

THE MODEL HEALTH SHOW

EPISODE 482

**How Fat Burning Actually
Works & Nutrition That
Impacts The Process**

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SHAWN STEVENSON: Welcome to The Model Health Show. This is fitness and nutrition expert, Shawn Stevenson, and I'm so grateful for you tuning in with me today. This episode, we're diving into how food impacts our emotional stability, our relationships and our community at large. And we're going to kick things off with a fascinating study from researchers at the Ohio State University. They wanted to find out how abnormal blood sugar can impact how we relate to one another, in particular, in intimate relationships. So what they did was, they collected a group of couples and they gave them blood glucose monitors, and they also gave them Voodoo dolls... Alright. Now, this is all going to tie together in a moment. So what they wanted to find out was, how do people respond when their blood sugar crashed. And why does this matter? Well, first and foremost, here in our culture today, blood sugar abnormalities are the norm. So abnormal blood sugar is normal. And to kind of highlight that point, if we look at some of the data that we have right now, about 130 million Americans are either type 2 diabetic or pre-diabetic right now. So that's chronic abnormal blood sugar.

But this can happen to any and all of us at any time, if we interact with foods that really make our blood sugar go a little bit bonkers. And so for example, what most folks experience when ingesting, for example, one of my favorites growing up, which was Pop-Tarts. Alright... Pop-Tarts with the sprinkles on top. When those came out, that was my jam. But eating a processed food like that, we get an imminent blood sugar spike. And we might have a little bit of a buzz, a little bit of jolt of energy. But inherently, we also have the impending blood sugar crash that comes along with it because the body tends to over-compensate when working to normalize blood sugar. Your body takes blood sugar very, very seriously.

This is a very primitive primal programming because our blood sugar needs to be stable to keep us aware in our environment if we need to fight or flee. So we're talking about very primitive programming that we still have very much alive and well within us today. But we don't kind of exist in those conditions where we might need to get up and run from a bear or a saber-toothed tiger, but that programming is still there. Your body wants to keep blood sugar on point, so that it can make sure to move your major muscles and also keep your brain as sharp as possible if you need to avoid danger. So when your blood sugar spikes, insulin and other hormones kick into hyperactive gear to clean up your blood stream and to get all that sugar into the cells and out of the blood stream where it can cause a lot of damage.

Having a lot of abnormal glucose in the blood... A good similarity or a good analogy is kind of like having little shards of glass roaming freely and, in essence, tearing things up. This is why, in particular, smaller capillaries tend to get damaged pretty easily once we get into a place of insulin resistance. Like the condition we see with type 2 diabetes, where folks start to lose their

vision or having to have toes amputated and the like. So having high blood sugar can be very dangerous. So again, your body kicks into hyper-gear to clean up the blood stream. Now, here's the issue, it over-compensates and now the blood sugar crash takes place. And that's all good. Your body has the mechanisms to get that back to normal as well. And it's really, really good at this piece. What it does to get your blood sugar back to normal is it releases what are known as catecholamines, also known as stress hormones. So things like adrenaline and cortisol to get it back to baseline. No harm, no foul, or is it? Because here's the side effect of these catecholamines, of these stress hormones... It can make us a little bit irritable, maybe even a lot irritable.

And so in this study, here's what the researchers found... After controlling for baseline levels of relationship satisfaction... So whether the relationship was a loving, passionate relationship or it was on the rocks. Regardless of those parameters, whenever the test participants had abnormal blood sugar crashes, they were far more likely to be aggressive towards their partner, less patient, less likely to perspective-take and far less likely to resolve their relationship conflicts. And at the end of the day, what's the outcome? What's the result we're looking for? And the result is not good. At the end of the day, not being able to solve the conflict, that's the ultimate price that we're paying. And here's the crazy part that I don't often talk about with this study, is that one of the things that they used... The researchers used to monitor how aggressive they felt towards their partner, was they gave the test participants little dolls. Alright... Little sort of like Voodoo dolls in a sense, that they were then instructed to put a certain number of pins into the doll to demonstrate how aggressive or angry they felt towards their partner.

And sure enough, after monitoring their blood sugar and monitoring their responses towards how they felt about their partner, there was a direct connection there. The more abnormal blood sugar, the lower the blood sugar crashes that take place... Again, regular behavior in our culture... The more aggressive people felt towards their partners. Now, just imagine how that out-pictures in the real world all the time, and we have no idea that this is happening. We think we're being logical and rational when we're having these heated conversations, "heated conversations with our loved one." And a lot of times, we're not even showing up as our normal self... Our "normal self".

And what are some of the things that are going on here? Well, additional research... And this was published in the Journal of Frontiers in Endocrinology, revealed that dramatic changes in blood sugar shifting from high blood sugar spike to an impending crash can increase anxiety and trigger hyperactivity in the amygdala. So number one, going from that blood sugar spike to a blood sugar crash triggers increased anxiety and also triggers increased hyperactivity in the amygdala. Alright, we call this an amygdala hijack. Alright, the amygdala is an incredibly important part of the human brain. And we sort of evolved multiple brains on top of more kind

of original brains. We have the very evolved prefrontal cortex, it really makes us human, who we are. But the amygdala is part of our primal brain, our primal programming. And it's really more regarded and functioning with things around survival. Specifically, survival of self.

Alright. It's the much more reactive part of the brain, but it's really about protection. And it also... It plays a major role in being influenced and modulated by stress. So that part of the brain becomes hyperactive when we have a blood sugar spike and the impending crash. Alright. Now, in addition to that, some of the latest research that we have... Here's some other issues when we have hyperactivity in the amygdala. This has been found to directly reduce memory recall. So, when we have an amygdala hijack take place, this is when our far more forgetful cell jumps into the driver's seat. It's like Grand Theft Auto and it jumps in the driver's seat, and it doesn't really know where it's going. Alright? So that's one thing that happens. Also, hyperactivity in the amygdala has been found to lower inhibitory control. So, what this means is the ability to delay or to even prevent acting on impulses... Again, the amygdala is about reaction, it's about survival of self. It's about now... Right now... Nothing else matters we got to make it. Today is the last day. We got to live to fight another one, potentially.

This is kind of the just that the amygdala is operating from. So, what happens when we have that lowered inhibitory control, when we have this blood sugar crash, for example. This means that our ability to have forethought and to think, "Okay, if I do this thing or say this thing, what's the outcome going to be?" And decide whether or not I want that outcome to happen. And choose not to do the thing. So, in the context of food, for example, a lot of times when we reach for lower quality food is when we have this blood sugar crash. And this is encouraged in our culture. Because one of the things that a lot of the data actually shows is that when people have a blood sugar crash, advising them to have high carbohydrate foods... Have a little bit of sugar to bring that blood sugar back up. But then it's going to happen again. But that's what we're kind of trained to do. So, reaching... So that reduced inhibitory control, reaching for things we might not normally reach for, saying things we might not normally say. And also, they found that hyperactivity in the amygdala has been found to just increase overall psychological distress.

So, you're in a heightened state of stress and now you're in this conversation, and it's just like adding fuel to the fire. We're already having psychological distress. We feel that things are much worse than they might be a lot of times. And then we out-picture that on the person in front of us. Even if it's somebody that we love. So, I wanted to kick things off and share that bit of data because we're going to dive so much deeper. And this is really a master class on understanding how our food affects our emotional output. How our food affects our emotional agility, our emotional intelligence. And also, how food directly impacts our relationships. Our relationships, in a family context, our relationships outside of our doors out in the community, and even our relationships with ourselves. But stretching even wider how

our food affects the community at large. And also, we're going to dive into multiple real world, tangible, proven solutions for all these things.

What's really fascinating about this is that this is well noted in the data now. We've got tons and tons of peer-reviewed evidence on how food affects our emotional stability. And we even have these cute little terms in popular culture, like hangry, for example... A combination of hungry and angry. We know that it happens. We've got little commercials about it. But we're not really addressing how real it is. Because science has taken this very seriously. Because that aggressive behavior could lead to making decisions that are not advantageous to us, our partners or the people out in the community around us. How many decisions are we making? How are we interacting with people with our physiology and our biology really being at the helm and being disrupted and causing us to react in a certain way? So with this concept of hangry, being in the popular culture, I really like to approach that with a framework and understand first and foremost, that we are all subject to this. We are all subject to this happening. And I like to give the analogy... And this is what I talk about in my book, Eat Smarter. I give this framework to kind of identify your hangry representative.

