

THE MODEL **HEALTH** **SHOW**

EPISODE 586

5 Calorie-Free Things That Can Cause You To Gain Weight

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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 to me today. I've got a question for you. Do calories control your weight? In my Nutritional Science class at this fancy pants private university that I attended, I was taught that if we can control calories, you can control your health. Calories were the end all be all. It was the warden of the metabolic prison that you might find yourself in, is the leader of the pack when it comes to nutritional science.

Now, as it's borne out over the years, this hyper-focus on caloric management has led to some pretty poor outcomes. Not to say that caloric management isn't a viable and useful scientific tenet, because it is, but today we know that there are several epicaloric controllers that we've covered in depth here on the show many times.

And today we're going to talk about some of those throughout, but because calories aren't the only thing that's governing our metabolic health, in our caloric expenditure, for example, our simulation of calories, on this episode we're going to talk about five calorie-free things that can actually cause you to gain weight. Five calorie-free things that can actually cause you to gain weight and to gain body fat.

Now, having this calorie-focused paradigm in our society, where are we at? Is this working out for us? Because millions upon millions of people right now are on diets and they're carefully monitoring their calories, only to find themselves possibly losing some weight temporarily, but then traditionally, if we look at some of the data right now, somewhere in the ballpark of 80% to 90% of people who invoke a calorie restricted diet regain the weight that they lost and oftentimes regain more weight. What in the heebie-jeebies is going on here? What are the outcomes? What are we dealing with right now?

Well, a recent study publishing in a peer reviewed journal, Metabolic Syndrome and Related Disorders, determined that 88% of American adults are metabolically unhealthy. 88%. It's not flipped, where it's just 12% of Americans are metabolically unhealthy. The vast majority, almost 90% of our population is metabolically unhealthy. What's going on here?

Should people just cut their calories, monitor their calories, and find their way to this magical place of metabolic health? Is that the solution? But also, what are some of the kind of global outcomes? If we're talking about just here in the United States, but kind of a meta perspective of the outcomes, what is the numbers, what do the actual numbers look like?

Of the somewhere around 340 million Americans here in the United States, right now, according to the latest data, we're almost at 250 million of those citizens being overweight or obese. 250 million citizens. Again, the vast majority of our society is now struggling with our body weight, with our body composition.

Today we're going to talk about some of these nuances because it's not just our BMI, that doesn't... It's not the end all be all about us, and it's not just about our body weight. But if we're going to pay attention to those things today, I want to add some legs to the understanding, not just the belief, but the scientific understanding, the scientific revelations that there is more to our body weight.

Since we're going to focus... If we're going to focus on weight, we're going to focus on the truth about it. There's more to it than just managing calories in and out. Being able to take in less calories and expend more calories, that was the solution that was taught in my university setting, that would lead us to the weight loss that we're striving for. But my teacher himself was struggling with his weight, and this is the part of the story that I don't share enough. And it's not...

He was a brilliant guy, clearly knew the information that he was teaching inside and out. But the question is what he was teaching, was it actually effective? Alright? Because if you take a really smart person and you teach them the wrong thing, they can become very good at teaching and implementing the wrong thing, and that's what we've seen borne out in our society right now and the place that we're in now.

Again, we don't have to look very hard to see that we're not doing well. Something is off. There's a missing link here with the nutritional science that we have, the health science that we have, and the state of our society, the state of our culture. There's something not connecting here.

And so again, what we're going to talk about today are five calorie-free things that can actually cause us to gain weight. We're going to jump into the first one here, and this one is incredibly powerful, and I'm starting with this one because this is for me, the number one most overlooked thing when it comes to managing our health and our body composition and our body weight.

For many years I would have people coming into my clinic whose goal was to lose weight, was to lose belly fat, and they would be hyper-focused on changing their nutrition. Me working as a nutritionist, that's what they were coming to me for. But I knew that this wasn't the whole story, this wasn't the whole enchilada, in getting people from where they are to where they want to be.

At first, I did, I believed that if I could just get their nutrition right, get them moving, that would solve all their problems. And it solved problems for many people, especially once I had that insight about getting their nutrition personalized for their needs right now.

Now today, here, getting close to 20 years in this field, personalized nutrition is now something that's getting a lot more focus. Rather than these cookie-cutter systems, we're paying attention to people's metabolic individuality. But within that metabolic individuality, there are key inputs that are determining what that person's metabolism is doing.

Food is one of them, movement is another one, but also their stress, their stress exposures, their overall stress load was having a key impact, a key control over their body composition. Over their body weight, over their ability to manage their metabolic rate overall. Now, what people don't seem to understand is that excessive stress literally alters the way that your metabolism works.

Now because it's invisible, because it's calorie-free, people don't tend to give stress the respect or the credibility that it deserves when it comes to controlling what we see when we look in the mirror. Stress has a huge, huge impact on our body composition. A study publishing the journal Obesity sought to find if there's statistical population evidence showing that stress leads to higher rates of obesity.

The lead author of the study states, "We found levels of cortisol to be positively and significantly correlated to larger waist circumference and higher body mass index. These results provide consistent evidence that chronic stress is associated with higher levels of obesity."

Now, this was a large data set, affirming something that we already know. However, again, based on this, this is a correlation as noted, as she noted in her dictation, correlation, not causation. They know that stress is involved here, but which direction is it going was not affirmed in this study.

Because stress is likely contributing to higher rates of obesity, but also obesity itself is contributing to higher rates of physiological stress and mental stress. And so, this doesn't affirm, this particular study doesn't affirm which direction the stress is going, the stress and obesity. Is the stress causing obesity or is the obesity causing the stress? But they are definitely walking together, skipping hand in hand. Alright?

Now so here's the thing, if we take this a step further, researchers at Stanford University recently discovered that your large array of precursor fat cells are far more likely to turn into

actual body fat if your body's levels of glucocorticoids, mainly the glorified stress hormone, cortisol, rises at night. Rises at the wrong times.

So, when we have cortisol being produced in abundance and in levels that are too high or at the wrong times, this can drive our precursor fat cells into becoming actual body fat. But again, it's driven by stress, and why would you be producing cortisol, high levels of cortisol in the evening?

Well, it's going to be stress inputs. It could be psychological stress, it could be relationship stress, it could be stress from the food that we're eating. One of the most fascinating studies that came out recently was looking at how stressful it is eating a meal, when we're in a state of obesity versus being in a state we're "normal weight". A normal weight individual eating a meal, we see a rise in cortisol levels rise about 5%. And so that's normal.

