THE MODEL HEALTH SHOW

EPISODE 597

The Truth About Processed Foods & The Microbiome-Soil Connection

With Guest Autumn Smith

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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. On this episode, we'll be diving into digestive wellness. You're going to find out about a shocking connection between the microbiome of our soil and the microbiome of our bodies. The science around the human microbiome has absolutely exploded in recent years, and there's been some big revelations, including the fact that the bacteria that make up our microbiome have incredibly important roles in determining our health outcomes. For example, there are certain species of microbes that literally create critical nutrients in us for us. For example, certain species of microbes create SCFAs, or short-chain fatty acids, that are then pushed through our intestinal wall and utilized to help to regulate a variety of processes, from what's happening with our blood and our heart to what's happening with our brain. Alright, yes, there's a huge connection between our microbiome and our brain health, our heart health, the health of our joints, our lungs. There is a microbiome of our lungs as well.

So, understanding this relationship between these bacteria that inhabit our bodies, which we have five to upwards of 10 times more bacteria that live in and on our bodies than we have human cells. It is bananas. Trillions and trillions and trillions of these microbes. And we have this symbiotic relationship that has evolved over time. But here's the rub, in recent years, we've seen the species, the diversity, that spectrum of bacteria has plummeted. So, if we're using the analogy, for example, of a rainforest, the human microbiome has many endangered species right now and many species that have gone extinct. And many of these species were responsible for a variety of metabolic processes, immunological processes in the body. The list goes on and on. And also, not just the advent of processes, making processes happen, but also the prevention of degradation, so the prevention of disease. Our microbes play a critical role in this formula. And what are we seeing right now in our population? Skyrocketing rates of all manner of chronic and infectious diseases as well. Contrary to popular belief, infectious diseases are up. Now, the thing is there cannot be a problem without a solution, but we've got to look at the root. And that's what we're doing today. We're looking at the root cause, and I mean that literally, in today's episode. So very excited about this. Let's jump to the Apple Podcast review of the week.

ITUNES REVIEW: Another five-star review, titled, "The Model Health Show is one of my best friends," by HBL Cree, "This podcast has gotten me through so much. I've learned new truths and reaffirmed truth I already knew. Whenever I need some motivation and inspiration, I turn on The Model Health Show. I always feel rejuvenated. There's also so much new content every week. I always have something new to listen to. Love it. Thank you."

SHAWN STEVENSON: Amazing. Thank you so much for leaving me that review over on Apple Podcasts. It really does mean the world to me. If you've yet to do so, you could pop over to Apple Podcasts and leave a review for The Model Health Show. And on that note, let's get to our special guest and topic of the day. Our guest today is a functional diagnostic nutritionist and co-founder of Wild Pastures and Paleovalley. Autumn Smith holds a Master's of Science degree in Holistic Nutrition. And she's really helping to reshape the way that our food is grown and the health and wellness of our society. And she's doing this in a big way that you're going to find out. It's really, really remarkable. So, let's jump into this conversation with the one and only Autumn Smith, welcome to The Model Health Show.

AUTUMN SMITH: Thanks for letting me be here, Shawn. Such an honor. I'm such a fan of your work and just glad that we've met at last.

SHAWN STEVENSON: You're awesome. You're matching the ambiance here.

AUTUMN SMITH: Thank you. I tried.

SHAWN STEVENSON: You know? Yeah.

AUTUMN SMITH: No, I don't.

SHAWN STEVENSON: You look beautiful. Thank you so much for hanging out with us. So, to kick things off, according to a recent study published in the Journal of the American Medical Association, fancy stuff, upwards of 16% of the United States population, around 52 million citizens, now have a condition that's labeled as IBS. Can you start by sharing what IBS is?

AUTUMN SMITH: Yes. IBS is kind of actually a waste basket diagnosis. It can be characterized by things like digestive issues, diarrhea, constipation, gas, bloating, but it doesn't really describe what's happening. Usually what happens is they rule out other more serious pathology. And when you don't have that, it's kind of like, "Well, you've got irritable bowel syndrome." And I know it well because I suffered from it for years and years.

SHAWN STEVENSON: Yeah, so can you talk a little bit about that? Was it like...? How long were you dealing with this?

AUTUMN SMITH: Probably when I was about 10 is when it started.

SHAWN STEVENSON: 10?

AUTUMN SMITH: 10, yeah.

SHAWN STEVENSON: Oh my gosh.

AUTUMN SMITH: Yeah, I would just have intermittent... And it wasn't like that serious or... For me. But it was debilitating 'cause it was unpredictable. So, it wasn't like it never stopped, but I never knew when it was going to happen. I would all of a sudden look pregnant. I wouldn't want to go out. My life became unpredictable. And every doctor that I saw just said, "Oh yeah, well, this is a stress-related condition. So go home, take some Pinot, relax." And that's kind of the treatment I got. And when it wasn't remedied, and we didn't really look for the root cause, it kind of snowballed as I hit my teenage years. And we now know there's this gut-brain connection, and it became mental health stuff, and I really flew off the rails. But I do think it was that irritable bowel syndrome, in the very beginning, was kind of like a warning sign that I didn't know to take seriously because we didn't know that food would matter, really, at that point in time, or the doctor didn't tell me that at least.

SHAWN STEVENSON: Isn't that one of the craziest things?

AUTUMN SMITH: It's insane. Now that you think about it, why would food not have something to do with? It's your stomach.

SHAWN STEVENSON: Especially in the field of gastroenterology, which is a field dedicated to studying and treating the organs responsible for digestion.

AUTUMN SMITH: Yeah.

SHAWN STEVENSON: Right? For digestion, assimilation, elimination, of course food matters. And you know we've had on award-winning gastroenterologist, one of the top guys in the field, just to ask him like, "How much training did you get on food?" He's like, "Basically nothing." And it's so crazy because even the organs themselves are made from the food that you eat.

AUTUMN SMITH: I know, right? And yet I was never told anything to look for anything about what I'm eating or anything other than stress, reduce it and take some Pinot. It was... Yeah.

SHAWN STEVENSON: Well, you just gave... When you kicked off that answer, you said something really profound, I don't want people to miss this. It's really a blanket statement, right? Is a blanket diagnosis for...? And the acronym that some people in this space, some clinicians use IBS is, is bullsh*t right? Because it's just like, you're not actually identifying what the issue is. And it can become incredibly frustrating. Because number one, we're not looking at the root cause and because you can't figure it out, you just give it this categorization of IBS. You just leave it at that. That's what you dealt with. And you mentioned that by not addressing

that, we get to a place where this brain connection and stress and attributing, now they're probably giving you some antipsychotic medications or something like that.

AUTUMN SMITH: Well, you better believe. Yes. I went on a lot of different psychiatric medications, Wellbutrin, and Paxil, and just kind of the litany, and they made me feel like a zombie. I know that they're valuable for some people, but for me, they... I just didn't have a good experience. I had the brain zaps. And yeah, I think I always said I had like one thought an hour. I just... There was like a shell of me. And when that didn't work, I kind of thought, "Wow, I'm just broken, there's just something wrong with me." And so, in order to not feel physical pain and emotional pain, I then just looked to substances and my life got really out of control. And I actually got kicked out of my parent's house before I even graduated high school. And yeah, I think had I known to look at what I was eating or that I had any sort of control around the way I was feeling, I think things would have unfolded very differently.

SHAWN STEVENSON: So how did you figure this out? How did you happen upon what the real solution is?

AUTUMN SMITH: It took a long time. I continued... I've always been someone who kind of pulls myself up from my bootstraps. And so, I still went to LA, and I graduated college, and I worked in a dance company. And it really wasn't until I met my husband, that he moved in with me right down the street actually, and said, "You are smiling, but you are suffering. And your life is kind of a mess." And so, he got on the internet, we went to one final doctor in LA, and they didn't have a solution. So, he just saw some people in a little corner on the internet back in 2007, were seeing some luck with changing the way they ate. It was I think Robb Wolf, maybe, and one other person.

SHAWN STEVENSON: My guy.

AUTUMN SMITH: And we tried it, I was really reticent, but I said, "Oh, this sounds like it's not going to work, but I'll do it for you." And we just started going to the Pasadena farmer's market and cutting out processed foods, and in 30 days, my digestive issues were gone. Now, the most surprising part was though when my mental health over the course of the next year got... I became a different person, and I was so inspired by that change. I had a great job working at Tracy Anderson, and I was like, I just... I need to understand this other piece because I've always been fit, but I was not well. And now that I am, I want to know how to give that away too.