And what I use is an analogy to identify your hangry monster inside. So, I'm going to give some details on each of these and try and identify which one you might fit into a little bit more. So, what kind of hangry monster do you usually turn into? First of all, there's the Dracula type. The Dracula type has the cravings come out in the night. And for the Dracula type, they're very likely to say seductive things to get the food and drinks that they want. And they might even resort to biting if invoked. So that's the Dracula type... Cravings creep in during the night time. They might even say seductive things to get what they want, and they might bite you if you're not careful. So that's one type. Now, are you more of the invisible man or invisible woman type? This hangry personality type, when they're hangry, they just want to hide away, they don't want to be seen, they don't want to be bothered. Periodt. With a, T on it... Alright. Periodt. That's the invisible man, invisible woman. When they're hangry, don't want to be seen, don't want to even be bothered... Leave me alone.

Next up is the werewolf type. You're totally normal most of the time, but every so often when hanger strikes, you can run off the rails, snap and even bark at people. Are you more of the werewolf type when you get hangry? The Frankenstein type. When you're hangry, you find yourself mindlessly pulled to crappy food. You're not trying to hurt anybody, you just want to eat and be left alone by the townspeople, but you'll step on someone if they get in your way. That's the Frankenstein type. And finally, we've got the mummy hangry type. When the mummy's hungry, they can get really unraveled. They don't hold it together very well at all. And they get a dusty attitude and they're not very fun to be around. So, one of these frameworks, one of these hangry types, can you identify with one more than the other? I'll tell you right out of the gate, my wife is more of the Dracula type, and I am more of the werewolf

type. And if you've seen any of these movies recently, vampires and werewolves don't really get along that well.

Alright, shout out to Underworld. Now... Now being that my wife is more of a Dracula type, more of the vampire type, she will in fact say seductive things, especially in the nighttime, to get the snacks that she wants. When she's in that vibe. She basically proposes me that if I want to get these cakes, I'm going to have to get her some cake. Some chocolate cake. And in one way or another, it comes out and that... It's my task. You think I'm going to turn down finding a way to get that cake? And by the way, if I don't... If I bring up some kind of argument or try to curve that proposal, I might get bit. It might not be a physical bite, but it might be a bite of coldness... The good old cold shoulder that might come about. So, we can all fall into these things. But when she's in balance typically, she's not proposing throwing out seductive words and looks to, to get snacks. But any of us again, can fall victim to our hangry representative.

Me being more the werewolf type, when I'm hangry, if the hanger strikes... Dog... I'm barking like a dog. I could turn into... I could turn into that guy, shout out to DMX. So, identify your hangry representative. And most importantly, the reason I wanted to bring this, bring a little color to it, bring a little fun to it, is that this is happening all the time for us. And if we cannot acknowledge that we do in fact change when we are hangry... When our blood sugar is abnormal, when we're nutrient deficient... If we don't really understand that we can continuously set ourselves up for a lifetime of conflict oftentimes with people, we love and not even know why it's happening. Because truly our biology trumps our rationality over and over and over again, and we don't even realize that it's happening. Alright, so this is starting to create a little bit more empowerment by becoming aware of it.

So, start to have this practice of checking in with yourself when in conflict. When you feel like something is happening and you're just in your feelings and there's stress and intensity going on... This takes some work, what I'm about to share, but it is possible and it's very... It's not just possible, it's probable and tangible by putting it into practice. And so, one of those things whenever we happen to have a conflict, my wife and I, who... She's my best friend I love her so much. But sometimes, we can have issues. And oftentimes, they're rooted in things that are just irrational, truly. The things that couples argue about are some of the craziest silliest things. And if you can catch it in the moment and see how silly they often are... That's another layer but what I do is I run through a checklist in my mind. Sometimes I get to it faster than others. But I've gotten to a place where if there is a conflict, I tune in with myself and I ask, "Am I tired? Am I... Did I sleep well last night? Am I really stressed? Am I hungry? Am I hangry right now? Is that why I'm responding this way?" Or is this why I feel so sensitive or feel attacked, or whatever the case might be. Checking in with myself... Doing this mental checklist.

Am I tired? Am I excessively stressed? Am I sleep-deprived? Have I not really been moving and I don't really have some... A healthy balance of endorphins? All of these things I check in with myself. Now, here's the other part, but this comes with the caveat and some grace. Do that for your partner as well. This is hard. In the moment when things are inflamed, when things might be intense, and you just want to be right and you want them to be wrong, to have a little bit of grace and understanding and empathy, and do a checklist for them as well. Just think about it... Did they get a good night of sleep? Are they excessively stressed? Have they been running around and doing a lot of things and they just feel a little bit discombobulated? And maybe they've been out-picturing that on you or creating a conflict... Co-creating a conflict. Checking in for them as well, and doing that checklist, so you can bring a little bit more compassion into it. And even with that... If that happens... If the fire is already burning, it might be just a situation that is not just going to put the fire out, but it might dim it down a little bit enough so that you can bring a little bit more patience to the picture. At the end of the day, these are all character traits that any great relationship is built on.

Now, all of this has been in the context of our loving relationship of relationship with our significant other. And then this can stretch out into our nuclear family as well. The people in our household, family members. But in reality, this stretches out to the community at large. How we're showing up and interacting with other people. And what we're going to dive into now, this research should be absolutely jaw-dropping for you. If you really, really understand the implications of what I'm about to share, this is a necessity and an absolute game changer for us to address this. Being that our nutrition has such a huge impact on our biological function, and being that our nutrition literally makes up... It is the raw building blocks to make up our hormones, our neurotransmitters, our neuropeptides, our organs, our cells, our heart, everything running through our veins, the blood itself, our internal organs, the list goes on and on. We are made from food, and our body is always striving to get these raw materials and the base nutrients that it needs to regenerate us. It's a constant evolving practice of the body to drive us to bring these things in.

Just so that we have not just normal function, baseline mediocre function, but really to operate in optimal level. But what happens when we're deficient in these things, understanding that these nutrients play a major role in the function of our brain, for example? We already highlighted data from the journal *Frontiers in Endocrinology* that revealed that changes in blood sugar, just that one simple principle, creates hyperactivity in the amygdala. And hyperactivity in the amygdala has been found to directly reduce memory recall, lower inhibitory control, which is the ability to delay or prevent acting on impulses, and also increases psychological distress. We already know this to be the case. And one of the other drivers of this hyperactivity in the amygdala and the deceleration of activity in the prefrontal cortex is nutrient deficiencies. And now what the research indicates is that these nutrient deficiencies lead directly to changes in our behavior and also changes in our tendency towards violence.

Researchers at Oxford University conducted a randomized double-blind placebo-controlled study to find out how nutrient deficiencies would affect a population of prison inmates. Now, within this population, we already have stereotypes on what that looks like, a tendency towards aggressive behavior, a tendency towards breaking laws, and a tendency towards violence.

Now, what's advantageous about a study like this, although the circumstances are unfortunate, is that it's a ward study. So, what that means is, it's a controlled environment, and so the test subjects aren't just running out and getting some Jack in the Box or running out and going to Whole Foods and changing up the diet format, and what was implemented in the study. And what the researchers wanted to do was find out how simply giving a group of prison inmates improved nutrition just through the form of increased amounts of vitamins and minerals in supplement form and also Omega-3 fatty acids, just to see how that would stack up versus prison inmates who were given a placebo. So, they gave one group increased nutrition, vitamins, minerals, essential fatty acids, and another group received a placebo to monitor the effects on their behavior over a multi-month study, and here's what they found. After compiling all of the data, the researchers found that the prison inmates who received improved nutrition had a 30% drop in behavioral offenses simply from that one implement, that one action of improving their nutrition. But what was especially eye-opening was that the prison inmates who received improved nutrition had a 37% drop in violent offenses, almost a 40% drop in violence simply by improving their nutrition.

Other researchers, other scientists saw this data and didn't believe it, they didn't believe this was possible. There's so many programs of rehabilitation and counseling and all these things that didn't compare remotely to the effects of improving the nutrition they were receiving. It didn't make any sense. So, another group of scientists set out to redo the study themselves with another group of prison inmates, and this study was published in the journal *Aggressive Behavior*. And to the researchers' surprise, they got almost the exact same outcome with the number of violent incidences, in the group receiving additional nutritional support, drop by a startling 34%.

How is this possible? How is something like this possible? They did other analyses to find out, was there a change in character, were there any other kinds of things that they can use to kind of explain this? But it was simply a matter of bringing in additional nourishment. And where this is really rooted, how something like this can happen, is really rooted in the human brain. And we touched on this a little bit earlier, but nutrient deficiencies lead to hyperactivity in the more primal parts of the brain, namely the amygdala, and significantly reduced activity in the prefrontal cortex. The prefrontal cortex is the part of our brain responsible for decision-making, for social control, for distinguishing between right and wrong, for having forethought

and being able to map it out, "If I take this action, this thing is going to happen, let me not choose that thing."