And now the question is, why would I have an increase in stress hormones when I eat a meal? Well, it's because this is a very intensive process, your body is now interacting with an outside substance and our immune system is going to be front line because it has to associate and say, "Okay, is this stuff even okay to come into this system here that we're here to protect?"

Also, we have to have energy front and center to take this food substrate and turn it into actual human tissue. That's an arduous process in and of itself, you have to take this source of food that we're bringing in and actually convert it into metabolic energy. The list goes on and on in why this could be a stressful event, but we see about a 5% increase in cortisol levels.

What the research has found is that once we venture into a state of obesity and we eat a meal, we can have cortisol secretions increase not just 5%, but upwards of 50 plus percent higher, just from eating a meal, there's a greater stress response once our body teeters into this abnormal metabolic place.

And so, these researchers are highlighting an important point, which is stress, and when we say "stress", we're talking about this is a physiological change. It isn't just, "Oh stress." When we're experiencing stress, physiological stress, that feeling or that expression is based on the chemistry that we're producing, and these glorified stress hormones, and I say, "glorified stress hormones" because it's not just that there are these bad things, it's just "stress hormones", cortisol is just a stress hormone.

Cortisol is also required for you to create thyroid hormone, which is required for you to operate and have a healthy metabolism in the first place. Cortisol is a key ingredient in that process of making thyroid hormone. It's not that it's just all bad or just all detrimental to

metabolism, but when it's produced in excess and at the wrong times, as their data indicated it can cause some serious problems with fat gain.

And part of the reason is that cortisol has this catabolic action where when the stress hormone is being produced, if you're looking at evolutionary biology, we're looking at a state where the stress hormone is getting produced and we have to be in a place where we can optimize energy production and availability. So, it's going to increase our blood sugar, number one, and in response to that, it's going to increase our insulin levels. Alright?

So, insulin is well noted to be our major fat storing or energy-storing hormone. And also, cortisol has this really interesting ability once it's produced in excess, to break down our lean muscle, muscle and lean is kind of synonymous, but break down our muscle tissue and turn it into more fuel. It's a process called gluconeogenesis. So, our valuable lean muscle that keeps our metabolic rate higher, muscle is expensive for our bodies to carry, and so it's just inherently going to be burning off more caloric energy just having it on your frame.

But if you're looking at a state where your body is in a chronic state of stress, for our biology is just feedback like this person is experiencing an event to where maybe they are hiding out from danger, maybe they are unsuccessful in finding shelter or food or whatever the case might be, and whatever we're getting, we need to alter our metabolism to stop expending so much energy and store more fat to keep this person alive as long as possible.

Now, this is a very rudimentary understanding of it, but we are hard-wired to adapt and to survive in times of stress, in times of famine, in times of turmoil. Maybe there's warring entities, warring tribes. Today, we don't have that stuff really. These things are not... For most people, it's not a lack of food access, we have too much.

Today, for the first time in modern human history, just within the last couple of decades, today more people are dying from the over-consumption of caloric energy than from the lack of it. More people are dying today from the over-consumption of food, than from starvation. We had this flip that got switched, that shifted this thing in our culture.

And so, this process again of gluconeogenesis is breaking down our muscle tissue, which is then going to reduce our metabolic rate when we then are able to consume food again, we're then able... Or maybe we didn't even stop consuming food, but when we were eating, now we're going to have an issue because our temperature at which our body is kind of burning off fuel is going to be reduced because we're losing muscle.

So, these are some of the hallmark reasons behind why stress, even though it's calorie free, can cause us to gain weight. And let's take another global look at what stress can do. A study

that was published in the Journal of the American Medical Association, JAMA, for short, JAMA Internal Medicine, reported that upwards of 80% of all physician visits today are for stress-related illnesses.

We give these blanket names, these cookie-cutter names to these categories of symptoms, right? If you got high blood pressure, you get that label, if you've got diabetes, you get that label, insulin resistance. If you get a situation where you've ventured into obesity, you get this label. But no two disease manifestations are the same.

No two people in the history of humanity have ever had the same diabetes, have ever had the same heart disease, have ever had the same cancer. It's always a different expression because you are different. And that's part of the problem is that we give these blanket labels. We look at a set of symptoms, and then the person is labeled or categorized as that thing, and you get standard of care. You get the same care as everybody else, even though you're different, is part of the problem.

But today, we are changing that. We are saying, "I am unique, I am different. I have a unique metabolic fingerprint that is unlike anyone else." Yes, we all have some of the same tendencies and tenets for the healthy expression of our genes. Absolutely. However, when I'm expressing these symptoms, these symptoms are unlike any other person who's ever existed. They're unique to me. My genes, my genetic template is unique to me.

We all share, humanity collectively shares, right now if you look at the Human Genome Project, we thought was going to find millions and millions of different genes, but collectively, we share the same 25 to 50,000 genes. Were still trying to figure it out. The Human Genome Project was not the end all be all, there's still things being mapped out, and even recently, we saw that the protein coding genes, the number of protein-coding genes was thought to be much more, but they're only somewhere in the ballpark of about 20,000 protein coding genes.

So, we collectively share the same template, but the way that that amalgam mixture that comes together for each and every one of us is so unique and it's so different, there's so much variety, because we have our gene compilation, but then we also have epigenetics, which are these environmental inputs, both internal and external, that determines how various genes are being expressed.

So, there's this rudimentary statement that we're turning genes on and off. Even that there is some truth to it, but that's not quite accurate because genes are always doing something, but it's whether or not they're getting expressed in a certain way. And so, what I mean by that is that if we take a single gene, we can possibly have a thousand different expressions of that

single gene, depending on our environmental inputs, our psychological inputs, our thoughts even influence our genetic expression, because our thoughts create chemistry in our bodies.

And if you talk to somebody like cell biologist Dr. Bruce Lipton who we've had on the show multiple times, I absolutely love him, and he's the person who really impressed upon culture, really pushed the term "epigenetics" into popular culture. He's the guy. And every time I talked to him; he always brings me back to this tenet.

Yes, we have entire fields of nutrigenomics and nutrigenetics looking at how every bite of food that we eat influences our genetic expression, and our genetic template has a huge impact or correlation with the foods that are best for us based on our current gene template, it goes both ways.

But he always brings me back to the point that the human mind, our thoughts are the most powerful determinant of our gene expression. That's something that's really difficult to wrap our minds around, that we have so much influence over what our genes are doing, but our thoughts even determine our actions.

