



EPISODE 962

The Top 4 Things That EVERY Diet Needs to Protect Your Gut Health & Boost Your Longevity

With Guest Dr. Will Bulswiewicz

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SHAWN STEVENSON: Welcome to the Model Health Show. This is fitness and nutrition expert Shawn Stevenson, and I'm so grateful for you tuning in with me today. We live in an amazing time where we have access to choices. We've got choices on top of choices, on top of choices, even when it comes to our diet, not only in the selection of foods that we can choose from, but the diet frameworks themselves. There's everything from a completely plant-based vegan protocol all the way to the other end of the spectrum. We've got a carnivore protocol where there's no plants involved at all.

The plants are not invited, and everything in between. There are so many different ways that people can choose to eat today. Mediterranean, lacto, ovo, vegetarian. The list goes on and on and on. There's so many different frameworks. There's color diets. I only eat purple foods. All right? It's for, it's for a specific chakra, so many different diets that we could choose from. But what we're gonna cover today, and I'm so grateful for this, we have on one of the world's leading gastroenterologist and experts in the domain of human nutrition, and he's gonna be sharing whatever diet we choose to follow. He's gonna be sharing the four things that we need to prioritize with any diet that we choose to have.

And within this incredible conversation, we're gonna take some twists and turns. We're gonna go on a journey. We're even gonna take a little slight turn into dairy and I'm not talking about from the cow. I'm talking about the town, the Stephen King. Welcome to Derry. There's a little Easter egg in this episode, and you're gonna hear about why he references a certain type of food product given to children and why it's akin to a Stephen King horror novel. He's gonna be talking about the impact of microplastics as well in this whole conversation with our health, and I'm gonna ask him about, is there any data related to our gut? And make sure to stay tuned in to the very end because he's gonna also crack open the conversation on the power of when we're eating as well.

Circadian nutrition does the timing when we're eating our foods and different types of foods. Does that matter? Does that impact our health? And so incredible revelations there as well. So, so much incredible stuff for you to power you through your day, through your life. Let's dive into our special topic and our amazing guest today, Will Bulsiewicz MD, known as Dr. B, is

a New York Times bestselling author, award-winning gastroenterologist and leading expert on gut health and the microbiome. Dr. B has authored several published peer-reviewed studies in journals like Gastroenterology and Nature Medicine, and he's consulted with the United States Congress, the USDA and professional sports as well, including the NFL alumni.

He now directs the Gut and Microbiome Center for Excellence, and he's dedicated to helping you to uplevel your nutrition and your body by being plant powered. Plus, let's dive in this conversation with the amazing Dr. Will Bulseiwicz. Our mission today is to provide new insights, context, and a plan of action. And so regardless of what diaphragm works somebody's subscribing to, which there's so many diets for people to subscribe to today. What are the four things that we all should prioritize regardless of the diet that we're choosing to do?

DR. WILLIAM BULSIEWICZ: Okay, so flat out, Shawn, before we jump into that, there are many patterns of, like, there's many different dietary patterns. There's many different labels that have evidence to indicate that they can be healthy. So whatever you wanna call it, whether it be Mediterranean, pescatarian, flexitarian, vegetarian, vegan, whatever it may be, whole food, plant-based, whatever, it doesn't really matter. Because what really matters is quality.

So the entire idea of like getting locked in on some sort of label is a little bit of a charade to be totally honest with you. Because what really matters this idea of quality and the opportunity that we have to build an anti-inflammatory diet, if we simply focus on these four nutrients that most of us are missing, right? So yours will not be the same as mine. And I welcome and I embrace that. And I celebrate it because we can reach the same end point of being super healthy just by focusing on these four things. I call them the four workhorses. Alright. And I have this like specific image in my mind. I hope you don't mind where I'm thinking about like me and you in St. Louis, that's where you're from, right?

SHAWN STEVENSON: That's right. Yeah.

DR. WILLIAM BULSIEWICZ: So we got the, we got the arch, right, which is like, basically like the gate to the west and it's 1870 and we're all geared up and we're gonna hop into a wagon, you're family and mine and we need the Clydesdales to pull us. So, and when you're going across the plane and it's flat, one or two horses is enough. But when you hit the mountain and you gotta climb and it's hard, right? And that's what it's like for people when they're dealing with a sickness. You want every single opportunity that can be working for you on your side. You want all four workhorses pulling, powering you to that better health, right? So the four workhorses, these are the four things that I would advise everyone to focus on is number one, fiber.

Number two, polyphenols. Number three, healthy fat, and number four, fermented food. I choose these four things, Shawn, because if we get more of something that we already have plenty of, you're not moving the needle. If you want to move the needle, you need to identify not only the thing that is anti-inflammatory, but it also needs to be missing. So for each of these four, I have identified that they are anti-inflammatory in a powerful way, but at the same time, most Americans are not getting enough of these four things.

SHAWN STEVENSON: Amazing. Let's dig in deeper. Why? Why is fiber one of these things that regardless of the diet framework that, that we're looking at, why is fiber critical for us to prioritize?

DR. WILLIAM BULSIEWICZ: So, to me, there's an entire conversation that we've been having about protein. And I don't have a problem with that. I think protein is important and protein is the building block for muscle, right? But I think it's time for us to also have a conversation about fiber. It doesn't mean we need to exclude protein, but we should build and level up above, beyond this, where fiber to me is the longevity nutrient. Like if you wanna live a longer, healthier life, if you wanna look younger, if you wanna feel younger, it seems like a lot of people do want that. I mean, the longevity industry is massive. We need to be focusing on this, addressing our fiber deficiency. 95% of America is deficient in fiber, Shawn. So, and what they're missing out on the 95% is that this is the essential food for their microbiome.

Fiber feeds those microbes. The microbes in like basically an expression of our lifelong partnership. Our symbiotic relationship that we have between us as humans and this ecosystem, the microbiome that lives inside of us. Fiber represents an expression of that because we as humans lack the ability to process and break it down. What we did as we evolved is we outsourced the digestion of fiber to the gut microbiome because as we were basically like spreading out across the globe, we couldn't keep up. We couldn't evolve fast enough. We would arrive at a new place before our body would have the ability to adapt and adjust to the new diet.

So, but your microbiome can adapt and adjust very quickly within 24 hours already changing. So those microbes, they unpack the fiber, break it down, it stops being fiber. They unlock what are the most anti-inflammatory nutrients that I've ever come across, which are acetate, propionate, and butyrate. Those are the short chain fatty acids. And they have healing effects. So, the thesis or like the core thesis of my book, which, you know, before I jump into this, I just wanna say for the listeners at home, Shawn really reads these books. And he read my book cover to cover and I have to tell you that I'm so grateful for you to do that. Like, thank you.

SHAWN STEVENSON: It's my honor.

DR. WILLIAM BULSIEWICZ: So, because it means a lot, you know, to have someone that I know how busy you are to take the time to read my book. Not everyone does that. So anyway, the, the story.

SHAWN STEVENSON: Well, I just gotta say before you go on, you're an incredible writer and communicator and storyteller. You know, and it might not necessarily be what we think of as a conventional story, but the way that you lay things out, it brings it to life. So it makes it very easy, you know, it's not always like that, you know, of course. I, I love to read, I love the expansive knowledge that we can get, but when you put something together, it's, it's exceptional.

DR. WILLIAM BULSIEWICZ: I appreciate that. Thank you. Alright. So anyway, the short chain fatty acids, the core thesis of the book is that our gut microbiome and our immune system are so intertwined that we can't separate them. So when the microbiome is unwell, the immune system will be unwell. At the same time. That means inflammation, right? That means the immune system is actually causing trouble. Whereas the opportunity for us to address the epidemic of inflammation across our country is to also acknowledge that we can take the unwell microbiome and make it well through the choices that we make.