It's like a governing force over that impulse control. It's the adult in the room being able to manage our behavior and our decisions. And when we're deprived on key nutrients, that part of the brain is literally starving. And this is not being accounted for, and so much of what's going on in our world today where we see these rampant reports of violence, and we see so much polarization and people being pulled apart more than ever in recent history. And such a lack of communication, a lack of perspective taking, a lack of being able to put yourself in someone's shoes and to see from their perspective, a lack of healthy conversation. When at odds, we see so little of that today when we need it more than ever, and we wonder why. Like, why does this happen? Why are people not listening to each other?

We are the sickest nation in the history of the world, here in the United States, we're the sickest nation in the history of the world, self-inflicted. I'm going to keep saying these statistics until it's a part of our matrix, our cellular matrix, so we know how serious it is, and we can do something about it. 242 million Americans are obese, are overweight right now, and the number just keeps growing. The most recent data show, and this was about two years ago, 43% of US citizens are clinically obese, and we were on track to hit 50% within 10 years. That number, that 10-year span has been shortened dramatically thanks to the shutdowns, thanks to the change in our lifestyle that we went from a sedentary culture to an even more sedentary culture. A processed food-consuming culture, to an even more processed food-consuming culture. A sleep-deprived culture, to an even more sleep deprived culture. A stress culture to an even more stress culture.

All of these have taken place in the blink of an eye. And if we don't do something about it, that 50% is just going to happen with the next couple of years, and then we're just going to surpass that. But this does not have to be our fate, but we have to acknowledge that this is happening. 130 million Americans, as I mentioned at the top of the show, are right now diabetic, type 2 diabetic or pre-diabetic. Right now, about 60% of our citizens have some degree of heart disease already. Hypertension in children is skyrocketing, childhood obesity skyrocketing, childhood ADHD skyrocketing. What was once reserved to adult-onset diabetes, now, the rates of diabetes type 2 lifestyle-related, diet-related diabetes in children has skyrocketed. Every decade it's got worse and worse and worse. These are multiple, multiple epidemics all happening simultaneously, and you don't hear anything about them, anything about solutions for them, but they're existing, nonetheless.

115 million Americans are regularly sleep deprived. We have a culture of sickness. And it promotes sickness, and it treats symptoms, it doesn't address the underlying cause of the symptoms. We have a governmental system, as we'll talk a little bit more about, that invest in

processed food companies. And we have lack of government regulation in what's being marketed to our children through television, for example. One of the recent studies published in the journal Health Communication, found that children who are more exposed to advertisements from processed food companies consume about 45% more food than the children who are not as exposed to these advertisements. 45% more food, and we tend to unconsciously relent to accept this as business as usual, and it's not. It's not normal, it's not okay. And we have to put an end to it.

And how do we do that? We start to really understand this data and create a culture of health. We have a culture of disease that encourages and supports disease, all the while our children are just getting inundated and programmed right along with all the processed food commercials, we've got drug commercials as well, with these companies just phishing and siphoning our communities to develop lifelong customers. It's the goal. It's how they make money. These are billion-dollar entities, why on earth would they want you to not have high blood pressure? Why? Why on earth would they want you to not eat their Hot Pockets? That would be crazy. And you do one, and they end up doing the other, and just gets in that vicious circle, but we can break it, we can break it, I believe it.

So, in analyzing some of this data looking at how our nutrition affects our proclivity towards violence, how is that out-picturing itself in our world today? This is a big reason why I wrote Eat Smarter. Of course, to dive into the very best data that we have on how food controls our metabolism, absolutely. How food controls our cognitive performance, absolutely, but also how food impacts our ability to relate to one another, especially in a context of all the tension that our world is experiencing right now, what can we do about this? We've got to get our citizens healthier. Now, another report, and this was published in the American Journal of Clinical Nutrition, and in the journal Case Reports in Psychiatry, from that malnutrition and the consumption of high glycemic foods are at a notable risk for depression, anxiety, and abnormal mental and emotional states.

Now we out-picture this into our environment, into places of public service, into our behavior in the community, and you see how these interactions when we're not well, can start to take place. And we have citizens who might be at odds with each other and inability... Like, a little... A road rage, where somebody cuts you, and it turns into the most dramatic, life-threatening, life important thing in your life, and it just consumes you, right? And it doesn't mean that the person is right for whatever it is that they did, but for it to take us over and to forget that that's another person who they might be in some kind of trouble, they might... Of course, they might just be a bit of a skadoosh, alright.

But even with that, maybe somebody hurt them, maybe they've been through stuff and we don't know, but it's still another person, and we lose that. It just kind of jumps right out of our

psyche that that's even a possibility. It's just you versus them in an all-out battle for hand gestures, alright? Or whatever can come from that. So, when we go out into the world and really, again, not understanding that we're not showing up as our best selves, and being where I'm from and coming up in the conditions that I came up in, where being on food stamps, government assistance, the WIC program, getting food from food shelters, these food pantries, these charities, and things of that nature, and whenever we would happen upon a little bit of money, we're not going to spend that on some organic rotisserie and some broccoli, and... That's expensive.

When you can go to a fast-food menu and you can feed a family of five and still have money left over, whereas you can't even afford to do the other things. So, I'm just inundated with poor quality food, and most of my family members are clinically obese, experiencing a myriad of chronic diseases ranging from diabetes, to heart disease, to arthritis, to autoimmune conditions. The list goes on and on. It's just the norm. Like chronic asthma, I was hospitalized every year, I'd end up in the hospital. And... I mean, it was kind of cool because they had Nintendo, we didn't have one yet. But it was very abnormal, I just accepted it as normal. I had my little inhalers, the...

I had my...

I had the white one, I had a gray one, and then I got a pink one, and the same thing, my little brother and my little sister. My little brother had really bad asthma, he had asthma worse than me. And my little sister had terrible eczema. Now, let me make this clear, when I really lost control of my health and was diagnosed with this really devastating arthritic condition, this advanced aging disease, my spine was deteriorating, degenerative disc disease, incredibly low bone density, all these things broke me down physically and mentally. But when I did what was necessary, if you know my story, to turn my health around and to really transform my reality. My body didn't just change, my mind changed as well.

But even when I got healthier as far as my physical structure, the regeneration of my spine, the rehydration of my disc, and my two herniated discs getting back into position, all the wonderful things that took place by changing the way that I was eating, my nutrition, I made some great strides, amazing. But I still had these lagging allergies, right? I had a history of asthma, and seasonally, I'd get these little things. And by dialing things and even more with nutrition, it's been going on two decades now, like a whole other lifetime. It really does seem like it was a lifetime ago that I've had any allergy/asthma symptoms. It just seems like, I can't believe that that was my life. Now, there's degrees of this for everybody, and I just want to

open the door of possibility. Of course, in looking at how our nutrition affects our expression of chronic illnesses, I do want to touch on that.

But my point is, growing up in these conditions where disease is the norm, violence is the norm, aggressive behavior is the norm. In my household, I saw so much violence, I saw a lot of blood on the floor. I wake up to it, I go to bed to it every day, just seeing it. I know my mother loved me, she loved us, but literally 75% of the time, it's just yelling in the house, right? And for me, I was just thinking in terms of like, "What am I going to do today to get punished?" Whether it's getting beat or whether it's something else, it was just the nature of my reality. Now there's a degree there in a perception of discipline, of course, but the level at which I saw the fighting, the violence, my mother being in situations where, again, I wake up and she's got a black eye, and having other family members get knocked out, but also us having that is a thread that that's normal, how we would abuse each other as kids and also how we took that out on the road with us.

I mean, I got kicked out of high school for an entire year, for fighting, my entire junior year. I graduated in three years of high school, not my choice. It didn't matter, I had the great GPA, I was in student advisory, I was in the first implementation in our district of being able to take college credits, there's a program called INROADS, scholar athlete, I had all the things, everything was going good, but I also had this aggressive tendency. If there's a problem, this is how we solve it. I tried to fight against it. I did. Many times, I was able to manage, but this is just how I was programmed, and it wasn't even... It's not just the conscious decision, it's also physiologically being driven to it because I'm not in a good physical place, right?

