

AUTOIMMUNITY: Signs, Symptoms & Triggers – A Top 10 Episode with Dr. Thomas O’Bryan

Announcer:

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Dave Asprey:

You're listening to Bulletproof Radio with Dave Asprey. Today's guest is Dr. Tom O’Bryan, and he's an internationally recognized speaker about wheat, its impact on health, and autoimmune disease in general. He practices functional medicine and looks at these chronic diseases and metabolic disorders. And this is relevant to you because there are a huge number of us listening right now who have a little bit of chronic disease or metabolic disorder, but you don't feel it until it really, really hits you years later. There's a huge number of people walking around today, going, "I feel really good. I'm doing well," but they've got the markers, like a little fire is smoldering.

And if you want to remain high performing long into your old age, or you want to maybe join me on my quest to live to at least 180 years old, you need to stop this stuff before it becomes, oh, look, I've got an extra 20 pounds. My liver is fatty and my life sucks. So I invited Tom on the show today to talk about, well, what's going on in this thing. Tom, welcome to the show.

Dr. Thomas O’Bryan:

Oh, thanks, Dave. Thanks. It's a pleasure to be with you.

Dave Asprey:

What made you get into looking at the body as a system instead of what a lot of medical practitioners do, which is sort of, well, this is a liver, this is a kidney? They don't really have that much in common.

Dr. Tom O’Bryan

Well, it started before I actually even got into my internship, that my wife and I could not get pregnant. And I called the seven most famous holistic doctors that I'd ever heard of at that point. This was 1979, and I was able to reach all of them. And I asked them, "What do you do for infertility?" And they would say, "Do you know what a category one is?" And I'd say, "No." And they say, "Learn," okay, okay. I'd write it down. And I wrote down the notes, talking to these seven doctors, and I put a program together, and we were pregnant in six weeks. When you go to the doctor with symptoms, irrespective of what they are, it's kind of like you've fallen over a waterfall into the pond below. And you swim up to the surface and you spit out the water. And you're trying to stay afloat in the pond of recurrent miscarriages, or in the pond of chronic fatigue, whatever the pond is that you're stuck in.

You're trying to stay afloat, and everyone's looking for a life jacket to stay afloat in the pond of their symptoms. And that's important, but once you've got a life jacket on, and you're okay, you're stable at the moment, you have to swim over to the side of the pond, get out of the water, walk up the hill, go back upstream to figure out what the heck fell in the river that eventually took you downstream and falling over the waterfall. That's functional medicine, is: What is it that's going on way back there that that has triggered or is fueling whatever the symptoms are that you have going on right now?

Dave Asprey:

Talk about what's going with autoimmunity. Is autoimmunity on the rise as well?

Dr. Tom O'Bryan

It's so on the rise in the last 30 to 40 years and what most people, and even doctors, don't put together is that we think the number one cause of getting sick and dying, morbidity and mortality, is cardiovascular disease. Well, every doctor knows or should remember from their studies, that cardiovascular disease, the plugging up of your pipes, atherosclerosis, is immune driven. It's an autoimmune mechanism. So this topic of autoimmunity really becomes a primary concern for all of us, but we've never looked at it that way. So once we understand this, that this is prevalent in almost all of us, that it's an autoimmune mechanism, meaning your immune system attacking your own tissue, whether it's your blood vessels, or components in your blood vessels, the fatty membranes of the blood vessels, or it's your brain, or your joints, or whatever it is, when your immune system is attacking your own tissue, that goes on for years. It's called the spectrum of autoimmunity.

It goes on for years before you ever have a symptom. You have an entire new body every seven years. Some cells reproduce really quickly, like the inside lining of your gut, every three to five days, depending on what study you read. And some cells are really slow, like your bone cells. But every seven years, you have an entire new body. How does that happen? Your immune system has to get rid of the old and damaged cells. Antibodies go after the old and damaged cells to make room for new cells to grow and develop. So there's always a normal reference range for antibodies to your thyroid and your liver and your brain and your nerves and your skin. There's a normal reference range. But when you have elevated antibodies on a blood test, it means you're killing off more cells than you're making. And this goes on, it's called the prodromal period, meaning before symptoms.