And in doing that, you will not just be healing the microbes, you'll be healing the immune system at the same time, and that's anti-inflammatory. So the way that these short chain fatty acids contribute to that, and there is nothing else that I would recommend more than these short chain fatty acids because most of us are not getting enough of them. The way they contribute to that is that they, number one, adjust the microbiome itself. So they will suppress the inflammatory bacteria like e coli. They will lift up the beneficial bacteria. You'll get more of the good guys, and you have just shifted the balance where more good guys, less bad guys, they are the stewards of our gut barrier.

So your gut microbiome is what actually handles maintains your gut barrier. The gut barrier is an interesting story, Shawn, because this is actually the most rapid cellular turnover in the entire body. So every three to five days, we install an entire brand new gut barrier. So like a person like yourself, your intestines might be 15 to 20 feet long and across that entire landscape, you have an ent, you have a cellular surface, a single layer thick that is going to be reinstalled every three to five days. As we sit here talking to one another, literally every second, 450,000 new cells are being installed. So the opportunity for healing is literally by the second, and those short chain fatty acids are helping to recruit the healthy cells. They're nourishing those cells. So it turns out the butyrate is actually the energy source for our gut lining, and they're creating the tight junction proteins, which is basically the cement that holds the wall together.

And so when you create a strong gut barrier, you are going to protect the immune system. And it turns out that 70% of your immune system is in the lining of your gut. So the immune cells, it's like our little army that's there to defend us. And their basic training is in your bone

marrow. And then they get deployed and it's like they're gonna get sent out into the world and their job is basically to protect you. And we deploy 70% of them to your gut lining because that's where the action is. So they set up shop there, and if we could keep them safe and comfortable, they would be totally fine. But when the gut barrier is weak, we allow things to sneak across. We call that increased intestinal permeability, but you could definitely call it leaky gut.

And I don't have a problem with that 'cause that is exactly what's happening. So when things come across and the immune cells, they recognize, yo, you are not supposed to be here. So they go to war. And unfortunately when we have these chronic inflammatory health conditions, this can be happening 24 hours a day where because the gut barrier is not strong, the immune system is chronically turned on, right? Constantly fighting in a forever war. And I don't mean to overdo this whole like wartime analogy, but it is the right way to understand this issue. And we must all acknowledge that there is no such thing as war that doesn't have consequences, doesn't cause damage, right, of everything else. So that damage that we're talking about, that is the inflammation that contributes to disease.

So what I'm saying is, and by the way, thank you for allowing me to take this answer and run with it. What I'm saying is that these short chain fatty acids, they repair the gut microbes. They repair the gut barrier. By the way, they also repair the immune system and they help to promote the, these specialized cells called treg cells, T regulatory cells, that actually are the peacekeepers. So if you want to be anti-inflammatory, I've just basically shown you the way to do it. That's fiber.

SHAWN STEVENSON: Amazing. Amazing. Now question for you, would you say that there's such a wide variety, thousands upon thousands of different type of fiber types, basically, or sources, fiber sources. Is it true that not every fiber source is gonna resonate with every body? And I'm asking you because I know that there are some people listening who have found that, and you know this is a prevailing narrative as well, that fiber can be problematic. Maybe it's just the category of fiber that someone's consuming and not all these different fiber types. And so someone might say for example, because when I think of fiber, I think of poo poo.

DR. WILLIAM BULSIEWICZ: Yeah.

SHAWN STEVENSON: And I know you do as well.

DR. WILLIAM BULSIEWICZ: For sure.

SHAWN STEVENSON: And but somebody who doesn't eat any plant foods, right. Carnivore type approach. And they're having their poos. And you know, with that being said, maybe they're like, yeah, fiber, muscle fiber. I'm getting in my muscle fiber. And so can you speak to that a little bit? Because for some people, removing fibers, at least short term, have helped to resolve some of their symptoms of, say, an autoimmune condition.

DR. WILLIAM BULSIEWICZ: A hundred percent. It's, it's a complex topic, right? There's a lot of nuance there. And 'cause we must also acknowledge that all foods have many different nutrients. It's not one thing. So anytime we're sort of reducing it down to, oh, well all plant foods, it's fiber. No, actually there's a lot more going on there. So, and it could also be the way in which we're growing the food that has nothing to do with the food itself. So, that being said, I think that the most important thing for your listeners to understand is the way in which we rely on these microbes to process and digest fiber and what that means.

We don't have the ability to digest it, our microbes do. They are readily adaptable. When they come into contact with fiber as it enters into the large intestine, literally teams of them will step up using specialized enzymes that they have. And we don't to break down the fiber. But basically what I'm saying, Shawn, is that we are a hundred percent dependent on our microbiome to digest fiber. So if your microbiome is unwell and you start introducing fiber and you do too much, it can't handle it, it gets overwhelmed, right? So I like to think of it this way. This is the way that I approach it, is your gut is a muscle. It can be trained, it can be made stronger. If it's hurt, we can restore functionality, we can bring it back. But there is an amount of work that is capable of today. And if you do, if you handle things properly, it will be capable of more tomorrow. Right.

So in the same way that when we use our muscles and we're physically active, we grow stronger, but we have to match our capacity for exercise with what we're actually doing. So when it comes to fiber, you need to make sure that you're not overdoing it if you go too hard, and it's more than your gut microbes can handle. That's effectively the same as stepping into the gym. And look, dude, I would love, I would love to step into the gym and, and press 450 pounds and be literally the strongest dude in there.

I would love to do that. I would hurt myself. That thing would fall on my chest, right. So can I do half of that? Yes. Many times. And I feel great about that at 45 years old. Right? But I have to work to keep building towards that goal. I don't know that I'll ever get to 450. I highly doubt that I will. But the process of building though the muscle, it does take time. Same is true with our gut. Basically, if you can match the fiber to what your gut actually needs, what your gut is capable of digesting, then that's exactly where you need to be for today, and that will allow you to continue to grow stronger and do more in the future.

So, a lot of these people, basically what the, what I'm hearing is these are people that have gut issues. They already, I already know that I don't need to hear more. Right. And I, for me, as a gastroenterologist, I want them better. Right? But then better doesn't mean the avoidance of symptoms. And that's an important point because if I jack my knee, I could make the decision to never walk for the rest of my life and I will not have symptoms. But that doesn't actually return function to my knee. So, and I would suffer if I were to make that choice, no one would actually do that. Right. But this idea of shying away from something because you don't think it's possible, it, I'm telling you, it is possible. You just gotta reduce the amount, get it right, and then grow slowly. So I always say wo and slow.

SHAWN STEVENSON: I love that analogy because if you did injure your knee, there might be a small phase where you're not walking, right? Right. And you're allowing whatever to heal up, but you getting back to work and restoring function.

DR. WILLIAM BULSIEWICZ: Yeah. And, and to be honest with you, like to me, I'm, I reject, I reject the idea of tribalism. I reject the idea of pissing on people just because they choose a different approach than what you choose. I don't think that's right. So a person who follows a

carnivore diet, lemme just say like, it's not what I would recommend. Right. But at the same time, I first of all respect that they're willing to make a change because most people are not. So there's something to be said for that. And I also, I wish them well, and I hope that like it could be something that's a temporary thing and then we, and then we bring you back and we rebuild that gut muscle. Make it strong again.

SHAWN STEVENSON: You said something that's very important in this conversation, which is about not necessarily the source of the fiber, but the toxins or toxic environment that it might be grown in or bringing into your system.

DR. WILLIAM BULSIEWICZ: Totally.