SHAWN STEVENSON: That's so powerful, because that distinction between fitness and health or fitness and wellness, they're two different things. Of course, there's many intersecting points, but you can be incredibly fit on the surface, but internally just be at absolute mess.

AUTUMN SMITH: Yeah. That was my life. I remember walking down the aisle and I had to hold my arms up because I had these veins 'cause I was so fit.

SHAWN STEVENSON: So vascular.

AUTUMN SMITH: So vascular. But then at night I was like crying and I would crash. And I didn't know... I was a mess; I was an absolute mess. I felt like a fraud, I was a fraud to some extent. And so, it was really new when that little missing puzzle piece came together and I thought, "Wow, this is something worth sharing."

SHAWN STEVENSON: This is important, truly. Again, upwards of 16% of the US population has this condition, this diagnosis. Another big problem with it is that because it's a blanket statement, so many things fit under that. And no two people's expression is the same at all. And this is not to negate the suffering that people are in, but oftentimes also because it doesn't seem it's that like it's life threatening, it's negated how life detracting it is. Like it can really be a constant weight that you're just carrying and probably fear, you probably had a lot of fear around food.

AUTUMN SMITH: Oh, absolutely. You just never really know what's going to happen, and when you're going to feel bad, and it interferes with your social life. And I actually started passing out in high school. I don't know why, but I would go to a drive-in restaurant, or I'd be... I'd crash my head into the lockers. And yeah, I just think it all started snowballing and because it was left unaddressed when it was a pretty simple fix. I'd say so, or at least I think it was. For me, cutting out foods isn't that hard. I know it can be hard for some people, but yeah. I just wish more people knew.

SHAWN STEVENSON: Even then its personality based, what people... How much change, but also pain is a great motivator, especially when you find some solution, something that's working, like it tends to really compel people.

AUTUMN SMITH: It does, just that sense of, I have a little bit of control, right? Like my health is in my hands, I don't need to rely on people anymore and I can make decisions that change my life, change the trajectory of my life. So, it's absolutely powerful, I was managing every day. Smiling, suffering in silence, but getting it done, but now life looks so much better when I have the energy to do what I want. Life is more predictable, and I feel some sense of control. It's interesting.

SHAWN STEVENSON: It's like unlocking a superpower in a sense, like it was always there. I just actually posted something last night. And it's this little clip from one of those parody movies,

it's called Superhero Movie, it's like a parody of all these superhero movies. And it's Leslie Nielsen, the guy from the naked gun?

AUTUMN SMITH: Yeah.

SHAWN STEVENSON: And the kid walks into the door, and he shoots... Leslie Nielsen shoots a nail gun his way, and the kid just dodges it and grabs it in the air. And he's just like, "What? How did you do that?" He was just like, "Oh, I guess you know just got a good night sleep or something." And then Kevin Hart's character was standing right next to Leslie Nielson, he aims a gun at his hand, and immediately shoots him right in the hand. But then I created a little meme. Real talk I mean if you're not following me on Instagram, I'm @shawnmodel. If I wasn't doing this, I could just full-time create memes and I'd be killing it, to be honest. [laughter] But anyway, so I created this meme that basically when you... This is what happens when you lock in on eating good food, exercising, and getting great sleep consistently. It's like a different reality opens up for you and you don't really realize when you're in it, when you're in that fog, how good you can feel. And it's just one of those things I see consistently, and it clearly happened for you because once you started getting well, everything changed.

AUTUMN SMITH: Everything changed. You don't even know what you're about or what you have to share, I feel like when you're just managing it. Yeah, no, my whole life is completely transformed.

SHAWN STEVENSON: Well, this is where we're getting into the nuts and bolts. Whoever came up with that, by the way? The fruits and berry... The nuts and berries.

AUTUMN SMITH: That's a different thing.

SHAWN STEVENSON: I want to provide a little bit more context because your experience and what you've created is so special, and it's a big reason why you're here right now, and it's such a great opportunity for all of us to be able to learn from you, but I just want to provide a little bit more context on why we need to focus on this issue right now. This study was just published in the Journal of Gastroenterology, again, the primary journal on this subject, and they found that approximately 70 million Americans are suffering with digestive issues right now. It's crazy. This is a huge chunk of our population, and it's just become normalized. And that data was from 2012 by the way. Alright, so that's 10 years ago. You think things have gotten worse or better? You already know the answer everybody.

Now, in 2009, there were over 245,000 deaths from digestive diseases, crazy stuff, you don't hear about this, and again, things have gotten significantly worse, but my point being that the most prevalent digestive issues like IBS aren't directly considered to be deadly issues, but over

time, it can lead the development of chronic diseases and things that actually do shorten our lifespan, but... Specifically shorten our quality of life. Can you talk about specifically why processed foods are a huge part of this problem?

AUTUMN SMITH: Oh, yes. Well, basically, because our bodies... Our environment has changed dramatically, but our bodies really haven't. And so, what's happening is we're wired to really eat what we can and to expend as little energy as possible. And today, when there's food everywhere, processed food, and we are also wired for really simple kind of like textures and flavors, and right now we're just bombarded with all of these different processed foods, they're taking out the nutrients, they're adding additives, they're spending millions of dollars in order to create these combinations that will make you not want to stop eating, but also not having enough flavor so that you stop. So, you kind of like, it's messing and hijacking our satiety signals. And as a result, 60% of our calories today come from ultra-processed foods, and this was my story.

It also hijacks your dopamine, your dopaminergic system. And soon after time, if you're eating it and eating it and eating it, pretty much you need more, soon, and more and more, and it doesn't... So, we're kind of stuck in is vicious cycle where the majority of the things we're eating are kind of more like a... They're not even real food. And this not only displaces other food that could actually be nourishing us and building those cells and everything in our body in a really robust and full of vitality way, but we're also just putting in foods that could harm us as well with the sugar and the additives, and for some people, things like gluten and soy, and on and on, and this is the bulk of our diet today, and our bodies can't keep up.

SHAWN STEVENSON: I've never thought about it, like you just said, that dopamine component, you just reframed something for me, which is, even with something like alcohol for example, if you consistently are drinking, you build up a tolerance over time to get that same effect, and also a tendency towards drinking more because you build up that tolerance. And the same thing is occurring with these processed foods.

AUTUMN SMITH: Absolutely. As that was what I was eating when I was having my digestive issues, of course, I learned the pretty bad advice that a calorie was just a calorie. I grew up as a ballerina, so I knew all I had to do was keep it within a certain amount of calories, I had caramel apple suckers every day and Big Hunks and just... I was not eating high quality food at all, and I didn't really know how to get out of that cycle, and that's all I wanted to eat. And I think had I known food mattered, and if I could have gotten off that treadmill of just eating processed foods, my digestive issues would have probably went away almost immediately, but I was just stuck in the cycle, I think like a lot of people are unfortunately today.

SHAWN STEVENSON: Yeah. And you also mentioned that we are wired for simplicity.

AUTUMN SMITH: Yes.

SHAWN STEVENSON: A light bulb went off when you said that.

AUTUMN SMITH: It's such a fascinating thing. I had a really cool conversation with Robb Wolf, and they've got this down to a science. So, they create these combinations with millions of dollars of research where they'll give you just enough flavor to keep you want to keep eating so that you don't want to stop, but not enough that it would actually make your appetite like shut off so that you don't reach that satiety point. And he tells the story of where he found out there's this bag of Doritos and they're called the Dorito roulette or something like this, and he noticed every few, every other one was very spicy, but you couldn't predict it, and they... I guess it was according to like a power log distribution, and he called the company, he's like. "Oh, did you guys make this according to that like was this intentional." They're like. "Wow, we are so impressed you know that" and yes, because it's kind of a maximally addictive experience when you can't predict where the really intense flavor is going to come from.

SHAWN STEVENSON: This is blowing my mind.

AUTUMN SMITH: And this is what's happening.

SHAWN STEVENSON: 'Cause I, I look for that chip.

AUTUMN SMITH: You do.

SHAWN STEVENSON: The right chip.

AUTUMN SMITH: Yes, you're gambling.

SHAWN STEVENSON: You have one and then the next one is like, no it's not, and then maybe two later. Oh my God.

AUTUMN SMITH: Yeah.

SHAWN STEVENSON: Holy Mackerel.

AUTUMN SMITH: This is how much work goes into just helping you not be able to eat just one.

SHAWN STEVENSON: Oh my God.

AUTUMN SMITH: Yeah.