And of course, you want the life jacket to deal with the symptoms, of course you do. But you have to go back upstream and figure out what the heck fell in the river that triggered this whole mechanism of killing off more cells than you're making. That is the auto immune fix. That's what the whole message behind Betrayal is. We've had over 500,000 people that watched Betrayal, and it's all free. And when you watch this, you go, "Oh my God, this just makes perfect sense." We interviewed the scientists. We interviewed the world leaders in auto-immune diseases, and then interviewed the clinicians, our friend, Mark Hyman, and many others, who were applying the principles of these scientists.

And then we interviewed the patients of those clinicians, who were showing. Look, I used to have eight lesions on my brain with MS, and I couldn't walk. Two years later, there's only one lesion left and I have no symptoms. You have to figure out why this is happening to your body.

Dave Asprey:

What percentage of people have autoimmunity going on right now?

Dr. Tom O'Bryan

Clinically, when you do the right tests, you will find somewhere between six to seven out of every 10 patients to come in your office, when you do the right testing, have elevated antibodies to their own tissue.

Dave Asprey:

I care a lot about this. I had arthritis in my knees when I was 14, Tom. I think we talked about that. And I had Hashimoto's and all these other things. And the more you control it, the longer you're going to live and the better you're going to perform in the meantime, which is why this episode is just, it's so important.

Dr. Tom O'Bryan

Dave, you brought up a really important concept there. In the study you're referring to, I'm assuming it's ANA antibodies. I'm assuming.

Dave Asprey:

I believe so.

Dr. Tom O'Bryan

Yeah. Now ANA antibodies mean anti-nuclear antibodies, meaning the antibodies are attacking the nucleus in your cells. And there are many different diseases that can manifest when you're attacking the nucleus in your cells. So the question is: Why is my body attacking the nucleus inside my cells? And the answer is, there's more than one answer, but the majority answer, it's the environmental toxins that are accumulating in your body. The bisphenol A, the mercury, all of the crud that we're exposed to every day, that in minute amounts, it's not a big deal, but it accumulates and accumulates and accumulates until you cross a threshold. When you cross the threshold, your immune system says, "That's it. No more." And your immune system starts attacking to go after that.

Dave Asprey:

What are the biggest triggers? You mentioned mercury, you mentioned bisphenol A. I'm assuming glyphosate is in there. What are the other big toxins that are actually causing these multi decade things that you can detect now that aren't going to hit you for 20 years?

Dr. Tom O'Bryan

For the vast majority of people, the most common source of toxins that trigger your immune system eventually to protect you is what's on the end of your fork.

Dave Asprey:

Let's zoom in on grains. Talk with me about the differences between a wheat allergy, gluten sensitivity, gluten intolerance, celiac disease.

Dr. Tom O'Bryan

So let's break down the different categories of problems to wheat. The first one, the most common that we're familiar with, is when a doctor does pinprick tests on your back to see if there are some foods you're sensitive to. And wheat is one of those foods that can come up. If you have a reaction there, that's called an allergy because it stimulates an immune reaction called IGE. There are five different immunoglobulins. IGE is the one that's related to allergies, and that's histamine responses.

Do you want to know you have too much histamine? A simple test to look to see if you have too much histamine right now, when you have excess amounts of histamine, you're red. With wheat, the second most common one because of the science, there's over 20,000 studies, literally 20,000 studies on celiac disease. Celiac disease is when your gut's being chewed up from a sensitivity to wheat. The third category is non celiac wheat sensitivity, and that's the big kahuna picture. Non-celiac wheat sensitivity can manifest as brain dysfunction, autoimmune brain disease, skin disease, joint disease. There's no tissue in the body that might not be effected by a sensitivity to wheat. Look at the immune system to see. Is my immune system telling me I've got a problem with this food? Because body

language never lies. If your immune system is activated to protect you against a particular food, stop eating that food.

Dave Asprey:

Now seven out of 10 of us have something going on with autoimmunity. And what percentage of those people do you think is caused by grain?