SHAWN STEVENSON: That could be causing the issue. There's been a huge debate for years now about grains. Right? And today we know that the vast majority of grains, in particular wheat, that people have been exposed to our kind of modern culture have been inundated with a certain type of toxin. Can you talk about this? You've got a chapter dedicated to and is, you know, adequately titled Toxic Environments.

DR. WILLIAM BULSIEWICZ: Yeah.

SHAWN STEVENSON: So let's talk about that. Let's talk about some of the big issues with our toxic environment, our food culture that can be contributing to gut issues.

DR. WILLIAM BULSIEWICZ: Yeah, I mean, there's, there's a huge conversation here, and let me be the first to say that I don't, I don't believe in like trying to scare people, right? My book is about what you can add now, what I'm trying to scare you away from or take away. That being said, we gotta keep it real, right? We have to be willing to have an honest conversation. If we can't have an honest conversation, then what have we got? Right. So this is the chapter where we get serious, we get honest with what's happening out there, and the acknowledgement that the food supplied, the food system that feeds us, that feeds our children, it is completely different than what it was for our grandparents a hundred years ago.

Right. So, and we can't take these things. I'm not saying they're all automatically bad. What I am saying is that we are normalizing things that were never normal in the first place. And as we suffer the consequences, we have to be prepared to try to understand when people are getting sick and they are. We have to be prepared to start to look at the data, be curious, be critical, and understand where are our mistakes? Because clearly we are making mistakes if we got people that are getting sicker and sicker, which they are. Right. So, with that in mind. I think there's like a few different places that we could go with this.

So let me start with just saying like, you walk into a supermarket and within that space, 75% of the calories that exist are ultra processed foods, right? 25% are not ultra processed. So you have a three to one ratio of stuff that you and I couldn't even prepare in a kitchen. Even if, even if I gave you all of the necessary ingredients, you wouldn't be able to do it, right? These ultra processed foods have been hacked basically to get at our brain. Alright? So if you and I were, and I don't mean to be too critical of food scientists, I just disagree when the purpose is to sell product and there's no, no interest in like what are we doing to humanity here? What are we doing to the people that can consume. Right. So, but if you and I were food scientists and we owned a company together, so Will Bultsiewicz is a model we'll call it. How about that?

SHAWN STEVENSON: I like it.

DR. WILLIAM BULTSIEWICZ: I've always wanted to, but they never, they never called me. But anyway, we, if we had this food company, there's a hack that we could play, which would dramatically increase our sales. What we would do is we would take basically refined carbohydrates. So that's sugar and flour. We would take salt and we would take fat, but like specific forms of fat and we would like crank at least two outta three to proportions that do not exist in nature. So like abnormally high refined carbohydrates, abnormally high salt or abnormally high fat.

Gimme two outta three. You have now met the criteria for what are hyper palatable foods. And the research of Professor Kevin Hall at the NIH has shown us that if you take literally the same diet, but one is ultra processed and the other is matched for every single major, nutritional quality, but it is not ultra processed. With that difference, the ultra processed diet

will result in people consuming 500 calories more per day. Times seven is 3,500 kilo calories. 3,500 kilo calories is one pound of fat. You just gained a pound of fat in one week. So, this is the first thing is we got hyper palatable foods and that's 75% of what's in our supermarket for the most part.

Number two, we have been flooded with food additives. So the world that we currently exist in was basically structured after World War ii. Like there was a major sort of re like regrouping that occurred after World War II and in different places, including in our own country. We had to figure certain stuff out. One of the things they had to figure out was how do we regulate food? And there was like the development of new food products and they said, well, you know, there's these ingredients that like, clearly we don't need randomized controlled trials to show that salt is safe, right? Or like black pepper or vinegar. So we're just gonna call them generally recognize the safe. And then we let, we allow them into the food supply. That created a loophole that has been exploited since that time, which was, I believe like 19 50, 19 56 or something like this. Right.

SHAWN STEVENSON: Become a black hole.

DR. WILLIAM BULSIEWICZ: Right. So this created this loophole where basically we could start stuffing things through that haven't had human testing even in the short term. And one of my things is like, what happens when you raise our kids on these foods from birth Right? All the way through their entire life. What are the consequences of that? We honestly have no clue. We have no clue. Right. So, but these 10,000 food additives, I'm not saying they're all bad, but they enter into our food supply and surely, surely some of them are bad.

But disentangling that taking acro apart, like that complex knot, trying to figure out out of 10,000, dude. I eat a certain way today. I ate a different way for a long part of my life. I've been exposed to tons of these. How do you measure that? How would you even know which one is the problem? It's impossible. So, this is part of the issue that we've, that we've sort of run into and, you know, for what it's worth, like this is a, this is like a major initiative for the Maha movement. And I sit here and basically what I say is, dude, I like people who make this political with trying to make our food clean.

You're completely insane. This is not politics. This is about your health. It's about your, the health of the people that you love. This is about the health of your children, right? So I pray that they're successful, but there's a lot of work to do. And I, I'm, I'm praying for more. Is where I'm at right now. So, and then I think the last thing, Shawn, I mean, there there's other stuff that you, perhaps you, you would like to talk about, but the last thing is that we our food system, even when it's whole food, has changed. And so it's not the same as growing it in a garden. And it's not the fertile, lush soil of the farmer that you know, that your grandfather or grandmother knew.

It's not the, it's not the same meat from the butcher that was grown at the local farm, right? Like, so on the plant side. On the plant, like on, on, on like the growth of these plants, there are some concerns and what you were raising was spray with glyphosate, which is found in Roundup, and that's an herbicide. It kills plants. The reason that it kills plants is because of something called the chiott pathway, and it's thought that glyphosate is safe for human consumption because we have a workaround for the chiott pathway, which basically involves specific amino acids. So we have the ability to produce those amino acids.

So like in theory, we as humans shouldn't have a problem. But the prob, but the issue is that they have started to look at, okay, but what happens when microbes right, which are delicate, invisible inside of us, but really important to our health. What happens when they get exposed? And the problem is it doesn't take much. You see the destruction of the beneficial bacteria and the ones that are the most resistant. Are the ones that are inflammatory. So there are, I would encourage, 'cause I, this is an area that gets like fiercely debated, right? And the truth is, like, as a medical doctor, I'm gonna stand by what I see in the science and people are gonna hear different things.

And I would encourage you to quite simply, as a, as a listener of this show, go to Google and type in glyphosate, gut microbiome, hub med. And articles will show up. And that's all that you need to basically like put your own eyes on the science of what the scientists are writing in these peer reviewed publications. It's right there.

SHAWN STEVENSON: You know, it's all available.

There are a few things better than a home cooked meal. It's like a warm hug inside. It's a great opportunity to deliver some of the best nutrition as well. All kind of managed and curated by us or our loved ones versus all the stuff out there on the streets.

Right? There's so many wonderful benefits of cooking at home, but, and it's a big old, but most people were unaware that when we were cooking at home trying to provide our family with incredible nutrition and great health, we were actually being harmed. We were actually being poisoned because for years so-called non-stick cookware. Teflon, the Teflon Dons we're creating cookware that has been harming human health. One of the most notorious compounds used to make Teflon cookware is a chemical called perfluorooctanoic acid, or PFOA, which has been found repeatedly in peer-reviewed studies to contribute to higher rates of infertility, liver disease, and a variety of cancers.

For instance, a study published in the Journal of the National Cancer Institute concluded that PFOA is a strong kidney carcinogen. Now, this compound has only recently been removed from creating non-stick cookware only to be replaced by chemicals that were found to be equally as destructive to human health. Like Gen X was a recent iteration and so many people are saying no more. Enough is enough. We're choosing better than, and how can we break free from this nonsense? Cooking is supposed to be one of the most healthful things that we can do, and so for real, safe, beautiful non-stick cookware, one of my favorite gifts to give and what my family utilizes every day is the cookware from our place.

