

THE MODEL HEALTH SHOW

EPISODE 721

5 Ways to Stop Cravings for Unhealthy Foods

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SHAWN STEVENSON: You are now listening to the Model Health Show with Shawn Stevenson for more visit the Modelhealthshow.com. Welcome to the Model health show. This is fitness and nutrition expert Shawn Stevenson, and I'm so grateful for you tuning into me today. What are cravings and why are we driven to eat certain foods? On this episode, we're going to uncover the science behind cravings and how to manage our cravings to support our health long-term. Now, the word craving has a lot of meanings in our language, to sum it all up, it can range from a small internal whisper to a deep burning desire for something we can crave achievement, love, drugs, food, and so much more. In fact, cravings are at an all-time high today, there are more things than ever to crave, more access to them and more things designed to keep you coming back for more. Now, let's dive in and actually analyze what cravings actually are in the context of food and nutrition. So what are cravings? A craving can be defined as a strong desire for something in the context of food, a food craving is an intense, urgent desire or longing for a certain food.

SHAWN STEVENSON: Now again, keep in mind, cravings can be subtle, but for our intents and purposes, today we're talking about the cravings that can really grab you by the jugular. Now, I also wanna make this point clear that cravings are totally normal and natural, it's a natural part of being human, it's a natural part of being really any species, all of us are driven to certain things to certain behaviors, so cravings, again, this is not what's abnormal. What tips things into abnormality, and even danger, is having consistent cravings for things that can ultimately cause us harm. Now, what causes these cravings? Well, cravings we experience are the result of a series of chemical reactions, so remember that part, it's a result of a series of chemical reactions. These cravings are very real physical changes in the body.

SHAWN STEVENSON: But this is where things can get tricky, cravings are not a simple "physical desire for something", cravings can be triggered by physical, mental and even social conditions. Your thoughts and your perception of the world around you can instantly alter the chemistry in your body, and some of these alterations can drive us to certain behaviors, and they can also increase our cravings. So we're gonna break down each of these pieces in just a moment. But a big part of the problem in our modern understanding of biology of cravings of the human body and how we interact with our environment, is that our education today frames the body, the brain and the mind as totally different.

SHAWN STEVENSON: Now, the reality is that they're all intimately connected and cannot be separated from one another, and they're constantly feeding back data every moment of every day to each other. So what's happening with your mind is inherently going to affect your body because your thoughts instantaneously alter your chemistry. so whether you're

having thoughts that are more positive and affirming, so thoughts of peace, of love, of satisfaction versus thoughts that might be a little bit more detracting, thoughts of sadness, depression, envy. These are all things that alter our chemistry and what we would define as negative or positive ways, but we don't wanna put a blanket statement on any of these things because all of these things are human emotions that we all can experience. And the keyword here is experience, we literally feel these things in our bodies when we're angry, you feel it in your body. When you're excited, you feel it in your body.

SHAWN STEVENSON: When you're feeling anxious, you feel it in your body. Your chemistry is changing based on your thoughts, so remember that because this is a very important ingredient in really understanding how our cravings work and how to helpfully manage our cravings.

SHAWN STEVENSON: So again, what actually causes cravings, let's look at this from three specific levels now. The three major sources of cravings are number one, physical, physical maintenance and survival of our bodies. Ourselves literally require key nutrients from the external world in order to function.

SHAWN STEVENSON: Now, if you think about this, this is really cool and also kind of freaky, we take stuff from the outside world, put it into our bodies and it becomes a part of us. It's very strange that that's kind of how life is constructed. Everything is eating something. Everything is exchanging energy and kind of living on. When we take something on, put it into our bodies, it's living on through us, it becomes a part of us, if anything, becoming an energy substrate or an energy source to fuel processes in the body as well, and our cells require key nutrients in order to perform all the stuff that the body does. And so just for your vision to function properly in all the interactions with your brain and nervous system, there are key nutrients that are involved in that process, maybe it's Zeaxanthin. Maybe it's lutein. Maybe there's this role that vitamin C is playing. The list goes on and on and on. We need these key nutrients or our vision is gonna start to fail, but prior to that, our biology is going to drive us to crave certain things to get those key nutrients into our bodies because... And this is where the physical aspect comes in and the body's intelligence. Through human evolution and also all species again.

SHAWN STEVENSON: Have you ever thought why certain animals are driven to eat certain things? Have you ever thought about that? Why does a cheetah eat certain things? Why does an anteater eat certain things? Why does a lamb eat certain things? Who told them to eat those foods? Who gave them that instruction manual and told them that this is what you're supposed to eat? And also, by the way, their diets will adjust based on the environment that they're placed in. There is inherent kind of instruction manual that would drive certain animals to eat certain things, and the same thing holds true for us as human beings, but

what is the biggest difference about this is that humans are able to literally plant themselves anywhere on planet earth and find a way to survive.

SHAWN STEVENSON: And also we have such a vast array of different foods that we eat collectively as human beings throughout our evolution, and depending on where you are on planet earth, different humans are eating different things. And up until recently, however, and this is the big caveat, we will get more into this shortly, humans were eating natural foods. Foods that had a close proximity to the natural world, whereas today we have all of these kind of highly refined, ultra-processed foods that we've just simply made up.

SHAWN STEVENSON: Food scientists have created. And it's kind of thrown off this system a little bit, because what would happen through our evolution, and this is how it actually work. When we would eat a certain food, we'll say, wild strawberries, for example, we would eat that food then our ancestors... Just keep in mind, we're talking about earlier on in human evolution, our ancestors would eat that wild strawberry and their cells would essentially take notes, little sticky notes, on what nutrients were found in that food. What nutrients came along with that flavor. This phenomenon is called postingestive feedback, and again, is essential to our understanding of how food in our interaction with the external world works. Why we're driven to eat certain things, so this is very, very important to postingestive feedback. When we eat a certain food...

