

THE MODEL HEALTH SHOW

EPISODE 727

Toxicologist Shares Why You Should STOP Using These Products

With Guest Dr. Yvonne Burkart

You are now listening to **The Model Health Show with Shawn Stevenson**. For more, visit themodelhealthshow.com.

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're gonna be diving into the world of toxins. Now, toxins are one of those words that are kind of catch-phrases today, but we're gonna talk about what they really mean in the context of our health and fitness, and what is actually impacting our biology and our environment today, and I think it's going to blow your mind. Now, the word "toxic" gets thrown around a lot today especially in popular culture. A lot of things are considered to be toxic, whether it's related to food, whether it's related to relationships. "She's toxic. Keep your distance, she's toxic; this is a toxic relationship." And what we're talking about, let's talk about the definition of toxic or toxins in particular for our context today. Toxins are substances created by plants and animals that are poisonous/toxic to humans, and can cause illness when present at even low concentrations in our bodies. All right? So small amounts can take us out, can make us sick. That's what a toxin really is.

SHAWN STEVENSON: Now, of course, there can be toxic relationships. There can be toxic compounds in foods. But even in this definition, we're talking about things that are coming from plants and animals or coming from the environment. So even the most toxic substances that we're gonna be covering today, and things that are being put into the environment recently, in our air supply, in our food supply, these are still elements coming from the earth itself, coming from our environment itself. We're not getting things off planet as of now, or according to our popular narrative, we're not. But the bottom line is, even the things that are causing us harm right now that we're unaware of, they're coming from our planet, but they might be processed in a certain way or denatured in a certain way that it can become harmful to our bodies and especially the bodies of our little ones.

SHAWN STEVENSON: So I'm very excited about this because the conversation you're getting access to today is elite. This is not something that many people get access to. And I'm saying that because we actually have somebody who is a board-certified toxicologist. This is somebody who is classically trained in toxicology and spent time in the flavor and fragrance industry, and understanding that chemistry and the interactions that that has on our biology as well. And so diverse background, diverse education, and a perspective that... We can talk a lot about these things, and of course, we can stay on top of the data; we can have our personal experience, but we're gonna learn from somebody whose life has been revolving around toxicology, and that is our special guest today.

SHAWN STEVENSON: Now, an important caveat for this information is to approach this from a balanced perspective. We do live in a very different environment than the one that our

ancestors evolved in. We are exposed to tens of thousands of chemicals that have been released into our air supply, our water supply, our food supply, personal care products, the list goes on and on and on. And we can get into a place where we become inundated and very skeptical of so much. So we want to approach this with some balance, but also we don't want to lie to ourselves. We want to be able to be aware of what's taking place so that we can make informed decisions. Because that's what we have not been granted. We are not given informed consent with so many of the things that are in fact causing us harm. So with that being said, we want to approach this from a place of balance and understanding, and also understand that this is a master class on toxicology. And looking at some of the things that we're being exposed to, whether it's through our food supply, personal care products, from somebody whose life, again, revolves around toxicology and has a really unique and powerful perspective to help us to be healthier, to stack conditions in our family's favor.

SHAWN STEVENSON: So, we don't want to be inundated and just feel like this is too much, too many things to be aware of and to avoid. We want to get the education and then make smart, simple upgrades so that we can feel better about our decisions, so that we can feel better knowing that we're getting our families even 1% better, even 5% better, and improving on that over time. So, with that being said, when my special guest got here, I know her level of scrutiny, and so I offered her some tea because we have incredible teas here at The Model Health Show Studios, and I knew they had to meet her standards. The tea that I gave her was triple-toxin screened, third party tested for purity. Because a lot of people don't realize these teas can be incredibly beneficial for human health for a variety of reasons. But even conventional tea bags out here, companies that are teabagging the population are not informing their customers that their teas are riddled with microplastics, that they're riddled with heavy metals and other toxicants. And oftentimes they're not just even negating the benefits they're getting from the tea, but sometimes adding in things that are far worse.

SHAWN STEVENSON: And so teas can be incredibly beneficial, but we want to make sure that we're sourcing it from an ideal place. And the tea that I gave her was from my favorite company, Pique Life. And Pique Life has a patented cold extraction technology to really retain the nutrients that you're getting in their teas. And one of my favorite teas that they carry is called Pu'er. And it's one of the few teas or even foods, beverages, whatever, that's ever been discovered that has a profound impact on the health of our microbiome. And our microbiome is largely dealing with a lot of the toxicity that we're bringing in from our environment, namely in the form of food and beverages. So we want to make sure that we have a healthy microbiome.

SHAWN STEVENSON: In a study that was published in the Journal of Agriculture and Food Chemistry, they found that Pu'er has a potential to reverse gut dysbiosis by reducing ratios of potentially harmful bacteria and increasing ratios of beneficial bacteria. Very, very special.

And again, cold extraction technology. It's wild harvested. What other tea company is doing that? So it's even more concentrated in polyphenols and triple toxin screened for one of the highest level of purity. Go to pikelife.com/model. That's pikelife.com/model. And right now, Pique is going to provide you with 15% off and free shipping for their Pu'er bundles. All right? Plus, for a limited time, you can also get a free quiver that has twelve different tea samples when you get their most popular bundle. All right? So rush over there now, get yourself hooked up, pikelife.com/model, that's pikelife.com/model, and now let's get to the Apple Podcast Review of the Week.

APPLE PODCAST REVIEW: Another five-star review titled "definitely enhances my life. I love this site." I can not say enough about how Shawn's podcast has positively affected my life. His passion and knowledge shines through in every episode. Every week I look forward to a new episode, and I'm always educating while listening. I'm so excited about his new Eat Smarter cookbook. I pre-ordered one for myself and one for my daughter and her family. I'm blessed to share the same lifetime as Shawn Stevenson. Thank you for all you do for me and my family, and for everyone that is blessed to listen.

SHAWN STEVENSON: I received that. Thank you so much for sharing that over on Apple Podcast. Thank you so much for sharing your heart. I really, really felt that. And wow, by the way, mentioning, sharing that gift of knowledge, of empowerment, of fun, of delicious food through the Eat Smarter Family Cookbook, that's what it's all about. And by the way, if you have not pre-ordered your copy of the Eat Smarter Family Cookbook, do so now. Reserve your copy. And by the way, our special guest today is part of the 2023 Family Health and Fitness Summit. This virtual event that you're getting access to, it's a \$297 event. You get access to it for free when you pre-order the Eat Smarter Family Cookbook. All right? So this is a true movement. Go to eat-smarter-cookbook.com. You can pre-order your copy there or from your favorite retailer, Amazon, Barnes & Noble, and then head over to eat-smarter-cookbook.com to get hooked up with that incredible pre-order bonus and some other amazing things we're doing as well. We're giving away a bunch of incredible gifts. So reserve your copy. There's still time to do it. You gotta do it quickly though, because these bonuses are not going to be there forever. So eat-smarter-cookbook.com. And now let's get to our special guest and topic of the day.