Our place Cookware is non-toxic. Pfas free, ceramic coated, and has over 75,005 star reviews with their award winning cookware, pressure cookers, air fryers and more. And definitely check out their titanium non-stick cookware as well. Just head over to fromourplace.com/model and you're going to receive 10% off all of their cookware and appliances when you use the code model.

F-R-O-M-O-U-R-P-L-A-C e.com/model. And with their 100 day risk-free trial, free shipping and free returns, you can give this gift to yourself and the people that you care about with confidence. Again, take advantage right now. Head over to fromourplace.com/model. I'll let you in on a little secret. They've always got some great bonuses and sales and bundles, and

that's how you could save even more. On this amazing cookware, again, go to fromourplace.com/model. And now back to the show.

SHAWN STEVENSON: One of the things that I really love about you is that we're not trying to get into a conspiracy. You know, some of these things have been brought into our culture with aspirational intentions.

DR. WILLIAM BULSIEWICZ: Totally.

SHAWN STEVENSON: Right? To feed Americans, to feed families. And what happens is these things get exploited. And also the science can be very shortsighted, right? Oh, it's, we don't have this particular influence with human cells, but we're not considering, we're not just human cells, far from it. And so this is where your work is really focused, is like our health truly is resulting from the inside out and taking care of this microbiome. And today in our environment, we are just exposed to so much more stuff we need to be aware of, but not in fear. Because a big part of your work and your book of course, is like, add these things in, add these things in which we're gonna get to. But I wanna ask you a little bit more about, because I wanna know your opinion on it with some of the things that we're facing in our environment today.

So I want to ask you, because you wrote a little bit about this, and more people are becoming aware. I wanna know from your experience as somebody who has studied the gut, who's helped so many people over the years, what about the association with microplastics and our health and in particular with our gut health, is this affecting our bacteria?

DR. WILLIAM BULSIEWICZ: Okay, so that's an interesting question. As we move into talking about this, I just want to first start high level and say that I have been advocating for them to have stricter regulation of these food additives for a very long time. And I have been advocating for microbiome testing to be a required part of their process. Because if your food or your additive is going to induce dysbiosis in me or my children, I want to at least know before I choose, right? 'Cause that's gonna affect our health. So, with the microplastics,

okay, so just to define some terms, the term microplastic refers to small pieces, small particles of plastic that are up to five millimeters in size.

Now five millimeters in size, you and I would be able to see that, like we would be able to see that there's the sprinkle of stuff. But there are these other ones that are invisible to the naked eye called nanoplastics. And part of the problem is that plastic when it is biodegradable, it's actually quite challenging to break it down. It takes a long time, but in many cases it's not biodegradable at all. And so if you release that something that's not biodegradable out into nature, then what will happen is that it just will be sort of shattered into smaller and smaller fragments, but it'll never disappear. It'll never actually go away.

And so those small little fragments are again, that are invisible to the naked eye are called nanoplastics. The impact on the microbiome, I don't know, Shawn, I haven't yet seen a study to say what is the impact on the microbiome? But the impact on human health, regardless of the microbiome, is highly disturbing to me. And the reason why, first of all, it's sorry, but it's impossible to take these plastics, which of course could have other things, could be affecting your hormone levels or other things like this. It's impossible to make an argument where microscopic particles of plastic getting embedded into your tissues would be good for you.

Like it just doesn't exist, right? So the simple question is like, how bad is it? And there was a study done in the New England Journal of Medicine where they took a group of people that were undergoing a surgery on their neck, a blood vessel in their neck called carotid endarterectomy. Alright, so we like abbreviated CEA, carotid endarterectomy. So in essence, what's happening here, this is your, if you were to, for the listeners at home, or you can see me on YouTube, if you were to put your hand on your neck and feel the pulse, that's your carotid artery. You got two of those, one on each side. That's basically bringing oxygenated blood up to your brain.

And we can develop plaques there just like we can around our heart, which could cause, like in our heart, it causes a heart attack, but in this case it would cause a stroke. So when there's a big enough burden, the surgeon will literally cut open the artery. And peel, peel out the junk right off the surface. And so in this study, they took the, the plaque that was coating these

arteries and they sent it to the laboratory to be examined under microscope. And they identified that certain people had a disproportionate concentration of these nanoplastics in the artery. Like in the, in this plaque, some people had less, or, you know, I mean, I don't know about none, but some people had less.

The ones who had more the following years after the surgery we're more likely to have a heart attack, more likely to have a stroke, and more likely to die. So now these plastics are ubiquitous. Ubiquitous means they're everywhere. Right. So, and it can sound very scary. Let me just share some of the practical approaches that I've implemented in my own life. 'Cause actually we don't need to like get totally overwhelmed by this. We just need some small strategies. So one of the things that I've done is I stopped spending money on soda and I started spending money on a nice reverse osmosis water filter. So the RO reverse osmosis water filter, which doesn't have to be super expensive, it will basically remove anything, including the nanoplastics.

'Cause even the smallest little things can't get through, right? Only the water passes through the filter. So even minerals are too big to get through. So, so that's one of the ways that we can clean our water supply. So when we're consuming water at home in our family, it's always through this reverse osmosis water filter. It's never from the tap. And then the other thing I said, I replaced soda. I, that was actually a quite intentional comment because you go to a supermarket, okay, look like, artificial sweeteners, again, there's a debate on this topic. Some people have really big feelings about this topic. Fine. Like even if you think that there's no concern at all, which I don't agree, there's microbiome studies that are concerning, right?

But even if you think that there's no concern with art, artificial sweeteners at all, you still have, let's just take like a Coke, for example. A cola. A cola generic brand. You still have a carbonated beverage under pressure with citric acid. Check the ingredients, check the label. It's acidic. You can taste it. You can taste the acid, right? So it's pressurized, it's acidic, and it's in a plastic bottle. This is the perfect setup. For nanoplastics to leach from the plastic bottle into the beverage and you wouldn't even know. So even if you, even if you don't have concerns about artificial sweeteners, I really think you should have concerns about these other elements that go long.

We should never be like saying Diet Coke is off the hook and it's totally fine. So what have I done to replace that? So like our family, we have four kids, right? Groceries have gotten expensive. We shop at Costco and I'll get Perrier in the glass bottle. The cool thing about that is like a big bottle of Perrier, it might last me two days, right? And that gives me the fizz that I really like, but really nothing else. And it's in a glass bottle, so I, there's no plastic. And what I'll do is I'll just pour that over ice and then like, I might put a squeeze of citrus, or I might put a splash of kombucha or a splash of juice over the top of it. You don't need much. You're just like, literally adding just a little hint of flavor and it's great.

SHAWN STEVENSON: That kombucha hitter or some fer like that does a, that really spices it up when it comes to like a sparkling drink. That's a great tip.

DR. WILLIAM BULSIEWICZ: Yeah. And if you're buying kombucha's, the rule is the same too, by the way. So like, when it comes to microplastics and nanoplastics, where I get worried is heat. Heat. So like, don't throw food in a plastic container into your microwave, right? Don't serve food in plastic. If you can avoid it. If it's warm, I get worried about acid. So that's why the acid in the soda, also acid in kombucha, also acid in tomato sauce. And I get worried about pressure. So the carbonated drinks exert a pressure along the walls of the beverage. And that can also, so those three things, heat, acid, and pressure, can basically lead to shedding of these nanoplastics. So I, every time I see something that's in that spectrum, I'm like, yo, gimme the glass. I'll pay extra.