'Cause it's not just changing the chemistry in our bodies, it's determining the actions that we take in the world, it's determining the environments that we go into, it's determining the environment that we create within our bodies. So it is that powerful, and again, having this simplistic view of weight loss and we gain where we are just ignoring what makes us most human and saying, "Just manage calories," not understanding that calorie-free stress, if we could buy a can of stress and it says "calorie-free" on it, people might get it a little bit more, right?

But it's not a physical thing that you can necessarily put your finger on, but it is a physical change that happens internally inside of our bodies, that then is out-pictured. So I'm telling you this, and I've been in this field for many years, and I cannot tell you how often I've seen people who they work their ass off, they're exercising, they're really paying attention to their nutrition, but they're just not getting the changes that they want to see on the scale, and they don't really understand, I'm telling you this and it's so important, just how much stress is causing their weight gain. Just how much stress is causing an inability for them to lose the weight that they're trying to lose.

Stress is that powerful, and we ignore it, we just push it away, and we don't respect the fact that the human brain and our physiology was never meant to endure this chronic level of stress. Like today, the environment itself is so abnormal, we're not connected with nature anymore. We evolved in this association, constant connection with nature, with sunlight, with

fresh air. Even if we can be in the coolest house or office building, but the air that we're breathing is kind of this processed air.

And we know that levels of air pollution are in orders of magnitude of 10 times more air pollution indoors than outdoors, even in some of the cities that have the highest rates of outdoor air pollution, indoor air is more volatile. So, these inputs, just the environment itself, psychologically are stress inputs.

Because just to map this all for you, if we're talking about stress, I think we tend to think about it as this one lane, cognitive like mental stress, we have mental stress, something's stressing me out, and that's the end of it. We don't understand that that's just one component of our overall stress load.

Your overall stress load includes your psychological stress, yes, so your mental stress. Work stress, people often associate stress to work. Your relationship stress. Relationships can be some of the most stressful things in the universe for us. But then also we have our diet stress, what you're bringing into your body.

For the vast majority of Americans, right now for the vast majority of Americans, the average American's diet is 60% ultra-processed foods, 60-plus percent ultra-processed foods. So, diet stress. But even if we're eating foods that we consider to be more health-affirming, it might not be right for us, it could be contributing to diet stress. And we've got stress from sleep deprivation, we've got stress from exercise.

Exercise is, we know it's a good stress, right? Good stress, also known as a hormetic stressor. But "hormetic" means that it can make you better if you're allowed to recover from said stress. But you add on training for a marathon in addition to all the other stress that you're dealing with in your life, your overall stress load, that can break you. And again, we wonder why we're not getting these results. So, these are all components or ingredients that go into our overall stress load.

Spiritual stress, we can be in a place where we are feeling a lack of a sense of value in significance, we can feel disconnected, cut adrift, not a part of anything. We could feel like we don't matter. All of these things add to our overall stress load. And if we're not paying attention to these things, we can have the best diet in the world, we can exercise our face off and still not have the metabolic health that we're striving towards, because we're not addressing the very things that make us human, the very things that are determining what our genes are doing. So that's number one here on this list of these five calorie-free things that can cause us to gain weight.

Now we're going to move on to number two here, and number two, this calorie-free thing can cause us to gain weight. Number two is sleep deprivation. Researchers at Columbia University revealed that lack of sleep has now been connected to, yes, increased calorie consumption because your booty is up eating, but also, they found that lack of sleep reduces our body's overall energy expenditure, it lowers our metabolic rate. So, sleep deprivation in and of itself reduces the rate at which we are expending energy.

So, with that combination of now eating more and expending less, what do you think is going to happen? And this isn't something external where we're talking about exercise, we're talking about simply being sleep deprived causing this phenomenon to take place. We also have an increasing body of data showing how sleep deprivation can disrupt and damage our organs that control our metabolism, like our thyroid, for example.

Research published in the journal Neuroscience Letters found that short sleep debt, even a short amount of sleep deprivation has an immediate impact on our thyroid hormones. In essence, they see a significant stress response that's depressing the function of our thyroid. This research conducted at the Department of Psychiatry at the University of Pennsylvania Medical School found that a larger sleep debt "Demonstrated significant inhibitory effects on thyroid hormone measures." We're damaging the organs that control our metabolism when we are sleep deprived. Calorie-free thing that can make us gain weight. Alright?

Now, what is the out-picturing of this? Do we actually see some of these symptoms or outcomes based on the data? Can we actually see some outcomes? Not just, "Okay, this is doing this to the thyroid," but what happens? A joint publication of the Sleep Research Society and the American Academy of Sleep Medicine shared some remarkable findings from a study that tracked visceral fat, this belly fat accumulation using CT scans over a five-year period.

The results found that test subjects who slept less than six hours per night had a 32% gain in their visceral belly fat, compared to the test subjects who were getting six or seven hours of sleep per night, who had an increase of just 13% in their waist circumference, in their visceral fat level around their belly.

So, the people who were getting six to seven hours of sleep had an increase over this five-year span, just being in American society, an increase of 13% in their visceral fat. But the people who were sleeping less than six hours per night had more than twice as much belly fat, visceral fat accumulation over the same five-year period. It altered the way their metabolism is working. So again, we know some of the underlying mechanisms and we also know the out-picturing of this in society, it's not looking too good.

What's another culprit here in sleep deprivation being a calorie-free thing that can cause us to gain weight? Well, the study that was highlighted in the Annals of Internal Medicine had test subjects to... They put them all on the same diet to help them to lose weight, calorie restriction, conventional calorie restriction, but in one phase of this study, they sleep-deprived them, in another phase, they allowed them to get adequate amounts of sleep.

And so, after compiling all the data, they found that when folks were allowed to get... And by the way, sleep deprivation was five and a half hours of sleep versus giving them eight and a half hours of sleep. When they were getting adequate amounts of sleep, they lost 55% more body fat than when they were sleep deprived. Alright, 55% is astronomical.

But here's the thing, I said "body fat", they lost 55% more body fat. Not weight. Actual fat mass. But here's the part of the study that's relevant for today, which is the people who were sleep deprived but still on this calorie restriction, they lost weight too, they still lost some weight, but 60% of the weight that they lost was from their muscle.