SHAWN STEVENSON: Again, we'll use these strawberries as an example, wild Strawberries, and maybe our ancestor was able to pull in vitamin C. Some Folate, some copper, some potassium, and so now our cells are basically slapping a label on their flavor. A memory is tied to that flavor that, Hey, if I'm in need of vitamin C to help to regenerate an injury to my skin, or to help to fortify my immune system, or to help my body to manage the stress I'm experiencing, I'm going to incite a craving for those strawberries, because I know that there is a viable source of vitamin C in those strawberries. This is how cravings evolved. This is how the intelligence of our bodies was developed for hundreds of thousands of years in this current form.

SHAWN STEVENSON: And so it's a highly intelligent system, but the question is, what happens when we come in with newly invented flavors and taking things that we evolved with. For example, that strawberry flavor, and now through several new inventions. One of them being a gas chromatograph, scientists can identify the flavor make up, the chemistry that makes the flavor of a strawberry, and now we could take that chemistry and add it to things that are not strawberries.

SHAWN STEVENSON: We can add that to soda, we can add that to candy, we can add that to chips. I know you're like, Why would somebody eat strawberry chips. In Canada? They're

eating ketchup chips! I just found this out. Shout out to all my family and friends in Canada. What's going on? It's just weird to us, but I get it, potato, ketchup, potato, ketchup but lays. Lays ketchup flavor potato chips is just... It's just weird, but it's a cultural difference. It's a cultural change because of course, a lot of people from different countries, we see some of the stuff we eat here, and they're just gonna be like, Man, we are on one for sure.

SHAWN STEVENSON: So again, now we can take that chemistry, that certain flavor, because guess what, there is no actual ketchup on those Lays potato chips, it's ketchup flavor. The tomato flavor can be isolated and identified and that chemistry can be added to basically whatever they wanna add it to. And so now, this post-ingestive feedback, where our bodies are expecting certain things that come along with certain flavors. Even though those flavors don't have to be exactly the same by the way, because a strawberry soda doesn't taste exactly like a strawberry, it's just a hint of it. It's just a reminder. It's just a little bit of a whisper, but it's enough to muddy up those metabolic waters where the expectation with certain flavors are now confused and our biology starts to get confused. And now we've run into this place where we're having abnormal cravings. Now we run into this place where that craving feedback that our body is trying to give us to drive us towards certain food, it's all now kind of getting ruffled up, and I just thought of ruffles because of the damn Lays potato chips.

SHAWN STEVENSON: And we're gonna talk more about this, but I just wanna open up that mental tab for you post-ingestive feedback and how important that is in understanding how cravings work, that cravings are not bad. We evolved having cravings. Again, so the first major source of our cravings is physical cravings, physical maintenance and survival. Our bodies are biologically driving us to eat certain things. Now moving on to the second major source of our cravings has to do with our mind. Our mental state is a huge driving force of our cravings in particular, our state and perception of stress. Now we already highlighted how our thoughts changed the chemistry in our bodies. And so if we're dealing with an abnormal amount of stress, this is going to tend to drive certain behaviors, including eating certain things. This phenomenon of stress eating is a very, very real thing. Pretty much everybody has done it at some point, but oftentimes, we might not realize that we're doing it because the behavior becomes automated. We are oftentimes looking for a sense of certainty, some peace, but in particular, eating something that is more carbohydrate dominant even activates a release of a little bit of serotonin.

SHAWN STEVENSON: And this is this kind of glorified feel good neurotransmitter/hormone that brings a little bit of balance, a little bit of peace, a little sense of goodness, a little sense of even pleasure. And so this is why we tend to go towards those type of foods when we are feeling a lot of stress. And again, this isn't that it's wrong to crave some more carbohydrate dominant foods when we're feeling stress. Again, through our evolution, we probably would have had the same drive, because all the decisions that we're making, for example, we can

experience something called decision fatigue. Just the fact that we're making decision after the decision after decision, all that stuff is just pulling glucose from our system. Siphoning a lot of energy, in particular with the human brain being able to process all these decisions, and so we're going to have a draw towards things that are more carbohydrate, dominant.

SHAWN STEVENSON: So, our mind, our mental state is a huge driving force of our cravings, again, we are gonna talk more about this, but we're just highlighting these three major sources of cravings. And the third one being social/environmental triggers. We all make neuro associations where our brain links certain environments to certain behaviors. Our brain makes certain associations between certain people, and certain behaviors. Being around certain people can incite certain cravings.

SHAWN STEVENSON: I don't know if you've ever paid attention to this before, but when we're around certain people, we make adaptations. Whether this is adaptations in our language, our pace of dictation, our level of excitement or being de-excited, we are adjusting to fit into our environment, we evolve doing this again, as human beings, but also we tend to include ourselves and in the behaviors of the group. So, in the context of what people are eating, we tend to dabble... Even if it's unplanned, we tend to dabble in what everybody else is eating when we're in a certain environment, and this is okay.

SHAWN STEVENSON: Now, a lot of people as they're trying to get healthier, what they deem to be healthier, often faced with environments where they have these certain behaviors> Maybe it's going over to your aunt's house, for barbecue. Maybe it's they're bringing out the cupcakes for somebody's birthday at the office, whatever the case might be, and you're like, you told yourself, I'm not gonna eat these certain foods, but you find yourself dabbling. And again, we're not getting into a place where we are starting to villainize behaviors. We're getting to a place where we understand our draw towards those things, our cravings, and where they come from. Even if something doesn't seem to be attractive, what we're telling ourselves, we don't want to involve ourselves in certain things. Oftentimes that would involve ourselves not being in certain environment, because the cravings will be triggered just by being around certain people or in certain places.

SHAWN STEVENSON: Now, where are cravings managed in our bodies? Where is this actually located? Where is there like a little man with a crane moving around? Stuff in our brain, I'm thinking about Homer Simpson with the monkey, with the symbols, what's happening in our bodies? Where is this located, who's driving us to want certain things?

SHAWN STEVENSON: Now, there are certain areas of the brain that regulate cravings and our appetite, which is how much of something we are driven to eat by the way. So there's a distinction between the two. Our cravings are the drive towards the thing, the drive or the

longing for eating a certain thing. Our appetite is how much of that thing we are driven to eat. So where is this happening? Where is this going down? Where is the man on the crane? Well, our cravings are actually managed in something called the appetite Appetite Regulating Network or the ARN. And this consists of distinct circuitry in our hypothalamus.