SHAWN STEVENSON: That is so crazy. Hold on I got to pause for a second. This is... Alright this is blowing my mind, I feel so taken advantage of right now, I feel a little Dorito dirty. But here's the thing in addition. If we're looking at... Again, we've evolved as a species even if... We're not even talking about the countless centuries prior, but just in recent, the last couple of thousand years, we're still eating very simple foods, simple textures, simple combinations of real food. We can "process" them, but it's going to be something that is of minor incidence versus today, which is, you mentioned 60% is ultra-processed foods, right?

AUTUMN SMITH: Mm-hmm.

SHAWN STEVENSON: And so that simplicity of maybe a few flavors or foods combined and textures combined, our brain is simply not able to handle the complexity of a f*cking Apple Jack.

SHAWN STEVENSON: You know what I mean?

AUTUMN SMITH: Right, yeah.

SHAWN STEVENSON: Like it's, there's no chance. And so, the reason that Apple Jack even jumped up is because my brain remembers. My brain is like, "Ah, that was good times, Shawn."

AUTUMN SMITH: Yeah.

SHAWN STEVENSON: And so being able to... How do you even break that addiction? Because you mentioned dopamine is driving us as a motivator, moving us towards this. Is it just like, again, you sit somewhere in the corner and you "detox" and you get the jitters and try to tough your way through it? Or do we have some transition foods, what happened for you? How did you go from IBS and this constant just a conflict going on internally to being free of that? And not only just in a state of health, but then so healthy, you want to help and serve other people.

AUTUMN SMITH: Yeah, it started with that pain. It went on long enough and it was intense enough to feel that way that when my husband proposed, "Okay, we're just going to pull these foods out." I thought, "Yeah, that sounds like a good idea." For a while, it looked like Monday through Friday, I was really good. And then Saturdays and Sundays, we went a little crazy. So, there was a transition period, but pretty soon it became very clear the way I felt was dramatically different when I didn't eat those foods. And over time, I don't even have to think about it now. I have to actually tell myself, "Come on, have a little more, you could have some

sugar," like something every once in a while, and it's totally on the other side only because of the way I feel and who I am.

It's not only like a physical thing. It's... There's a stability about not being on a blood sugar roller coaster, not being in the middle of all this chaos that you're creating simply because your biology is imbalanced. And so over time, seeing that new side of yourself I think is very reinforcing, but do know some transition foods that I used were just things like RBars, really high-quality food bars that still felt like that, really dark chocolate. That's something... I'm a very sweet girl so I really like dark chocolate or just having fun food Friday. This is what my family does now is, we practice very healthful living. We don't bring things in the house, but on Friday we all decide exactly what we want, and we go out and if we go to three different places, that's what we do. And we just kind of make it an event to still celebrate food, but not make that our usual course of action.

SHAWN STEVENSON: I love that so much. And even sharing that because there's going to be... There's different bridges.

AUTUMN SMITH: Yes.

SHAWN STEVENSON: There's many paths to the goal.

AUTUMN SMITH: Yes.

SHAWN STEVENSON: And so, having that cheat meal paradigm basically where you're doing the Monday through Friday, then the cheat meals, and this brings up an important point because again, that can be a bridge, but at the same time there's probably going to be some hangover that tends to happen. Especially if you're giving your body, the things it's been looking for all this time and your symptoms resolve, and then boom, you hit yourself with these typical things in the name of, I'm just going to take a few days off.

AUTUMN SMITH: Oh especially because I was working as a fitness trainer, and so it was dramatic. I'd come in on Monday and I'd feel terrible, and I wouldn't perform well. I just didn't feel like I wanted to inspire people. I didn't feel like what I was doing was very inspirational. And yeah, quickly I realized, you know what, it's a simple switch, and when you see that new side of yourself, it's easier than you think. And so, if anyone's just kind of on the fence, I think just definitely worth diving in no matter which path you take, but over time you'll see a dramatic difference.

SHAWN STEVENSON: You know what? Part of the reason I think that I've been able to connect with so many people is that I'm a fan of food. I love tasty things, and I think we've been

inundated with the belief that those tasty things have to be unhealthy; they have to be these things that have all of these chemicals and additives, but the reality is much different, but it's like taking back control of your biology. And I'm saying this to say that I have a little bit of an issue with the word cheat, and I've impressed upon culture a little bit with this, so this idea's gotten out there a little bit, but just to reiterate it, there isn't anything else really in our culture that we attach the word cheat to that is tolerable or socially accepted as okay. So, if you're cheating at sports, bad, if you're cheating on your spouse, bad, you're cheating on a test, bad, cheating on food, good.

Right. It just like, that doesn't cognitively, it's telling yourself because cheat is attached to something that's bad or something you're not supposed to do. And it's not the fact of like enjoying and having a different food experience, it's the psychology of throwing the word cheat on there can be troublesome for some people.

AUTUMN SMITH: No, I love that.

SHAWN STEVENSON: If that makes sense.

AUTUMN SMITH: It absolutely makes sense. And there's no morality in food, it's just the decision that you made today. And sometimes I make that decision, not cheating, but just decide to prioritize pleasure for a moment. And I think there's value in that too.

SHAWN STEVENSON: Yeah. So, you're not being a bad girl.

AUTUMN SMITH: No. I'm still a great person. I'm just making a different choice. Making a choice that I might need in that moment. A lot of us have lost touch with prioritizing pleasure and it's actually something that's very, very important.

SHAWN STEVENSON: Yeah. It's what... It's part of life.

AUTUMN SMITH: We're wired for it. And I think it's easy to lose sight of that in today's world, but it's actually something I do when I work with people, I have them do a pleasure inventory of food and non-food-based activities, because I think it's something so many people have lost touch with. Just like if you woke up on a day off and you had nothing to do, where would you be? And who would be with you? And where would you go? And just knowing those things and making time for those things I think is one of the best things. It's one of the more impactful exercises for most people I work with.

SHAWN STEVENSON: I love that, pleasure inventory. That reminds me of this Janet Jackson song, Pleasure Principle, back in the day.

AUTUMN SMITH: Love Janet.

SHAWN STEVENSON: Yeah. Shout out to Janet, icon alert. But also you said a really powerful word there, which was morality. Giving morality to food is one of the things that can psychologically beat us up, that can lead to a situation where we're... It definitely leans into eating disorders a little bit stronger when we're giving morality to food, because we tie our identity to our behaviors. And so, if we're cheating, if we're doing bad things, then we have to have a punishment. It's just... These are some of the issues that can... They're well-intended, but for the majority of people, they can't handle these, because they haven't done the inner work necessary to be... Well, identify like, "What does this word mean to me? What does this feeling mean to me?" And so, we were talking about this before the show, about people doing the work and being able to have introspection and to question their beliefs and their biases so that they can appropriately step into these things.

And I want to ask you about this, because being that the world has shifted so much, you mentioned that we're hard-wired for simple flavors, simple foods, simple experiences. Not to say we can't dress it up and have something amazing, but right now we've been inundated with this paradigm that highly processed, plant-based foods are ideal versus the simple foods that we evolved with as... Having hunter-gatherer DNA. And it's because of the framing that, "It's because this is plant-based," even though it's highly processed, ultra-processed foods. And so, our recommendations, government guidelines, all those things have been shifted dramatically. And contrary to popular belief, our consumption of things like red meat have plummeted by 44%, you sent the paper over to me.

AUTUMN SMITH: I did, it's a crazy 2022 analysis they did. They did both food availability data, just like what was available, and then also adjusted for loss. And it was so counter to what we're hearing in the mainstream narrative that I couldn't even believe it. So processed foods between the years of 1800 and 2017 or '19, depending on the statistic, went from below 5% of calories to over 60%. And then grains increased by 30%. And sugar, it depends on the type of sugar, but sugar definitely went up. And what they were looking at is the relationship to non-communicable diseases, which we all know is rising precipitously. The really fascinating part, red meat and animal fats, the two foods that most people demonize, our mainstream government dietary recommendations, they actually went down. Red meat by 21% when adjusted for loss and foods like lard by 78%. I think butter stayed around the same. But the piece of research actually concluded that saturated fats from animals have an inverse relationship with non-communicable diseases in that time period.

SHAWN STEVENSON: Wow! Inverse relationship let's clarify what we mean by this.

AUTUMN SMITH: That means the more that you eat, the lower your risk of disease, or that's at least how it appeared from this. And we have to remember, we've been eating animal-based foods and simple foods and whole foods 2.2 million years, and it's only in the last few decades since we've had our recommendations that our health has been declining rapidly.