These folks that were sleep-deprived, they were losing weight, but they were losing muscle tissue, not just some body fat. They increased the loss of their fat-free body mass by 60%. They were losing muscle. What does that do to your metabolic rate? You already know. It depresses it significantly. So, what happens when they go off of this calorie restricted diet or just "a maintenance diet"?

They are not going to be able to help but to regain that weight and more, now that they lost their muscle tissue. So, this is another reason why something calorie-free, sleep deprivation, can devastate our metabolism can cause us to gain weight and we might not even realize it. So that's number two here on our list of these five calorie-free things that can actually cause us to gain weight. And this moves us gracefully right into number three on our list, which again, this is another calorie-free thing that can cause us to gain weight.

Number three is lacking muscle tissue. Not having muscle tissue on our frame. Why does this matter so much? Well, muscle tissue is one of the primary factors that helps to keep our insulin sensitivity high. Insulin resistance, as I mentioned earlier, this classic sign of that is accumulating more belly fat. So, insulin is a primary driver of our body's ability to store energy, to store potential fat.

Now, insulin is incredibly important. We often cognitively tie the word "insulin" to diabetes in our society. Because one of the treatments is giving folks insulin, whether it's Type 1 diabetes where they're not producing insulin, the beta cells in the pancreas are no longer or haven't been producing insulin.

Or Type 2 diabetes, which is where the pancreas is still producing insulin, but the cell signal, the insulin sensitivity, the cells' ability to actually recognize that signal from insulin has dramatically plummeted. And often the number one driver of that is the excessive consumption of foods that spike our insulin levels. And so, it's kind of like getting spam, like cellular spam for many years coming in the form of all the sugar that we consume in our society, the average American is consuming about 100 pounds of sugar annually today.

Alright, crazy. The vast majority of that is added sugar, but all of that consumption is like cellular spam coming in, and eventually they start going to the junk mail. That signal, it gets put over into the spam folder like, "I'm just ignoring you. You keep on hitting me with the same signal with this sugar, I can't even hear it anymore. I'm already... I'm already overworked putting all this energy into these cells, I'm done."

And so, we'll artificially go in and start driving more insulin into the system to try and force those cells to open their door. Does that sound like a good treatment? No, it doesn't. But this can be a means to help keep folks alive, but oftentimes we're really missing the point, we need to remove the cause of the insulin resistance. And one of the biggest drivers of insulin resistance in our culture today is the lack of muscle tissue that the average person is now carrying.

Now, why is muscle tissue so important as far as our metabolism and insulin sensitivity? Muscle cells in and of themselves are far more until insensitive than our fat cells. That's just one of the big takeaways from today, why it's so important. Muscle can just sop up carbohydrate intake like a biscuit. Just sup it up. And it's used as on-site energy to then run muscular functions. It's pretty cool.

We even have a form of intracellular fat that's right there side by side with our muscle, sending over energy as well to be used for muscular function, but our muscle cells themselves can store glycogen. And also, our liver can store glycogen as well, but it's really our muscles is where we have the ability. You can't proactively just do a workout and grow your liver. Alright? Grow your liver's capacity.

But you can, your muscle, your ability to gain muscle is within your hands. This is one of the greatest gifts that humanity has access to. But a part of that is becoming aware, awareness is really the key here. And understand that we have this powerful metabolic key right in our hands that we can choose to invoke or not.

If we were talking about a key scenario, by the way, that's how insulin kind of functions, being able to open that cellular door and allow energy in. Glucagon is the key that's coming along in other aspects and unlocking the door for stored energy to be utilized, and both of these are

getting produced within the pancreas. So, we've got the alpha cells producing glucagon, beta cells producing insulin.

They're loving mother... I refer to them as twin brothers, and they got their loving mother, Miss Pancreas, and it's really about again, having a great relationship, a healthy relationship within that family. And a big determining factor obviously is our diet, but in a calorie-free aspect of this, it's our accumulation of muscle tissue or the lack thereof.

These are huge drivers of our metabolic health, and lacking muscle today more than ever is one of the underlying calorie-free factors that can cause us to gain weight. As mentioned earlier, muscle is expensive for your body to carry. It's an evolutionary adaptation that humans have developed over time to be able to just be more badass, to be able to survive, to be able to thrive under various conditions.

This is one of the things that really stands out about humanity is our ability to survive and thrive in all of these different places. There isn't another species, we're talking about our really highly evolved species, that can survive pretty much anywhere on Earth.

Now, we can get into conversation about some of the things that inhabit us that we would consider to be more primal, like certain bacteria or archaea, we can talk about those things, but as an entity that's out here doing stuff in the world and in building things and creating civilization, this is what makes us so remarkable. But muscle is one of the things that has evolved to help us to do all the things that we're able to do.

And so again, we have the ability to proactively grow and build muscle, but another big part of this equation is the fact that muscle in and of itself is a very powerful reservoir. It's like a container when we're building muscle becomes a container for metabolism-supportive, anti-aging hormones. What we put in this category of anti-aging hormones.

So, we're creating a reservoir, we're creating a bank. And this is why we see in the data, folks, as we venture into those senior years, who carry more muscle tissue, are far more resilient against injury and also recovery from injury. A big part of that recovery is not just your state of health, it's not just a superficial thing, it's the hormones that you're carrying and your body's ability to drive that response, that healing response.

Kids, when stuff happens to a kid, they heal so quickly, and that tends to slow down as time goes on. Even the immune system, we have immunosenescence. As time goes on the immune system isn't producing and performing as it once did. But what are some things we can do to support our immune system and support our metabolism as time goes on? Build some muscle. Cue Diana Ross.

Again, this is something that we have the power to do something about. We can proactively decide, "You know what? I'm going to do some load-bearing exercise. I'm going to work and build this gift that I have access to, that's within my genetic template, to make me more resilient, to make me more metabolically healthy. The power's within my hand. I'm not doing this for what's showing up on the scale, I'm doing this so that I can put my body in a position where I am metabolically healthy. The number on the scale is a side effect of that."

Our ability to build and sustain a healthy amount of muscle is one of the things that keeps us functioning at a high level and really activates our potential as a human. That's what it's really about, it's about being more human, we've got to use those muscles. Build muscle with that as your thrust towards it, as your modus operandi.

Not trying to do something, again, a scale that's an outcome. We can have that there in our perception, but really this is about being more human. Your genes expect you to lift heavy things, and if you're not doing that, we're not going to be activating and altering these epigenetic influences to create a more robust, resilient, healthy functional version of yourself. So, cue Diana Ross again.