SHAWN STEVENSON: Alright, so this is really the master gland in the human body. According to many different scientists would deem that to be the master gland. And it's really the tip of the spear of the hypothalamic pituitary adrenal axis, but along that we have the thyroid, we have the gut, we have the gonads. A lot of that is happening on that the information super highway, but your hypothalamus is really integrating, it's an integration point of your endocrine system, your hormones, and your nervous system, your neurotransmitters. So there's a lot of intelligent action happening here, and by the way, this is also where the appetite regulating network is seated.

SHAWN STEVENSON: Now, this distinct circuitry and in the hypothalamus relays desire to eat and the appetite drive to respective cells in your body that drive us towards these behavior., And it's subject to modulation by excitatory and inhibitory, so driven to do something, and also pushing away, or inhibiting, or being un-attracted to a thing. Based on messages from other regions of the brain and body, I'm gonna say that again, it's subject to modulation by excitatory and inhibitory messages from other regions of the brain and body. So your hypothalamus isn't just telling you to go eat something, it's getting feedback from other places in your body.

SHAWN STEVENSON: Let me give you an example. Signals from leptin, which leptin is... Today, a lot of people have heard this already and they're aware of this, but truly leptin is your body's major kind of primary satiety hormone. There are many others. So we've got GLP-1 for example, we've got peptide YY or P YY, pretty young thing, for example.

SHAWN STEVENSON: But there are many different satiety hormones. But leptin is really the power player in this. And leptin is actually produced by our fat cells. So something produced by our fat cells, primarily, is telling us that we've had enough, is making us have this reduction in cravings, higher feeling of satiety, reduction in appetite. Based on what our fat cells deemed to be like, okay, we're good. We've got enough, we've got enough filling here. We've got enough stockpiled, we're solid, and we produce some leptin. Shut off that appetite. But the question is, for many people that have excessive buildup of body fat, why is leptin not enough to shut down the appetite? And this is a phenomenon known as leptin resistance. Leptin resistance. This is when a ton of leptin keeps getting produced, but the receptor sites for leptin start to lose their sensitivity because of all the leptin exposure.

SHAWN STEVENSON: And the question would be, why would we keep eating so much when our cells are like screaming out and shooting out all this data to shut down the appetite and the cravings? And this is really at the heart of this episode that we're gonna get to in a moment, but that's really kind of the crux of the situation. Our bodies are making these things to help to shut this down, but for some reason today, which you're gonna find out why it's not enough. Now here's the tie in with leptin. Leptin and ghrelin, which is produced by the gut, that's our major hunger hormone, communicates with the appetite regulating network in the brain. So this is one of the ways that it works. It's communicating a direct communication with that aspect of the brain, and it's establishing moment to moment regulation of energy homeostasis.

SHAWN STEVENSON: All right. So these hormones are getting produced at their respective places based on the data that our body's picking up about ourselves, about ourselves and relationship to the environment, the world around us. Producing leptin, producing ghrelin, communicating with the ARN in the brain. And it's establishing the moment to moment regulation of energy homeostasis. So this system, this highly intelligent system, is regulating energy signals, aka, what the body needs. And our cravings are actually a call to reach homeostasis. This is such an important aspect of understanding this. Cravings are actually a call to reach homeostasis. Better said, your cravings are a drive to bring balance to your brain and body.

SHAWN STEVENSON: Now the question is, what caused the imbalance in the first place? Now, let's dig into five of the primary drivers of this imbalance that tips us out of homeostasis, inciting the cravings. Number one is excess stress exposure can definitely drive cravings. A question is why. We're just going to touch on a couple of aspects of this. So one of them is when we are experiencing excessive stress, our adrenal glands... so this is really a hub for our stress related hormones, is also dumping out a lot of vitamin C into our system as well, because this vitamin C is a modulatory factor for our immune system function. And we're talking about stress, we're talking about things like inflammation. These are all regulated and driven by our immune system. Our immune system is trying to sort things out to keep us alive and to keep us protected. So excessive stress is essentially, it can be like an emergency situation that our immune system really needs to be front and center because something stressful is happening.

SHAWN STEVENSON: Maybe this person is facing an injury getting hit with a spear or bit by a bear. We need to be ready. We need to stay ready so we don't have to get ready. That's the mantra of the immune system. And it should be our mantra too, by the way. All right, so as we're dumping out a lot of vitamin C, this is going to incite accordingly, a later craving for vitamin C, because again, this is one of the most essential nutrients that we have to get from the external world, from our environment. Some animals make vitamin C. Funny enough, we

don't. Because through our evolution it was really abundant and we had a lot of access to it. But this vitamin C dip can cause cravings for sweets, for sweet things. Because through our evolution, vitamin C has been found abundantly in sweet fruits. And accordingly, a source of fructose.

SHAWN STEVENSON: Or fructose if you're nasty. Now, unfortunately, our sweet cravings that have been tied to fructose can now be cross-wired with highly concentrated forms of fructose found in ultra processed foods. This is again, where the situation gets sticky. Something that would be more normal and natural, a dip in vitamin C, a drive or craving for something sweet found in nature. But now suddenly ultra processed foods are where we most tie these sweet sensations to. And this is where, again, this cross wiring happens. It's kind of like with the Ghostbusters when Venkman and them was like, don't cross the streams. Don't cross the streams. We might blow up the whole planet. We might rip a hole in the universe, we don't know. Don't cross the streams, but our streams are getting crossed through this rampant exposure to ultra processed foods. And again with crossing the streams, we might rip a hole in humanity's universe or blow up the state puff marshmallow man. We don't know what's gonna happen. But we're seeing the results thus far.