SHAWN STEVENSON: I love it. You know, sodas are one of those things that have that complex that makes them so addictive. You know, and not to mention the additives, the colorings. And yeah. We're just, now again, the data's coming out where it's becoming more socially aware, but this, this has been around for quite some time, you know, in regards to, and again, I'm so grateful that you mentioned that too, with, because it can be Stigma, even the Maha movement, you know, just like, well, damn, whatever, you know, people are battling about that we should be coming together. This should not be a political issue.

DR. WILLIAM BULSIEWICZ: A hundred percent.

SHAWN STEVENSON: To make sure that our food supply is safe and healthy.

DR. WILLIAM BULSIEWICZ: A hundred percent. And, and this is where I, at least for me, completely independent of my political views, right. I am cheering for their, their success. And yet, simultaneously I will hear, I will keep them honest and accountable to my expectations. So, and I think that's where everyone should be.

SHAWN STEVENSON: Yeah. And one of those critiques is, you know, we've got this over here, this carcinogen over here. Why are you so worried about red food dye? Like that's such a big victory.

DR. WILLIAM BULSIEWICZ: Well, the red food dye was kind of a joke to me too, by the way. That was before Maha. That was, that was actually in January.

SHAWN STEVENSON: It was in process.

DR. WILLIAM BULSIEWICZ: Yeah. Yeah, it was. But the, it was a joke because you actually had a easy play for the food industry because you got rid of one version of red, but there's other versions of red.

SHAWN STEVENSON: Yeah.

DR. WILLIAM BULSIEWICZ: So they just substitute.

SHAWN STEVENSON: So that was my big, like aha moment for everybody is okay. So red number three is banned what happened to red One and two and seven and ten. And you know, just specifically looking at the impact on the gut because it's not just the red dye, but orange one. This was common commonly used food dye, and this was back around, you know, the 1950s. But it was banned in 1956 after it was found to cause serious gastrointestinal issues in children. This story, this story's on the FDA's Webs website. All right? And so did they clean house and just like, we're not gonna, we're not gonna allow it. No, it's grass.

Like we could just come up with these other food dyes, some what we believe to be benign ingredients to make them, and we're just gonna keep doing more and more. And here's the thing. Their banned only after the fact. They don't have to prove that it's safe. We have to prove that it's harmful.

DR. WILLIAM BULSIEWICZ: Right.

SHAWN STEVENSON: That's the problem.

DR. WILLIAM BULSIEWICZ: Well, and I mentioned in the book that since I believe it was like since 1982, there have been eight banned substances total. So like, basically during my lifetime, you know, we have 10,000 things and eight of them have been removed from the food supply. It's crazy. So, and you know, with that, like. So to me, safety, like if we were serious, if we, if you actually were competent and serious about making sure that something was safe before you allowed it. I'm not saying that you need a randomized controlled trial the way you do with a drug, that's a totally different question. But what I am saying is like, shouldn't we add a minimum, require feeding studies first in an animal and subsequently in humans to see what happens?

Shouldn't we require that they actually check the microbiome to see what the impact on the microbiome is? Because that's going to get out, fall out of balance first before you suffer the bodily injury. Right? So like, shouldn't we require those things? Shouldn't we require long-term monitoring beyond just, Hey, it's in the food supply. Let us know. Let us know if you see anything, right? Like, shouldn't we require a long-term monitoring? Shouldn't we be like bringing them back up like, yo, give us your safety data. We wanna review that right now. None of these things exist, Shawn. 80%. 80% of the food, of the food additives in our supply have never had any feeding study human or animal. So if you're not putting it into a mouth, how are you approving that? How do you know that's safe? That's crazy.

SHAWN STEVENSON: Before we get into some of the good stuff. All right.

DR. WILLIAM BULSIEWICZ: Yeah.

SHAWN STEVENSON: I want to take one more turn into dairy. Okay. Welcome to Derry. Yeah. And I'm saying this specifically.

DR. WILLIAM BULSIEWICZ: Welcome to Derry .

SHAWN STEVENSON: Because..

DR. WILLIAM BULSIEWICZ: Is that show good?

SHAWN STEVENSON: You have a little bit of a subset in the book a little subsection where you talk about a horror worse than a Stephen King novel.

DR. WILLIAM BULSIEWICZ: Yeah.

SHAWN STEVENSON: All right. And you're addressing like, this is as soon as we get here, as soon as we arrive here on Planet Earth and we're born. Children are being exposed to some of this terrible nutrition with all of these different newly invented chemicals and additives. And you talk about that in that little subsection about infant formula.

DR. WILLIAM BULSIEWICZ: Yeah. Yeah. So basically, if I could weigh this out for the listeners at home, I have four kids. We, we've spanned the full spectrum where we've had times where we're actually donating to a milk bank. And we've had times where we're actually requesting from a milk bank. But, to me, with total clarity, breast milk is the perfect nutrition for a developing baby. And formula is us making an attempt to replace that. But like we haven't leveled up our formula. Other than like the only thing that I've seen them do is sprinkle in mono fibers, right? So like the only thing I've seen them change is they've realized, hey, we should add fiber to that.

And that's about it. And so, and when you go and you review these ingredients, I would encourage everyone, like, I have no problem with vitamins and minerals. You need to have vitamins and minerals in there. But are we really offering our children the best start to life when like the first five ingredients are either various forms of oils, some of which you've

never even heard of before, or they're protein extracts, which protein extracts is not protein in like a conventional native way.

It is the extraction of protein where it's being artificially removed. Right? Or it's these fiber extracts, which I actually don't believe in fiber extracts in terms of health, because you can totally overstuff the microbiome if you give too much of just one thing. So bottom line from my perspective is we can, we should, we need to do better for our kids. So when we have, my wife and I have bought formula, but we are not buying that formula. But we have to unfortunately, like import from overseas in order to get something that we feel is a higher quality.

SHAWN STEVENSON: Yeah. Yeah. Thank you for sharing that. That's the biggest takeaway. We can do better. We can level up, there are better alternatives today, but the accessibility isn't that great. And we have the ability to provide, because, you know, breastfeeding isn't always possible. Right.

DR. WILLIAM BULSIEWICZ: Right.

SHAWN STEVENSON: And also that's part of the equation, but also the education against breastfeeding that took place for quite some time. The indoctrination that it wasn't good enough. And we're still coming out of that and normalizing it and, you know, being aware that there's multiple aspects. And you said this earlier about, you know, not trying to glorify going to war. But there's been multiple fronts on which the battles have been taking place, when it comes to human nutrition. And so now that we're coming out of that and we have platforms like this and people who are like the top of the top in their field, like yourself, who is sharing this education? People, this is the, one of the most beautiful things about this is that people get to learn from you.

Right. 20, even 20 years ago. They didn't have access. Right. You know, like we had to go to some esteemed university and dig through the library, or maybe get access to some esteemed professors and it was reserved for the few. Now we can push play on our phone and get to learn from the best people in the world. It's so powerful. And with that being said,

you're also here to deliver the good news and give us, point us in the direction of what are those things that the biggest body of data is showing that we can start to add these things in and see some remarkable results. So how do we get plant powered plus? What are some of the goodies that we need to be adding in?

DR. WILLIAM BULSIEWICZ: Yeah. Yeah. Healing is possible. It comes in many forms, right? It won't come just out of nowhere. If you're searching for health, something has to change. You have to be willing to change, but I can put on the table the evidence-based tools that are available to you. And one of the things that I wrote in the author's note, Shawn, is that one of the things that I struggle with as a, as an author and a doctor, is that I know that medicine is personalized, right? You have to like, develop a relationship with a person, understand them, and then you tailor specifically based upon what you've learned about them to what their needs are.