Build muscle, it's your right, it's your prerogative, it's within your power. We're going to talk about some action steps for all of these things as well, but we're going to get through our five here. We just covered number three on our list of these five calorie-free things that can actually cause you to gain weight.

Number four, calorie-free, but it can cause you to gain weight, and that is sedentary behavior. Now, it's not that you're proactively not "expending energy". That's the thing we tend to think with sedentary behavior, is because we're not expending energy, but what it really is, is that when you're sedentary, you're negatively altering the way that your metabolism works overall. That's the truth. Right? It's not about...

Again, just look at where we've been as a society, really smart people, dedicated people expending more energy through exercise and consuming less energy in the form of food and not getting the results that they're promised, and this is because the science doesn't affirm that paradigm. That's not how it works.

It really is about having a healthy overall metabolism and understanding these epigenetic controllers that decide within your body what calories are doing in the first place, how is your body expending energy in the first place? Those are the leverage points, not this superficial "calories in calories out" thing. Again, that has some credibility in some context, but overall, we're really missing the point.

Now to affirm this, that sedentary behavior negatively alters the way that your metabolism works, a study published in the Journal of Physiology titled, Sedentary Behavior is a Key Determinant of Metabolic Inflexibility, details how a sedentary lifestyle can impair your ability to oxidize carbohydrates and reduce your ability to oxidize fat.

Whether you're eating or not, whether you're eating or not, this is changing your oxidation, your metabolic rate, your ability to utilize those fuels when you are living a sedentary lifestyle. Metabolic flexibility is defined as the ability to adapt oxidation rates of fat or carbohydrates in response to changes in fuel availability.

The researcher stated, "The inability to switch between the oxidation of lipid and carbohydrate appears to be an important feature of chronic disorders such as obesity and Type 2 diabetes." These are the underlying pushes; these are the underlying factors that are disrupting our society's metabolism.

Again, we started by talking about the state of our metabolic health in United States with only 12% of Americans being determined to be metabolically healthy. This metabolic inflexibility, driven again by our sedentary lifestyle, not just the fact that we're not "expending energy", but that it's altering the way that our metabolism works, this is the crux of the situation. People aren't being told this stuff, they're just told, "You need to get out there and exercise, to expend more energy, burn off that fat, burn calories."

No. This is about creating a healthy metabolism, this is about creating a healthy genetic expression. This is about protecting you from all manner of degradation and diseases. That should be the tenet first, that should be the focus first, not the superficial. Not the vanity metrics. We can get those things, those are side effects, but we're pulling away from our humanity when we're not moving our bodies.

So, this one is really important, but it's complicated. But folks can over-complicate it. Also, there's also simplicity here to be found, and this is really tying into, again, we think that we need to move more and eat less, when in reality, when we're not moving, we're altering our metabolism in such a negative way that when we try to eat less and we try to move more, we're going to struggle.

And so, when people aren't getting that heads up that, "Hey, this might not work for you, when we are exercising more and eating less," especially long-term. Let's shift gears and look at getting you metabolically healthy by doing some healthy movement throughout the day, and not allowing this sedentary lifestyle to put you in such a metabolic cellar.

I'm thinking of the movie Evil Dead, "What's down there?" We're down there. As a society, we're the creepy... Do you remember when his hand got possessed? We're that. Our own bodies are coming at us. Then a hand gets cut off and he replaced it with a chainsaw, it's pretty badass. Alright? We need a metabolic chainsaw, so we can cut through all of this nonsense. Oh, my goodness, that's iconic. That's an iconic moment. Cue DJ Khaled.

So again, sedentary behavior is a calorie-free thing that can cause us to gain weight. And now we're going to move on to number five of these five calorie-free things that can actually cause us to gain weight. And number five is inflammation. Inflammation has become this really popular buzzword right now, but this has so much scientific proof behind its out-picturing of chronic disease, but also of its contribution to obesity and weight gain.

It seems like this is kind of inert thing, "Oh it's inflamed, inflammation," but there's a difference between the inflammation that we kind of experience viscerally, like an inflammation for if you get a cut or a wound or something like that, and you have some swelling and some pain, we get that inflammation, but chronic inflammation, systemic inflammation, that we can now of course, we can monitor by several factors like C-reactive protein, for example.

We can actually see that the word "inflammation" simply if we look at the roots, we're talking about "to set on fire". We're talking about there's something that's ablaze within our system. And this chemistry taking place, inflammation is not a bad guy. That's part of the understanding. Inflammation is needed to drive growth, to drive healing, to drive evolution. We have to respect the fact that inflammation is one of the key factors with us becoming better.

But when inflammation becomes chronic, when there's rampant inflammation taking place within the body... We need enough inflammation to heat the house, to cook things, but it can also burn our metabolic house down if we're not careful. That's the thing. So, we need information in balance. And so, what happens, what's driving this chronic inflammation?

Well, we already know, we know that our diets are a big driver of inflammation, sugar is one of the big culprits behind driving inflammation. Our abnormal consumption of these highly refined "vegetable oils", it's a major driver of inflammation. And the list goes on and on in that domain. But here's the thing, our fat cells themselves are a big driver of inflammation that's largely ignored today.

Our fat cells are one of the biggest adaptations that we've developed as a human species, that have enabled us to reach the place that we are. We can survive quite a long time without access to food, and so our fat cells are who we need to thank for that. Our fat cells are actually able

to store so much energy, it's uncanny. Our fat cells can expand their value by a thousand times. A thousand times their value to contain extra energy to save for a rainy day.

Now, we have bodies that have been doing this for the past couple of decades for a rainy day that never comes, right? So, it just keeps accumulating and accumulating and accumulating. And our fat cells, they've been stretched, literally, but to a degree that we've never evolved having that kind of access to that much caloric energy, and so now we're at a place where the cells, the fat cells themselves are sending out a false distress signal to our immune system as if we are infected.

Our fat cells are sending out a distress signal as if they're the source of an infection, and this is highlighted from researchers at the Methodist Hospital in Houston, Texas, and the research is publishing the journal Cell Metabolism, finding that again, our fat cells, inflammation itself is a natural response of the human body to injury or infection, but even though our fat cells may be in good working order, when they are over-burdened, they appear to issue false distress signals that can send your immune cells into a tizzy.