So, I can go on and on, all the suspensions, all the... I wouldn't... This is not even who I am. Looking back on this, I'm in the club, throwing hands. Alright, I'm like, you wonder why the club got shut down, I'm sorry. I'm sorry if you was there that day. Alright. But what could be in a person's biology, in their psychology, that would make that the first response? And being... And even still, I really felt that I was a good person then. I didn't want those things to happen, I just felt that I had to. Now, there's psychological components, of course, but again, when I got physically healthier, those ideas of wanting to fight just dwindled away, especially hurting another person. Now, my fight is for us, my fight is for humanity, my fight is for health. I can channel that aggression into something positive, consciously. That's what's possible.

So, when I'm talking about this, this isn't from some abstract, "I think that this is true," kind of place. The majority of my years on planet earth, I lived in Ferguson, Missouri, Ferguson-Florissant, Missouri, which now, most people know of this because of the incidents with the interactions with police officers and the community, just kind of being highlighted. Now, one of the guests that I've had on the show, a Chicago City police officer, Jemal King, and incredibly talented, loving, powerful individual, who spent over 20 years in the police department, and

now he's really working to help to uplift communities, and to teach people about finance and success principles, because he's also very successful, he's probably the wealthiest police officer as well, but not on the Training Day tip. Alright, not on that tip. Not on the Denzel tip, but just on an ethical... Really building a foundation, learning about health.

I mean, he's also remarkably healthy, but being able to have friends who are in both spheres of folks who experience oppression and folks who are deemed to be the oppressors and seeing that there's a heightened tension that very easily takes place when we're not in a good space. Because the truth is this, and one of the biggest takeaways, it's so simple, people don't do well because they don't feel well, and hurt people hurt people. So, we can talk about the psychological trauma, but we can also talk about the damage to our bodies that gets done by the way that we live our lives. And if we are talking about folks who are physically and mentally unwell, matching off with other folks who are physically and mentally unwell, what do you think is going to happen? The probability for violence to take place is palpable. It's a ticking time bomb, and this isn't getting talked about, and it is a massive component of the story.

Our systems are not set up in a way that it takes care of our citizens and takes care of the people and trusted with taking care of our citizens. If we look at the medical profession, for example... I've got so many amazing friends and colleagues who've done the whole thing... The medical school, the clinicals, all those things... And me working at a university for many years, these people were my clients. And they would be tore up. Tore up from the floor up, coming in. Medical students, nurses and they're... They are messed up. Gaining weight, they can't lose, not sleeping, excessively stressed, not having time to exercise. That's why they would try to pay me to try to hold them accountable. And it was just a big mess because the system not only indoctrinates our healthcare professionals to be unhealthy, it encourages it. It's like a badge of honor if you sleep deprive yourself, if you're excessively stressed, if you run yourself to the ground. This is why there's such a high rate of illness within the medical profession that's not talked about.

And nurses, for example, higher rates of cancer than the general population... What? That shouldn't even be a thing. With physicians and nurses, some of the highest rates of psychological stress and depression of any vocation. Physicians have the highest rate of substance abuse that you're going to find with those prescription drugs having access to and also other abuse, as well, with alcohol and the like. But these things are not discussed. And so I want to bring these things to the light to have these conversations, to spark thinking, and to spark we need to have improved systems to take care of the people who are taking care of everyone else.

We shouldn't have a system that encourages people to be mentally and physically damaged coming into it. And then we look at the very broken systems that have been created that are

governing the actions, the health of our first responders, firefighters, police officers, EMTs. It is so destructive it's really hard to describe. If you look at police officers, most folks don't know this... We're talking top two in suicides of all vocations. Top three, the top two. And it's as if it doesn't exist. And we look at, yes, stress is a component, but not understanding one of the greatest physiological stresses, when we look at the rate of health we see at the top of most fields, most vocations we see police officers with high rates of type 2 diabetes. Some of the highest rates of heart disease and heart attacks. Some of the highest rates of depression. The list goes on and on and on. And then having that being the template, the sleep deprivation, it's unbelievable. When you need to be at your best more so than anybody, when you need to be on top of your game with your reaction time, with your ability to perspective-take, and to be able to diffuse situations and your ability to be able to manage yourself and manage other people's emotions and all of these things put into place... And yet so many of our police officers have been inundated with this system that encourages poor health.

And a big part of this and really getting to the heart of why these matters, when additional support can be given for that, to make sure that police officers are physically and mentally healthy, it's going to come down to money. It's going to come down to funding and not being deemed as important. The lives of these folks, our firefighters, police officers... And just the public at large, it's not deemed important by policy makers. But there was actually a study done to see what would happen. Because at the end of the day... Show me the money, Jerry. Shout out to Jerry Maguire. Cuba Gooding Jr. What if money could be made by taking better care of our firefighters and our police officers. And outside of that, again, our healthcare providers, our healthcare professionals. But specifically looking at... This was a small pilot study that was conducted in Reno, Nevada. And they were looking at a situation, after doctors analyzed the troubling blood work of these public servants. And looking at putting together a comprehensive plan that would become the basis of this study.

So, for two years, these police officers and firefighters were supported in following a reduced processed food, reduced sugar, lower carbohydrate protocol, and receiving counseling on nutrition, making sure they're getting more high quality, real whole foods. And also receiving counseling on how to improve sleep and reduce stress. And here's what happened. The improvements in their biomarkers were so pronounced that it was estimated that the pilot study alone saved the City of Reno \$22 million in healthcare costs and associated expenses... \$22 million saved by taking care of them. And now the question is, are they going to do their job better, when they feel better and they're healthier? You know the answer to that. We got to look at that for ourselves as well. How are we showing up to our thing? How are we showing up to our family? How are we showing up to the work that we do? Our family doesn't want a shell of us, they want the best version of us. We've gotta take care of ourselves so we could show up better for everyone else. We can't possibly do our best work when we are not well. As a matter of fact, if we're really, really unwell... Like you know what it's like. If something...

If you're hit with something really tremendous, like, tremendous sickness, nothing else matters... Or an injury... Nothing else matters except just getting to a place where you are okay. So, this cliché that health is wealth. The most important wealth, it's real. Because if you don't have your health, you have nothing. Everything else is very superficial. And so many times over the years, I've met some of the most successful people, many of me of who, which really have their nutrition dialed in. Many of them... And I get the calls, man. Now I get the calls on the bat phone. This particular actress she saw me on whatever, she read my book and trying to get some counseling on how to optimize her sleep that's been messed up for 10 years. Whatever the case might be. I get the call on the bat phone or the model phone... The model bat phone. So, I get these calls now, and I see this, that people are making the investment in themselves, at the top level now, more than ever, for sure. But I've also seen the people over the years that spend so much of their life energy running themselves into the ground, to make money, to take care of their family, to make an impact that now their family is trying to take care of them because of their chronic disease and they're in a nursing home or adult living facility, should I say prematurely. Like that's where my father is.

My stepfather right now, he's in an adult living facility because he can't take care of himself because of the damage that crack cocaine did to his brain. The damage that all the years of alcohol did to his body. I come from that. I know what it's like. I know what can happen when these things are ignored. And I've seen coming from those conditions, I am a testament as to what's possible. There's nothing inherently special about me. I just happened to make certain decisions. I just happened to have certain information land in my hands, and I took action. If there's anything that I did that's exceptional, I simply took action. And this is what's possible for all of us. I know this for certain. We've got to get our communities healthier. We've got to get our communities healthier. Now, a little side story here with my step-father and just prove positive again, that no matter where you are, no matter how far along things have gone, no matter how bad things might seem, as long as your heart is beating, there is always the possibility of improvement. Now, because of this issue, he would have these... He became epileptic and would have seizures all the time.

And so... We got pharmaceutical medications on the table, but by shifting his diet a bit... Putting a little bit more emphasis on to reducing the intake of processed foods, processed sugar... And there's a tremendous amount of data right now on ketogenic diets being effective in the treatment and even remission for epilepsy. But we're not in a situation to manage all of these pieces currently, but simply making sure he's getting those Omega-3 Fatty Acids, making sure that he's getting his micronutrients in, very simple things, he's doing so much better all these years later after this imminent damage. So much more coherent, so much more lively. So much more optimistic. It's beautiful. There's degrees... All of us have our things. All of us have our stories. And I just wanted to impress that upon you today, that no matter what you've

been through or your family members, good things can happen, but first and foremost you've got to make sure you're good. We got to make sure you're showing up so that you can manage all that stuff because it can be tough. It can be tough. So, let's dive in a little bit more on what are some of the things we can do, what are some of the things we can add into the mix? Well, small dietary changes have been found in the data... As you know, from the tremendous amount of data that we cover here in the show can make some major difference.