SHAWN STEVENSON: Dr. Yvonne Burkart is a board-certified toxicologist and corporate consultant. She's a 22-year veteran of toxicology with expertise in reproductive toxicity, particularly endocrine disruption, infertility, and cancer. She has also served as a senior toxicologist in the flavor and fragrance chemistry industry, where she helped to ensure the safety of flavor ingredients. Dr. Burkart is on a mission to help consumers to slash their toxic exposure with confidence and ease. Let's dive into this powerful conversation with Dr. Yvonne Burkart. All right, Yvonne, so good to see you. Thank you for coming to hang out with us.

DR. YVONNE BURKART: Thank you so much for having me. I'm so excited to talk to you today.

SHAWN STEVENSON: I've got to ask you about your superhero origin story because your expertise is really exceptional. And... as I was saying before we got started, I'm so excited to have you here, truly, because you have this very diverse background. But my question is, who gets introduced or interested in toxicology in the first place? What got you interested in that field?

DR. YVONNE BURKART: I actually stumbled on it kind of serendipitously, I guess you could say, because I was a college student studying biology, and I was looking for a summer job. So I got this grant to get a summer job and I found this toxicology lab, and I was actually looking to work with a woman professor; I was just really into women's empowerment. And so I started working with her and she was doing research on toxicology, and I just became extremely fascinated by it. I was helping her just doing dishes and helping maintain the lab equipment. So I wasn't even doing research, but I really got obsessed just watching what she was doing.

SHAWN STEVENSON: Interesting. So because you were saying just off camera how you had an opportunity to take a different track in going into pharmacology, and a lot of your peers were doing that, so you made a decision to go towards toxicology. But why did you make that decision? Why didn't you go down the pharma route?

DR. YVONNE BURKART: Yeah, I was actually interested in several different things. So toxicology was definitely at the top, but part of me also wanted to go into medicine. I wasn't sure if I wanted to go into pharmacology and that kind of work. But really, toxicology just captivated me because it's so applicable to daily life.

SHAWN STEVENSON: Yeah.

DR. YVONNE BURKART: And I didn't feel that same connection with the other fields. I just feel so passionate about learning how do chemicals in our environment interact with our bodies and our cells, and how does it affect our health.

SHAWN STEVENSON: So is that what toxicology really is at its core?

DR. YVONNE BURKART: Exactly. It's really the safety science. It's studying how do chemicals interact with the body, and how can we use this information to inform our decisions.

SHAWN STEVENSON: Now, because of the word "toxic" being so overused, or "toxins," I think that sometimes people can put up a little bit of a force field and kind of ignore in many ways that toxic elements in our environment are also our body's interaction with toxins and metabolic waste products and all this different stuff. But we live in a very different environment right now than our ancestors evolved in. And so this is why your work is so important because you can start to highlight like, "Okay, I know we've got this new invention called plastics. Here's how it's impacting our biology." And so let's talk about that a little bit. Let's start with plastics. Right? So first of all, where the hell do plastics come from? And what is the potential implications with how we're interacting with them?

DR. YVONNE BURKART: Plastics essentially come from crude oil, which is the same starting material that creates gasoline for our cars. It's just used in a different way and creates these synthetic polymers that don't exist in the environment. So it creates these very versatile... As we know, plastics are everywhere; you can't avoid them anymore. But it's come to the point now where plastics are not made the same way that they were when they were created back decades ago. Where they break down into tiny fragments called microplastics and eventually into nanoplastics. And these are one of the most persistent environmental pollutants. They're literally everywhere. You can't avoid them anymore. It's basically becoming an epidemic. You've seen pictures of those plastic islands in the ocean. You see how much plastic is washing ashore, the disposable masks, all of the things that we have been using in the last even few years have just created just mountains and mountains of this waste that we can't get rid of.

SHAWN STEVENSON: Yeah. And of course, the thing is, we can start off with good intentions with something like plastics. And I think back to some of the things that we would have prior to plastics being so integral in our environment or in our culture, and things like frames for people's glasses or things that we're brushing our teeth with. They might have been made of wood or ivory and things like that. Everything is coming from the earth in some form or fashion. We're not like off in outer space grabbing materials just yet, which maybe they are, I don't know. But plastics are a little bit different. This is something that is very malleable, can be made into a bunch of stuff. And because of the way that our industry is structured, it's very cheap. So it came in and replaced so many different things. And because of it's now really deeply integrated into our culture, we're always touching plastic. We're always in touch with it some kind of a way. So what are the big concerns with plastic? Let's start with our food packaging and beverage packaging, for example.

DR. YVONNE BURKART: So some of the main concerns will be that they are leaching plasticizer chemicals. So plastic in and of itself is a hard material, and it needs to become malleable with the addition of plasticizer chemicals such as bisphenols, phthalates. These are very commonly used plasticizer chemicals. The problem is that they are estrogenic. So when

they interact with our body, it has an estrogenic effect, a hormone effect in the body, which is not a positive attribute. The thing is, that we can't avoid plastic, like you said. There's definitely some pros to plastics that we can't avoid, like tubing that's used for medical procedures and things like that, where maybe there wasn't another alternative before. So there's definitely use cases for plastic. But when it comes to food packaging in particular, they're usually single-use plastic. People are heating them, heating foods in them, and that's going to increase the leaching of these chemicals. We're ingesting these chemicals, and even though some of them might be metabolized quickly, we're exposed continuously, day-in and day-out.

SHAWN STEVENSON: Yeah, one of the studies that just came out was looking at microwaving your food in plastics, and I think it was a three... Actually, we'll put the study up for everybody to see, but it was a 3 centimeter space of the food container, this "Microwave Safe" plastic, and it was leaching billions of nanoplastics into the food within 3 minutes of cooking and millions of microplastics. And that was just from a 3 centimeter space in which is, these containers can be much more than 3 centimeters. And so again, this is getting into our food, and it's getting into our bodies. And now you're answering the question, being somebody who works in this field, this is interacting with our cells, our receptor sites for hormones, namely for estrogen, and basically being able to turn on processes related to estrogen. And you mentioned BPA, for example, and being something that can soften the plastic, make it more malleable. Now, the thing is, and even yesterday, I just took a flight, and I find a plastic bottle that says "BPA-free." So is that good enough? Is that going to save us from this interaction with plastics?

DR. YVONNE BURKART: Unfortunately, BPA-free is just the tip of the iceberg. It's almost I would borderline think of it as a scam because BPA is only one type of plasticizer. There's so many plasticizer chemicals just in the BP family. There's BPB, BPF, BPS. There's so many different types. So BPA is just one of them, and that's not good enough.