The study found that excessive body fat can trigger heightened activity with your immune system, and too many over-filled fat cells can actually make your body think that you're infected. So, our fat cells themselves are in the state where it's making it very difficult for our metabolism, because even our immune system, there's an entire field of immunometabolism, our immune system is siphoning energy from our "weight loss", trying to deal with a perceived infection in our bodies. Your immune system is taking a top rung, so more of a priority because we're talking about survival.

Your body could care less about you trying to lose weight, it's trying to keep you alive. And this is part of the issue, so the fat cells themselves and this kind of teetering back and forth with chronic inflammation and weight gain is one of the underlying issues here. But also, and this is the big one, this is the big one, we're talking about inflammation and weight gain, we have to understand how our brain is really the governing force controlling whether we're losing weight or gaining weight. Alright?

Our brain, the human brain is the governing force determining whether you're losing weight or gaining weight. Where do you think the operating system is? This is the command center of your body, Star Trek Enterprise, this the captain's chair. Alright? This is really what's determining what's happening with all manner of our hormones regarding weight loss, or hormones regarding energy expenditure, or energy consumption and storage.

And to actually demonstrate this in our peer review data that we have, a recent study that was published in the Annals of the New York Academy of Sciences reported that brain inflammation, specifically hypothalamic inflammation, is one of the leading drivers of our epidemic rates of obesity, and they found that obesity is one of the leading drivers of hypothalamic inflammation.

So, our brains that are controlling our metabolic rate, that are releasing hormones that are determining what we're storing and what's getting excreted, what's getting expelled, inflammation in our brain is leading to excessive amounts of body fat storage. And body fat storage is creating inflammation in our brains.

This is a huge metabolic dysfunction that many people are getting trapped within and don't even realize it, because they're not utilizing nutritional and lifestyle protocols that are helping to reduce inflammation in their brain. Nobody's talking about that. It's just about exercise your face off and cut your calories.

For the most part still, as advanced as we're supposed to be, we're doing these superficial things without any context, without any real understanding of what's happening with human biology. And so, to lean into this even more, researchers at Yale University School of Medicine found that there's a specific communication that's happening with your brain and with your gut, and your brain is literally able to tell your gut to absorb more calories from your food, or it can tell your gut to reduce the amount of assimilation from the food that you're taking in.

And so, the Yale University researchers determined that this communication, by the way, is happening between the gut and the brain via the vagus nerve but based on the information that's getting fed back and forth from your gut and your brain, if there's inflammation in your gut, it can throw off this whole process. If there's inflammation in your brain, it can throw off this whole process. And the next thing you know, we have this calorie-free way that we're gaining more weight, driven by inflammation.

Alright, now that we've covered these five calorie-free things that can be causing you to gain weight, let's talk about some solutions. Now, we've done master classes on all of these subjects throughout the years, and so we're going to hit some power punches on some of these points and some action steps that we can implement starting today, but we'll put some episodes for you in the show notes addressing optimizing your sleep, addressing inflammation.

So, we'll have those episodes for you, but just to kick things off, number one for an action step, we have to address the stress in our lives. We were never designed to be cut adrift, to be separated from nature, from natural inputs. Whenever I say the word "nature" today, for me, like I say the word, but then I'm just like, "That, it doesn't fit."

It's an inappropriate word because it's just a means of communication, but everything is nature, we are a part of nature. And so, to say "nature is out there", we're kind of missing the point. We are a part of out there. And when we take that away, when we create the separation, we create this barrier, this wall between "out there nature" and who we are, all of the nature that's taking place within our own bodies, wow, some serious problems can start to take place.

So, we have to address the stress in our lives. Part of that addressing of the stress is getting ourselves in contact with sunlight, with exposure to clean abundant air outside, versus the processed air that we're constantly breathing indoors. And the basic things as far as communication and connection with other people, these are huge modulators of stress.

Humans are social creatures, even the most introverted among us, we require human connection, and this is one of the ways that we produce oxytocin, which has a profound impact on reducing our stress levels, is through interaction, especially close connection with people that we love. Humans are great at oxytocin, especially women are really, really great at oxytocin, getting together in groups and hanging out with friends, and all of us do this, but there just tends to be a better access to that.

So, I really want to encourage you, especially women, especially moms, who can often have the weight of the world on their shoulders, to allow yourself, give yourself permission to connect with your friends. Schedule that sh*t. Make it a normalized part of your schedule. At least every week, give yourself some time to connect with people that make you feel good, that you can vibe out with, that you can express and share your grief, your problems.

We have to. We can't hold that stuff in, we get spiritual constipation. We get spiritual constipation by holding that stuff in. We have to be able to release, we have to be able to talk some sh*t. You see how that whole analogy just came all full circle there. We have to be able to express ourselves, to share our heart, and to laugh and to connect and to have joy and to have tears. Whatever it is, we need to connect with other people. So, give yourself permission.

It's so crazy, if somebody's coming in and they're on this new diet program, exercise program, they're getting metabolically healthier, but they're not really achieving the results that's possible for them. To give them the prescription of more time with people that they love, it takes a... It's so far against what we believe to be true in our society today, it would be difficult to accept.

But it's true. Look at the results we have as a society, we're more and more separated than we've ever been. That's not an accident that we're also more and more unhealthy than we've

ever been. For all manner of diseases. You name it, everything is worse. So, give yourself permission to connect and to allow yourself to de-stress.

Alright, stress, we just live in a stressful society today, it is what it is. Well, we could proactively put some things in place for us to de-stress. And even on the nutrition side, even when you're getting together with friends. I was just hanging out with somebody the other day and they gave me some matcha tea.

Just having tea together, like teatime, that's a phenomenon in many different cultures, to have time to have tea together. In our culture here in the United States, oftentimes it's more of getting coffee. But both of those can be a great intervention for our mental well-being and help to de-stress.

But I really love tea in this aspect because green tea itself contains a unique amino acid called L-theanine, and this is one of the rare nutrients that can actually gracefully waltz its way across the blood-brain barrier. Because the blood-brain barrier doesn't allow...

So, a lot of people might be taking these things that they believe have these neurotrophic effects, they're not even making it to the brain, they're not even impacting what you believe they're impacted. But L-theanine factually is able to waltz its way across, it's invited past the blood brain barrier into the brain, because L-theanine is actually able to increase the activity of the neurotransmitter GABA, which helps to reduce anxiety and make you feel more centered and relaxed.

Not only does L-theanine have these anti-anxiety effects and these calmative effects, but also dramatically improves our cognition and our mental performance. As a matter of fact, a study that was published in the journal Brain Topography found that L-theanine intake increases the frequency of our alpha-brain waves, indicating reduced stress, enhanced focus, and even increased creativity. And the research noted that sipping around two to three cups a day was noted to carry the greatest brain benefits.