A randomized control trial published in BMC medicine, tracked the results of 67 adults with moderate to severe depression. Again, looking at depression being a major issue in some of the most important vocations. If we're talking about the public service, if we're talking about the healthcare profession... But I mean, everybody's important, let's be real. All of us are important. But I'm just talking about the management and care for other people... Our teachers. We got to take care of our teachers. Alright. Again, high rates of depression in just about every field now. It's just growing and growing. But here's one of the things that we can look at to do something about it. So, folks with moderate to severe depression. The participants were randomly assigned to either nutritional counseling sessions with a dietitian where they were instructed to make dietary adjustments like eating less junk food and eating more nutrient-dense foods like vegetables and fish. Or they were assigned to social support sessions without nutrition counseling. And at the end of the 12-week study period, only 8% of participants in the social support group achieved remission of their depression.

While over 32% of the participants in the dietary intervention group achieved remission of their depression. The rate of success was four times higher by improving nutrition. We don't just have to be victims in this. Solutions exist. Another study. This was looking at our children. This is another demographic that is so often ignored with policy. We need to be standing up for our children now more than ever with these organizations really looking to siphon and fish our communities to develop lifetime customers. Just getting caught in that system of drugs... Getting caught in that system... Pharmaceutical drugs, to be clear... And the stuff on the streets. But pharmaceutical drugs, they're the big... If we're talking about El Chapo, I mean, come on. And also processed food companies. A recent study of 120 children and adolescents published in the Journal of Pediatrics, found that consuming fast food, sugar and soft drinks was associated with a higher prevalence of diagnosed attention deficit hyperactivity disorder, ADHD. Again, association here, we're not talking about causality. Okay? But we're going to go a little bit further.

The study also found that children who ate fewer vegetables, fruit, fatty fish and other natural foods were far more likely to have symptoms of ADHD. Here's the key... Even after accounting for other potential confounding factors. So, these are looking at other possibilities that could have led to these outcomes. So, there's a very strong association, not just a little bit of association which... Again, this is correlation, not causation. But while these associations

don't... And this is what the researchers said. While these associations don't prove causality, the authors note the data suggests that diet could play a significant role in the development of ADHD through unknown mechanisms. You think? You think?

So, we're looking at some solutions here. We know how nutrition impacts issues regarding even severe depression. It's important. It matters. With our children, understanding this consumption of processed food and soda and all these things, and now we've just gotten to this place where children are routinely put on medication. They are routinely given drugs as if it's normal and not looking at the underlying cause. Number one, that they're a kid. And maybe they don't... They're not designed. Their genes don't expect them to sit for seven hours a day and just be inundated with rote memorization and control when their genes expect them to move and to play. Check out the episode we did with biomechanist Katy Bowman. That's your next assignment. If you missed that one, check that one out after this episode. We'll put it for you in the show notes. Just to understand how our physiology and activity affects our cognitive function and our ability to focus and to "behave." All these things play into it, but instead, we just treat a symptom with a drug. So, we've just got to upgrade simple things for our kids. And this the beauty of today is that we don't have to turn our world upside down necessarily to make improvements. That's why I got...

That's how I got better. I didn't completely eliminate all my health issues at once, but I got significantly better simply by upgrading the things that I was doing at the time. I went from hitting up fast food restaurants every day to making more of my food at home. Improving the ingredients. So instead of having the McDonald's C-grade beef from cows that eat candy. And that's a real thing, by the way. There are... And I talk about this in Eat Smarter as well, but... You just go to... You can YouTube it and look at cows fed candy... Cattle fed candy. But that kind of beef to going to... To organic grocer and getting grass-fed. And instead of the McDonald's fries and the partially-hydrogenated oils, to getting some oven fries and having some broccoli along with it. So just upgrading these things, bringing in better quality ingredients and also identifying those key nutrients that my spine is made of. And the list goes on and on. I made some really great advances, but today it's easier than ever. We can upgrade so many of the things that we're already doing.

For example, growing up, we would eat Slim Jims. Slap it to a Slim Jim... We see these commercials... Randy Savage was on there... Oh, yeah brother. Yeah. The macho man... Yeah. So, we had that stuff. Again, where's it coming from? The preservatives added to it... The low quality of these ingredients... But if this is something for our family, for example... If they're on the road, if you're providing things for the lunch box, if you're just having snacks around the house, instead of the Slim Jim, we upgrade that and we get the 100% grass-fed beef sticks. These things exist now, and they're easier than ever to get access to. My favorite company that's providing the most incredible products that have such a high level of efficacy, 100%

grass-fed and grass finished, raised in the United States by family farmers focused on using rotational grazing practices and creating lush green pastures free of chemicals and pesticides. Never fed grains. Never given antibiotics. This exists. So if this is something that you would want for your family, my team freaking loves them, the grass-fed beef sticks, and also the amazing turkey sticks. And they have the same level of quality and integrity.

Check out Paleovalley, like yesterday. They're amazing. Alright, so again, if we're looking at snacks for the kids... Food bars as well, utilizing delicious cashew butter, and super foods in there, pumpkin seeds, organic kale, spirulina, acerola cherry, one of the most vitamin dense super foods in the world... Organic blueberries and high-quality organic protein as well. So again, for snacks for the kids, snacks for the family, Paleovalley is in a league of their own. Go to paleovalley.com/model, that's P-A-L-E-O-V-A-L-L-E-Y.com/model, and you get 15% off their incredible snacks. And I'm a major fan of their Vitamin C Complex. It's one of my all-time favorite things. It is right over there. I keep it close on hand. Truly, truly amazing with the most dense vitamin C superfoods in there, the camu camu berry, acerola cherry, amla berry... Things, I've been a fan of for years... 15 years, 16 years now it's together in one formula, done the right way. No additives, no fillers. Check them out, paleovalley.com/model... 15% off everything they carry.

Now, let's talk about a key nutrient that may need more attention than most others. The Journal of Abnormal Child Psychology analyzed the effect of Omega-3 supplementation on behavioral problems in children. The children who received Omega-3s, whether on its own or in conjunction with psychotherapy saw significant improvements in hyperactivity and impulsivity compared with those who received placebos... Who received those placebos on their own or with psychotherapy? The children who received the Omega-3s also had improvements in attention, reductions in disruptive behavior, and improvements in overall behavior. This exists... These are the very things that our brain is made of. If we're deficient in Omega-3s, our behavior is going to be abnormal whether we are a child or not. As a matter of fact... And this was a study directly from Eat Smarter. And in this study, they actually use MRIs to look at brains and see how these Omega-3 Fatty Acids affect the form of the human brain itself.

And the study was published in the Journal of Neurology. And I broke it down more in my book, Eat Smarter. But, essentially the research discovered something really shocking. They found that the people who had the lowest intake of the Omega-3 Fatty Acids, EPA and DHA... The people who have the lowest intake of EPA and DHA in their diet had significantly accelerated brain shrinkage. Brain shrinkage. And the researchers noted that the lack of EPA and DHA in the diet was particularly harmful to the memory center of the brain called the hippocampus, which lost neurons. It had this accelerated loss of brain cells and added years to the aging of the person's actual years at... Their biological years. Their brain was aged beyond their years.

And they stated that the people who ate less than four grams of DHA per day show the highest rates of brain shrinkage than those who ate six grams or more who had the healthiest shrink-proofed brains. So, if you think this is a joke, when we're talking about nutrition, we're talking about the very thing that makes up the cells of the brain itself. Why Omega-3s, these DHA and EPA specifically are so critical to the human brain is that they're needed for the structural integrity of the brain itself. These are called the structural fats. When we're talking about the form and function of the human brain. So structural fats at the brain cells themselves, but also these specific DHA and EPA... These Omega-3s and able to encourage something called signal transduction. So essentially enabling your brain cells to talk to each other, which is pretty important.

Again, we want the brain cells talking when we're in conflict, we want the brain cells talking when we're in situations where violence could take place, we don't want lack of brain cells talking. That wouldn't be good. But we're not talking about... We have to nourish the brain itself, we have to provide the very things the brain is made of, or it's simply not going to perform at its best. So, this one is a major key, making sure that we're getting our DHA and EPA, and this is abundant in food sources, so we've got... We mentioned this a little bit earlier, grass-fed beef is a source of DHA, egg yolks, fatty fish is the most notable source of DHA, salmon, mackerel, but in particular fish eggs, so salmon, roe and caviar, and we talked about this with neuroscientist... Brilliant, just love her. Dr. Lisa Mosconi we'll put that for you in the show notes as well, because she brought the caviar to me, alright, because I didn't know nothing about it. I didn't come from caviar circumstances, I saw it on Lifestyles of the Rich and Famous with Robin Leach, shoutout, but I didn't know what that was about. I had no idea what it was, but generally, we might see three times the concentration of DHA and EPA and salmon roe and caviar, for example.