I can only write one book, but what I wrote is that when you read this book, I really hope that you hear it in a way that's personalized to you. So there are these aha moments where the thing that you're missing, let me help you to find it. Right, and let me put the tools on the table. They're all evidence-based. Every single thing I am sharing all of the references to my book to make it as easy as possible. I did the work. All you gotta do is click and read and you can get access to everything. Okay, so we've already talked about like this idea of forget labels, right? This is why I called it plant powered because to me, any diet where you basically address these four deficiencies, four things that we are not getting in America, fiber, polyphenols, healthy fats, and fermented food.

If you address those four things, you, number one, have an anti-inflammatory diet and you, number two, you will feel the difference, right? If the thing that your body is starving for and has been missing is properly addressed, you will feel the difference. And if you don't feel the difference, then this was not the thing that you needed for healing. That's the truth. So, but there are other options and that's the plus, right? So the plus is that we can dig into the patterns of our day, right? And acknowledge that the way in which we live, what's culturally normal and, and like, you know, let's keep it real, like life is fast. Life is hard. Most of us, we go through our days Monday to Friday just trying to keep our head above the water, right?

But if you could just build a little bit of time in the morning, just build a little bit of time in the evening, you could do a lot with that to really get your body into an alignment where your body will be able to know, hey, this is what time of day it is, this is what he or she is trying to do. And the body and the microbes will be prepared to rise to the occasion to support you. So Shawn, what I'm talking about is the circadian rhythm. And it turns out that roughly 50% of our genetic code is flipping switches during the course of a 24 hour cycle at specific times, right? So about half of our genetic code, but our microbes, it's even more, more than 50% of the microbes within our microbiome.

They are rising and falling at specific time points to meet the moment to support you so that you can do what you need to do. So during the day, that means protein metabolism because we're physically active, we're moving around, we're doing stuff right? So basically these microbes, they're down there like, okay, let's make sure that he's got what he needs, right to do the right stuff today. But then the lights go out and you basically like slide into bed and the microbes, they flip. It's not protein metabolism anymore. Now their functional output, what they're doing for us is focusing on recovery, right? Healing. So, and it turns out that our immune system is nocturnal, and I can prove it to you because all of us have had the experience where like in the evening, your nose starts getting congested, right?

Closes off. You can't breathe through your nose. Then you wake up in the morning and it just kind of dissolves and disappears. That's inflammation. Or you've had the experience where you just smashed a big workout, you go to bed at night, you're feeling loose, but you're not sore. You wake up in the morning and you are sore. That's inflammation. But good inflammation. Basically the immune system is processing your exercise and making you stronger while you sleep. So all of these are examples of like basically the body, the immune system doing specific things at specific times and your gut microbes doing specific things at specific times.

So time matters. And if time matters, then the body needs to know what time it is. And the main lever that we can pull to let the body know what time it is, is morning sunlight, with total clarity. Because inside of us we have two main hormones that basically keep the clock cortisol in the morning and melatonin at night. Melatonin's the sleepy time hormone.

Cortisol is your get up and go hormone. Now, by the way, cortisol, that's like our body's prednisone. So when I mentioned a moment ago that your nose was congested. But you wake up in the morning and now your cortisol surges and all of a sudden, you know, notice within the first hour your nose clears up.

Or that soreness that you had from working out loosens up feel better. Cortisol defines our morning. It's, it timestamps the start of the 24 hour cycle. And if you step outside and you get morning sunlight, you will bump your cortisol by 50%. And that is a good thing. And what I'm saying is that for you, the listeners of your show, if you haven't been doing this, so like if you work from home, you might not go outside at all, right? Or if you're busy, you might go outside, just walk to the car, get in the car, drive to work. That's it. What I'm saying is if you can get something in the range of 15 to 30 minutes outside, you will feel the difference on literally day one. More energy, more focus, more cognitive endurance. You'll be able to take on more tasks during the course of the day, and then whatever time you stepped outside, let's imagine it's seven in the morning, whatever time you stepped outside at 14 hours to that, around nine o'clock that night, you're gonna start to feel tired because the body knew when you woke up. So now the body knows when you wanna go to bed too. The body is basically prepping for a 14 day day of activity, and then like eventually you're gonna go to bed and get your like nine, you know, eight or nine hours or whatever it might be.

SHAWN STEVENSON: One of the fastest ways to impact your gut health is through the things that you drink. That liquid medium is a fast delivery system. To improve your energy, boost your metabolic health, or to straight up mess you up. When it comes to gut health, one of the most powerful things seen in clinical data to instantly uplevel the health of our gut are polyphenols. And these are incredible compounds that have antioxidant and anti-inflammatory properties that are out of this world. And this is just one of the reasons why in that liquid delivery form, teas like green tea and black tea are noted in thousands, literally thousands of peer reviewed studies to have a variety of health benefits. Now, my favorite tea is absolutely abundant in polyphenols, and it's been found to have remarkable impacts on our gut health.

A recent study published in their peer-reviewed journal, nature Communications uncovered that a unique compound called Thea Brownin found in the traditional fermented tea called Pu'erh, has remarkable effects on our microbiome. The researchers found that Thea Brownin positively alters our gut microbiota that directly reduces liver cholesterol and reduces lipogenesis the creation of fat. Another study published in the Journal of Agricultural and Food Chemistry found that Pu'erh may be able to reverse gut dysbiosis by dramatically reducing ratios of potentially harmful bacteria and increasing ratios of beneficial bacteria. So much of these benefits seen in these peer-reviewed studies are due to the incredible concentrations of polyphenols.

That are found in Pu'erh, and the only Pu'erh that I drink is triple toxin screened for purity. It uses a patented cold extraction technology and it's wild harvested, making it even more abundant and polyphenols. The Pu'erh that I'm talking about, and again, it's the only PIR tea that I drink, is from the incredible folks at Pique Life. Go to piquelife.com/model and you're going to get up to 20% off. Plus they're going to hook you up with a free starter kit that includes an electric frother. With some of my favorite bundles and my favorite tees over at Peak Life, again, go to piquelife.com/model. That's P-I-Q-U-E-L-I-F e.com/model to take advantage. This Pu'erh Tee is in a league of its own. It's absolutely incredible. You can enjoy it, either hot or cold, and there are multiple studies affirming its benefit on our overall metabolic health and supporting fat loss as well. It's truly special. Again, head over there, check 'em out, piquelife.com/model. Now, back to the show.

SHAWN STEVENSON: So we know that light is a primary controller of these circadian rhythms. What about when we're eating? Is there anything you can share there? You know, again, this is plant powered plus, so is there anything that we should know with circadian rhythms regarding our diet?

DR. WILLIAM BULSIEWICZ: So first of all, you can eat literally the exact same food at two different times of day and get slight and get like at least. At least slightly, if not more than slightly different results in terms of the way that your body responds to the food. So insulin sensitivity is actually peak in the morning and it gets worse and worse as the day goes on. So what that means is that basically like your blood sugar spike from the exact same food will be

worse later in the day than it would be early in the day. That's actually a quite important thing because blood sugar spike, one of the things that I discuss is how that actually disrupts the gut barrier. So we don't really want like an excessive blood sugar spike. So, and this is the argument in favor of like trying to shift meal times to earlier in the day.

So like, I don't know about you, I'm actually not a breakfast guy, and like, this is me just being honest that like, I advise that breakfast is good, but in my own life I typically don't eat it because most days I'm like going. But when I do eat breakfast those days, actually I'm less hungry. And I think over the course of the whole day, I actually am consuming less food because it's almost like my body got what it needed early in the day, and it's totally at ease and comfortable.

