conditions there but I've never heard of putting iodine on the scrotum. Is that also something that's done? I didn't know there were receptors down there. I'm going to have to try it tonight.

Amy: Yeah, I don't know.

Dave: I'm going to have to dip the boys.

Amy: Check it out. Let us know.

Dave: I didn't think we-

Amy: I was going to say something about well, blue balls but-

Dave: Yeah, different colors, you know?

Amy: And you went from blue but yeah, purple balls.

Dave: If there's a way to get like a rainbow of colors, there'll be unicorn balls.

Amy: Yeah.

Dave: That's perfect then. I'll use some kale when I'm done.

Amy: Yeah.

Dave: Now, would you describe what's going on with thyroid as an epidemic at this point? It almost feels like so many people have it that it's like an undiagnosed thing happening.

Amy: Yeah.

Dave: Is that an overblown statement?

Amy: I don't think so. I think autoimmunity in general could basically be considered an epidemic and certainly thyroid. Within autoimmunity, thyroid is the most popular, so to speak, autoimmune disease but we've increased the number of people with autoimmune disease by three-fold in the last 50 years. I remember when I was little there was like one person or family friend that had something and it was, I remember hearing Lupus, and it was this really horrible, terrible disease. Now it's like everywhere you turn somebody, you know? You know five people with some sort of autoimmune condition when you ask about the thyroid.

I remember when I was traveling actually for filming something for our PBS special. The woman at the desk at the hotel was super, super kind to me so I ran out to a Barnes and Noble and I thought, "Well, is this weird to buy her this thyroid book," but then I thought it was a nice gesture to give her a copy of my book but I didn't have one with me. Of course I hand it to her and thought it was going to be awkward and she's like, "Oh, I just got diagnosed with thyroid. This is perfect." How many people do you run into that tell you that, the random person behind the counter with their thyroid dysfunction?

Dave: Right. You just don't know but you see it sometimes and it's kind of sad. It's the same thing though, if you see a person who's 300 pounds, like I used to be, sitting in a restaurant obviously trying to eat healthy, loading up the pasta and you're just like, "Ugh!" You want to say something but either they're interested or they're not

interested. I usually don't say anything unless they ask, right? I might just drop a crumb and if they're interested otherwise I don't want to be that guy who like walks around and tells people, "You have mold! You should stop eating gluten!"

Amy: I know. It's so hard but being a doctor and being somebody who went into profession to help-

Dave: Yeah.

Amy: What I did is I had my staff, I had basically instead of business cards made I have one card that's the cover of one of my books and the other side is the cover of the other book because I'll see people with vitiligo or psoriasis or something and I don't want them to think that if I give them a business card that I'm soliciting them to come see me as a patient because I'm not. I have plenty of patients. It's more I want to offer them help so I found now that I have these cards with just the book on it, that people are much- they're receptive usually. I was at Target the other day and this woman had the most horrific rash and I could tell she was so uncomfortable. I just said, "Look, I know this is kind of awkward. I hope you don't mind but I noticed your rash and one of these books might be really helpful for you." She was so appreciative because she was like, "Yeah, I'm at my wits end. All they want to do is give me creams at my doctors and I've really started exploring other things." I've found most people are really appreciative if you approach it in that kind of way. But I hear you. It's a weird thing where you want to help somebody but not- It's also kind of invasive to say something.

Dave: Yeah, and you don't want to trigger people. Any time you're dealing with food, it's a survival thing.

Amy: Yeah.

Dave: Because if you don't have food, you die and anytime you're dealing with almost any medical thing at a really core level there's fear of death involved so people act in the weirdest ways. I'm always like, "Look, if you're interested, cool. If not, you're going to do what you're going to do and I'm going to be okay with that."

Amy: Yeah.

Dave: But it took me a while to get there. Well, I appreciate you sharing what you know about thyroid. Tell me the titles of your books again.

Amy: The Autoimmune Solution and The Thyroid Connection.

Dave: Awesome. These are definitely useful books for if you're listening and this whole conversations been up your alley. These are books you totally want to read. All right Amy, if someone came to you tomorrow and said, "I want to perform better at everything I do in my life. Not just my job, not just my sport but just at everything. What are the three most important pieces of advice you'd have for me?" What would you tell them?

Amy: I would tell them to give up gluten. I would tell them to follow a, I mean just to say, "Get good sleep," is kind of difficult so I have programs in both books, the amber lights and I'm big into the glasses but good sleep hygiene of getting good night's sleep. I would say working on their level of stress, reducing stress. These are all different things than you think I would probably say but-

Dave: Food, sleep, and stress, it's a good list. It really is.

Amy: Yeah.

Dave: Awesome. Well, thank you for coming on Bulletproof Radio and what URL can people go to, to sort of get the whole download?

Amy: Everything is Amy Myers MD so my website's just Amy Myers and Myers is M-Y-E-R-S MD and Facebook, Twitter, all that social stuff is just Amy Myers MD.

Dave: Awesome. Amy, thanks for being on Bulletproof Radio.

Amy: Thanks for having me; really appreciate it.

Dave: If you enjoyed today's episode, head on over to your favorite book seller and pick up a copy of one of Amy's books. While you're at it, you might want to pick up your pre-order of Headstrong, my new book about mitochondria and how to have more energy in your head. Hopefully you'll get both books together. They'll be paired up there at the bottom of your screen and you'll learn something from both of them. Have an awesome day.