SHAWN STEVENSON: We'll put this study for everybody in the show notes, but this was published in Frontiers in Nutrition, nutritional epidemiology. The title of the study is, "United States dietary trends since 1800s." It's a nice life span of this. "Lack of... " And this is the title of the study, "Lack of association between saturated fatty acid consumption and non-communicable diseases," right? So again, that was a thing that even... I went to a conventional university, I had my nutritional science class that I paid for, and we were taught that saturated fat is going to kill you, literally the teachers just like beating this over our heads constantly to avoid saturated fat, avoid saturated fat. And, again, so the consumption of these from natural food sources has went down significantly, yet these chronic conditions have skyrocketed, 'cause the question is, "What did we replace that with?" And it's highly refined... And again, it's... I don't want to create a schism here, because it's not that plants are bad, it's...

AUTUMN SMITH: No.

SHAWN STEVENSON: We're talking about taking plant foods and then creating Apple Jacks, you know what I mean?

AUTUMN SMITH: Exactly. Exactly. No, yeah. And the other thing I didn't mention too is vegetable oils, the new fats on the scene have increased maybe more dramatically than any other food group actually, more than sugar and processed foods. So yeah. And also, even back in the day when Ancel Keys did his original research, and he looked at six different countries and... The more fat they ate, it looked like the greater their risk for heart disease. But then some statisticians came along and re-evaluated the data based on the 22 available data points, what was interesting is most people will tell you that the relationship wasn't there, but it still was. What wasn't there, what was very interesting, is when you adjusted for total mortality, it looked like animal fats and protein were actually protective. So, it just... So, in other words, a lot of nuance. But when we hear these messages, what we have to do is kind of verify them, right? Does it make sense historically? What does the bulk of the data show? And does it matter if it decreases our risk of heart disease but all... Increases the risk of everything else?

SHAWN STEVENSON: Oh my gosh. So recently, we had on Dr. Cate Shanahan, who was reiterating this point, and she's been a good friend for the last few years. Amazing impact, she's worked with the Lakers, helped extend Kobe's career, got him on bone broth, all this stuff. And the crazy thing is, she shared with me some data looking... And this is what I love about what you said. We're looking at a huge span of time here, we're talking about going back to

the 1800s, but there were some biopsies that were done in the earlier part of the 1900s looking at what is the actual makeup of a human fat cell. And so, the average human's fat cell in the US population was... The construct of the fat cell itself, around 2 to upwards of 3, maybe 5% PUFAs, polyunsaturated fatty acids. Today, doing that same biopsy, the polyunsaturated fatty acid makeup of a cell, a biopsy from a human cell is around 25%. So, the cell itself, the ingredients that make up a human have changed so dramatically, and the question is where the hell are all... It's not that polyunsaturated fats are bad. Like in a normal human, through our evolution, we had some and our cells are made of some. Now, the recipe has changed of what we're made of. We're different... If you change the recipe, you're going to have a different outcome. You know what I mean? And so now, it's just like where are all these PUFAs coming from and what is the answer?

AUTUMN SMITH: Vegetable oils. And do you know this history of how vegetable oils came into being?

SHAWN STEVENSON: Please share.

AUTUMN SMITH: It's fascinating. So, William Procter and James Gamble, entrepreneurs, they had soap and candles they were making, and electricity came around, so candle sales went down, but they had this surplus of cottonseed oil, they thought, "What do we do with this?" So, the advent of hydrogenation happened recently, they decided, "Well, we'll hydrogenate it," which means they'll take a liquid fat, and they'll make it a solid fat. And when they did it, it looked like lard, it looked like animal fat. And so, without any substantiation of its health benefits or detriment, they launched this massive marketing campaign and they convinced Americans that this was the cleaner cooking fat, that it would liberate women from the kitchen because they weren't churning butter and that our kids would have better moral character. They went after Rabbis and celebrities, and it worked, and we now know that the way that Crisco was originally made, 50% of it was trans-fat, and trans-fat according to the World Health Organization, kills 500,000 people every year. And again, that's only to say not that vegetable oils are dangerous, maybe they are, maybe they're not, but they definitely go against history, and it's not something I think people have really looked into, at least when Crisco was created. It was more like, "This is convenient. Let's see what happens."

SHAWN STEVENSON: Crisco was a staple, you know.

AUTUMN SMITH: Yeah. And it's different, there's a different recipe now, it definitely doesn't still have 50% trans-fat, but I just think it's... We need to question, right? Are these new-fangled food things that we're eating, are they really going to provide the same level of health as what we've been doing for millions of years?

SHAWN STEVENSON: Yeah, I would err on the side of what got us here. You know what I mean? But that is so fascinating, because it's one of the things that people largely can agree upon, is this trans-fat paradigm, because again, I was taught that in that same class, saturated fats and trans fats. But even with that, it comes with... For me, it's just like, are trans fats even really... Is that the full story? Because we're going to find traces here or there, but that's the key, traces, if we're talking about naturally occurring foods and minimal processing. But today, with these highly refined oils, and literally the generation, the creation of trans fats in concentrated forms, wow, that's something that we ourselves, our biology isn't really acclimated to handle. You know what I mean? So, I want to ask you about this because a major issue for sure is still, if we're looking at the paradigm of animal foods and how things have been done in recent decades, it's scary. If we look at the foods resulting from conventional farming methods, the quality has really snowballed downward in many ways, again, versus what we evolved with. So, can you talk about some of the major problems that we're having right now in conventional agriculture? Because it's really important for us to know.

AUTUMN SMITH: Yeah, basically, when we walk into a food store today, about 95% of the products, animal products are coming from confined animal-feeding operations, and we've all kind of seen the pictures where animals are taken out of their natural setting and they're... Somewhat stressful conditions, and these systems, industrial systems, they came from a good intention. I think it's important to acknowledge that, we had a fear that the exploding population was going to... We weren't going to be able to keep up with it, right? We had grain surpluses, we had new supplements, and so they came with that. But what we didn't know is these unintended consequences like animal welfare issues. I can't say this enough, it's just I think that removing animals from the natural setting, how they used to be raised and giving them very little space, and... Actually, this is interesting, making them eat one thing. We all have different foods that are healing to our bio-individuality. And animals, Dr. Fred Provenza does a lot of research around it, they self-select, they medicate, they can prevent illness, they can create vitality, but they can't in these systems. And then also, they're handled.

So, the human and the animal welfare issue is such a big deal to me. The second one is the environmental issue. When we had these pasture-based systems where we moved the animals around, their manure was actually an asset, because 50% of the fertilizers used were actually manure-based. But when we have thousands of animals on top of each other, that becomes a source of pollution, it decomposes, it creates air pollution. We know kids living near CAFOs have higher rates of asthma, and respiratory issues are rampant in people who work in CAFOs. And then we have the additives that are being used. There's one called ractopamine it's a beta-agonist, and it's banned in 160 countries and linked to heart palpitations in humans and poisonings in China, and maybe aggressiveness in the animals themselves, but we still use it here. Antibiotics 73% of the antibiotics used worldwide are used in animal agriculture, and when we use antibiotics at the sub-therapeutic level, it's something Alexander Fleming who

discovered penicillin, actually warned against this very scenario that the bacteria they'll mutate... They'll create antibiotic-resistant bacteria, and we might see a day where we can't use antibiotics for simple infections anymore, and that's absolutely terrifying to me, and another one of the issues is the social impact.

In America, when it began, 50% of the people living in America were involved in food production, and that creates an investment in your community, an accountability, and it creates food security. Today, these big corporations, there's four of them in the meat industry that control much of the processing, they essentially buy up land like in Missouri, Smithfield owns about 50,000 acres and then they outsource their pollution to us, and then again, a handful of CEOs in far off countries are making decisions that impact our community, decisions that impact the health of our soil, which is essentially the health of our communities and are people living within them, and so I think that was a big step back that kind of took us out of the system, and more recently, we've realized COVID showed us how important food security is, food sovereignty, having our own supply that we control, but essentially, that's been gone with our current methods as well.

SHAWN STEVENSON: We are a result of the soil.

AUTUMN SMITH: Yes.

SHAWN STEVENSON: As a species, as I'm looking at you, I'm seeing everything that's come from the soil, whether it's directly from the plants or the animals that ate those plants, we are a result of the soil.

AUTUMN SMITH: It's fascinating, right? Yeah, 98% of the foods that we eat are coming from there, there's... We're creating energy in the soil, biodiversity, when we have bio-diverse microorganisms living in the soil, we have more plants, we have more animals, we're at a point in history, we have actually the lowest level of minerals in our soil right now. You're supposedly, according to Dr. David Johnson, you have to eat two times as much meat, three times as much fruit and four to five times as much vegetables as you would have in 1940, but the reason isn't because they're not there. Dr. Christine Jones has shown the reason is because those micro-organisms living in the soil that biology has been broken, they have been killed by our current and extractive and chemical-based agriculture, and so, yeah, by restoring the soil, we restore the health of the plants, the animals, the humans, the environment.