And so I'm not like searching out for food. So I, I have noticed the difference when I shift things earlier. My, biggest thing is to avoid late night meals. So like, when it gets dark, we need to be dialing back on the food and the alcohol because these things ultimately are going to affect us and they're gonna affect us while we're like, we should be in recovery mode and our body's still digesting and dealing with the food. So, so bottom line, like meal timings, they do matter.

SHAWN STEVENSON: Got it. Got it. This has been awesome so far. Can you give us some good food sources? So you mentioned the importance of these polyphenols.

DR. WILLIAM BULSIEWICZ: Yeah.

SHAWN STEVENSON: So can you just drop us a quick nugget on what polyphenols are, and also what are some of your favorite sources for us to get, like some heaping amounts of these polyphenols?

DR. WILLIAM BULSIEWICZ: Okay. So like, cetin, resveratrol, curcumin, cetin, you find in garlic and onions, resveratrol, you find in red wine. Curcumin, you find in turmeric. You've heard of these. I mean, I know you have, I'm talking to your listeners right now. So you've heard of these things.

Those are polyphenols and it turns out that those things are basically meaningless until they come into contact with your microbiome. So we have much like fiber, the polyphenols require the gut microbes to activate them. But once they do, once the gut microbes basically flip the switch and turn them on. Two things happen. Number one, you get access to those bioactive polyphenols, which are the things that we celebrate. You know, again, curcumin, resveratrol, cetin, right?

These are really healthy. You get access to those, they enter into your body. They have beneficial effects. But the other thing that happens is your microbiome changes. So your microbiome will actually shift and it'll move in a direction where it's actually more capable of producing short chain fatty acids than it was before. So a quick example of this, Shawn. With 38 Terra, which is my supplement company, we wanted to prove, like we're very confident in our product, but we also felt like if we want to prove what happens when people use this product. So we commissioned a study with basically the world leading laboratory that does microbiome simulation.

It's a real human microbiome, but it's done with a simulation. So they're like recreating digestive enzymes and all these different things. Right. It's quite sophisticated. The reason I brought this up is that one of the coolest findings from this study is that the, basically the feeding, 'cause there was a feeding, the feeding that was occurring on a daily basis was the exact same amount of the product. The product never changed, but the amount of short chain fatty acids kept going up. So basically what that tells you is that the microbiome is what was changing because the microbiome was getting better at producing more short chain fatty acids from the exact same, you know, fiber and resistant starch.

So that's what we get from polyphenols. Polyphenols do that for us. It's really beautiful. What are the foods, well, I already mentioned like, you know, garlic, onions and turmeric, but to me it's the color foods. It's color foods, so anything that's colorful, whatever color that is, there's something there. And all plant-based foods are gonna have these polyphenols. Berries are like a really nice concentrated source. So I don't know, you tell me. What's your fav, do you have a favorite berry?

SHAWN STEVENSON: Depends on the time of year.

DR. WILLIAM BULSIEWICZ: Oh, seasonal.

SHAWN STEVENSON: Yeah, definitely.

DR. WILLIAM BULSIEWICZ: Good for you.

SHAWN STEVENSON: Right now, right now I'm really vibing with, I'm really vibing with blackberries right now.

DR. WILLIAM BULSIEWICZ: Cool. Yeah, so I, I am just like naturally a raspberry guy. Like if you told me you could get organic raspberries for the rest of your life, that would be like winning the lottery for me.

SHAWN STEVENSON: Raspberry Beret.

DR. WILLIAM BULSIEWICZ: Oh gosh. Raspberry anything. You can't go wrong, right? Raspberry dark chocolate. Always a win.

SHAWN STEVENSON: That was a Prince song, by the way.

DR. WILLIAM BULSIEWICZ: What's that?

SHAWN STEVENSON: Raspberry Beret.

DR. WILLIAM BULSIEWICZ: Oh, really?

SHAWN STEVENSON: Yeah.

DR. WILLIAM BULSIEWICZ: Oh, sorry.

SHAWN STEVENSON: Shout out to Prince.

DR. WILLIAM BULSIEWICZ: Yeah, that guy was great. So yeah, so like the, you can find a high concentration in those types of things, right? So, if you look at the colors of your food, we are naturally attracted to these colors. This is deeply entrained in who we are as humans. And when you like, see, hear this concept, eat the rainbow, you're basically eating for more polyphenols.

SHAWN STEVENSON: Love it. I love it. What about the healthy fats?

DR. WILLIAM BULSIEWICZ: Alright, healthy fats. So like, I think that like the idea of vilifying macronutrients, I push back against that. So we have made it sound like carbs are bad. Okay, hold on. I get it. When we're talking about sugar and flour, right, those are refined carbs, but fiber is a carb. Not all carbs are bad. Same is true with fat. There's good fats and there's bad fats. We all agree that trans fats are bad. Alright, my position, and let me just sort of unpack this. I hope you don't mind. Unsaturated fat isn't that you're supposed to be unsaturated fat. That's not my argument. My argument is that saturated fat needs to be in balance.

That's my argument. And when we have a lot of saturated fat and no fiber, that's a setup for problems. So that, that's my concern with that. Okay? But there are these other fats, like there's the monounsaturated fats that you would find in an avocado or extra virgin olive oil, right? Or there's the Omega-3 fats, which you can find in chia seeds, flax seeds, hemp seeds, which you can also find in fish shellfish. These are anti-inflammatory fats. They're so good for you. And there's some studies looking at like, what's the impact of these things on your microbiome? And it starts to give the appearance that their prebiotic, which means, which I didn't ex, I didn't see that one comment. Right?

There was one study where they had people consuming extra virgin of olive oil every single day, and eight weeks later, their gut microbiome was healthier with more diversity. That's the only thing they were doing. It's incredible. Or omega threes. Omega threes are essential fats and they're anti-inflammatory. And we need them, and we need to focus on 'em. Most of us don't get enough of them. So to me, the fats, like what I'm calling out here, is like, you don't need to get rid of fat. You just need to heat. And you just need to choose good fat, high quality, fat Focus on these, like, I don't, the seed oil debate. You could debate, we could debate this topic. I don't, I honestly don't even know how you feel about it. But my whole

thing is like, this whole debate feels really silly because isn't it obvious that extra virgin olive oil is better? Why don't you just make that choice?

SHAWN STEVENSON: If we're just looking from the lens of ultra process versus minimally processed, just from that argument alone, it's pretty clear. Extra virgin olive oil. So what about the ferments? Because, you know, growing up I knew of two yogurt and then the sauerkraut that my mom ate that I wanted no parts of. What else do we have in the context of fermented foods?

DR. WILLIAM BULSIEWICZ: You know, you're, you're raising a good point though, because basically we have abandoned fermented foods because we've developed other ways to preserve our food. Right. So canning refrigeration, but also preservatives. I mean, how can we call it normal that a food could sit on your shelf at your supermarket for who even knows how long, and be just as crisp, just as fresh as the day it was made. Right? Why? Because it's actually the microbes, Shawn, that change, transform our food and prepare it to turn it back into soil.

They, they degrade it, right? It's the microbes. So if you wanna keep the microbes outta the equation. You gotta kill 'em. That's what's happening. So, but fermented foods are a different take on that because we're preserving by building a healthy ecosystem. So people hear ferments and they hear the word probiotic, and I see something a little bit different. I see this entire ecosystem of microbes living in balance, that they're healthy and that's how you created those foods. And when we consume them, there are now multiple studies to suggest that you consume that healthy ecosystem and you have inside of you your own ecosystem and they can integrate themselves and become a part of what you got.