SHAWN STEVENSON: We just take a good look at the world around us, and something is definitely spooky. All right, we're gonna move on number two here, and looking at again, what is causing the imbalance? What is tipping us out of homeostasis? Number two, having a blood sugar spike and a respective crash is one of the fastest ways to trigger cravings. Your body takes your blood sugar levels very, very, very seriously. We are hardwired like this. Having our blood sugar too low means susceptibility, means a potential inadequate ability to survive. Should we be faced with a threat? Because our DNA, even though we pop in the Teslas. Even though we can have the retro ones all the way to the Jordan 27s of where we are at, right?

SHAWN STEVENSON: Everything looks so evolved and sophisticated, but our genes, our DNA is all functioning on programs that have been running for hundreds of thousands of years, and this really deep intelligence. And if our blood sugar goes too low, this might mean we can't run fast enough to get away or to defend ourselves. And so, because again, we evolved in conditions where we had to stay ready, alright? And so blood sugar crash, our body takes that very seriously and there is a response with our stress hormones. It is definitely going to activate that kind of stress pathway when we're talking about our sympathetic fight or flight. Nervous system is gonna kick on. It's gonna trigger something called glucose neogenesis, the creation of new glucose, if need be, it can break down our tissues to make glucose if need be. And/or it can prompt you to get something that is very dense in glucose in your body ASAP.

SHAWN STEVENSON: That's where the cravings come in at. And so again, our blood sugar is something that our bodies take very, very seriously. And one of the cool things about today in our innovations is that this is one of the few things that we can track ourselves. We can get incredibly accurate and viable data so that we can manage our blood sugar ourselves because no one else is like you. Part of the problem with all these cookie cutter diets and exercise programs, we don't understand that we are different from everyone else. Yes, there are some basic tenets that apply across the board to some degree, but being able to track your own blood sugar in real time is such a valuable asset.

SHAWN STEVENSON: And this is a way that you can understand how certain foods affect you versus someone else. Your best friend, your significant, other your parents, whatever the case might be, your coworkers, different foods affect people differently. For some people they can lead a food that is deemed to be super healthy can lead to an abnormal spike in crash. And then we're wondering like why we don't feel good and why we're having cravings later. And can also provide you data on how other things affect you, like stress and your sleep quality. And you'll notice how certain things might increase or decrease your cravings. But to be able to track this for myself, for my family, and for hundreds of thousands of people, we've been utilizing Levels and Levels shows you in real time how food affects your health through continuous glucose monitors.

SHAWN STEVENSON: The Levels app provides access to continuous glucose monitors and the incredible Levels app pairs with CGMs or continuous glucose monitors to give you your own personalized data. They've got hundreds of thousands of data points on different foods and they're just collecting all this so that we can start to understand some averages, right? So rather than guessing which foods might be bad, like we can get population data and see that, but also we can track it for ourselves because even if 90% of people are having this reaction, maybe this food is ideal for you right now. And again, this is about empowerment, this is about understanding what's happening in your body. And one of the things I was surprised by myself is that my wife's blood sugar is much more stable than mine when it comes to food. She doesn't move much at all.

SHAWN STEVENSON: She doesn't have a lot of spikes in dips and troughs, Whereas for me, it depends, really depends on the food. It really depends. I'm much more sensitive. But with that said, she's much more sensitive to stress, much more sensitive to stress. And these are just some of the things that we found out by utilizing Levels. And right now Levels is providing us with a special offer when you go to levels.link/model. Go there right now. And when you get their annual membership, they're going to give you two months for free. So check them out ASAP. Again, that's levels.link/model. That's L-E-V-E-L-S-L-I-N-K/model. Grab their annual membership, get two months for free. Alright, awesome. So, so awesome. I love the folks over

at Levels. Now again, your body takes your blood sugar very, very seriously. And this is one of the things that can tip us out of homeostasis.

SHAWN STEVENSON: Let's move on to number three here. And number three of these five key ways that can tip us into imbalance, that can tip us out of homeostasis. Number three is nutrient deficiencies. Chronic nutrient deficiency leads to chronic overeating. I'm gonna say that again. Chronic nutrient deficiency leads to chronic overeating. We talked a little bit about this already. Our biology's going to drive us to eat certain things. And when we're, for example, deficient in copper, in magnesium, in key amino acids, in lysine, in arginine, whatever the case might be, and we have a craving. And then in comes some Pringles. Once you pop, you can't stop. And although our body is inciting a craving maybe for something salty, and now we're eating those Pringles hand, getting stuck in the canister trying to get the ones at the bottom. Is there a strategy with that? That comes in and now we've got an influx of caloric energy in this ultra processed food form, but we didn't provide our body with the key nutrients that it's looking for.

SHAWN STEVENSON: So guess what's gonna happen? We're going to be hungry again shortly thereafter. And our body's gonna keep driving us, driving cravings to eat more, trying to search for the nutrients that it needs to keep us alive, to regenerate our tissues, to manage our immune system, to manage our digestion, to keep our heart beating. It's kind of important. So that's where these cravings can be triggered from as far as nutrient deficiencies. Now again, we're just touching on these drivers of imbalance and we're gonna cover some science backed solutions for all of them shortly.

SHAWN STEVENSON: So let's look at number four here. Number four on this list of key things that can tip us out of homeostasis. Number four, and this has to do with the environment/social dynamic. Number four is fitting in to the social dynamic. No one wants to feel like an outcast.

SHAWN STEVENSON: And I'm not talking about Andre Benjamin and Big Boy. All right, shout out to Outkast. But no one wants to feel like an outcast or unwanted or a threat to the social dynamic. That stressor often leads to participation in behaviors of the group to fit in. So we think that we're not influenced by peer pressure. We're kids in elementary school, middle school, whatever. And you know, we get a presentation on peer pressure and you know, just say no, whatever the case might be we think that that's just for the kids, but adults truly like, it's not that we're subject to peer pressure, like we're super good at it. It's because we've had years and years and years of experience at adapting to that peer pressure. So for many adults it's like just automatic.