SHAWN STEVENSON: So as I said, "health-washing," right? Framing it a certain way so that it looks like, "Oh, this is safe. It's BPA-free." Because when I posted about that particular thing with the study with the microplastics and nanoplastics, in particular in bottles for babies, for infants, and folks were like, "Well, if it's BPA-free, then what's the big deal?" It's just, again just, it's... We get this kind of like superficial thing, and we want to trust; we want to think that things are safe. And also, we don't want to feel guilty if we have used these things unknowingly. But that's just... This is another reason I'm happy to have you here, is that a lot of stuff we just don't know. And let's not ignore this. Let's get educated about it. And we don't have to be neurotic, but we do need to be more intentional today than ever, because there's a lot of things that are impacting our families we might not be aware of. So what are some of

those other things... For you, what are some of the bigger concerns for families today in our current environment?

DR. YVONNE BURKART: Generally speaking, it's overall the endocrine disruption. Kids are getting puberty earlier. We're seeing diseases that are arising later in life because of early life exposures or in-utero exposures to these plasticizer chemicals. The rates of infertility are through the roof. Kids are coming down with cognitive impairment. There's just higher rates of disease in the younger population than we've ever seen before, and cancer is also one of them too. I personally know of two people, two women that had cancer in their early 30s, breast cancer. And this was decades ago was unheard of. Cancer generally turns up 20, 30 years after exposure began, so who knows what triggered this cancer in these young women? But we're seeing more and more cases every day.

SHAWN STEVENSON: Yeah. The thing is, I'm a big fan of looking at the results, something is seriously awry right now where we're seeing these disease states, again, in earlier and earlier populations. And these exposure, really, is happening so much earlier, and many of us, we grew up with certain things that just today they're normalized, but they might not have even been around yet. One of those is like... [chuckle] Roundup has been getting a lot of attention recently, glyphosate. And me being from St. Louis, Monsanto is home-based there, and so they would come to the job fairs at my university, and I used to say, "I wanted to work there," and I was like, "Get a good job at Monsanto." But glyphosate has been affirmed by the WHO even, one of these bigger entities as a Class 2A carcinogen. So this means it probably causes cancer in humans. "We don't know for sure, but probably."

SHAWN STEVENSON: And just look at the amount of exposure that we get though. Because it's often it's not just the toxin, it's the exposure, how much we're getting exposed to. And in my new book, I started a study by the Environmental Working Group, and they just looked at conventional products on store shelves, and they found upwards of 80-90% of conventional grain products were contaminated with glyphosate. So it's just like, again, this is a probable carcinogen, we're getting all this exposure, and this is something that wasn't around a few decades ago. And so this is what you're pointing to, is the environment is very different right now, and we need to be aware of these things because we're probably getting exposed to a plethora of different carcinogens. And so I just mentioned this interaction with plastics, and one of the things you shared... And by the way, everybody needs to follow you seriously on Instagram. It's the best, it's so good. And what's your Instagram handle?

DR. YVONNE BURKART: Dr. Yvonne Burkart.

SHAWN STEVENSON: Dr. Yvonne Burkart. All right. Follow her. You shared about the plastic cups that you get your coffee in at Starbucks. Let's talk about those.

DR. YVONNE BURKART: Well, everybody's out there with their to-go cups. They're so convenient, but if you think about it, just take a step back, I didn't even question this myself too heavily until fairly recently either, is how do things work? A paper cup by nature should absorb water. If it's not absorbing water, then that means there must be something, a barrier in-between the paper and the liquid, and that barrier is polyethylene plastic. If you think about it, a hot liquid should increase the amount of basically melting the plastic. It's melting that layer of plastic into your drink, and not to mention the lid on that plastic cup is also melting plastic as you drink through it. There are several different factors that will affect how much is leaching and how many micro-plastics are being released such as the heat, the duration of contact, the pH. So if you think about it, coffee is acidic, coffee is hot.

DR. YVONNE BURKART: Most people don't drink their coffee in 2 or 3 minutes if it's boiling hot, so this amount of time is allowing microplastics to leach. In fact, a study found that in 15 minutes of contact with hot liquids leach 25,000 microplastic particles into your cup. And people drink more than one cup of coffee a day. People drink coffee every single day all the time. But no one's questioning this; no one's really thinking about it because it's just part of our daily lives.

SHAWN STEVENSON: So with that exposure again, are we very good at metabolizing plastics?

DR. YVONNE BURKART: No. Plastic is a foreign body. It's a foreign particle. In fact, it'll break down into nanoplastics, and nanoparticles in general have the issue of being able to penetrate cell membranes. So it can penetrate very deeply into the cell. It can cause inflammation. Your body doesn't know how to deal with it. It's a foreign object, so you'll get the inflammatory response when you encounter these. But to make things worse, the microplastics themselves are a foreign body, but they also release plasticizer chemicals when they're in contact with your body, and they can also carry toxic chemicals into your body.

SHAWN STEVENSON: All right. So we know there's a couple of things here: The fact that they can basically invade and integrate into our cells, and you are what you eat, right? So these plastics, are we turning into real-life Barbie and Ken dolls?

DR. YVONNE BURKART: We could be because there's actually microplastics that have been detected in human lung, blood, and placenta. And who knows how much of this is getting into babies? Are babies being born with plastic in their bodies? I would guesstimate, yes, just based on the evidence.

SHAWN STEVENSON: This is bananas. All right. So another reason, again, I'm very so happy to have you here, is your diversity in education. You have your conventional education, and then you actually packed up, moved to Cincinnati for a while, and you worked in the flavor and fragrance industry. I wanna know what made you decide to do that, and also I wanna know what you learned in your time working in that industry.

DR. YVONNE BURKART: Well, I definitely knew that I didn't wanna go into working for the government. That didn't interest me or any of the other industries, chemical industries that most toxicologists go into like petrochemicals, Agro-Chem, and so forth. And I came across this opportunity at this flavor company and it sounded different. I thought, "Okay, well, these are chemicals that are going into foods. How bad could they be? So let me just try it out." Once I was there, I saw all the formulations of all the flavors. And what I'm talking about is if you look on your packaged food and you see the word "flavor," "natural flavor," these are the types of chemicals that I was working with. Just knowing that a scientist could recreate any flavor out there in the world and dissolve it in water, just plain water, you just look at that and think it's water, but drink it and it tastes like my favorite pho soup that I ate growing up. That was absolutely shocking to me: Just knowing that you could recapitulate such a complex flavor but make it almost undetectable. How is this working? And I thought to myself, "This can't be good for our taste buds. It can't be good for our bodies. What is this doing to me? Is this making me want that type of flavored food over the actual food?" And over time it did. Because it was so good; it was too good.

SHAWN STEVENSON: 'Cause, well, we craft it that way. And that in particular, that kind of befuddlement with our flavor receptors and how we interact with food that we evolved with for hundreds of thousands of years, and suddenly we can take that chemical and add it to things that are not that thing. We could take the blueberry flavor and add it to things that are not blueberries. And it started to really invade in this really powerful adaptation that we've developed, which is something called post-ingestive feedback. So we eat that blueberry and our bodies get feedback associated with that flavor, which nutrients we're getting, right? And so maybe we get some selenium, we get some different anthocyanins, we get a couple of amino acids, vitamin C, whatever the case might be. And if we become deficient in any of those things, we can start to develop a little bit of craving that would drive us so we just gonna go eat some of these berries today.