Now, matcha is amazing, it's my favorite green tea, but the sourcing of our teas matters today more than ever. There's so much garbage out there, and it's one of those industries that has a lot of microplastics and contaminants and heavy metals. We need to make sure that we're getting this from the best place possible and places that have integrity.

I drink the Sun Goddess Matcha from Pique Teas. It's actually shaded for 35% longer, so the L-theanine content is even higher. It's also crafted by a Japanese tea master, there are less than 15 in the world. And it's the first matcha to be quadrupled toxin screened for purity. And no

added anything, no preservatives, sugar, artificial flavors. None of that. Just the highest quality matcha that you can find.

And with Pique Teas you get an exclusive 10% off store-wide if you go to piquelife.com/model. That's P-I-Q-U-E L-I-F-E.com/model. You get 10% off their amazing matcha. I also love their ginger tea, their pu'er. So many amazing award-winning teas and they do stuff the right way. Go to piquelife.com/model for 10% off.

So again, sharing a cup of tea with somebody that you love, a couple of coffee, hanging out connecting, give yourself permission to de-stress. You need it, it's one of those invisible things that can be causing you to gain weight and/or preventing you from losing weight.

Also here, optimizing our sleep. So, number one strategy, number one homework assignment is to de-stress, proactively give yourself permission to de-stress. Number two is, put some intention on optimizing our sleep. We don't have to be perfect. It's not about perfection, it's about progress. So, make sure that we're being mindful of getting the sleep that our bodies require so we're not hampering our metabolism. So, what does that look like?

We've already mentioned this. Same thing, getting some exposure to nature, natural sunlight exposure in the early part of the morning helps to set your circadian timing system and your cortisol rhythm. So, one of the things that are seen in innovations in clinical neuroscience, for example, that exposure to sunlight in the early part of the day actually helps to reduce your cortisol levels at night.

That's one of the things that we addressed here that we were seeing causing people to be in a position where their metabolism was slowing down when their cortisol was too high at night. Getting sun exposure helps to reduce cortisol at night, it is a solution for that thing, a natural solution, a cost-effective free solution that you can be engaging with. So, getting some sun exposure.

Also, that sun exposure increases our body's production and really mobilization, utilization of serotonin. Serotonin is a precursor to making melatonin. So, it's setting the stage for better sleep at night by getting some sun exposure in the morning. And also, in the evening then, we don't want bright light exposure, which is the normalcy in our society today. So, let's do some things to buffer that, give yourself a screen curfew, maybe... At least 30 minutes. Alright?

But also using protective things like blue light-blocking glasses and the like, you can do those things, but optimally, we want to have some time away from bright lights and screens and things like that, to facilitate better sleep. Also, thermal regulation, making sure that we are sleeping in a cooler environment, and making sure that the environment, creating a sleep

sanctuary where we're not exposed to artificial lights. That our screen is picking up light as well. We have photo receptors in our skin that can throw off the Circadian timing system.

So many strategies of course we've talked about here on The Model Health Show, got an entire book dedicated to this subject, there's 21 clinically proven strategies to improve your sleep quality and sleep smarter. But this is another thing, again, number two here on these action steps is to optimize sleep.

Number three, build some muscle. If you didn't get one thing from this episode today, this is something you have the power to control. You can actually build something on your body that is remarkably healthy. Again, you can't proactively just decide like, "You know what? I'm going to build up this liver. I'm about to get the most diesel kidneys on planet Earth." You can't do that. But you can build some robust, healthy levels of muscle on your frame.

It's not that you're not going to have to put some work in, but it's not that difficult. It is not that difficult at all. Especially if you're engaging in just a couple of days a week, even twice a week of some load-bearing exercise. This can be as little as 10 minutes if you get the right stimulus. This doesn't require that much. Alright? But it's a genetic input, it's an epigenetic influence that we really need. So, build some muscle.

Alright, so moving on. Number four tip here is, create more movement. As we noted, a sedentary lifestyle negatively alters the way that our metabolism actually works, leading to what the researchers denoted was reduction in our metabolic flexibility. So, they denoted that, folks who were engaging in a sedate lifestyle had higher rates of metabolic inflexibility.

So, we need to create more movement in our lives, and so how do we do this? When we're going from being sedentary, full on couch potato, to having more activity and movement in our days. Listen, we don't even have to go that far from the television, we can hack our environment.

One of the things that I tend to do, if we're just hanging out, watching TV, watching the show, is every now and then I'll just get up and do a couple of stretches, I do some mobility exercises. I know people that have put like a mini trampoline in their living room or treadmill, so they can still have their entertainment, but engage in a little bit of movement.

But this doesn't mean we can't kick back and put our feet up as well, but if we're going to do that, let's also make sure that, hey, if we're going to be hanging out and watching a couple of movies in the evening, let's make sure we go out for a 30-minute walk together. Hang out with the fam, connect, talk about some things, have some good times. Maybe just walking with

somebody, maybe it's a business thing that you're working on, so maybe you're on a call. But have some time to actually get out and move some.

So walking is the number one form of exercise for humans, it's the thing that we know that we are designed to do. We're bipedal, we have these two legs, they're made for walking. This is what we're designed to do. All the other stuff is bonus. But if we really want to engage our genetic potential, we are designed to walk.

So just finding some ways to create more movement in our lives on a day-to-day basis, that's really the game here. And also, with that said, give yourself permission to do more of the movement that you love. So, if you absolutely love to go roller skating or you love painting, or you love gardening, that all counts as movement. Give yourself permission to do those things.

We often see those things like, this is just my thing that I like to do when I have "free time", or it's "me time". You get to do that, period, but if it's not scheduled sometimes today, if it's not scheduled, it's not real. Moving in the bedroom. Also, another form of movement could be knocking the boots, right? So, if you're really passionate about passion, that might be another way for you to cognitively gain some more, and also you could burn quite a few calories when you're doing the... What is it? The horizontal mamba? Is that what it's called?

Anyways, when you're getting it on. Alright? So, find more ways to create movement. And also, if you want to create a double whammy, you also involve the people that you love. So, whether it's going for a walk, whether it's... One of the things that we do as a family on Saturdays, for example, we do a family workout.