Dr. Tom O'Bryan

Oh, my goodness. Grain is likely fueling that inflammatory cascade and that autoimmune response. My suspicion would be certainly 60%, 60% to 70% of people, it's grains that are fueling it. And it may not be exclusive. There could be other foods and excess sugars and bad fats, and all of that. But at least 60% to 70% of our patients, when we reduce their grain consumption, they just start feeling better right away.

Dave Asprey:

It seems to be that way with people across the board.

Dr. Tom O'Bryan

So when you go on a wheat free diet, you must focus on prebiotics. You must focus on replacing the [inaudible 00:10:49] with other inulins. So fancy words, but just eat the prebiotics. Just go to Google and download list of prebiotic foods, and make sure that you eat at least two of them a day.

Dave Asprey:

I did essentially zero carbs for three months, one serving of vegetables a day. I'll try and eat like an Eskimo. And it completely triggered food allergies I didn't have before. And it actually disrupted my sleep at all. And that's why the Bulletproof diet, look, it's a cyclical ketogenic diet without toxins because the toxins trigger inflammation and autoimmunity. And if you never feed your gut bacteria, you'll be able to measure this on a volume test. You can see that it jacks you up, so you've got to be eating this. And that's why if you can find a way to get that inulin or any of these things in, you don't have to eat wheat. And I love that you're just calling this out because this was a problem even on paleo for a long time.

Dr. Tom O'Bryan

Critical. There's a lot of people that are saying, "Gluten free diets are not good for you." Well, nonsense. Gluten free diets are necessary for most people. However, you have to know how to do a healthy gluten free diet. So we tell all of our patients, you say, "Listen, here's what you do. When you go shopping, you're buying your vegetables, always get organic." Critically important, get organic, but buy a couple of every root vegetable that's there. Turnips, parsnips, rutabaga, Jerusalem artichokes, sweet potatoes, carrots. And every day, you have a couple of root vegetables. And download the list of prebiotic foods, and include other prebiotic foods, like bananas, in your diet, artichokes. And just make sure every day you're getting a few of the foods that are high in prebiotics, so you can feed the good bacteria in your gut.

Dave Asprey:

That is probably the most important thing that we've shared in this episode so far. So if you're listening to this and you're on a keto diet, if you're not eating any carbs at all, the bacteria in your gut will not have any food.

Dr. Tom O'Bryan

Critically important for all of your listeners who are dialing down their diets and really focusing on fine tuning for high performance, you've got to have prebiotics. If you don't, your probiotics die. When they die, when the good guys die, the bad guys that are stronger and more resistant, but just minor amounts of them, they don't have the army suppressing them anymore, they rear their ugly heads, three, six months down the road. And here come more autoimmune mechanisms because you've got this toxic bacteria causing intestinal permeability, getting into your bloodstream, and your immune system starts working overtime, trying to protect you from this stuff.

Dave Asprey:

Let's talk a little bit about intestinal permeability, which is a very exciting topic. And I see it trending on Google. Oh, actually, you don't. So what is intestinal permeability? And just walk me through how that works.

Dr. Tom O'Bryan

This is patient. Your intestines are a tube. It's 20, 25 feet long. Imagine you've got a donut and you could just stretch a donut out, one big, long donut. Look down the center of that donut. That's your digestive tract. Right? So when you swallow food, it's not really in your body. It's still in the tube. Now that tube is lined on the inside with cheesecloth. So only really small molecules can get through the cheesecloth into the bloodstream. That's one of the reasons why your intestines are 20, 25 feet long, because proteins have to be digested. Think of proteins like a pearl necklace. Hydrochloric acid, made in your stomach, [inaudible 00:14:30] the clasp of the pearl necklace. Now you're holding a string of pearls. Your enzymes, made by the pancreas and the gallbladder and the liver, and the microbiota and the intestines, the enzymes act as scissors to cut that pearl necklace, the proteins, into smaller clumps of the pearl necklace, smaller clumps of amino acids, smaller and smaller.