SHAWN STEVENSON: But now, that metabolic water is getting muddied up, literally, mentioning water, and we have this confusion and now we're craving things that are not that thing. We're craving things that are not natural or normal anymore. And not to mention just the flavor part, but also there's some other interesting things that are done by food scientists to manipulate our brains and our chemistry. There's this vanishing caloric density, and just how the food just disappears when we're chewing it suddenly like a Cheetos. A couple of bites

and it's just dissolving so quickly. So you're working in with flavors, and what about fragrances as well. So again, we're making stuff smell like things that are not those things. How is that impacting us?

DR. YVONNE BURKART: Well, we know for a fact that these flavors and fragrances, they definitely interact with our brain chemistry. So you can get a hit of dopamine by smelling certain things. It can trigger memories. They're very potent and very powerful triggers for our sensory system. We are sensory beings, so given that there's so many fragrances out there, our bodies are getting confused. And people's threshold for being able... And by the way, our sense of smell is a survival mechanism, right? You gotta be able to sniff out, is there toxic gas leaking somewhere? I need to know this so that I can run away and survive. But now our systems are getting muddled, and there's just too much input, and there's sensory overload. There's fragrances everywhere: Plug-ins, scented, everything; perfume, fragrances, and things that don't even need fragrances like a fragrance lip product. Why do you need this? We should start to question this stuff. Why is there so much fragrance in everything? It's extremely overused, in my opinion.

SHAWN STEVENSON: Do you ever walk through the fragrance section, like Macy's?

DR. YVONNE BURKART: I try my best to avoid it. I do not. [chuckle] I try not to, to be honest.

SHAWN STEVENSON: It's crazy, right? It's crazy. And also the ladies that come up with the spray, "Hey, hey, come here, come here." Yeah, that's bananas. So all of that kind of integration, again, very sophisticated, especially human smell. That's why our taste is so complex is because of our ability to smell things, and so all of this stuff is invading... And this is so recent. But why do we need it? Part of it, people want stuff that smells good. Right? I was just on a walk and I picked up a pine cone and I smelled it, it was like, "Damn, this smells like Pine Sol," right? And I brought it back into my house and I had my son, my youngest son, smell it just like, it smells very... It smelled like it's a natural smell though of pine. And my wife as well, and I'm just like... And as soon as my son smelled it, he was like, "This smells like cleaning products," right? He's never smelled a pine cone before, so his association was cleaning products. But there's none of that, there's not actual pine fragrance itself from a natural source in the cleaning product, right? So we like stuff to smell good. And my question is, with all these different fragrances in our house and whatever else could be affecting the indoor air quality, this is a huge concern right now, so let's talk about indoor air quality. And what about outdoor air quality? What is the comparison: Is one worse than the other?

DR. YVONNE BURKART: Indoor air quality is much worse than outdoor air quality. So the EPA actually estimates that it could be three to five times worse indoor air quality than outdoor air quality.

SHAWN STEVENSON: Five times worse?

DR. YVONNE BURKART: Yeah. Up to five times worse.

SHAWN STEVENSON: Why?

DR. YVONNE BURKART: People are not opening the windows. There's just not enough ventilation going on in the house. There's excess moisture leading to mold formation, mold growth, and things like that. All of these things are being kicked up into the air that we breathe.

SHAWN STEVENSON: Yeah, there is a lot of smells going on in the average house. So what are some of the most pervasive things? You mentioned plug-ins earlier. "Plug it in, plug it in."

DR. YVONNE BURKART: Yeah.

SHAWN STEVENSON: Lets talk about that.

DR. YVONNE BURKART: Scented plug-ins. Oh, okay, well, these are of course, usually made out of synthetic undisclosed fragrances, and the term "fragrance" on the label can be an umbrella... It is an umbrella term because companies by law can use this as proprietary protection for their fragrance formulation. The International Fragrance Association or IFRA, actually publishes a list of all of the possible chemicals that could be in that word "fragrance." There's nearly 4000 of them right now on that list. There's known carcinogens. There's endocrine disruptors. And fragrance chemicals are some of the most potent allergens known to man. These are all within this umbrella term of "fragrance." So think of how many products that you're using that have fragrance in it. If you have these continuous release products like scented plug-ins, and then you're using the fabric or deodorizing spray, then you've got your scented laundry detergent, and you're not opening your windows, all of these volatile organic compounds, this is what the fragrance chemicals are, they have to volatilize for you to be able to smell them, they're being trapped in your house, if you don't open your windows. And you're breathing them in. They attach to house dust, and you re-circulate them over and over and over.

SHAWN STEVENSON: So I'm already hearing one of the solutions is to open your damn window. [chuckle]

DR. YVONNE BURKART: That's it, one of the easiest things that you can do is open your windows. Of course, there's caveats to that nuance is, if your outdoor air quality is not

favorable, of course, you don't wanna let more pollution in, but it really depends where you live. If you live near a busy highway, maybe consider getting an air purifier or you can DIY a HEPA box fan filter. That can help too. But you really don't wanna create... You wanna minimize creating the pollutants in the first place.

SHAWN STEVENSON: Yeah, yeah. Now, of course, most folks are not gonna be living right by highway. And if you are right now, shoutout to you. We all live in different conditions, but most of us, as you mentioned, the outdoor air quality versus the indoor, indoor air quality is gonna be three to five times worse, so opening the window is going to be a free application for most people. And to upgrade even further, a high-quality air filter like an AirDoctor, for example, would be great also; it does this cool ion setting, that kind of thing. And what are some other... I'm curious about this air quality thing, because again, we're oftentimes just kind of boxed in with all this stuff. And you mentioned things like plug-ins. What about when we're cooking as well? Is there anything there for us to be aware of?

DR. YVONNE BURKART: Yeah. Cooking is actually one of the main sources of pollutants too, because any time you're creating smoke, those are particles that you don't wanna breathe in. So smoke contains carcinogens that are created just in the process of cooking. So it's not necessarily something to be alarmed about, but if you have a vent over your stovetop that vents outside, make sure that happens 'cause I lived in a place where it vented back inside, which was completely worthless. Open a window, maybe blow a fan so that the fumes go outside. And of course, try not to burn your food.

SHAWN STEVENSON: Yeah. You shouldn't be burning your food anyways.

DR. YVONNE BURKART: Right. [chuckle]

SHAWN STEVENSON: But also again, just if we can get in a habit of just, again, cracking a window open, and as you mentioned, being able to use that little fan, which a lot of us... A lot of modern ovens have a setting to turn the fan on. But again, making sure that it's not pulling stuff in, which is crazy. And in particular also, there are some certain things... We were talking about this a little bit before we got started. In the journal Inhalation Toxicology, they specifically identified vegetable oil, and that smoke point, when the fumes start happening when you're cooking it, and they found that it was damaging to DNA, to human DNA, which is crazy. We don't think about a smell causing harm literally at the level of our DNA. But inhalation is like a big... That's how we interact with our environment and in such a profound way, right?