We can also sequester carbon in soil. And this is a big thing for climate change, I know some people don't think it's as big a deal as others, but the truth is, carbon levels are rising, and while a lot of people are focused on emissions, the bigger question is, what are we going to do how are we going to take it out of the air and soil, in the top meter soil, there are three times as

much carbon as there are in the entire atmosphere, and so when we are not paying attention to the soil, we are missing all of that it is to have health essentially.

SHAWN STEVENSON: Oh, wow. That's so powerful. And just to circle back, you mentioned this that even for the animals, they are a result of the soil as well, and so there is this culture now of these mono-meals, what happens when we have a mono meals ourselves, where we're just fed one thing for months or years on end, we're going to develop so many different abnormalities, and the thing is there's an intelligence within every species to know what to eat when left to their own devices, like what if you're sick, like certain animals will go to certain weeds or certain plants, just in nature to medicate themselves to help them to heal, but that intelligence is taken away and they're just shovel this kind of mono-feed, should we put it like that, where, oh, we're just going to add in these different things, and of course, antibiotics is going to be laced in here. You mentioned that 73% of the antibiotics used in the world are for feed for animals, there should be two questions that come up, why the hell? Number one, and that being for... Well, two answers to one question, one being, of course, these animals are going to develop a myriad of diseases because of their malnutrition and eating abnormal things that this animal is not designed to eat in the first place.

I've never seen a cow, like, shucking corn. You know what I mean? That would be super weird. If you saw like, how do you... You know? That's number one, but number two is, and I mention this in my latest book, in Eat Smarter, a really great meta-analysis looking at how antibiotics are utilized to help to encourage weight gain for these animals, and so multiple studies have found this to be true, but also that was the intention. It was kind of accidentally stumbled upon, but then it became the intention, like if you want your animals to grow, farmers are inundated with these ideas and they're just trying to do their job as well.

AUTUMN SMITH: I know, absolutely. They're the heroes in this whole story, they're just trapped in a system that's prioritizing efficiency, and like you said, when they use antibiotics, they gain weight more quickly, and there was some regulation in 2016, they're not supposed to use it for a weight gain, but it still can be used to prevent illness, and so there isn't really...

SHAWN STEVENSON: That's a loophole, big enough to drive a freaking...

AUTUMN SMITH: It is, it is. So, it still happens, and a lot of deaths worldwide, 700,000 each year from antibiotic resistance, so I think if there's one thing I really want to change about the system is the fact that antibiotics have to go. And there's even really tricky ways that they label them, but yeah, we just... That's one of the worst things we're doing apparently.

SHAWN STEVENSON: So, you've been somebody who's done something about this. And this is... I mean, I admire you so much for this because you have to have the audacity to be like, I'm

going to do something that's so huge, because the degradation of our soil has led to... Is one of the components to the degradation of our species, and it's gotten so bad, most people have no idea about this. We're just going... Again, you go to a grocery store, you see all these items, we are so dissociated from where this is coming from, as you mentioned, 50% of people had their hands in the process. Now, it's like, what, 1% maybe. You know what I mean? Probably far less than that. Most people would have no connection to where their food is coming from in our society today, now that's a whole other issue in of itself, but when we're talking about the soil quality, and that's determining the quality of food and determining the quality of people, as a result, right now, there's this movement taking place that more people need to be aware of and to get on board with, to contribute to, to vote with their dollar and its regenerative agriculture. And again, you've stepped up in a major way to actually do something to help to change this situation, so can you talk about what regenerative agriculture is and what you've been doing to actually make a change?

AUTUMN SMITH: Yeah, so I became aware of this issue because of the farmers, because we had relationships with farmers and they were teaching me about the nuance in the different kind of systems, and I think we've realized that from our discussion that we've been living in this extractive relationship with the earth, we've been taking out more than we're putting back and prioritizing efficiency over ecology, and 70% they say of the soils today is degraded and that there's only 60 years of top soil left according to the Food and Agricultural Organization. So regenerative agriculture, a lot of people are looking to sustainability, and a lot of people are looking to organic, but what they're missing is we can't sustain this, where we are, our soil, it's like a broken cup, it doesn't hold water, the food is lower quality, and so we need to regenerate or bring back to a higher or more worthy state. And that's exactly what regenerative agriculture does. It has a set of principles that says, "Okay, how is this land now and how do we get it back?" So, some of them are things like not disturbing the soil, least disturbance, tilling is actually pretty detrimental, it can cause water evaporation and carbon goes into the air, also maximizing photosynthesis because the plants are taking carbon out of the atmosphere and they're turning it into carbohydrates that feed these microorganisms, and so the more we can do that, the better and that's going to create...

Those microorganisms then make the minerals and nutrients in the soil and the water available to the plants, and then adding animals, there's this narrative that animals are destroying our ecosystems, but if you've ever seen Dr. Allan Savory's TED Talk, where he was working in Africa and he was trying to restore the land, and he actually ordered for a lot of elephants to be killed, and what happened to the land was that it didn't get better. And he realized that it was this disturbance, this animal, when they come in and they break things down and their hoof they make water for... Or space for water, and they fertilize it, and then they stimulate grass growth. Our ecosystems need animals and when you use them in a highly managed way, it's a beautiful process. And then adding biodiversity. I think since 1970, 68% of our biodiversity is

disappearing. Pollinators, Birds, and this regenerative agriculture restores that, and the last one is just making sure there's context, no two farms are going to be alike, no two ranches are alike. And so, it's really... One of our farmers likens it to a friendship, you kind of look at your plot of land and you watch it over time, and so it's a movement away from chemical agriculture and a movement to prioritize biology, essentially.

And there's some really exciting and emerging research around it, but yeah, we've basically partnered with regenerative farmers because they didn't want to put themselves out there, they didn't want to market themselves, they're like, "We just... We want to hang here and fix the soil and be with our animals, and so we decided to cut out the middleman," because I do think we're at a point in history where we have to. I don't want to give my child a planet where he can't grow his food one day, and I truly think we're just borrowing this planet from future generations, and so we just made an effort to help people access it, help people understand, but then also make it affordable enough that this can actually move a needle and put a dent in the current system so that we can all kind of contribute.

SHAWN STEVENSON: Yeah, we only have this, this is our home. And I think we can get caught up in the movies and think we can jump to another dimension or multi-verse or something or live off planet. But that's not the reality. Especially not any time soon. We've got to take care of this. And if you just look at this one concept, and one visual concept that we all can see is like these fields of monocrops, fields of wheat. We've all seen it before, you've at least seen images of it, fields of corn just miles and miles of the same plant on various farms. And again, I love that you mentioned this that it wasn't necessarily a nefarious beginning, it's largely in many ways a mission to feed America, feed the world with the growing population, but somewhere along the lines, there's always going to be people who manipulate the system and take advantage regardless of the outcomes. Begin thinking very short-sighted, myself right now, myself, my family, this generation now, not caring about what's going to happen, the ramifications, but even that, it's just like we don't want to hold so much disdain towards people, again, that people are just largely doing what they feel is best.

Now, of course there's some dark stuff out there, there is. But for the most part, we got to look at like, okay, we took a wrong turn, we had a decent intention, and now we're at this place where... Because of this... Basically what we do is we have this monocropping where we just have fields and fields and fields of soy, or fields and fields and fields of corn, that does not exist in nature. Agriculture is one of those leverage points that helps us to create cities and all this stuff, but if you think about what is sustainable, that's not. And what happens is when you do that, the soil is destroyed, and it doesn't have that animal husbandry or interaction to sustain the soil because that's what the soil required forever. And so basically, we create a desolate land and then we just go to the next land. And destroy it again. And so that's why you mentioned like 70% of the soil has been severely damaged. Now there was a time when I was

like... This would bother me quite a bit because I was of the belief that... And this... It's going to take thousands of years to fix this, or it can't be fixed once it's destroyed, but that's not the case.

AUTUMN SMITH: No, it's amazing. When we talk to our farmers, they say that basically, human intervention is finite. We don't want to be relying on a system where we have to come and fix things. He says nature knows exactly what to do and she's like a horse behind a gate. We just have to get out of the way. And they say that they can visually see that soil, over the years, just growing, their farms are literally getting higher and higher. And you've read accounts, like Gabe Brown's farm, they are increasing the percentage of organic matter in the soil by percentage points every single year. And yeah, we did used to think that it took like 500 years to build soil, but we're realizing that it can be a lot faster than we thought. And there's been estimates all over the place that just to sequester the amount of carbon it would take to come to the point of draw down, essentially where we're reducing emissions, it could take five years, if we all pitch in, it could take only 10% to 20% of agricultural lands. It just... It depends on the estimate. It's a very nuanced topic, but nature comes back quicker than you'd think it would.