Snip, snip, snip, snip, snip, until they're down to each individual amino acid, the pearl of the pearl necklace, each individual pearl. Those individual amino acids can go right through the cheesecloth into the bloodstream. Then your body can use those amino acids as building blocks to build new muscle, new brain cells, new enzymes, whatever it is you need. But they're the building blocks of your tissue. It takes a lot longer to break down the proteins in prime rib than the proteins in a banana. That's why your intestines are so long because snip, snip, snip snip's got to occur all the way down the intestines. But the intestines are lined with this cheesecloth. Now intestinal permeability, the leaky gut, is when you get tears in the cheesecloth. You get tears in the cheesecloth, now larger clumps of the pearl necklace, called macromolecules, these larger clumps get through the tears in the cheesecloth into the bloodstream before there's been enough time to snip them down into little individual pearls that go through the cheesecloth.

Now they go through the tears in the cheesecloth. These macromolecules get into your bloodstream, and your immune system says, "What the heck is this? I better fight this." And you start making antibodies to wheat, or antibodies to tomatoes, or antibodies to bananas, or to basil. And these are the people that do 90 food blood test panels, and it comes back they're sensitive to 25, 30 foods. And they say, "Oh my God, that's everything I eat."

Well, of course it is. Your body's trying to protect you from this toxic crud that got in there because you got tears in the lining of your intestines.

Dave Asprey:

How do you fix intestinal permeability, Tom?

Dr. Tom O'Bryan

The first thing you have to do is identify: Why do you have intestinal permeability? And what's missed by so many of our healthcare practitioners is that the environment of the intestines, the microbiota, has developed over years of abuse, to be a microbiota that's inflammatory. And the microbiota itself can cause tears in the intestines and cause the leaky gut. When that happens, now you've got intestinal permeability.

Dave Asprey:

This is why those diets where you have a cheat day a once a week, they're just a bad idea. So no, on the cheat day, you still don't eat wheat. You don't eat gluten. You don't do that kind of stuff. You might have some sugar, which still isn't good for your gut bacteria, but it's nothing compared to these whole grain toxins.

Dr. Tom O'Bryan

Cheat days are very healthy for the emotional side of health. It's very healthy to have a break, to just rest and congratulate yourself that you're doing really well. So you find the least toxic, the things that your immune system don't say are a problem. So a little bit of sweet, maybe not a problem. But certainly not wheat. You have elevated antibodies to wheat, you now have memory B cells to wheat. They never go away. So if you clean up your diet, six months later, you see that, oh look, the antibodies are all gone, I can have wheat now. No, you can't. But we say this to patients all the time, "If you want to try, go ahead. You'll see." Then we'll do the blood test again in a month, and you'll see the antibodies come back again. And then if your weak link in the chain is your brain, you start attacking your brain again from these wheat antibodies.

Dave Asprey:

Some species of toxic mold have the same protein on them that's on gluten. So even if you're not exposed to gluten, if you're exposed to basically breathing this stuff in a building, it can trigger that same antibody reaction in you. And what do you think about environmental toxins that you breathe from these molds that don't belong in our houses as being a trigger, even for original gluten sensitivity or casein sensitivity?

Dr. Tom O'Bryan

Well, that's an extremely sophisticated question, Dave. And just yesterday, I had a consultation with a patient with MS, who is in a wheelchair and can't speak, that it's that far advanced. And she's been squeaky clean, swear has been squeaky clean, no cheat days with wheat for three years now, two or three years. I think it was three years. And yet, her test just came back sky high antibodies to wheat. Where's the trigger coming from? And at the top of the list is: Have you ever checked your house for mold? And Mrs. Patient, if you go out, if you go out for a week, or two weeks, on vacation, something, and you come back, do you have to open the windows to air the house out? Well, yeah. You got mold in the house. And have your house tested.

Dave Asprey:

For me, I really inoculate my environment in my house, in my car, and places like that, because this is a trigger that's as important as what you eat. If you're breathing something that pisses off your immune system, you get inflammation. If you're eating something that pisses off from your system, you get inflammation. So you have to look at your entire environment like that. And I kind of feel for people who are saying, "Well, I'm doing so much in my diet," and they go home and you're like, "But your ceiling tiles are all stained." And that's as important as what's on your fork. And it's that complexity that I think is really messing up a lot of science, where they're trying to boil this down to a single variable, but it's that old story. And you've got a thumbtack in three of your fingers. Well, I took out my little finger. No, that wasn't it, so you put it back. And you took out the next one. You've got to do all of them at once. What are the other things though, that might be autoimmune triggers that people don't think about?