DR. YVONNE BURKART: Yeah, inhalation is actually the most sensitive route of human exposure through daily life. It's only second to IV injection. Inhalation, you can very quickly...

You can die if you breathe in the wrong stuff very quickly, as opposed to putting something on your skin or eating something. Inhalation is the easiest way to increase your toxic load. If you're inhaling polluted air, your body is polluted. Because these gases and these particles are very fine. They can penetrate very deeply into the lungs where the alveoli are. Some are even just one cell layer thick. These chemicals and these particles can enter your blood stream, and they go everywhere in your body.

SHAWN STEVENSON: All right. So the mission today is for us to take our breathing seriously. All right? Shoutout to Tony Braxton. We wanna breathe again, but we wanna breathe again better. And just again, this is about getting educated and looking at what are some of the cost-effective things that we can do, for right now for the vast majority of us, just even opening a window occasionally. Even if it's a winter month, if you can crack the window, let a little bit of air in, at least some time throughout the day. That's one of the things that we would do, even... I've lived in Missouri, and there were some pretty strong winters, but just like even cracking the window open for 20 minutes a day or something like that, just to let in some fresh air, and let some of that toxicity that's built up in the household to be able to dissipate a little bit. So, [chuckle] I gotta ask you about this one. My oldest son is into candles right now. Let's talk about candles.

DR. YVONNE BURKART: Oh, candles, everybody loves candles, especially around this time of the year. It starts to cool down. People are into the pumpkin spice, the baked apple pie scented candles. I used to be into that too, so I totally get it. The problem is that most of these candles contain these undisclosed fragrance chemicals, like I mentioned, the carcinogens, the endocrine disruptors, the allergens, not to mention the paraffin wax that they're made of that comes from the crude oil, the petroleum. Burning these creates toluene, benzene, formaldehyde, and ultra-fine particles. You don't wanna be breathing any of these in. Those are all carcinogens through the route of inhalation.

SHAWN STEVENSON: All right. So the sexy vibe, we gotta be more mindful of this with the candles. Are there any candles that are not toxic to us like that?

DR. YVONNE BURKART: Yeah. I did a lot of research on this, and it was not easy-to-find information, but I looked into various plant waxes and beeswax. So based on my research, beeswax contains the least amount of pollutants, even though any type of combustion technically is creating pollutants, but beeswax created the least. So that's a good thing to know, right? It's really about taking it back to what our ancestors used to do. All this new stuff, I've even seen these clear jelly candles, very odd. I'm positive they're made out of some petroleum ingredient that you don't wanna be inhaling either. Just keep it simple, go back to the basics, beeswax candles. I think people were hand-dipping those for centuries now. It's not that hard.

SHAWN STEVENSON: Yeah, mind your beeswax.

DR. YVONNE BURKART: That's right.

[laughter]

SHAWN STEVENSON: All right. Now, one of the cool things that you've been talking about recently, and again, I want everybody to make sure they're following you on Instagram because you keep people up-to-date with some of this stuff. You've been talking a lot about glutathione, right? So can you share, first of all, what is glutathione? And let's talk about some of the roles that it plays in our bodies. Because I think that this can even help our bodies to be more resilient in the face of these things.

DR. YVONNE BURKART: Absolutely. Glutathione is known as a master antioxidant. It's basically made out of three amino acids: Glutamine, cysteine, and glycine. It's very simple, but it can do so many things. It detoxifies these chemicals that I'm telling you about. It helps with detoxifying free radicals. So us breathing oxygen creates free radicals that glutathione neutralizes. So glutathione is one of the things that basically keeps us alive, and it keeps us young, and it keeps us healthy. And there are so many chronic diseases that are linked with low glutathione levels.

SHAWN STEVENSON: So this is like... You said it's a master-level antioxidant. So the question is, is this something that we could just buy a glutathione supplement, or is this something that we can do or improve our production of it internally with certain lifestyle factors?

DR. YVONNE BURKART: The second one. So you can buy glutathione supplements, but that isn't necessarily gonna solve all your problems. So our bodies have glutathione in them. The highest levels are in the liver and the kidney, and the third is in the ovaries and the testes. That's how important it is.

SHAWN STEVENSON: Interesting.

DR. YVONNE BURKART: So the liver and the kidneys detoxify chemicals, right? And then of course, our reproductive organs, they need to be protected too; that's like our third most precious organ if you look at just glutathione. But glutathione is made naturally in our bodies. You don't necessarily need to supplement with it. It's just that modern lifestyles often take away this vital antioxidant that we need just to survive. So just by avoiding toxins and lifestyle changes like your diet, exercise, sleep, reducing stress, all of these things can actually help to maintain glutathione balance. Because our cells recycle glutathione. You don't always

need to make new glutathione. Don't deplete it, and help your body recycle it. It's very simple, actually, if you think about it. So all of the things that I've heard you talk about that just are the basic foundations of health are rooted in glutathione balance, basically. And I would venture to say that all of those things, glutathione is what's mediating a lot of these health benefits.

SHAWN STEVENSON: Awesome. I noted specifically, you shared a video on exercise in being able to support glutathione in your body. So let's talk about some particular ways through our nutrition that we can support glutathione. Magnesium is one that you noted. Is there anything else?

DR. YVONNE BURKART: Yeah, definitely. Cruciferous vegetables, anything that's rich in sulfur, because cysteine has sulfur in it. So it's actually the sulfur in the molecule that's doing all the work. So the more sulfur you can give your body, the more building blocks it has to create glutathione. So cruciferous vegetables: Broccoli, cauliflower, kale, those kinds of things, garlic, onions. So you can really give your body what it needs to maintain your glutathione levels.

SHAWN STEVENSON: Cool. Now, what about... This might be surprising to people, what about whey protein?

DR. YVONNE BURKART: This is interesting. I was actually looking into this, because I wanted to know what are the dietary interventions that we can make to increase glutathione. And one of them, interestingly enough, was whey protein. And it's likely because it contains the amino acids that are required to make glutathione, but it also supplies, I think, other co-factors in there. It's not fully studied, so the mechanism isn't well understood, but it does increase glutathione in people. But you've got to get a high-quality whey protein. You don't wanna just take any whey protein off the shelf, 'cause there's a lot of contamination with proteins and supplements in general.

SHAWN STEVENSON: Yeah, for sure. Especially the supplement industry is very sketchy, as you know. And so we don't wanna add to the problem. We wanna get these benefits. And by the way, I was just talking about this yesterday. Hippocrates, again, father of modern medicine, that's what we kinda established in our popular culture, he used whey protein in his practice as well. It was called "serum." But it wasn't something people were necessarily drinking, they would bathe in it for healing. It's so fascinating. Again, this has been around for thousands of years, this isn't something new, but the way that we do things now and also what the animals are being fed or what kind of environment they're exposed to, the chemical processing, the synthetic additives and all this stuff is creating something very different than what our ancestors might've interacted with. And so that's really cool with... And I would

imagine some of these amino acids would be helping with glutathione production in some kind of way?