SHAWN STEVENSON: So, but we think that we outgrow this so that we're so hyper aware of it. But again, we evolved having this deep primal drive to make sure that we're fitting into the group because being outcast from the group means death. Alright, humans, we need each other. This is how we evolved. Today, of course we can hide out for a while, but the most introverted among us still needs love and connection. Now, in this social context, this typically involves foods, drinks, drugs, and all sorts of modeling behavior to adapt to the environment that you might find yourself in. Now, the macro culture where there's more things to crave now than ever and more access than any other time in history. And now we're seeing the consumption of food energy rising higher and higher with each generation accordingly. And my question was, could this be changing our brains in some way? In particular, looking at what's regulating our cravings and appetite in the brain. And I came across a study that was published by the Federation of American Societies for Experimental Biology, the FASEB Journal and the scientists detailed how exposure to excessive calorie intake while we're in our mother's womb, can result in permanent changes within the central appetite regulatory network, the ARN, that according to these researchers, likely leads to more weight gain and lowered leptin expression throughout our lives.

SHAWN STEVENSON: So we're at this point, this tipping point with our society where our brains are changing before we even get here and really priming us for higher rates of cravings and leptin resistance. So even when our cells are getting full with energy, that signal trying to shut off those cravings is not getting picked up by our brains. Now again, this is not about judgment, this is not about guilt or any mistakes that we might've made. I grew up in the golden age, well, the beginning of the golden age of ultra processed foods. I'm pretty sure my mom was guzzling Coca-Cola, no, I'm sorry, her beverages choice was Pepsi when I was getting baked in her oven. So I'm a product of that life. And then coming in through the '80s and all of this ultra processed food and this boom and fast food restaurants and access to really cheap, ultra processed foods, it definitely altered my biology. The same thing for all of my family members. There really wasn't a person in my family that didn't have some kind of a chronic disease. Whether this is obesity, heart disease, diabetes, cancer, the list goes on and on, let alone the mental health aspect of this. And we've got to understand that the environment that we are in is literally changing the way that our brains are being constructed.

SHAWN STEVENSON: And this, rather than inciting fear, this should be driving us towards empowerment and understanding like we have a lot of power in this, but if we're just going with the flow of what's happening with society, we're just gonna fall right in line with what's happening. But I know that we can change this. And so again, I'm gonna look at solutions in a moment here, but also I wanted to hit this last one.

SHAWN STEVENSON: So this is number five on these key elements that can tip us out of homeostasis and drive cravings. Number five is that insurgents of ultra processed foods that have altered our biology, that have altered our neurochemistry. Ultra processed foods are literally designed by food scientists to be addictive, to drive excessive cravings and to make you eat them more often. It's about the bottom line.

SHAWN STEVENSON: The company is not in the business of having a one-time customer. Their mandate, their mission is to create lifetime customers, to create repeat customers who keep buying these ultra processed foods, becoming more and more addicted to them over time. And of course, seeing the degeneration of our health, the loss of our sense of self-control. All of these things come packaged up in this explosion in ultra processed food that we're seeing.

SHAWN STEVENSON: Now, am I just saying this? You know me, I don't just say stuff. Alright, I've got the science to back this up, and this was highlighted in a randomized trial that was recently published in the journal Cell Metabolism. They took 20 weight stable participants, 10 men, 10 women, and they were admitted into the Metabolic Clinical Research Unit at the NIH. They're at the NIH hanging out in there. Creepy, Stranger Things lab. And while they're there, they are actually staying once they sign that paper for 28 days, and they're tracking everything. So, this is a ward study, they're not just going out to like, I'll be right back, let me run a Whole Foods. They're eating what they're given.

SHAWN STEVENSON: So, the participants are randomly assigned to either the ultra-processed food group or the whole food-based/minimally processed diet for two weeks. Followed by immediately swapping to the alternate diet that they were not on for the final two weeks. So, everybody got exposed to each diet. But it was random how they were placed. Now, the meals were provided to the test objects containing an equal amount of calories, please hear this. Equal amount of calories, whether it's ultra processed or minimally processed. Equal amount of calories in the meals, equal amount of macro-nutrient ratios in the meals, equal amounts of sugar, Sodium and fiber.

SHAWN STEVENSON: But the key change being, is this naturally derived or ultra processed? When we're even talking about sugar, for example. But one other important point here with this study is that the test subjects were instructed to eat as much as they wanted. Eat as much or as little as you desire from each of these respective meals.

SHAWN STEVENSON: Now, here's what happened after they compiled the data at the end of this 28-day study. At the end of the study, it was found that when participants ate meals of ultra-processed foods, they ended up eating about 500 more calories a day. That adds up quick, 500 more calories per day than they did when they ate meals of whole food/minimally

processed foods. Accordingly, test subjects gained about 2 pounds during the two weeks, eating ultra processed foods, and they also lost two pounds during the two weeks they were eating real foods. This is remarkable. Again, this is a recently published study, really landed out there, like when people are eating ultra processed foods, their biology is driving them to eat more. It's not shutting off those cravings and making you feel that sense of satiety.

SHAWN STEVENSON: So the question is, is dieting really the answer to our problem? Should we just do a random kind of conventional color restricted diet, and try to force ourselves to eat less of those ultra processed foods? Should we go cold turkey? Maybe the cravings would just go away through sheer will power. Well, several studies, including a study that was published in the journal *Appetite* in 2011, indicates that restrictive dieting often leads to increased cravings for those same foods that you're not trying to eat. For those, "off limit foods."

SHAWN STEVENSON: When we haphazardly just diet, if our diet is not constructed of real foods where so many of these different systems are like eat whatever you want, just manage calories in calories out. We've got a point system, we got... Some people can find success, but a lot of people don't, and they're not the ones in the commercials. All right. The quality of those foods do in fact matter, and that's what the majority of previewed clinical data shows. So, when we just try to muscle our way through it, cut calories diet, just don't eat those foods, our cravings go up for those same foods we're not trying to eat.