Dr. Tom O'Bryan

The three things that I think are most important to address on this particular topic is: What's on the end of your fork? What's going up your nostrils? And what's in your gut? You attack those three, you spend three months, four months, six months focusing on dialing down on this, learning those three categories, and what works for your body and what doesn't you will help enhance years and years more of quality life for you, for yourself.

Dave Asprey:

I love those three pillars. And if you only do two of the three, you don't have a stool that will stand up on its own. What's your take on charcoal as a potential LPS binder?

Dr. Tom O'Bryan

It's one of the recommendations for all autoimmune patients, is to take charcoal in the evening, a few hours. So certainly, don't eat before you go to bed. There should be three, four hours that you're not eating, but then take charcoal. Charcoal acts like a big sponge just to suck up whatever LPS it can in your gut.

Dave Asprey:

Now seven out of 10 people have autoimmunity. It seems like this is a really important thing. It's not even an expensive kind of supplement.

Dr. Tom O'Bryan

No, it's cheap.

Dave Asprey:

It's not the briquette side of your grill. You make activated charcoal by taking a clean source. We use coconut shells. But then you basically light it on fire, and then put it out by taking away oxygen, so you have lots of surface area on it. So that's one. The other thing is that if you're on a high fat diet, hey, listen up, if you're all keto all the time, you're on a high-fat diet. Fat escorts LPS across the gut, and most effectively, especially things like lauric acid, which is the cheapest and most abundant MCT in coconut oil, the one that we don't put in Brain Octane. That stuff, as well as any other longer chain fats, will pick up these molecules and bring them across the gut. But there are some types of fat, including the stuff that we use in Brain Octane, that are shown in studies to help the liver be protected from the impact of

LPS on it. So there's a reason that's in there with the butter in Bulletproof Coffee, because you want to be able to have some protective stuff in there.

Dr. Tom O'Bryan

Dave, I just want to give you kudos on this. And you didn't know I was going to say this, but you may remember it was five or six years ago that I said, "Dave, you can't use palm oil, man, in your octane," because palm oil enhances lipid raft transcytosis, which is these LPS being carried into the bloodstream, right through the cells. You do not need a leaky gut.

Dave Asprey:

This is one of those things that's fundamental to performing really well. What are the symptoms? what are you going to feel like the day after you have a spike in LPS?

Dr. Tom O'Bryan

Oh my goodness. It depends on where it's accumulating. It could be in your heart, and you're short of breath. If your heart muscle is inflamed and not functioning properly, most commonly, I think just in my clinical experience, most common is brain. And people just have stinking thinking.

Dave Asprey:

Exactly.

Dr. Tom O'Bryan

They just know that they're not on their game. They don't feel up. They don't feel engaged, that they really have to rev it up to give their best because they're feeling toxic. They just feel toxic.

Dave Asprey:

What do you tell to people who have developed a food allergy they didn't used to have? They fixed their gut. They eliminated it for six months. What are the other tricks for giving yourself, basically undoing the damage you might have done with the high fat, zeros carb diet?

Dr. Tom O'Bryan

Rebuild a healthier microbiome. It's the only way that I know of to be exposed again and not have an inflammatory response, that using the panels, such as biomes panel of evaluation, to see. What's my current state? And how do I get to where I want to go in terms of my microbiome? How do I get there? So first, where is it? What's the deficits? What are the things that are way out of balance? And then how do I get to where I want to go? And apply the principles, and then recheck. Six months later, you recheck.