DR. YVONNE BURKART: Yeah, absolutely. Because, yeah, we need the glutamate, the glycine, and the cysteine. And those are all found in whey protein.

SHAWN STEVENSON: Boom, there it is, there it is. All right. So this is one of the things that we can do to make ourselves more resilient in the face of this kind of toxic, I feel like... I don't know if you remember this. This got me thinking about The Toxic Avenger from back in the day, and I don't know, have you seen this before?

DR. YVONNE BURKART: Oh, I don't think I've seen that guy, but I've heard of the name Toxic Avenger.

SHAWN STEVENSON: Yeah, he's pretty... He's exposed to a lot of toxins, so he's pretty messed up. He's going around beating people up with a mop. But anyways, but then we've got on the other end, we've got Captain Planet. Do you remember Captain Planet?

DR. YVONNE BURKART: Oh yeah, I loved Captain Planet.

SHAWN STEVENSON: Low-key he's why you got involved in toxicology?

DR. YVONNE BURKART: He's our hero.

SHAWN STEVENSON: [laughter] There's like a... There's a parody of Captain Planet that's played by Don Cheadle, the guy... Do you know Don Cheadle, the actor?

DR. YVONNE BURKART: Yeah, yeah, the actor.

SHAWN STEVENSON: Yeah. So, yeah. We'll put that in show notes for people, if it's appropriate.

[laughter]

SHAWN STEVENSON: But anyway, so it's just, again, these things are put into our culture of avoiding toxins and looking out for the environment, but we forget that we are a part of the environment. And our regulatory bodies are... What's the best word to describe them right now? They're far behind. They're far behind where we are as far as what's getting utilized. And a lot of things are GRASS, "generally regarded as safe," and they get a free pass into our food supply, into our environment. And we've got to be our own Avenger, our own Toxic Avenger in

a way, and stack conditions for ourselves. So glutathione is one of those things we could support in our bodies, make sure that we're exercising, and also I would imagine just the process of moving and sweating occasionally would be helpful as well.

DR. YVONNE BURKART: Yeah, definitely. Sweating is a known detox pathway. So environmental chemicals, like I mentioned, the phthalates, some heavy metals, they've all been detected in sweat.

SHAWN STEVENSON: Sweat it out.

DR. YVONNE BURKART: So sweat it out.

SHAWN STEVENSON: Key sweat.

[laughter]

SHAWN STEVENSON: All right. So I wanna ask you about, you mentioned earlier, inhalation is like top tier way that we can change our health for the better or the not-so-better. You also mentioned putting things on our skin, so like topical things. And I don't think we realize that what we're putting on our skin is truly it's getting into our bodies. So let's talk about that phenomenon. How are things like lotions getting inside of our bodies?

DR. YVONNE BURKART: So when you apply stuff to your skin, it's not just necessarily sitting there. You'll apply a lotion and then a few minutes later it's gone, right? Sometimes you'll get a little bit of residue, but for the most part it's absorbing; it's penetrating into the skin. So by technical terms, absorption means it's getting into the bloodstream. Is it always getting absorbed? We don't know. But there's evidence to suggest or evidence showing in people that it does. So there's some chemicals out there, very common in beauty and personal care products, parabens and phthalates. Phthalates keep coming up, right? Because they're in plastics, they're also in beauty products, they're also in fragrances. These can penetrate the skin, get absorbed into the bloodstream, and studies have even shown that they travel to the breast and they will turn on breast cancer genes.

SHAWN STEVENSON: You guys, please hear that, please hear that.

DR. YVONNE BURKART: It's not just staying where you applied it, it's getting into your body and it's affecting your organs. And it's interesting because that study that I just mentioned, they didn't even measure cancer gene expression in other parts of the body; it was just the breast. But there's estrogen receptors everywhere: In the brain, in the ovaries, in the uterus.

So I would venture to say, I wouldn't be surprised if it was activating cancer genes in those areas too. We just don't know, right? We don't know.

SHAWN STEVENSON: Something's going on.

DR. YVONNE BURKART: Something is... [chuckle]

SHAWN STEVENSON: Because many of these cancers are on the rise in recent decades: Breast cancer, cervical cancer, brain cancer, the list goes on of all types. And many of these different cancers we're seeing were really rare for a time period, and now it's just like an explosion, essentially. And again, it's just like... And I know you feel the same way. It isn't necessarily one thing, it's our overall exposure that we're so oblivious to in our lives today. So that's why, again, I'm very happy to have you here. One of them that I'm curious about is lip care. Let's talk about lips.

DR. YVONNE BURKART: Lip products. Okay. So when it comes to lip products, we need to be careful for several reasons. Number one, because you're applying products just pretty much in direct contact with your mouth, and so you're ingesting some of it, and it's also... Some of it could be getting absorbed through the lips themselves. And over time that can be accumulating depending on what types of ingredients you're using. So when it comes to that, be as careful as you would with your food.

SHAWN STEVENSON: So what are most lip products made of?

DR. YVONNE BURKART: Petroleum, petroleum that comes from crude oil; the same petroleum that... The same starting material that will make plastic and gasoline and all these other things, goes into beauty and personal care products too. But the petroleum that's used in cosmetics is highly refined, is processed in a way that removes the majority of concerning chemicals, because there are naturally occurring polycyclic aromatic hydrocarbons in petroleum, in crude oil. But there's evidence that even then, the amount that's left behind in these petroleum ingredients are still getting into our bodies.

SHAWN STEVENSON: All right. So my question is, do we all have to be like LL Cool J out here and like...

[laughter]

SHAWN STEVENSON: Licking our lips constantly, or is there some better alternative?

DR. YVONNE BURKART: There's definitely better alternatives. There's pretty much a better alternative for almost anything out there that you can think of right now. Because people are becoming aware of the issues, and so companies are creating products that are healthier and being more conscious about it, which is great, which is what we need. But if you can, choose organic ingredients. For example, I've been using a grass-fed tallow lip product, and it's fantastic. It's edible. The more food-based that you can get with your products, the better.

SHAWN STEVENSON: Yeah. And just thinking about it through that lens, if you can't eat it, you probably don't wanna put it on your skin or on your lips.

DR. YVONNE BURKART: Definitely not on your lips.

[chuckle]

DR. YVONNE BURKART: 'Cause you are eating it.