SHAWN STEVENSON: Because we're not really addressing homeostasis. And also, the question should be, why are these ultra processed foods doing this to us? Part of it has to do with something called vanishing caloric density. Vanishing caloric density. And essentially, this is when you eat these ultra-processed foods that melt in your mouth that vanish very quickly after a couple of crunches of a Pringle, of a Cheeto, they just sort of disappear. And so, your brain and that data that's getting signal to your brain is that, hey, I didn't really eat much because whatever that was just kind of vanished. And this isn't just something that's made up by the way, food scientist Steven Weatherly, describes Cheetos, for example as, "One of the most marvelously constructed foods on the planet in terms of pure pleasure." Its ability to, again, 'melt in your mouth' it's called Vanishing caloric density.

SHAWN STEVENSON: If something melts down quickly, your brain thinks that there's little to no calories in it, you can just keep eating it forever forever. Forever. Alright, so I understand that food scientists are literally designing foods to have that impact on our biology. Like, oh, I didn't really eat that much, let me just keep eating more. And then they have the audacity to put that in their marketing, "I bet you can't eat just one." They're not kidding when they say that. Like truly it is that attractive and addictive and it's playing games with your brain.

SHAWN STEVENSON: Another aspect of these ultra-processed foods is their interaction with something called the bliss point. Snack food companies do a lot of research in order to design foods that literally manipulate your brain and alter your taste buds into a constant state of craving. A state the industry calls the bliss point. To achieve this bliss point, food scientists pay close attention to something called sensory specific satiety.

SHAWN STEVENSON: Sensory specific satiety is the tendency for big, distinct flavors to overwhelm the brain, which responds by depressing your desire to have more of that food. So, through our evolution, if we were to eat a natural food like we happen upon, we'll say some ripe pineapple. We're gonna start eating that Pineapple, but soon because of that flavor sensation because of how it's interacting with our system, that big flavor is going to trigger our brain to and say, "Oh, I've had enough that's... Oh, I'm good." This is why for most people, they don't go, "hey, I'm eating a whole pineapple". But to avoid that impact with ultra processed foods, junk food scientists ... products like Coca-Cola, Doritos, etcetera. They design things that consist of complex formulas that peak our taste buds, just enough to be alluring, but don't have one distinct overriding single flavor that tells the brain to stop eating.

SHAWN STEVENSON: Because Pineapple has some distinct flavors and you can't eat too much of it because your brain and your biology is gonna be like, oh, that particular flavor is gonna start to be less delicious as we're eating successive bites of pineapple. But again, there are some people out there who can eat a lot of pineapple, but you can apply this to chicken, you can apply this to potatoes, you can apply this to a lot of different things. And I'm talking about the whole food version, just eating a potato you're not gonna eat just a potato by itself. Sweet potato yeah, maybe, but just a plain, ordinary rancid potato without all the trimmings, you'll eat a little bit. You'll eat enough, but as you're having your successive bites at first, bite might be tasty, especially if you're hungry, then each bite thereafter is gonna be less and less delicious.

SHAWN STEVENSON: And so again, with the manipulation of the bliss point, food scientists are able to buy pass your body's intelligence telling you to shut it down, I've had enough of this flavor, it doesn't taste as good anymore.

SHAWN STEVENSON: So we're deconstructing where are potentially dangerous or abnormal cravings can come from, and being able to take back control of our biology so that we can make the choices that feel good to us. And so now we're gonna look at solutions. So we address those five big things that can tip us out of homeostasis, now let's talk about what we can do about it.

SHAWN STEVENSON: So number one, with being able to stop cravings for unhealthy foods or to be able to manage our cravings, and take back control of our biology, number one, is

that we must have stress relief in our lives. We have to have stress relief as a regular habit. We are all experiencing abnormal stress today, the very environment that we live in is bringing about stressors that we've never experienced. And so, we've got to put things into place, and one of the most valuable aspects of stress relief and help our bodies to recalibrate, to heal from stress is sleep. And we're also the most sleep-deprived nation in the history of humanity as well.

SHAWN STEVENSON: We've got well over 100 million Americans who are regularly sleep-deprived. And also we've got really sound data now and it's coming from researchers at Stanford, for example, just one night of sleep debt, one night of poor sleep quality can significantly reduce our body's production and sensitivity to leptin. Alright, so this is gonna drive more cravings. And I know if you've ever experienced this, I know that I have. If I ever found myself not getting enough sleep, in particular, I'm thinking about what's conjuring up in my mind when my wife had my youngest son. It was like 2:00 in the morning, have you ever thought about why babies tend to come really late in the evening, a lot of times, by the way. That's a whole other story. But it was like 2:00 or 3:00 in the morning, and I'm over there in the doorway, just like popping some of... My wife had bought some "organic" chocolate covered raisins.

SHAWN STEVENSON: And I don't even like that. I'm not a fan of chocolate covered raisins necessarily, no disrespect, it's no big deal. But I just found myself just popping a few, I'm standing in the doorway just like they're gone before I know it, just like I'm tearing through this bag. Alright. Sleep-deprived. Of course, I'm a little stressed, excited, but also, of course, you got the concern, all the things. But that can drive you to having more cravings and eating things you might not even normally eat. And so, that's a big part of this, is making sure we have stress relief practices.

SHAWN STEVENSON: Whatever that is for you, you know what helps to reduce your stress. Maybe it's just some quiet time on your own, going for a walk, reading a good book. Maybe it's taking some time, jumping into the hot tub or going to a sauna or getting a workout in. Or doing some mobility work, or of course, just taking a nap and shutting things down. Spending time with people that you love, listening to music, give yourself permission to do the thing that helps to shut down stress and create that buffer for you because you need it. Alright, this isn't something that I get that reward later, if I earn it. No, no, no, we can't do that today. We need to put in place to have a daily habit of stress relief, it's essential.

SHAWN STEVENSON: And also again, time back that drive to eat carbs, to the serotonin hit, for example. That's not necessarily a bad thing if we're experiencing more stress and we feel a craving for some more carbohydrates, but the question is, who can you run to? Shout out to escape. Now, who can you run to for those carbs? Are you gonna run to Captain Crunch? He's

not even a real captain, by the way, he's captain. Alright, he's not even a real Captain, he didn't get certified anywhere. Alright, I know he's a captain of addiction. But are you gonna run to him, are you gonna run to some sweet potato to be able to grab some carbohydrates that have a more friendly impact on our biology. That can also help again to it. We're trying to seek homeostasis, and that's what it's really all about.