SHAWN STEVENSON: Yeah. It's so crazy.

AUTUMN SMITH: It's cool.

SHAWN STEVENSON: If anybody's seen the film Sacred Cow and we did a show with Robb on it, but you can see firsthand this guy basically transforming a desert into viable land and viable soil and just... It's so amazing. Like you said, it's kind of the same thing with our health. Our bodies know what to do. Oftentimes we just need to get out of the way, maybe provide some of the foundational tenets for it to do what it needs to do. But the biggest problem is we are constantly intervening and putting the wrong stuff in the way of the natural healing.

AUTUMN SMITH: Exactly. Yeah. And it's... I liken it to our current system of medicine. We're chasing symptoms... That's kind of like conventional agriculture, like, "Oh, we have some weeds. We'll just put some chemicals on it. Oh, we don't have the nutrients, we're just going to add some fertilizer." Whereas I think regenerative agriculture is more like functional medicine. It's like, "Let's look at the root." What are we actually needing in order to remedy this situation and then looking at it case by case basis? So absolutely. We don't need to intervene. Nature never really needed us in the way that we've tried to provide for her recently. We just need to go back to ancient principles, use what we've learned. You can have electric fencing, you can make it more modern and more efficient, absolutely, but like you're saying, nature knows, and I don't think we're going to outdo her anytime soon. And if we keep trying, I don't like where we're headed.

SHAWN STEVENSON: Yeah. I love that too. The integration of technology, like you said with electric fencing because how things would be done historically is, we have grazing of animals and then they go to a different place, right?

AUTUMN SMITH: Yes.

SHAWN STEVENSON: Today, they just destroy the area, and then they're forced to find another place for grazing, to set up shop or whatever the case might be, versus using some of this technology to kind of circulate where the animals are going, and again, helping to regenerate the soil as they're going along and doing their thing in a certain spot, it's all working together.

AUTUMN SMITH: It's absolutely working together. And that's kind of why I think grass-fed gets a bad name because there's a lot of flavors of grass-fed. There is continuous grazing, and that is damaging to the environment. But you're right, when you bring the electric fencing and just these highly managed systems where they're on a plot of land for a few days, and then they're moving and then they're moving and they're moving, it's exactly what the earth requires and it's bringing the best of both worlds together.

SHAWN STEVENSON: Yeah. So again, you've stepped up in a big way to help to remedy this situation. And Wild Pastures, this is a part of my family's life as well. And it's so cool, the stuff that you do that you have a hand in is making my body that you looking at.

AUTUMN SMITH: I know. Appreciate that. I love that.

SHAWN STEVENSON: So, can you talk a little bit about Wild Pastures?

AUTUMN SMITH: Yeah. So Wild Pastures was... When my son was born and we had those relationships with our farmers and I had my nutrition practice, everyone was like, "Autumn, this is a great idea. I want to support these farmers; I don't know where to find them and it's way too expensive when I do." And so, we thought, why don't we just connect the farmers using regenerative methods to the consumers who wanted to vote with their dollar, but also do it at an affordable price. And the other thing that was very different is that a lot of the grass-fed meat was coming out of other countries. And if you think about that, we're robbing ourselves of the opportunity to heal our soil, and we're also... I love that other countries have great standards, but we need that food sovereignty here and we need our soil microbiome to be healthy. And we need American farmers to be incentivized, to use these regenerative methods. And so, we only source domestic, and basically, we just deliver the meat straight to your door. It shows up, it's simple, there's a lot of different options and it's pretty delicious too.

SHAWN STEVENSON: Awesome. So cool. So obviously there's a lot of wonderful companies that are stepping up to improve the food, what people are getting delivered to their homes, the accessibility, all that, but what you're doing is a step above all of these things, because we're looking at true regenerative agriculture and you have something really special for us so if everybody goes to wildpastures.com/model, you're going to get 20% off every box of Wild Pastures, Regenerative Agriculture, raised Meat for a life, 20% off, and you can manage which box you're getting, plus an additional $15 off. So, this is an investment in your family, and your food quality, but also helping to heal our planet.

AUTUMN SMITH: It's amazing. And it's like 44% lower cost than a lot of other comparative meat delivery services, because we do really, we're passionate about the mission. We think it's going to take a significant amount of people, and we just... We think everyone deserves high quality food, and so, even though inflation is running rampant and fuel costs are up and all of that, we are kind of taking it on the nose just so that people can still have access and feed their families in the way that they'd like to.

SHAWN STEVENSON: Yeah, it's really amazing what you're doing, and again, the quality and what's happening behind the scenes to be at that price point compared to what other companies have. Not to say that, again, other companies are doing some great work as well, but this is checking all of the boxes literally. So again, that was wildpastures.com/model. It's W-I-L-D- P-A-S-T-U-R-E-S.com/model, 20% off every box for life and an additional $15 off right now too. So go to wildpastures.com/model and there's something else that people need to know as well though.

AUTUMN SMITH: Yeah, because we're dealing with five animals and because we have such high standards, there's only a certain amount of people and memberships that we can take each month. And so, if you're interested, you might definitely check it out sooner than later. And we apologize, we hope to grow and make access more widely available. But for right now, that's the reality.

SHAWN STEVENSON: Yeah, exclusive...

AUTUMN SMITH: It is.

SHAWN STEVENSON: Exclusive alerts.

AUTUMN SMITH: Yes.

SHAWN STEVENSON: So, take action ASAP. And again, like you've already grown this substantially from when it began. And again, this is what's in our freezer, and also

understanding that this is just another logical step in not just human health, but also, again, in improving what's happening with our environment. And I want to ask you about this as well, because we didn't spend much time on this. Is, what's being utilized for treatment of the soil. And trying to... Well, the irony here in the... I'm struggling to even say this because we're trying to kill stuff, basically, with the pesticides and herbicides and fungicides and rodenticides, these are being used to kill organisms in the soil that would normally be there. And again, this kind of symbiotic relationship, and allowing plants to even develop resiliency. Now we have this very kind of superficial cookie cutter plant that's all one thing one way, and it has no resilience. A lot of plants can't even populate in the wild anymore. It needs human intervention just to do anything, just to grow and to survive. And so, the reason I bring this up is, we're doing the same thing with antibiotic use with humans and the same thing with the consumption of pesticides and herbicides and rodenticides from the foods that we're eating, treated with this stuff.

AUTUMN SMITH: Absolutely. And the sad thing is, when they started using them, they didn't understand the microbial life in the soil, and so they looked like a good idea. But the reality is, we need this weed killers and all of this because our plants are weak, because they're mineral deficient, because they don't have the relationships with these soil micro-organisms. And so, when we're supporting those practices, we're killing that biology and essentially, we're killing the plant life and us, ourselves at the end of the day. And we all know there's thousands of lawsuits against Bayer right now for exposure to things like glyphosate and these chemicals that we're using. There have been some huge settlements, linking this exposure, occupational exposure, specifically to cancer and lymphoma and things like that. So, yeah, it's a dangerous path that we're on, but one that we can absolutely correct with a little awareness.

SHAWN STEVENSON: The problem is that the onus is on us as individuals to prove that these products are doing us harm, instead of regulations. The EPA and all these other organizations are supposed to be looking out for the environment, looking out for us, making sure that this stuff is safe first. Instead, we got to prove that it's hurting us versus them proving that it's safe. And so, in addition to that, so you mentioned glyphosate, that's on the tip of a lot of people's tongue, hopefully not literally.

AUTUMN SMITH: Yeah.

SHAWN STEVENSON: But there's another one that's really popular, Pesticide Chlorpyrifos. And it's been caught up in red tape. It's still legal, but proven birth defects, cancer agent, but also, it's one of these things has been found to damage microbial gene expression. So, most of the genes in our body are not human genes. If we're going gene for gene, over 99% of our genes are microbial. And what damage is being done when we're literally messing up these genetic programs of the species that help to make us who we are. So, we've got to keep all this stuff in mind and this stuff has been going on for decades, unchecked. And the crazy thing is, even

though the data exists on the harm, it can get caught up in red tape, depending on who's in office, or depending on lobbyists and all these things.