SHAWN STEVENSON: And by the way, shoutout to LL Cool J. By the way, I just saw him in concert, it was my first concert since living in LA. The crazy thing is, before I lived here, I'd come out here for some things, a concert. One of them recently was like, we went to the Rose Bowl, there was like Beyonce and Jay-Z, I took my wife to that. But when I moved here, everything shut down. And so my first concert, my friends took me to the Forum, which is this legendary place the Lakers used to play, and it was LL Cool J. And man, he's different, he's different. He's 55 and he was out-of-this-world fit, like crazy, crazy. And just the stamina, he did two full sets of performances like one... 'Cause he's got a huge catalog of songs. And his voice, he didn't miss a beat, running around the stage, jumping up and down. It's just like the energy, the stamina, the fitness. And some other folks came out, it was like one of those things where somebody will pop out here or there, a couple of other people do sets. But he did two full sets, and also The Roots band was playing the background tracks for every song. It was like salt and pepper and like... Because they're in LA, they had Ice-T came out and did some stuff. But The Roots played all of those tracks. There was a guy holding a tuba for like 70 songs, by the way. It's just like, man, these guys are out here training, and I like that.

SHAWN STEVENSON: But I just wanted to give him a shoutout. And again, we can see what's possible because for him was one of the things... He even had a fitness book that came out maybe like 10 years ago. Dedication to certain lifestyle practices can turn out much better results, because you could see the distinction in his age group in the rapper community between where he's at and where other people are at. Are you making this a consistent part of your life? And also just knowing too, we're going to be exposed to things, we're gonna be exposed to environments, we're gonna be exposed to toxicity. How resilient are we? And let's take action to minimize our exposure to the best of our abilities. Which leads me to one of

my favorite songs from LL Cool J, which is Doin' It, doing it well. Let's talk about our bedroom. Let's talk about our sheets and our bedding in particular, and pillows.

DR. YVONNE BURKART: Yeah, okay. So pillows, of course, we're laying our heads directly on them. They are in direct contact with our breathing zone. And what's happening there is if you're using a foam pillow, it's releasing volatile organic compounds: Formaldehyde, benzene, polyurethane foam. That's what I'm talking about, the ones that you can get with all the chopped up leftover pieces from [laughter] the mattress industry. You don't wanna be breathing that stuff in. Eight to 10 hours a night, however long people sleep, but babies can sleep up to 13 hours a night, and their bodies are so tiny, they cannot metabolize any of these; they can't detoxify this kind of stuff. So be really careful with the kind of pillow that you're using. Organic is ideal. Again, going back to the basics. What did our ancestors use to sleep on? Feather pillows, cotton, just really simple swaps.

SHAWN STEVENSON: Awesome. And what about our bedding?

DR. YVONNE BURKART: Ooh, the bedding, it's the same situation. The polyurethane foam mattresses, those are everywhere. They use a lot of... So a lot of these chemicals are being released when you lay on them. So your body weight and your body heat is causing these chemicals to volatilize, you're breathing them in. If you sleep with someone that tosses and turns a lot, you're gonna get more exposure.

SHAWN STEVENSON: This is one of the things that I did for myself early on, just investing in me and investing in creating a really good sleep environment. And I upgraded the sheets that I was using in this awesome company I found out about, and they instead of conventional stuff, grown, a lot of even with cotton, it's sprayed with all these variety of chemicals and whatnot, and they were using organic bamboo lyocell for their sheets, and it was actually like softer than Egyptian cotton, when you start talking about the thread counts and all this stuff. And I didn't know about this stuff. I'm from the hood. I didn't care about thread count. But when I slept on them, I couldn't believe it. It was like slipping into a love song. It was so nice. And they're also, they were moisture-wicking, antimicrobial, hypoallergenic, and the company just ran a randomized controlled trial as well. And I think it was like 20% better sleep quality and more better cognitive function the next day for people sleeping on them, and 94% of people preferred sleeping on them as well. And I'm talking about Ettitude, which I'm gonna get you some, matter of fact.

DR. YVONNE BURKART: Okay. [chuckle]

SHAWN STEVENSON: I'm getting you some Ettitude sheets as my gift for coming all the way here and hanging out with us today. And by the way, if you wanna get some Ettitude sheets,

go to ettitude.com/model. That's ettitude.com/model. You get 10% off, and also this is a great gift. We're getting close to the holiday season as well. This is probably in my top three of gifts that I give people that I care about. 'Cause it's just an upgrade. Once you sleep on these sheets, you don't wanna sleep on anything else. And so yeah, ettitude.com/model for 10% off. And we've talked about bedding. We've talked about plastics in our environment. We talked a little bit about personal care. But for many of us, we're going like head to toe with stuff. All right. We talked about the lips. What about things that we're cleansing our bodies with? Let's talk about that, like haircare products, shampoos, and soaps.

DR. YVONNE BURKART: So we also need to be careful here because the skin on our body's different areas will absorb chemicals differently. So the scalp will absorb more than maybe other parts of your body, because there's a lot of blood flow there, there's a lot of hair follicles, so being very conscious about the products that you're using on your hair. But if you're using something like a body lotion, something that covers your entire surface of your body, that's going to be a higher risk type of product, just simply because of the amount that you're using, and the fact that it sits on your skin. So shampoo, I definitely would recommend trying to get as organic as possible there too. And there's a lot of great companies out there that are doing really, really, really amazing products that work just as well as the conventional counterparts.

SHAWN STEVENSON: All right. Now, even hearing about this and these kind of upgrades, and now, what about cost? A lot of this stuff, doesn't it cost more?

DR. YVONNE BURKART: Yes, generally speaking, the less processed, the more wholesome, the more organic products, will cost more, because generally they come from plants instead of petroleum. Petroleum is dirt cheap. They can synthesize tons, literally metric tons of this stuff for pennies... No, fractions of a penny. But to create something from a plant takes time, it takes energy, so it's going to cost more. But in the end, you can weigh out the cost-benefit analysis of investing in your health with healthier products, or do you wanna go another route and have to invest in your health later on down the line with medical care?

SHAWN STEVENSON: It should sound like a no-brainer, but it's just, again, for the average person being able to figure out where they can make that investment... And, again, coming from where I came from, I was in that situation, where sometimes literally, light bill or whole foods? I'm measuring, and I'd be at the checkout counter like, "I hope that this goes through," kind of thing so many times during this time period. But the interesting thing that happened is, as I was investing more in my health and I started feeling better and I had more clarity and more energy, not only did I start to make more income so I can afford more things, but the crazy thing is, now, a lot of the companies that I was buying things from, I know the people,

they're my friends, and they'll send me stuff and just things that I once had to buy, I don't even necessarily have to buy anymore.

SHAWN STEVENSON: It's just like when you invest in certain things and just alter your perception in your world, make it a healthier universe for yourself and your family, we can't even understand the good ways that the stuff starts to repay itself in our lives. And so that's one of the encouragements today, because I know that some of this stuff, and it can be a little bit overwhelming. Is there anything else you wanna add? Because, again, this is a lot. For parents that are concerned about some of these things and exposures, is there anything else that you could share with them?