So, through the week, it might be people going here there, on Saturdays, we get together, and we do a workout. And many Sundays as well, we'll go for a hike together. So, I'm integrating it. These are things that we didn't used to do. The Saturday workout has been... We've been doing that for quite some time for many years. The Sunday hike thing, brand new. It's new, we moved to another state and it's something that we have accessibility to, and we just found that this is a flow for us.

So, create more movement. If you make the intention, implement some things, try some things out and find a way to create more movement in your life, especially if you could integrate some of these other factors. Because that time with family can help also as being an ingredient to reduce stress.

And finally, number five here in our power punches of things to address, keep inflammation in check. We've already discussed some of the primary pieces of why inflammation could be so

devastating to our metabolism. Literally neuro-inflammation is one of the biggest issues today, and your brain is literally controlling your metabolic rate. Alright?

So, what happens if your brain is on fire, what happens if your brain is experiencing this inflammation, which if we're venturing into being significantly overweight and obese, high, high probability that that person's brain is inflamed. What can we do to reduce the inflammation in the brain? Reduce our overall information levels, period, of chronic inflammation in the body, so that we can put our metabolism in a healthier place?

One of those things that's really interesting as far as reducing brain inflammation was published by some researchers at Auburn University, finding that oleocanthal-rich extra-virgin olive oil is able to reduce brain inflammation. Specifically, it's been found to help to reduce inflammation and help to repair the blood-brain barrier.

Part of the reason the brain gets inflamed is the breakdown of the blood-brain barrier by all of these crazy artificial synthetic ingredients, I'm not even going to call them nutrients, that humans are now taking into our bodies. And also, the environmental exposures as well. It's like 40,000 synthetic chemicals that are released into the environment that are brand new just within the last couple of years alone. This data is coming from the EPA, Environmental Protection Agency.

Are you really protecting stuff? Letting all these new artificial chemicals, these new synthetic chemicals release into our environment, which we are a part of the environment. Olive oil, I don't have a dog in the fight. I don't care if olive oil is healthy or not, I'm just going on what the data says. And for me, when I saw this, was just like, "What? It can do that. That's world class, remarkable."

And also, to add another check to olive oil is really about that life, is that it's been used for thousands of years. And how do you make olive oil? You take an olive, and you crush it. That's it. How do you make "vegetable oil"? How do you make corn oil? You extract this minute amount of oil that's going to come from countless bits of corn and treat it with astronomically high heat, and you get this goo that comes out, and then you treat it with deodorizers and flavor enhancers and all these things to try to make it something that is palatable for humans.

All this action step versus this one step, right? And also, it's respected because virgin olive oil, nine times out of 10 you're going to find it in a dark glass bottle. Because it's also, not only is it heat sensitive, it's light-sensitive as well. The corn oil is heat-sensitive too. It's already... It's already been Freddy Krueger-ed. Alright? So that stuff is just trash.

This food, this olive oil has been utilized for thousands of years, it has so much peer-reviewed data to affirm how remarkable it is, especially for our brain health, that I had to make note of it. And also, another food here, if we're talking about nutrition and reducing brain inflammation, data published in the journal PLOS One, the Public Library Of Science One, revealed that spirulina has the potential to, number one, improve neurogenesis in the brain, creation of new brain cells, and number two, it was found to reduce neuro-inflammation, reduce inflammation in the brain. Powerful foods.

Spirulina has been used for thousands of years. It's not some new flash in the pan, fancy thing. You know, entire civilizations, countries from Africa to the ancient Aztecs utilize spirulina as a protein source in their culture. If we're talking about Chad for example, in Africa.

So, this has been utilized by humans for a very long time, number one source of protein by weight, by weight, let's be clear, of any food. It's about 71% protein by weight. And it's one of the primary ingredients in the Organifi Green Juice. I'm a huge fan. Been utilizing the green juice for so many years.

Spirulina, chlorella, moringa. Organic. Organic, low temperature process to retain those nutrients. And kids love it, like my son has it every day. If anybody's going to have green juice every day, my oldest son, Jordan, has his Organifi Green Juice. Head over there, check them out as well. You get 20% off. Go to organifi.com/model, it's O-R-G-A-N-I-F-I.com/model for 20% off their amazing green juice formula. They are in a league of their own.

So again, another food that's been found to help to reduce neuro inflammation, so we got extra virgin olive oil, spirulina, which spirulina is really the power player in this scenario, because it also stimulates the creation of new brain cells. Also, by the way, again, we want to make sure that the sourcing of these things matters. You don't go out and get Company X's spirulina. Organifi does it the right way. Organic.

Another food that's been found to help to reduce neuroinflammation is the cruciferous family, specifically broccoli. Alright? That's right, broccoli, you know 'em, you love 'em. It's one of those foods have been found to help to improve cognitive health overall, but also helping to reduce neuro inflammation.

But the number one way to help to reduce neuro inflammation is to avoid the cause of the neuro inflammation, which is the abnormal exposure to artificial, processed, highly refined sugar-laden sh*tty foods. Alright? We can't even... We need to stop calling it food. We can just call it "stuff". We can call it "doof". "Food" backwards. Alright?

We need to get that stuff on a new label, 'cause it's not food. It's food-like products. So, by taking that out of our normal diet circulation. Not to say you're not ever going to come in contact with a donut or Snickers Bite, but when these things are, we're regularly consuming them, and especially with the average person, the majority of their diet is made up of these fake foods. That's why we're in the state that we're in.

So, remove the cause, the brain inflammation is going to tamper down. Our metabolic health is going to dramatically improve, and all of these fit together as they naturally should.

I hope you got a lot of value out of this episode. If you did, please share this out with your friends and family. You could tag me, I'm a@shawnmodel on Instagram and Twitter, and at the Model Health Show on Facebook. You could send this episode directly from the podcast app that you're listening on as well, that's a really good gift.

And they've really made it easy with these different apps where it's Apple podcasts or Spotify, iHeart radio, SoundCloud, to share the episode with people that you love and keep spreading empowering information, sharing insights and tools and strategies and real education, so that we can really get our citizens in a position to where our poor state of health becomes the exception and not the rule.

Right now, being healthy is the exception and not the rule. You don't want to be adjusted to a severely sick society. You want to stay a little bit different, stay a little bit weird, but driving forward, being a beacon of hope, a beacon of light, a beacon of health, and creating a new model of what health and wellness can really be.

I appreciate you so much for tuning in to the show today. We've got some epic shows coming your way very soon, so make sure to stay tuned. Take care. Have an amazing day. I'll talk to 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.