And these are just things to add to the mix, but as far as plant sources. We have to be mindful of this, is that ALA, which is an Omega-3 found in plant sources, it does not do the same thing as DHA and EPA especially, he was talking about structural integrity of the brain. So we've gotta make sure we get a viable source of DHA and EPA, your body can convert a small percentage, I'm talking small percentage of ALA from chia seeds and flax seeds and all those great things into DHA and EPA, but you can lose upwards of 75% in the conversion process, 80%, 90%, depending on your microbiome, depending on your metabolism, you can lose so much of it and you need so much.

So, a viable source would be... I got food first, and then we got fish oil, and we've got krill oil, microscopic shrimp, which is abundant in Astaxanthin, it's a really resource of Astaxanthin, that's another source of DHA and EPA or algae oil, get yourself an algae oil. This is incredibly important. So if you're doing a vegan or a vegetarian protocol, which I've done everything, we

got to make sure we're taking care of that brain, because again, if you're not getting those things, accelerated brain shrinkage, it's not a joke, we need it, so make sure at minimum get yourself a high quality algae oil. Alright. Now one other thing for little kids and big kids alike, for all of us really, is upgrading our beverages. I grew up having Kool-aid, Flavor-Aid, Tang? I don't know if you know about Tang. So now again... We don't have to abandon those things, like most people, it's such a big on-ramp to go from... They're drinking Kool-Aid Jammers to straight celery juice. That transition might be a little bumpy, but if we can make sure we're delivering nutrition along with that same template, that same process or program or habit of having Hawaiian punched out...

I'm reluctant to say it, but that was my thing. I was not a big soda guy, I was a punch guy, the Hawaiian punch, and the fruity type sodas, the juice, pasteurized juices, things like that, which is just a massive amount of sugar, and we've talked about that on the show many times, and how comparable juices are to even 100% pasteurized juices comparable in their amount of sugar, too many popular sodas as well. So, let's upgrade the juice for our kids, and I found that even the most reluctant Picky-Eaters really do vibe with this next one. Now, I'm bringing this one into the full because if we're talking about accelerated brain aging, accelerated aging period, there's a large component of oxidation, and so providing the body with an abundance of antioxidants is one of those keys in buffering and modulating managing this process, protecting ourselves and Acai has an ORAC value, which is the scale of antioxidants of 103,000, we're talking top, top tier of ORAC value of anti-oxidant capacity, that means it has about 10 times the antioxidants of most fruits that you see out there on the streets.

Now here's the key though, does it actually effectively improve our antioxidant levels? Well, a study published in Journal of Agriculture and Food Chemistry found that Acai actually raised participants antioxidant levels demonstrating how effectively it's absorbed in the gut and getting in and actually being able to be usable in the human body. You mix the Acai, combine that with what researchers at the University of Michigan shared data on blueberry concentrate can potentially affect genes related to fat-burning, combine that with a study published in the Journal of Applied Physiology showing that drinking beet juice boost stamina up to 16% during exercise and training.

And also participants experienced less muscle damage and less fatigue after exercise. These are just a few of the ingredients, and my favorite pivot away from Kool-Aid and juices with all the added sugar, and by the way, this has no sugar added, no sugar added. And this is the red juice formula from Organifi. Kids love this, it's an easy on-ramp to get an abundance of nutrition into people's bodies, whether it's our kids or whether it's our family members... This is one of the things in my family... I literally send red juice, sometimes green juice formula as well to my family members, and now this is real talk, they'll request it, and I love that so much. I'll do whatever it takes so that I can get this for them because I know that it's getting them

some upper level nutrition that they normally wouldn't get, and so it just makes me so happy. So pop over there. Check them out. Organifi.com/model, that's O-R-G-A-N-I-F-I.com/model, you get 20% off the red juice formula, the green juice, their gold blend, amazing. Again, organic super food concentrates, no sugar added. And it tastes amazing. They really do.

Now we've looked at how our nutrition affects our emotional stability, how our nutrition affects our emotional intelligence, how our nutrition affects our proclivity towards mental health challenges, how our nutrition affects our behavior in the world. It's a very, very complex and deep topic, we've hit on just a few of the things that we know for certain to be advantageous to reducing some of those problems associated with nutrition and abnormalities and our emotional well-being and our mental well-being, but we know that our food choices deeply impact how we show up in our relationships, absolutely. We've looked at that data, but our relationships also deeply impact the food choices we make, study after study is demonstrating how our environment... How our environment within our own household has a massive impact on our food choices and how the simple act of eating together as a family can influence our health. For instance, researchers at Harvard University recently uncovered that people who consistently eat dinner with their families frequently consumed more fruits and vegetables and less processed foods and soda. Their data analysis also showed that families with increased frequency of family dinner also had higher intakes of several key nutrients that support health and defend the body against diseases.

Specifically eating together as a family, increased consumption of fiber, calcium, folate, Iron, B vitamins, vitamin C, vitamin E, lowered glycemic load and lowered the intake of low-quality fats. This result was simply from eating together as a family. It's not just what you eat, it's who you're eating with, that changes our association with food, that changes our food choices, that changes our health.

Another study, cited in the Journal of Nutrition Education and Behavior, found that children who ate breakfast with their family at least four times a week were more likely to consume ample fruits and vegetables. Now, the question is why this is, it really has to do with the structure, intentional meal planning involved and the elimination of distractions, that are some of the major reasons that this could be having such a big impact on our health. The study went on to report that children whose TV was never or rarely on during family meals were significantly less likely to consume soda and chips, and children who consumed breakfast, lunch or dinner with their family at least four times per week on average ate at least five servings of fruits and vegetables, the vast majority of days each week. Now, what's specifically interesting about this study is that it was incorporated using data from minority children who generally live within the construct of low-income communities, and this shines a subtle but hopeful light that even if we don't yet have access to the best food options, creating and

sustaining a new family ritual of eating together more often can dramatically improve the health outcomes of the family, which includes the children, but also the parents as well.

I can really identify with this one because growing up, we would... Oftentimes, we would eat at the same time, but we very rarely ate together, it was more like a free-for all, food would be done, or the fast food would come in, and then we would get food and we just find somewhere to sit, oftentimes in front of the television, video game, my brother and sister and I would eat together very often, but I can count on my hands how many times I ate together with my family, with my mother and my step-father literally on my hands, outside of maybe some holidays. It just wasn't a part of our culture. And so I can really identify with this one and the impact it could potentially make, because the times we did sit down is where more intention was put into the food, and by the way, this doesn't mean that you have to make the food all the time, but just even if you're ordering out, even if you're hitting up the app and getting something delivered, sitting down and eating together, the dinner table is a unifier. It really helps us to connect. And there's so many associated benefits there with a relaxation of the sympathetic nervous system and activation of the parasympathetic, rest and digest nervous system, reduction in stress.

We've got some data on this as well. And by the way, all of these studies are coming from my book, Eat Smarter. If you don't have a copy yet, you seriously need to have this book in your hands. So, pick it up anywhere that books are sold, and of course, you can check out the audio version as well, it's a very, very powerful dynamic fun book as well. Now, I want to dig a little deeper here, share a couple more studies, children and adolescents are at vulnerable life stages for the development of environment fostered obesity, and this is according to data published in the Journal of the American Medical Association Network and the Journal Pediatrics. Listen to this, children and young adults who share family meals just three or more times per week, are far more likely to be in a healthy weight range and more likely to have a healthier diet and eating patterns than those who share fewer than three family meals together, additionally, and this is incredibly important, these children were far less likely to engage in disordered eating. So how do we use this? The marker here, where we're setting the bar is simply three meals together each week, and it could be any meal, breakfast, lunch, dinner, whatever it is, just sitting down together, make that a mandate.

Three a week to see these benefits really manifest, and we're imbuing these habits into our children that they'll be then able to take on with their families as well. So incredibly important, incredibly powerful and incredibly protective for our families. Now, the truth is, our environment shapes our taste, food preferences, food accessibility, mental and emotional relationships with food and overall eating behaviors long before we become aware of it. Truly our environment is fostering and cultivating these things within us. Knowing this and

addressing our nation's issues around food, and our issues around eating behavior solely at the point of personal choice is a major problem, we have to address the environment.