SHAWN STEVENSON: And my family, especially my wife and my youngest son, they love the sweets. They're sweeties, they love their little treats for sure, and because of that, this is why we designed so many incredible recipes and the new Eat Smarter Family Cookbook that have those sweet treats. There's cashew butter, they're basically these protein balls, cashew butter planets, there are Snicker bites. Don't even get me started on cheese cakes, yes, yes I said it. There's a cheese cake. But it's about increasing the nutrient value of all of these things. And you're gonna find like how did he slide in all these incredible real foods into his respective recipes.

SHAWN STEVENSON: Alright, now I'm not saying cheese cake is a health food, by the way. But what you're going to be able to have access to is a 100 times better than the Cheesecake Factory, no disrespect. We probably got the CEO of Cheesecake Factory listening right now. He's like, "Shawn, you were my guy. Why you got to call me out like that." My bad, I love you, I'll respect. I'm just saying we're doing it better, alright. Real ingredients for these flavoring sensations. But most importantly, before we even get to the desert part in and the sweet treats. But making sure the basis of our diet is real whole foods that have delicious satiating impact on our biology, that's what it's really all about.

SHAWN STEVENSON: So, there's 100 incredible recipes in this book, and also this is the most science-backed cookbook that's ever been designed, and I don't say that lightly. There's over 250 scientific references in this book. So, the education is in a league of its own, but also the execution on that. You don't just learn about the benefits of these, for example, cherries, for example, and you get all these studies on its remarkable impact. Including helping to improve our sleep quality is one of the most dense natural sources of melatonin. But how do I use this cherry, Shawn? How do I use this?

SHAWN STEVENSON: Well, in my heart, healthy shake. Ooh. I'm telling you, number one is delicious, but number two, you're getting an infusion of all these powerful nutrients so that you're eating with a purpose. If you or someone that you care about, is concerned about cardiovascular health, you're gonna see when we talk about that particular super-food. It's gonna have little emojis by it to indicate what is going to target in the human body. And then you'll find later in the recipe section, those same emoji, so if you wanna improve your sleep quality, you're gonna find emojis to indicate that. Heart health, you're gonna see a little heart emoji. If it's your cognitive function, you wanna improve your memory and your focus, you're

gonna see a little brain emoji. Metabolic health, weight loss, you're gonna see that muscle emoji.

SHAWN STEVENSON: Alright. We are doing this based on science, but also honoring the culture. Honoring the culture that we are living in right now, and speaking to the culture that we live in right now, to make this more inviting and inclusive, because that's what it's really all about. And by the way, with stress, there's a big difference between relaxation and restoration. Relaxation, kicking back, scrolling through your social media, watching TV, whatever the case might be, we are living in the time of great entertainment, absolutely. There's so much to consume. But your brain is firing very differently versus when you shut things down and relax when you unplug. So just keep that in mind, there's a difference between relaxation and restoration, we need restoration practices more than ever.

SHAWN STEVENSON: Alright, number two. On a list of five ways to stop cravings for unhealthy foods. Number two is to make sure that we are proactively including the number one blood sugar regulator, protein. Of all the macronutrients protein has the most satiety-inducing factors, by far. One of the most potent factors in reducing cravings for unhealthy foods was noted in the study that we covered earlier, that was published in Cell Metabolism, that ward study done at the NIH (National Institutes of Health). And what people can look past in that study, which I don't. But of course, I don't because I've got the responsibility of delivering it to you.

SHAWN STEVENSON: When eating ultra-processed foods in this study, although the meals provided contain the same macro-nutrient ratios and the ultra-processed foods, and the minimally processed food. Same macronutrients, participants ended up eating significantly more carbs and fat and less protein when eating the ultra-processed foods. It's like somehow their mind and their biology was pushing protein to the side, along with his satiety-inducing effects, in order to eat more ultra-processed foods.

SHAWN STEVENSON: Alright, it was just like, whatever has protein in this, I'm not as interested, I wanna eat more of the carby stuff. I wanna eat more of the fatty stuff. Not to villainize either of those, but it's just interesting how, even though they were macro nutrient identical, people were pushing away the protein in order to eat more. Protein solves a lot of unruly cravings, partly because of the satiety factors. Peptide, why, why as we mentioned, GLP-1 left in and others are more activated with protein-dense foods than anything else. Researchers at St. Louis University, published a study in the International Journal of Obesity, and it looked at what happens with fat loss when you eat a high carbohydrate breakfast, which was a bagel, versus a high protein/fat breakfast, which was eggs. With the calorie count of the meals being the same.

SHAWN STEVENSON: And again, this is real whole food form, by the way, okay. So, we are not talking about ultra process version of protein, we're talking about eggs. The researchers had the participants decrease their caloric intake by 1000 calories a day in the study, but had people use different macro-nutrient ratios for their first meal of the day only. Here's what they found after eight weeks, study participants, who had the more protein dominant breakfast, lost 61% more in their body mass index, 65% greater weight loss, 34% greater reduction in weight waist circumference and a 16% greater reduction in body fat percentage. Same calories, different macronutrients for their first meal of the day only. Something special about nature's protein-dense foods.

SHAWN STEVENSON: Alright, now we're gonna move on to number five. And by the way, again, proactively make sure you're getting in enough protein at each meal, and it's going to help with that satiety. You're going to decrease the cravings for food later. It's very difficult, and it's also the most kind of thermogenic of all other macronutrients. There's a lot of energy required in order to process those proteins. So, use at your advantage, it depends on you, but we wanna target at least 20 grams of protein per meal. For many people it's gonna be significantly more than that. But just make sure that you're getting in that protein for those satiety factors.

SHAWN STEVENSON: Number three, in our list of five ways to stop craving unhealthy foods. Number three, ensure your macro-nutrient supplies are filled. Again, chronic nutrient deficiency leads to chronic overeating, this is not gonna come in the form of a 'multivitamin'. That synthetic form of those nutrients is not the same thing as what comes in real foods and real food concentrates. Now, if getting in your variety of whole foods that have those macro nutrient basis covered is an issue, and even if you just wanna make sure that your supplies are topped off so your body can do all the cool stuff that it does, in helping to regulate your satiety. I'm a huge fan of Green Super Food concentrates. But my family, even today, when I was leaving, my oldest son was getting his Organifi green juice.