AUTUMN SMITH: That's why I say, we can't wait for regulation necessarily, because we might be waiting a really long time. And that's why I think shows like yours are really important, because we have to decide what works for us. We have to decide to use the precautionary principle because this... In some ways, we are being looked out for, but in other ways, it's absolutely blatantly not the case, and this is one of them. I think these systems are prioritizing profit, prioritizing yield, and they're not noticing the detriment to our health and the detriment to our environment. And so, we can change it by us noticing and not waiting.

SHAWN STEVENSON: Yeah. When you mention shows like this existing, it's kind of like nature again finds a way, whether it's through...

AUTUMN SMITH: Yes.

SHAWN STEVENSON: It's kind of like an avatar situation.

AUTUMN SMITH: Yes.

SHAWN STEVENSON: Alright. So, I'm like one of those blue fellas.

AUTUMN SMITH: You are.

SHAWN STEVENSON: Which is like nature's communicating through to help to... It's forcing innovation, its forcing insight, it's forcing revelation, it's forcing perspective, perspective shifts. And one of the things, over the years, that was a staple for me, but I would always go to different companies to find it. For years, I would talk about it from time to time, but it was always complicated, like my vitamin C supplement. So, I would go like, "I would get camu camu from this place, I would get amla from this place, acerola cherry." Those are my three favorites for many years, and it went back to some data from a former head of the USDA who was checking through all the botanical sources of vitamin C and just found all these remarkable benefits with camu camu berry. And he was like, "Of course," like going... He kind of was in a way a little bit disheartened by what he was seeing at the USDA, so he was actually a botanist at the USDA. Not necessarily the head, but distinguished scientists, prestigious botanist, the whole thing. But again, he was a little bit disillusioned by what he was seeing, and he sort out to find what are the real access that we have as far as nutritional content of these various plans. And so, we start to look outside of the box because in the United States, we're largely eating out of boxes. And we're thinking in boxes, you know what I mean? If you've got a car like Shanna, we're driving in boxes.

Shout out to my friend, Shanna. But being able to access foods and food sources that humans have been utilizing for thousands of years is something really special because you put that together in a formula, all in one place, with the essential C-complex at Paleovalley, and it's something, again, I have on a regular basis, I travel with it. Because for years, of course, I'm paying attention to what the science is showing with the benefits from vitamin C, but specifically botanical sources.

AUTUMN SMITH: That's amazing, isn't it? I was really surprised when I started creating products that 90% of the vitamin C on the market is derived from genetically modified corn. And I don't want to say there's never benefit in times of serious illness and you need intravenous vitamin C, I think there's a time and a place. But there is research to suggest they're different. Vitamin C in synthetic form is just the antioxidant outer shell, there're so many other compounds in there, like there's P and J, and tyrosine, and ascorbigen, and all of these other botanicals like you're saying, that make the whole food vitamin C molecule different. So, there's one cool trial that I love, it was in smokers. And they chose smokers because they generally have higher levels of oxidative stress, and they gave some of them camu juice, camu camu, which you're talking about, one of the world's greatest sources of vitamin C. And then the other one, ascorbic acid. And then they looked at what happened to their levels of inflammation over the course of the next few days. And they found that only the whole food vitamin C was actually able to reduce inflammation and oxidative stress, and then the ascorbic acid didn't. And so, there's just... There's a magic, there's a synergy to whole foods that I think we miss out on when we use other forms of isolated nutrients.

SHAWN STEVENSON: You got to say that again, 90%?

AUTUMN SMITH: Yeah, and it's funny because for a long time it was all made out of one facility in New Jersey, and they all... Then after that, marketing kind of kicked in and they all had their different label or whatever, but it's a large percentage. It's basically the same thing, just isolated ascorbic acid from genetically modified corn, and that's it.

SHAWN STEVENSON: Oh my gosh, again, when people are seeing these little vitamin C packets out there and these supplements and things like that, that's coming from genetically modified corn, manufactured by Snooki at the factory in New Jersey.

AUTUMN SMITH: It was, I don't know if it's all in New Jersey now, but I know at one point in time...

SHAWN STEVENSON: Back in the day, Snooki was like, she had that worked.

AUTUMN SMITH: Back in the day, it was the vast majority. Yeah, and so... And again, there's many different benefits to whole foods, and you see that in the literature too. Fruits and vegetables and fish consistently show benefits and then isolated nutrients, beta-carotene, for example, vitamin E, they don't, they're not always the same fish oil. There's some value to fish oil, absolutely, but it's all over the place in terms of the literature, and I think it's because we don't yet understand what whole foods have to offer exactly. We can't quite recreate it yet.

SHAWN STEVENSON: Yeah. That's the thing. There's this intelligence there that is so far beyond where we are. We've learned a lot for sure, especially the last decade-ish. Our awareness of what's actually in food has jumped up mightily, but there's still so much we have not identified but people walk around as if we've got it all figured out. We know like 5%, maybe, about what's actually in food and how it all works, but even that little bit, what happens is food scientists are given the task of like, let's take what we know and basically try to manufacture and create this stuff on our own. We'll use a gas chromatograph. Once we can identify certain flavors or smells in food, it's just chemicals, it's a chemical makeup. But it's not, it's not just.

There's this unique intelligence there that animates that thing and makes it what it is. You're stealing, basically, a little bit of code and hacking the system and literally hacking our system so we can take that chemical complex that... Oh, strawberry has this chemical make-up and let's put that into soda or candy. And we know that it's not quite the same, but it's just enough to muddy the biological waters to where our biology is like, "Hey, I kind of know what this is, but not really." And so, this is why food, real food, is so important and so powerful. So that Essential C Complex is one of my favorite things, absolutely, but also, can you talk about the turmeric formula? Because you don't see that very often, it's mostly curcumin concentrates.

AUTUMN SMITH: It is. And again, in our product line, I just... We have this humility, and we believe nature knows best. And curcumin, very potent powerful, you'll see the literature on it, it's robust, but it is often marketed as the compound in turmeric, but it's only one of them, and there's other compounds in turmeric, dozens of them, things like ar-Turmerone, that have been shown to help with neurodegenerative issues. And then, there's actually been studies where they take curcumin versus turmeric against certain cell, or cancer cell lines, this was at Anderson Cancer Center, I believe. And turmeric actually outperformed curcumin. And they've even done studies too where they take the curcumin out of the turmeric, and that was as powerful, if not more powerful than isolated curcumin as well. And we already know, like I said, curcumin can go head-to-head against many modern drugs like Lipitor and Prozac, and some of these aspirin.

SHAWN STEVENSON: Anti-inflammatories.

AUTUMN SMITH: Anti-inflammatories, absolutely. And so, what we wanted to do was like, well, imagine the potential if we had all of those compounds together, that was... The makeup turmeric, and then we added ginger, clove, and rosemary, because there was a trial to suggest they're the most DNA protective spices, at least in that trial, and then add a little black pepper, and then imagine the possibility for people to be able to use that on a daily basis, even when they didn't want to take turmeric or eat turmeric every day. And, so yeah, we created a complex... Just with that in mind, but there's a lot more to be... A lot more benefit when you have the whole entire complex and whole entire food.

SHAWN STEVENSON: So good, so good. So, you mentioned that trial with looking at cancer. So turmeric is well noted to be anti-angiogenesis food, right? So, it basically can selectively cut off the blood supply to cancer cells, right? And again, when you hear that stuff like, we don't really get it. This isn't taught in a conventional University setting right now, there are a couple of speckling's here and there where it happens, like my guy Dr. William Lee, at Harvard. He's done a great job of like integrating this into education. But for the most part this isn't getting talked about, he's actually the head... The president of the Angiogenesis Foundation.

AUTUMN SMITH: Amazing.

SHAWN STEVENSON: So, he's like the guy knowing about angiogenesis, which is, essentially all of our cells are getting a blood supply, even cancer cells, but cancer cells just kind of doing what they want to do, they're getting their own blood supply, what if there were things that can intelligently cut away that supply so that the cancer cells starve, and so turmeric is one of those things, is so remarkable. But again, Paleovalley, go to paleovalley.com/model 15% off. Didn't have to do that.

SHAWN STEVENSON: 15% off, everything that they carry, that you carry, you're here.

AUTUMN SMITH: Yeah.

SHAWN STEVENSON: You're here. So, those are a couple of my favorite things as well, and so also my team here, we always have the bar, you saw it.

AUTUMN SMITH: I did, that was a real treat.

SHAWN STEVENSON: You got to see what we have the bars...

AUTUMN SMITH: That was...

SHAWN STEVENSON: Meat sticks, yeah. So, can you talk a little bit about the meat sticks?