Today, millions of people are born into communities in the United States, and I'm one of them inundated with substandard food, processed food, fast food, and eating practices that have been proven to be flat out deadly. When I lived in Ferguson, when I left my apartment complex, as soon as I leave the gate, across the street, there's a liquor store there, and on the other side of the street, there's Lee's Chicken, there is Papa John's pizza, there's Domino's right next door to that, Taco Bell, and there's a McDonalds. And across the street, moving down past the intersection, we've got a Chinese food restaurant, Dairy Queen, but it's not a Chinese food restaurant, nice sit-down vibe, we're talking bulletproof glass. We're talking... You don't know what... You don't know what they're cooking that in. You don't know what it is. That's the kind of Chinese food that I'm talking about, much lower quality, substandard, low-quality ingredients, that again, sold at the cheapest prices because it's just not good for you.

Then if I go down the street just a little bit, I've got Steak 'n Shake, if you got a few extra dollars because the burger's a little pricey. They put the name stake burger in there, so it makes it more fancy. We got Arby's, Krispy Kreme, Burger King, another McDonald's, another Chinese food place, and this one doesn't have bulletproof glass though. It's a little nicer in there, that's the one I would frequent, and we've got Wendy's, if you want to get a square burger for some reason, Jack in the Box, Pasta House, if you want to get a whole vibe going on, that's where I would... You take the ladies for the Pasta House. But if you know... If they got the little thing where they vibrate, you got to wait in line with the vibrate thing, I don't know if that's the fanciest dinner, but hey... You know, that's when I was balling, you balling out, you're at the Pasta House.

And all of this is just within a mile of my apartment, a mile, mile and a half. Are you kidding me? I didn't know what Whole Foods was. It didn't exist. There was one Whole Foods in all of St. Louis, I don't know when it was built but here in LA, it's like you could throw a stone and hit a Whole Foods, but St. Louis? Yeah, there was one, but it was nowhere near me. Nowhere near me. Gyms? Please. Yoga studio, come on. None of that existed. And as a matter of fact, the parks, it's a risk, it's a risk. You don't know what can jump off, the environment itself was not conducive to wellness, so today, millions of people are born into these conditions and then they get blamed for their health problems, blaming the victim, who... How can I eat healthier if I don't know it exists? I didn't know it existed. To me, I just grew up in conditions, we just ate food, I didn't know there was a difference. We just ate stuff, we ate stuff that tasted good, end of story. I had no idea my food affected my health, I had no idea my food affected my asthmatic condition or my spine or any of that stuff, I didn't know, but now that we know we can change it.

And we can change these conditions, we got to start with ourselves, start with our own families, and then we can start to integrate that out in the community. It's not too soon to start paying it forward, because no matter where you are right now, no matter where you are, there is always somebody who is a little bit behind, who's a little bit further behind you in this domain that you can help and serve and uplift them in health. There's always somebody, but again, you got to start with yourself, because when you start feeling better, we become more capable of serving others. So, how is this a thing? How is this even possible?

I wanted to really articulate this in Eat Smarter, bring this out to the public and audiences who normally wouldn't get this information, with Eat Smarter being... Having a national campaign with Target stores, for example, being in all the Target stores across America and having this cool little feature and just all the different places that the book was at, people got an opportunity who normally wouldn't see this kind of information, but in a way, that makes sense. That's fun to read and to learn about, but I wanted to share, this is one of the most important reasons that I wrote this book, underlying and opening this conversation up as to how is this possible, how is it that the reason that my mother, if she would go and sell her blood to get \$20, \$25 to feed her children, and instead of being able to buy some avocados and some fish, because it's too expensive. If that avocado might cost \$3 when she can get three burgers for her children. How is that even possible? The avocado literally can fall off of a tree, these burgers are so cost-intensive to make, it's absurd, how is it possible we can get three cheeseburgers for the same price of one avocado.

And this goes to subjects in Economics, elasticity of demand, all those things, but here's the bottom-line principle. A big reason that this is possible is thanks in large part to government subsidy programs that provide government assistance to these processed food companies, and so I wanted to look at, can we actually get some real tangible data demonstrating that these government subsidies are leading to higher rates of disease in our communities. And I found it. From 1995 to 2010 alone, it's gotten far worse since, but I was able to track this data down. The US government handed out nearly \$200 billion in agricultural subsidies to support the production of major commodity crops and farm foods that largely show up through the drive-through window, so the high-fructose corn syrup, the genetically modified dough wheat, the things that are in everything, soy, that are coming through the drive-through window. Now, I wanted to find out again, the most verifiable impact that these subsidies have on communities, the most glaring example was highlighted in a recent study published in the peer-reviewed journal, JAMA Internal Medicine, so the Journal of the American Medical Association Internal Medicine.

The researchers set out to find if higher consumption of these foods derived from government subsidies is associated with adverse risk to US citizens, the results were shocking. After adjusting for age, sex, socio-economic factors and other variables, the researchers found that

those who had the highest consumption of government-subsidized foods had almost a 40% greater risk of being obese. The people who ate the most of these government subsidized foods had almost 40% greater incidents of being obese, they were also significantly more likely to have excess belly fat, higher levels of blood sugar, and higher levels of inflammation measured by C-reactive protein. The government assistance programs for farmers may have started off with good intentions to feed Americans, but over the years, the funds have been doled out in mass to farmers growing wheat, corn, which is used to make sweeteners and for feed for cattle, and that's a whole mess there with conventional beef industry and other government subsidized crops that are grown at mass quantities that are used in the making of processed foods.

The result of these twisted government subsidy programs dolling out all of this money in mass to companies that are using these products for processed foods, is that fruits and vegetables cost a hell of a lot more. And you can ball out 'til you fall out on the dollar menu, it's all structured in that way, this is why it's possible. Researchers at the Yale University School of Medicine chimed in on the disparaging circumstances many low-income communities face when it comes to finances and health. In a study citing the journal diabetes care, the researchers asserted that fast food and processed food is widely available at low cost, enabling it to compromise a greater proportion of the diet of low-income individuals.

Their analysis revealed that being born into a low-income environment dramatically increases their risk of obesity, which in turn increases their risk of staying in poverty, so many people are trapped in this system, they have no idea that this environment is controlling their livelihood, their health, their ability to make it out of the environment, or the ability to make the environment better, it's being hindered by companies who are making billions of dollars off the farming of sick people, because the Food and Drug Administration is supposed to be regulating food and drugs. But the funny thing is everybody's getting paid off of our citizens and our children being sick, they're making massive money off of us being sick, they're not making money off of us being well.

We got to wake up. That's the reality that we exist in, and we're looking to these entities right now to save us from pandemic conditions, and ignoring so many of our citizens, they have no idea that these pandemic conditions are largely predicated upon the pre-existing level of disease that we already had. The CDC report, the most latest CDC report found that 95% of the people who lost their lives with SARS-CoV-2 on the death certificate with COVID-19 on the death certificate had an average of four pre-existing chronic diseases and/or comorbidities, but we don't talk about that, we don't talk about the underlying health issues that make us more susceptible to this and all manner of infectious diseases. It's not a part of the conversation because they don't give a. Why would they? The system is not built in that way, I'm talking about the system itself, not the people within it, because the people within it are

trained in a way of thinking by that system to believe that the drug is going to save the person, to believe that there's nothing that this person can do to get healthier, to believe that this person isn't going to listen, it's their fault, not understanding that if they're born into the circumstances, as a study said, and I'll reiterate this, their analysis revealed that being born into low-income environment, dramatically increased the risk of obesity, which in turn increases their risk of staying in poverty.

And they blame them. "Oh, they're not going to listen anyway. It's too bad people aren't going to take action to get themselves healthier." What about the environment? Now, there is a level of personal responsibility. And in closing for this episode, we're going to dive in and talk about some of the specific strategies that we can do to help to change all of this. First and foremost, we need top-down change and bottom-up change, so top-down change, structural, societal; bottom-up change, personal accountability and action of the individual. From the bottom-up, these aspects of personal responsibility for change include getting ourselves educated, but even with that, we need exposure, we need to know that it's a possibility to get educated in a way that the education becomes attractive, because I know many people after they graduated college, they're like, "I'm not reading again," or even graduate high school like, "I'm done with books. Done! I don't want to learn stuff, that's for school." But we all want to learn, we all want to continue to learn, it's how humans evolved, that's built into us, we want to learn, we want to explore, we want to create.