SHAWN STEVENSON: And this is because one of the primary ingredients... Well, a couple of the primary ingredients, spirulina, Chlorella are some of the most dense sources of chlorophyll, Chlorella, ever seen. A study published in the purview journal, Appetite found that chlorophyll can assist in weight loss and reduce the urge to eat hyper-palatable ultra-processed foods. There's something special, it's like nature has this antidote to our ultra-processed food consumption in the form of chlorophyll. And not only that Chlorella, which is again one of those super dense nutrients found in Organifi green juice, a double-blind placebo-controlled study and Clinical and Experimental hypertension found that Chlorella was able to normalize blood pressure of test subjects with hypertension.

SHAWN STEVENSON: Gold standard of clinical testing. There's something about this food that helps to bring homeostasis to the body. Head over and check them out is organifi.com/model, and you're gonna get 20% off their incredible green juice blend all organic, cold processed super food concentrate. Go to organifi.com/model for 20% off, store wide. Huge, huge fan of Organifi's green juice.

SHAWN STEVENSON: Moving on number four on our list of five ways to stop cravings for unhealthy foods. Number four is really taking an intentional approach to our social interactions. Being more intentional, being more empowered. Because it's another big takeaway from today, cravings are cultural. Cravings are cultural. When it comes to food, we crave what we've been exposed to. A person living near a rice paddy in Thailand who doesn't have a television, who's never seen a convenience store, they've never seen a 7-Eleven or a Kwik-E-Mart that has ultra processed foods on their store shelves. A person who's never been exposed to that stuff is very unlikely to suddenly crave hot Cheetos.

SHAWN STEVENSON: They're very unlikely to suddenly crave like, "Yeah, you know what, I got a taste for some Funyuns. I don't know where... I don't know what Funyuns are, but I got a taste for". That is not how it works. And in the context of food, we don't crave what we don't know about. We crave what we've been exposed to within our culture. As strange as it may sound, someone may have an intense craving to eat a deep fried tarantula in Cambodia. This is a real thing. Alright, this is out here. They're eating tarantulas in Cambodia and other places as well. It's a delicacy. You love it. It might seem strange to us, but another person in Iceland, for example, might have a craving for fermented shark, while another person in Kenya might crave some nyama choma, some barbecue goat meat.

SHAWN STEVENSON: It just depends on what you've been exposed to in your culture. And this is why being aware of our culture and our accessibility to ultra-processed food is so important. Because the culture that we exist in the macro culture is inundating us with desire to eat these ultra-processed foods. Whereas we can take control of our micro culture in our household, and that's what the Eat Smarter Family Cookbook is really all about at its core. The heart of that book is about creating a culture that makes health easy for your family, creating a culture that makes connection easy for your family. And if you have to do so, please pop over to Amazon, Barnes and Noble, your favorite retailer, and pre-order this cookbook while you still can, to be one of the first to get it, and also get hooked up with all these incredible bonuses that we have in store for you. Including free admission to the 2023 Health and Fitness Family Summit.

SHAWN STEVENSON: You get free access is about a \$300 ticket for the event, you get it for free. This virtual event you can attend from anywhere in the world, plus you're gonna get entered into the 25K Health and Fitness give away. So, you're gonna get access to potentially

winning \$500 in fitness equipment from Onnit, \$500 in groceries from Thrive Market and the list goes on and on. That's at eatsmartercookbook.com to get hooked up with those bonuses.

SHAWN STEVENSON: So, invest in yourself, invest in your family, invest in being a part of this mission. Grab your copy of the Eat Smarter Family Cookbook, ASAP. And now moving on to number five on our list of the five ways to stop cravings for unhealthy foods. Number five is to shift the ratio of ultra-processed foods in your diet and take back your palette. We're not talking about eliminating ultra processed foods, you live in the world, you're probably going to bump into a honey bun or two. Alright, Cinnabon they be on some smells alright, but there's all kinds of stuff that out there that we're gonna be exposed to. It's not about completely swearing off those things, it's making sure that the majority of my diet is real food. It's made of real food, that ensures this nutrigenomics epigenomics controllers are making sure, that the out-spring or the out-picturing of my health is radiant, is sustainable, is healthy. And the same thing holds true for our children, because we cannot have free choice when our biology and our psychology is being manipulated.

SHAWN STEVENSON: You might think that you're choosing what you're eating, but that's just a perception. We live in a culture that is inundating us at every turn. You don't see commercials for real food. Broccoli doesn't have a damn commercial. You see commercials for cereal, for beer, for every fast food that you can name. You don't see commercials for real food. You don't see that out here walking the streets. It's all advertisements everywhere at every turn for ultra-processed foods. We're swimming in it, and so we've got to take back control of our minds and our palates by simply shifting the ratio. Make sure that the majority of your diet is made of real food. Whereas today, according to the BMJ, 60% of the average adult in America's diet is now made of ultra-processed food, and the Eat Smarter Family Cookbook is providing the first book, publishing this new study that was cited in the journal JAMA, finding that almost 70% of the average American child's diet is now made of ultra-processed foods.

SHAWN STEVENSON: Enough is enough, we have to change this. We have to shift that ratio, it's 70 to 30 now, what if we switch that to 30% ultra-processed, 70% real food. What kind of health revolution can we create in our families, in our children? So, I highly encourage you to grab your copy of The Eat Smarter Family Cookbook and of course share this episode out with the people that you care about. Get this information into more people's hands so they could take back control of their own biology so they can understand their cravings and really the science behind all of this. Because it's just going to provide you with something else in your superhero utility belt that can help you to make choices that lead to healthier outcomes.

SHAWN STEVENSON: I appreciate you so much for tuning in to the show today, we've got some epic masterclasses 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 the modelhealthshow.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.