DR. YVONNE BURKART: Yeah, I would recommend starting with the products that you're using on your kids. Focus on helping your kids because they have a lot longer to live, they can't detoxify the way we can, so any amount of help that you can give them is gonna go a long way. And you don't have to go out and replace all your products at once. That's gonna create a lot of waste too. We don't necessarily wanna do that. But just making a more conscious decision the next time, even if it's 1% better, that's still better than it was. And one easy way is just to go fragrance-free. You'll save a lot of money like that. A lot of people are out there drinking their Starbucks in these plastic cups that are melting into our drinks, burning these expensive candles, buying these expensive hair products, you don't even need that. You can go really, really basic, and get what you still need at a fraction of the cost, and you're saving yourself a whole lot of toxic load.

SHAWN STEVENSON: I love it, I love it. All right. So I've got to ask you about this as well. How do we know? How can we trust that a company is actually looking out for our best interest? Can we just take people at their own discretion saying, "Hey, this is certified safe or hypoallergenic," whatever the case is. What about things like credibility, transparency, third-party testing? Let's talk about that a little bit.

DR. YVONNE BURKART: So at this point, since our products are so polluted, our environment's polluted, all of this is affecting the products that we buy, and we can't necessarily take it at face value, unfortunately. So looking beyond just what's on the marketing, and really asking the company, "Hey, if you're making these claims, can you back it up?" So I recently did a diaper investigation, and I went on all these websites and I was looking at diapers that are marketed as non-toxic, and I asked them, "Hey, if you're claiming that it's phthalate-free, PVC-free, all these things, do you have some way to back this up?" Out of 30 diaper brands that I contacted, only three could substantiate their claims. That's 90% are not able to validate their claims. So really at this point, we have to look for companies that not only can substantiate their claims, but are transparent with it, are willing to share these test reports.

DR. YVONNE BURKART: You have to test to know. There's no way to just make that claim. Because products are made with ingredients from all different vendors and sources and manufacturers, and you're just taking their word for it as a maker, then you're just trusting them that they're being transparent with what they're saying. And oftentimes, it's not the case, because there's things happening upstream of them that they didn't know about either. So you've gotta do the testing. As for me, if I was to make a product, I would test it, third-party tested so it's not done in-house, there's no bias, someone else is doing the test. And then I give you the report; I show you, "Hey, these are the numbers. If I'm saying this is a clean product, here are the numbers to back it up." The transparency is huge now. For me, it's the bare minimum now.

SHAWN STEVENSON: Yeah, yeah. Because again, a lot of marketers will use these things, these kind of public awareness of certain things and health-wash it, use it as... And the crazy thing is, unless you're getting a powerful legal force behind you, they could just do that, and they're never gonna suffer any consequences to say that it's phthalate-free and whatever. They could just say certain things, but it doesn't necessarily have to be true. They don't have to prove it, right? And right now, this is why I'm a huge advocate of, if you find good companies to really support them, companies that are doing really good work... And there are so many, more of them are emerging, for sure, and I think we're gonna reach a tipping point at some point, but we've also gotta vote with our dollar. We've gotta invest and say yes to better things.

SHAWN STEVENSON: And also that's where the economy of scales and different things can start to change where the price comes down for certain things as well. Because petroleum is cheap because it's really been... It's been integrated into a system that makes it cheap. It's a very cost-intensive thing to be able to extract from the earth, but systems were put in place because humans began to value that, right? And this is just... We're at a very interesting time, but we need to get educated. And this is why, again, I want people to follow you. And is there anywhere else that people can stay up-to-date with you besides following you on social media?

DR. YVONNE BURKART: Yeah. Actually, you can follow me on YouTube. I've started making videos there. I love making long-form content to really delve in very deeply on one topic at a time. But you can also find products that I personally had vetted at The Swell Score, which is an online wellness platform, curated products from doctors and scientists. I'm the head toxicologist, I'm personally curating and hand-picking beauty and personal care products, and my standards are the strictest in the entire industry. And so we've coined it "Ultra Clean" because clean beauty is, like you said, it's green-washed, health-washed, it can be deceptive 'cause not all products that are claiming to be clean are actually clean. But I can vouch, I've

vetted all of these products, I've got the test reports, I've spoken with the manufacturers, with the owners, the suppliers, so these are fully vetted products I trust and use myself, and you can find them all in one place, which is amazing.

SHAWN STEVENSON: Thank you.

DR. YVONNE BURKART: So you don't have to go searching piecemeal.

SHAWN STEVENSON: So awesome. Thank you for doing that. Thank you so much. So that's Swell Score, and also they have a social media platform that you could follow there. Is there a website people can go to as well?

DR. YVONNE BURKART: Yeah, definitely. It's theswellscore.com.

SHAWN STEVENSON: [Theswellscore.com](https://theswellscore.com). So definitely go there, get educated, and you do, yeah, your standards are very high, which is a little scary, because just like, if it doesn't meet her approval, I've gotta check myself and be honest like, "This is not up to par," and because you're looking out for us. And also, again, at the end of the day, it's making... Even, you just said it, 1% improvement is an improvement. We don't have to change everything at once, but we need to learn about this stuff. So thank you so much for doing this work. It's just like, I'm so grateful that you are out here and being a champion for us. This is really amazing.

DR. YVONNE BURKART: Yeah. Thank you so much. It's my passion, and I feel obligated to share this information because once you become aware of it, I have to take action, I have to tell people.

SHAWN STEVENSON: Yeah, yeah. So final question before I let you go. What is the model that you are here to set for other people, for other families, for other parents with the way that you live your life personally?

DR. YVONNE BURKART: It's being conscious and aware about what we are bringing into our homes and what we are feeding our children and our families, and the legacy that we wanna leave behind. Do we wanna make the world a better place? I wanna leave it less toxic than it was when I got here.

SHAWN STEVENSON: I love it, I love it. Thank you so much, Dr. Yvonne Burkart, everybody.

SHAWN STEVENSON: Thank you so much for tuning in to the show today. I hope you got a lot of value out of this. So again, this is about empowerment and education. This is not a means to be inundated. This is a means to make more informed choices, to have true informed

consent, to be aware of the things that we're exposing ourselves to, our kids, our family members, our communities, to really take back control of our biology. If you got value out of this, please share this out with somebody that you care about. You can share this directly from the podcast app that you are listening on, or of course, you could take a screenshot of this episode and share it on social media. You can tag me, and of course, tag Dr. Yvonne Burkart, share the love that way as well. We've got some incredible master classes and world class guests coming your way very, very soon, so make sure to stay tuned. Take care, have an amazing day, and I'll talk with you soon.

SHAWN STEVENSON: And for more after the show, make sure to head over to themodelhealthshow.com. That's where you can find all of the show notes, you could find transcriptions, videos for each episode, and if you got a comment, you can leave me a comment there as well. And please make sure to head over to iTunes and leave us a rating to let everybody know that the show is awesome, and I appreciate that so much. And take care. I promise to keep giving you more powerful, empowering great content to help you transform your life. Thanks for tuning in.