AUTUMN SMITH: Yes. So, the meat sticks came out of... I was on a world tour, I had just reclaimed my health and trying to find really high quality food, 'cause just the whole foods that I wanted to eat on the road was really hard, and so we decided, well, we're going to make a meat stick, because I historically under ate protein and we know now even grass-fed red meat has mental health benefits and I was an athlete and a celebrity or a fitness trainer, so I was like, "We just need to make a meat stick," but what was happening is that, I would eat the grass-fed meat sticks and they would give me a little tummy trouble, so kind of dug into why, why this might be happening? And then I found an ingredient called encapsulated citric acid, and it just essentially was derived from GMOs and some hydrogenated oil, and it melts in, and so I just wanted to do it a little differently. And I thought, if we fermented them, like people did way back in the day, it would be a more healthful, we could avoid those additives and it would have a different texture. I have some Polish friends who say it's like a kielbasa and it's like, it's just a very different kind of meat stick. And so, it's fermented, it's from American regenerative farms, and it's amazing quality, so you only have to add organic spices, there's no sugar, no MSG, no gluten, nothing else, and they come in five different flavors so, teriyaki, Original, jalapeno, garlic summer sausage, and summer sausage, and turkey sticks.

SHAWN STEVENSON: Oh, my gosh. I would think that to be able to create these verses the run-of-the-mill stuff, the Slim Jim's and things of the like. The reason that I'm even hesitant to talk about this is when I think about Slim Jim's, I think about Macho Man Randy Savage. I don't know if you know about that.

The commercial was about Savage Slim Jim. But shout out to Macho Man. But anyways, we're not talking about that stuff, right?

AUTUMN SMITH: No.

SHAWN STEVENSON: Which is... It's been marketed for... And again, like if you look at what we're seeing at the checkout, it's that kind of stuff, it's the vitamin C packets, it's like a deranged version of what we would see historically. So, to have the audacity again, that's the word for you is like...

To create a process where it's getting fermented. How did you even pull that off? How did you find somebody that can help to put that together?

AUTUMN SMITH: I'm very tenacious. Let's just say that I came home, I called probably 200 different manufacturers in the country and finally one said, "Yes, I'm willing to try," but it does take four times longer, it's not as lucrative and using encapsulated citric is the industry

standard, but they took a chance on us and it worked, people appreciated the fact that we were able to avoid all those additives and, and here we are. So, it just took one.

SHAWN STEVENSON: Awesome.

AUTUMN SMITH: But also, a lot of phone calls.

SHAWN STEVENSON: Well, I appreciate that as well. Again, I really do honor and respect what you're doing, I know it has not been easy by a long shot.

And I just appreciate it because it's so much... You know this is so much bigger than just us, and so I just really appreciate that, truly. And I hope that you are being able to enjoy this process as well as much as possible with all that's going on in the world. So, that's actually what I want to ask you about to close things out, because you're a mom.

AUTUMN SMITH: Yes.

SHAWN STEVENSON: You're a wife. You're a boss out here creating and helping to literally change the world and improve our planet, improve the soil, improve the environment, and you got a lot of stuff going on. So, how do you do it? How, how do you manage having such a full plate?

AUTUMN SMITH: Yeah.

SHAWN STEVENSON: What does your daily structure look like? Are you carving out time just for you and like...? Take me through and help me understand how you getting this stuff done?

AUTUMN SMITH: Yeah, I think in our culture as a company, it's the prioritization of work-life balance. And so yes, I'm working very hard, but I'm not working myself into the ground. That would be against the entire point to make myself a healthy human. So, in the morning, I wake up and it's my favorite time ever with my little boy and my husband. And we do some red-light therapy, or we get outside, and we get some sun, and that's like our golden time. We just... It's family time. And then I will go to work, probably around six hours a day. And then when that's done, we go home, and we just have normal family time. And I just use my time wisely, I know my priorities, and I do prioritize myself when it's necessary, but I love the work so much that it doesn't always feel necessary. And I love the team we've built, and I just... I feel grateful and lucky to be able to do something I'm passionate about and that could be potentially helping other people, so...

SHAWN STEVENSON: Yeah. And that's... You just said a key word here, is team.

AUTUMN SMITH: Yes.

SHAWN STEVENSON: Because I know that there could be a lot of long days and long nights through that process, but to be able to really find a flow and streamline things, it's going to be with and through other good people. One of them is sitting here with us, Shanna Mota, one my favorite human beings. Like this is... We wouldn't be connected if it wasn't for her. So, thank you, Shanna. Really love you.

AUTUMN SMITH: Yeah, we do. Thanks.

SHAWN STEVENSON: And listen. So, having that structure with your day, so family time in the morning, workday, decompress, all the good stuff. So is there any other... Or when you're... What is a non-negotiable? What do you got to get in during the day, just for you? Because you mentioned earlier something about ballerina, the dancing.

AUTUMN SMITH: Yes, dancing every day. Every day, non-negotiable. It's not even something I have to force myself to do. If I don't do it, I'm just not myself. And so luckily, we've just moved, and I have my dream of having a dance studio. We just got that about two months ago, and so I'm at least a half an hour every day. And I have these little goals and I do my little fortes or whatever, sometimes I just dance party, but yeah, non-negotiable is dance, its movement, and I used to feel guilty about it, but now I realize I'm teaching my son to prioritize himself, and what could be better than that?

SHAWN STEVENSON: You just said... Again, you keep... This is so profound. You said the thing, like it's... There was guilt associated with it. How crazy is that, in our culture that to take care of yourself, we have these emotions coming up of guilt? So, you had to work through that.

AUTUMN SMITH: I have a long history of self-abandonment, and I think that a lot of people do, because again, our culture is like, "Go, go. Just run yourself into the ground." But yeah, once I realized that I'm not going to be of good to my community. What if I've not balanced myself? And I'm not going to give my child permission to take care of himself unless I model that for him. And so, I think being a mom was the thing that pushed me over the edge and just said, "You know what, it's... May run counter to what you've done the rest of your life, but you have to change it now, if not for anyone else, but for Maverick."

SHAWN STEVENSON: Yeah. Shout out to Maverick. Shout out to...

AUTUMN SMITH: My little buddy.

SHAWN STEVENSON: Have you seen the new top gun by the way?

AUTUMN SMITH: Yes. He is in love. And everyone was like, "Oh, is that why you named him Maverick?" And it's, "No, of course not." But... But the movie was exceptional. He got a little popcorn thing with his name on it and oh, did you love it?

SHAWN STEVENSON: Man, listen, I'm a Tom... Tom Cruise, you got to respect it. Like literally, they're using real... What is it? F-18s, and it's so crazy, just like the real Gs, the real... He had one of the Mission Impossible, where he jumped out of this, one of the tallest buildings in the world. He literally just went and jumped out of it. There was one of the Mission Impossible, he's like attached to a harness on the outside of a plane. He literally did that. The dedication, you got to respect that.

AUTUMN SMITH: Oh, and he looks amazing. I mean, right? Yeah, no, I just... It was an explosive hour and a half or two hours, but worth every minute. It was awesome.

SHAWN STEVENSON: Yeah. Man, well, this hour and a half has been incredibly worth it. And man, it's just such a special experience, and just to see what you're doing, I'm grateful that our worlds are intersecting. And I'm a huge, huge fan, but also an ally in this mission and truly, I know when people are about that life, and so just for everybody to understand, you really are. And so just really thank you for that.

AUTUMN SMITH: Well, thank you, Shawn. I've been a fan. Everything you do is full of such integrity and just thought, and you're just such a leader and someone I've looked up to for a long time. So being able to be here today is kind of on my bucket list. So, thanks for that.

SHAWN STEVENSON: Let's go full circle. It's all about full circles today. Everybody make sure to check out wildpastures.com/model again, 20% off lifetime. But again, there's only a certain amount of folks that can get access right now, but I'm sure you can get in right now if you act quickly. Again, wildpastures.com/model, again, also, $15 off your order right now. And also, of course, paleovalley.com/model, that's P-A-L-E-O-V-A-L-L-E-Y.com/model, 15% off there as well. Vote with your dollar, invest in your health, invest in your family. Autumn, you're the best. Thank you so much for hanging out with us.

AUTUMN SMITH: Yeah, thanks again for having me. It's truly an honor.

SHAWN STEVENSON: Awesome. Pleasure is all mine. Everybody, Autumn Smith. Thank you so much for tuning in to the show today. I hope you got a lot of value out of this. This is one to share out with your friends and family. You can share this of course, on social media. You can take a screenshot and tag me, I'm @shawnmodel, I'd love to see that. And also, of course, you

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