Dave Asprey:

And this is sort of where functional medicine gets to be really interesting, whereas bio hackers, we want to have control of our own biology. And if my body is inappropriately targeting molecules that it doesn't need to for my long-term health and safety, there is a control mechanism, a reprogramming mechanism in there, and we will find it. And this is pretty cool because if you're listening to this and you're saying, "Well, I can't eat this food," maybe you have a genetic reason, like with lectins from nightshades, or grains, or something, where your people didn't eat it. You are not going to eat that. You'll never thrive

on that. And who knows? Maybe that's hackable. But for the rest of the stuff, if you're fine on it, you got exposed like I did. It was not just to that diet, but also you get exposed to some mold at the same time, all of a sudden, literally from one day, the next you can't eat stuff anymore.

We are going to get on top of that. We're going to be able to, whether it's an injection, or some other kind of thing, we're going to own all of that over the next five to 10 years, because Tom, when you talk about this stuff, when you write it in your book, it comes out. And now all of a sudden, it's in our public discussion. And then the functional medicine guys, the immunologists, we're all going to be working on this stuff and saying, "All right, there's a huge market for this." And we will get to the point, not so far away, where we're going to be able to say, whether it's a capsule, a pill, a lifestyle thing. Who knows? You might run an electrical current, but we're going to get there. And I'm incredibly stoked because we're about to understand why, now that we understand what, and you're really doing a great job of spreading the word about what's going on, and then we can fix it.

Dr. Tom O'Bryan

Well, that's really exciting, Dave. It really is. There's a lot of research right now in the world of celiac disease and wheat sensitivity. Lots of different teams are working on pills, or enzymes, or genetic modifications, that they're trying a number of different approaches to see. How can we help people eat wheat without triggering this immune response? And the key of course, is going to be a reprogramming. And it seems to me that reprogramming has to be comprehensive, so that you can't expect to reprogram to eat wheat, and then go around and eat sliders every day, or drink a six pack. It really is reprogramming for higher function and allowing to eat certain foods that you currently can't eat. In my limited experience, I think demands that you are living a high performance life in terms of taking care of your machine. If you treat your body like a Lamborghini, it's going to run like a Lamborghini. If you treat your body like a Rambler and expect it to run like a Lamborghini, you're going to be in trouble.

Dave Asprey:

That's an apt analogy. All right, Tom. Where can people find out more about your book?

Dr. Tom O'Bryan

TheDr.com, the doctor dot com. And the book's on the home page. And it links you to Amazon, but there's some downloads you get if you go through there. And of course, you can go right to Amazon for it. It's called The Autoimmune Fix. I'm very proud of it. I think it gives a big picture overview, and people then understand much more about: What's the path in front of them to develop higher performance?

Dave Asprey:

Even if I don't have autoimmunity that I know of right now, if you flip a coin, the odds are very high that you've got at least one of the many different types of autoimmunity starting somewhere in your body. You want to get on top of that. If you're in your 20s, heck, you're in college, and you notice this, your grades can go up if you turn down inflammation. Your resilience goes up. You look better. You feel better. And just understanding what's going on with this when you're young prevents you from feeling like absolute crap when you're 45, or 50, or 100. And that's the game that we're playing now. And maybe even beyond a hundred, because if you're 20 now, and you look at what would have happened 100 years ago to a 20 year old, the whole world is different.

You have the potential to live 100 plus, or maybe even 200 years, if you take care of what's going on right now. And that's why I think it would be useful to read Tom's book, look at Betrayal. It's TheDr.com/Bulletproof. And just take care of the hardware you've got, and it'll serve you very well. This

is something that I didn't know when I was young. I didn't know how to do it, didn't know how important it was. And if I'd have known the stuff that I know now when I was 20, man, my life would've been very, very different with a lot less work in it. And so that's one of the things that drives me to do Bulletproof. And thanks, Tom, for your work as well.

Dr. Tom O'Bryan

Oh, thank you, Dave. It's really a pleasure, really a pleasure. It's an honor to do this work and follow the passion. And I wish for everyone that they have the fuel, the internal fuel, in their brain and in their bodies to follow their own passion, to make this world a better place.

Dave Asprey:

Very well said. Normally, I'd ask you: What are your top three recommendations for people want to perform better? But you already answered it when you were on Bulletproof Radio last time, so we're not going to do it this time. Thanks again for being on Bulletproof Radio, Tom. Have an awesome day.

Dr. Tom O'Bryan

Thanks.