But those natural human expressions or tendencies can get suppressed by the environment and by being inundated with so much distraction, so much brain candy, where we rather watch someone else's greatness on TV than embark on our own. We can change this, but we got to become aware of it. So, education, that's what changed it for me. That's what changed it for me. Personal investment as well. We've got to invest in ourselves, it's the greatest investment that we can ever make, these are bottom-up change, these are pull yourself up from your bootstraps. Have you ever actually seen somebody do that? We need to stop saying that. "Pull yourself up from your bootstraps." What? You can't. Unless you're like in an anti-gravity chamber or something, I don't know, you can't pull yourself. Never mind. But investing in yourself, this might take some changes in our protocols or changes in our priorities. Because when I wasn't doing well, I was still getting the... I still had the fresh on. I had the fresh... The freshness. So, I get the new... We had the same Louis Rams there before they abandon us and came back to LA, going back, back to Cali, but I had the Rams jacket, fly, shout-out to Isaac Bruce, shout-out to Marshall Faulk, Kurt Warner, Greatest Show on Turf.

But I could have invested that into those avocados I was talking about, into some super foods, into getting... Changing the information I was putting into my body, because food isn't just food, it's information, and once I start to invest in myself, literally it wasn't just my body that changed, my thoughts changed, my perception of reality changed, I started to see more

opportunities to make more income so that I can invest more in myself because our society is set up in such a way that being healthy comes at a premium, being unhealthy is easy. We can change this though, I know we can change this, so personal investment, putting a priority on our health, taking a strategic risk sometimes. For example, I was buying super foods from the Tibetan School of Medicine back when I lived in Ferguson, Missouri, in my one-bedroom apartment. Mattress on the floor, terrible love seat. I mean the love seat was the... The cushion was crushed in, it was not a good look, but I was buying those goji berries to see what they do, I want to see. I found that article. So, I was investing strategically in myself and eventually company started sending me goji berries on the low, they started sending them at that Freemium model, it was like, "Hey, we found out about you. Here's some goji berries," "Thank you." But it comes from investing in yourself and then it out pictures, it changes the reality around you.

Also, with bottom-up change, with personal accountability and change, we have to have a lot less finger pointing, because even as I'm breaking down the data today, when I'm talking about entities that are governing decisions, I still have this center where I know that I'm still powerful to affect change and to make choices, that's never taken away, I can still do so much even with just within my own mind. And so, pointing the finger at this thing, that thing... That it's in total control. We can't change it then, we got to start pointing the finger back at ourselves and be more empowered because in my clinical practice, the number one obstacle that people would have when they're coming in complaining about their health issues is their family members. "I want to lose weight, but it's my husband, he's just always bringing bad food into the house," "bad food." Even that term, if you're labelling it bad, giving food morality and you eat the bad food, does that make you a bad person? But anyway, people would say "bad food," or "My kids won't eat it, my kids won't eat this healthy food, and so I make stuff for them and then I just end up eating it along with them," or another one is "My wife won't eat this, so I don't want to make two meals, so I just eat with cheese, I just make one meal so that I'm not making two." So, we pointing the fingers and oftentimes, same thing again, especially with kids, kids were big out.

"My kids won't eat it, so I'll just buy stuff they like, which is mac and cheese and chicken nuggets, and I just eat what they end up eating," and they usually finish it off with this line, something to the effect of, "I wish they'd change. I wish they change. If they would just make it easier then I can get the result." So absolutely, these are not negating the fact that these things do happen and make things more complicated, but bottom line is, we've got to take responsibility, stop pointing the finger, because we can affect change within any of these dynamics. But also, this leads to another solution, which is, having a little bit of a shift in your circles of influence, and so what that means is proactively getting yourself around people who are doing more of the things that you want, because we are not just a product of our environment, which we are; we're also creators of our environment. So, getting ourselves

around people who have influence, because chances are if you're hanging out with your healthy friend who doesn't eat fast food, when you guys are talking about getting something to eat, you're not going to pull up at Taco Bell, you're not going to run for the border, you're just going to... You're going to make a higher quality decision.

So, making a shift in your circle of influence, you can do that now. So, in the real world, preferably, but also online, who you're engaging with, who you're following, communication, curating that, put more healthy things, more encouragement into your mental Rolodex. Alright, last piece here, we've got to address the top-down change, really simply one of the most powerful things that we can do is to create more accessibility and more exposure for more folks, for more people in our community to see what health looks like, to see that health is possible, to get accessibility to education, to get accessibility to real food. So now we're talking about something, for example, I had my little microcosm of change within my own apartment, my own household, my own body, but that inspired me to provide exposure by teaching classes, by working with clients in the gym, by working with patients in my clinical practice, by doing things, by writing books, by creating master classes, by doing speaking events, the list goes on and on, on providing exposure and accessibility for more people to have access to knowledge and encouragement.

So, this is something we all can do, we can all provide a little bit proactively of exposure for folks, you never know, it could be somebody like myself, it could be a kid coming from where I'm from, providing that exposure can change their whole entire reality, which could change the lives of many, many more. Policy change as well. You know who pays for these government subsidies programs, these government subsidized farming practices? We do. Government subsidies aren't coming out of thin air, this is taxpayer money, we are the ones paying for the sickness for these foods that show up through the drive-through window, through processed foods and contribute to our nation's epidemics of degraded health. This is taxpayer money. We can change this. Every chance that you get, talk with your local and state representatives, demand that conversations and policy around food is addressed, every chance you get, whether it's a town hall, whether it's something that you're calling in and leaving a message, whether you're sending emails... This needs to be a priority, because this is literally, it's the foundation of our very livelihood is our health, there is nothing more important.

Alright, these politicians... The crazy thing is politicians reach out to me now, by doing this work, having things out there, maybe they pick up my book somewhere, or they see a piece of an interview somewhere, I don't know, but they send me messages and ask me. Now they're asking questions about, what I think about this, what I think about that? In that world, I don't even... Real talk, it can do what it'd do. I'm going to find a way to create the program for the inner-city schools to help to build the recreation center, the wellness programs. I'm going to find a way. I don't have to wait for them, I'm going to find a way. But I'm open to the possibility

that they'll do it as well, they'll put some funding into real wellness programs, recreation centers, community gardens, all those things, but we can do it too, but demand it because these...

With the politicians, it's really a popularity contest, they run on the policies that we demand, period. Keep bringing it up, keep that pressure on, keep the gas pedal down. And lastly, in this mission and mandate, and in this context, this container of widespread community change, is to simply invest in and support companies and individuals who are doing good things. We all hear this term of voting with our dollar, invest in those individuals, invest in those companies that are doing the thing that's unusual right now, which might be sourcing higher quality ingredients, sourcing from local farmers, not giving food to the public that's been sprayed with pesticides and herbicides and rodenticides and fungicides, and providing high quality products, higher quality ingredients.

Vote with your dollar, invest in those companies so that their practices are encouraged, because what's happening already is that major corporations, which I used to be against, like, "No, they just need to run away and hide, I don't like them, they need to go away," they're getting on to the "the bandwagon" because they see that their profits are being taken away about companies that are doing the right thing, that are providing organic products, that are instead of using lower quality oils, they're using higher quality ingredients, and so they're shifting in and investing in those products themselves, and truly, I think it's going to be a 'both-and' situation, because right now about 85 million Americans get fast food every day, so I can go to war trying to get people not to eat fast food or... And/or I can work to make sure that the fast food isn't giving the citizens things that are blatantly detrimental to their health, eliminating artificial ingredients and preservatives.

The work of Vani Hari for example, we'll put Vani's most recent episode, both of her episodes for you in the show notes. Freaking love her, the Food Babe. She's got policy change. McDonald's, Subway, the list goes on and on. She's literally got... She's just one person who banded together the Food Babe army and got these companies to eliminate some of the most detrimental ingredients that were coming through their food that most people had no idea about, that's the power we all have. So, vote with our dollars, demand change, invest in companies doing the right thing, doing better things, higher quality ingredients, higher quality service, more intentionality, and also making moves to encourage the companies that are in control right now to just simply upgrade, eliminate things that are blatantly hurting people and increase and improve their ingredients as well. So it's a 'both-and' world.

And again, no matter where you are right now, there's always somebody that we can reach back and help lift up. Alright, but it starts with us, we've got to take better care of ourselves physically, mentally, emotionally, immerse ourselves in more goodness, immerse ourselves in

real food, good nutrition to build healthier bodies, build healthier brains so we can better relate to each other and also to uplift the community at large.

I appreciate you so much for tuning in to the show today, I hope you got a lot of value out of this, if you did, make sure to share it out with everybody that you care about on social media, and you can tag me, I'm @shawnmodel on Instagram and Twitter, and at the Model Health Show on Facebook. And you can also send this directly from the Podcast app or if you're watching on YouTube directly to somebody's phone, email it to them, just send a little bit of love and light to people that you care about. We've got some epic shows coming your way very soon, so make sure to stay tuned. Take care, have an amazing day and I'll talk with you soon.

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.