And this can be the way that you add diversity to your gut microbiome Stanford study. Right? So the Sonnenberg and Christopher Gardner, have you had him on your show? Christopher Gardner. Oh, we gotta get him in here. So at Stanford, they did this research study where they basically had people increase their fermented food for eight weeks. And at the end of those eight weeks, they had increased gut diversity. They had lower measures of inflammation by about 25%. Okay. So I mean, in some ways that is like just another example, validating my

thesis that the gut and the immune system, they're together. Healthier gut, healthier immune system.

Boom, right there. You asked me what are the foods, so yeah, yogurt and kefi and you got lots of choices though, because you could do the sauerkraut, you could do the kimchi, but you could also do pickles, like real pickles, right? The ones from the refrigerated section. But even better make them yourself or like, we make dilly beans. So those are green beans that are fermented with dill, garlic, black peppercorns. That's what I make. Yeah, they're good. Miso, wonderfully fermented food. Tempe. Okay raw. Probably a little bit too weird for a lot of people who are listening right now. But actually you cut the Tempe and apply whatever marinade you like and you cook it and it's actually quite delicious.

So, and it's really high in protein, high in fiber, and it's fermented. What else? Obviously kombucha, water kefi, which is quite similar to kombucha, right? So these are, these are options. There's a lot of foods that are fermented that we don't even realize or like may not realize. Chocolate is fermented. Coffee is fermented. Tea, apple cider vinegar is fermented. Some teas, there's Puer tea, some tea. So purer tea. PUER. Purer tea is fermented tea and that's the highest polyphenol tea. Yeah. So, yeah, so, so all of these are out there. And then there's one last thing that I have to throw in there. So you are not, as a listener, you are not required to consume bread, but let's be honest, bread, it tastes good.

So there's sourdough. Alright. Sourdough is fermented bread. And that fermentation process actually completely transforms the nutritional qualities of the bread. So through fermentation, the glycemic index is lowered. So in other words, it's not gonna spike your blood sugar like it would've done if it was just the same flour. It also has less gluten, it also has less pesticides. You are like basically dissolving the glyphosate if it is there, right? I can't say it goes to zero, but you're helping to break it down. And there are these yeasts and bacteria that allow us to do this. And then like it's, you know, may sound a little sad, like you throw it in the oven and get roasted.

All right. But there's new research, Shawn, that in the last, like since the last time I was on the show in the last three years, that is indicating to us that if you take live microbes and you

heat kill them, they still can provide benefits. We call those Postbiotics, but my favorite. There's some other names that they've come up with ghost Probiotics or my favorite, zombie probiotics. So the point is the bread has been transformed, but it also has these zombie probiotics and they may be providing benefit even though you baked the bread.

SHAWN STEVENSON: Amazing. Ghost protocol. This is amazing. Yeah. And speaking of which, you know, there are many iterations of Mission Impossible and many iterations of our conversations together. It's been years. And this is, you know, you're one of my favorite people, man. You know that, and you know, you continue to uplevel things and to uplevel your communication and it's so special. And so right now, as of this recording, plant Powered Plus is about to hit the store shelves. But for everybody listening right now, you can get access to some pre-order bonuses for just a couple of days, depending on when you're listening to this. And so can you tell people where they can pick up a copy and pre-order the book, get the bonuses?

DR. WILLIAM BULSIEWICZ: Yeah, you can get a copy anywhere the books are sold. That being said, I like really believe in trying to go to your local bookshop because I'm all for like the convenience of the click. And, you know, prime, I'm not upset if you do that, but the point though, from my perspective, is like that local mom and pop shop, those are, those are your neighbors. And five years from now, 10 years from now, I really hope they're still open because I like popping into those kinds of places. And that only can happen if we buy from. So, but grab your book wherever you feel most comfortable, honestly, and then come to my website, the gut health md.com. Where number one, regardless of when you listen to this episode, I got resources for you.

I got supportive materials, I got the references, I got a lot of things that I wanna share because from my perspective, the book was the beginning of a bigger conversation that I want to keep having, but there's also the pre-order incentives that are available, at least for the time being where you could get access to a five day anti-inflammatory reset course that I created myself and made it just for you completely free. Otherwise you're gonna have to pay for it. Right? So there's a five day anti-inflammatory reset course and also you can get access to some of the materials from the book to get you started immediately.

SHAWN STEVENSON: Amazing. Thank you so much, man. I appreciate you. Is there anything else that you wanna share about the book before I let you go?

DR. WILLIAM BULSIEWICZ: Yeah, definitely. So the one thing that we didn't get a chance to talk about, but. It means a lot to me, and I know this is something that resonates with a guy like you. Chapter eight of this book, from my perspective, is with total clarity, the best writing that I've ever done, like by far. And it, I think it catches people off guard because they show up for nutrition and science and they end up drifting into a different place. The chapter is about the ways in which our mind and our body are interacting with one another and how that impacts our health. And there's a conversation about trauma. There's a conversation about our innate need for human connection and how important that is. And there's a conversation about our spiritual purpose and how we were beautifully and wonderfully made.

And designed for that higher calling and desperately starving for it. And I know these things, what I wanna just mention before we run, we're not gonna dig into the full details. That would've to like be another show, but, and maybe we'll do that sometime. But what I just wanna say before we run is that when I wrote my first book *Fiber Fueled*, which came out in 2020, I was very comfortable. It was very easy for me to come forward and say to you, I lost 50 pounds and I improved my health by changing my diet. But that wasn't actually the whole story. I had demons that I was dealing with and I had things that I was ashamed of from my past. And I had a relationship that was in repair that I was still dealing with.

And that was the relationship with my dad, which was complex. And so, uh, different aspects of our health or different aspects of our, actually our, our, our maturity, they come along at different times, right? So, like I, nutrition came real fast for me. 2012 to 2015, boom, I was flying. But the ability to develop these, these personal relationships, the, and also my desire to open up myself to a relationship with a higher power. It took me a while to get there. There's stuff that we could discuss, but again, the reason that I wrote about this and I had to say it, and I don't care if it's a risk. The reason I wrote about this is because this was the healing that I needed.

So healing comes, this is my closing message to your listeners. Healing comes in many forms. For some of you, it's the nutrient that's missing that you add in. For some of you, it's the daily rhythms that are out of rhythm that we could restore. But for many of us, it's also these things that we're not talking about enough, the traumas, the relationships, the spiritual purpose. And so I wanted to open up a conversation about that in the book. And, I believe that that for many people will be the most important form of healing that they will receive. And if you do love the book, I would encourage you, number one, share it with a friend. Number two, take it to heart. And if you, if you really feel inclined considered the audio book that when I read that chapter, it was hard for me to get through and we did it in one take. So, and I think it was a special moment.

SHAWN STEVENSON: Amazing, amazing. It's all connected. We're all connected. Everybody listening. Thank you so much for sharing your time with us today. Thank you for sharing your genius with all of us today. And again, pick up a copy of Plant Powered Plus right now, depending on when you're listening to this, you can grab those pre-order bonuses. Either way, hop over to the website, which is again.

DR. WILLIAM BULSIEWICZ: The gut health md.com. That's my home base. Sign up for the email newsletter. It's completely free resource, like a substack. You might as well jump in there and then check out my other stuff. Let's keep the conversation going.

SHAWN STEVENSON: Absolutely. Absolutely. I appreciate you so much. The one and only Dr. B, Dr. Will Swigs. Thank you so much for tuning into this episode today. I hope that you got a lot of value out of this. If you did, you already know what to do. Sharing is caring. Share it with somebody that you care about. You can send this via text message directly from the podcast app that you're listening on. Of course, you can leave a comment if you are watching or listening on Spotify, by the way. We're on Spotify video Pop over.

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