



Lesson 9: Cortisol & Stress

Hey, everybody. Welcome to day nine of the Healthy Mindset masterclass. Today, I had a couple more things I wanted to say about dopamine, one more thing to say about serotonin, and then I'm going to move on and talk about stress and cortisol.

When I talked about dopamine, I wanted to make sure that it's clear there are some things that you can do to help with your dopamine response system. One is to take some breaks from dopamine charges that you get. For example, you hear people taking breaks from social media or breaks from certain activities. This is really important because if you remember, we can become overly sensitive to activities and narrow early focus on looking for those dopamine responses, so it's important to take breaks. Even taking breaks from eating, taking breaks from certain foods could be helpful to manage the dopamine response.

Another big one, work on not having bright light touching your eyes late at night. By "late at night," I mean between 10:00 PM and 4:00 AM, so keeping your screens off, keeping your lights off, turning lamps in your home down if you still are up at that point, your devices, your iPad, your laptop, your phone, whatever you're using. This interferes with our dopamine structures.

We need certain level of serotonin to have that calm effect, so lower levels of dopamine are tied more to things like depression, anxiety, low energy, and sleep difficulties, so you do want to make sure that you're creating enough serotonin in your gut so you can affect this by exercising and eating healthy foods.

Let's switch gears a little bit and talk about another hormone, which is cortisol. Cortisol is a stress hormone that is released from our adrenal glands. Its primary intent is to activate gluconeogenesis, the new production of glucose, the new release of glucose, so that in the state of danger, our body can respond. We can have energy and our movement can be fast and we can be very alert. This is a good thing, but it's also a bad thing. What happens when we have cortisol on board is because its job is for gluconeogenesis, it means that it keeps our blood sugar up, it keeps our insulin higher, then, in response to this glucose, and it also dampens our immune response, so we don't want our cortisol too high too often, just like we don't want our insulin too high too often.

The good thing about cortisol is that it helps us in stressful or dangerous situations. Again, if you had a lion chasing you, it would make you run and try to escape or hide or whatever you needed to do. In uncomfortable situations, dangerous situations, it gives you energy, it gives you alertness. The reason it suppresses the immune system is it takes away all the energy that would be used for these protective things so that you have that energy available to you. It's really the fight-or-flight response. It activates the sympathetic nervous system. This is the alert nervous system. This keeps us kind of wired.

If you have a lot of stress going on, and if you don't manage stress, you're going to have a lot of cortisol. Too much cortisol too much of the time has some negative effects for us like weight gain, high blood pressure, type 2 diabetes, it can lead to heart disease insomnia or difficulty sleeping, and mood irregularities and low energy levels.

Some examples of ways you can lower this cortisol, this hormone in your body. Unlike other animals, we tend to hold onto these responses. Let's say, for example, in the wild, a zebra is standing at the watering hole drinking and a lion jumps out, and at the last second, doesn't catch the zebra or doesn't kill the zebra. What happens is the zebra pauses for a moment and then keeps drinking. It doesn't hold that charge. Unfortunately, we hold that hormone, and that's something that we need work on being able to reduce.

Exercise is one way to reduce cortisol. Now, the challenge with that is that too intense of exercise or too much exercise is also a stressor, so it can increase our levels of cortisol. A workout can increase your cortisol briefly, and then within a couple of hours, it can come back down, but if we exercise too frequently and too intensely, it tends to cause overall higher cortisol, which isn't helpful for us. But working out, exercising, getting movement, especially earlier in the day, is good. Earlier in the day is more helpful with good sleep, which is another way to reduce our cortisol.

Higher levels of cortisol are often seen in people who are having difficulty sleeping or who work shift work late night and sleep during the day, so sleep is another important way to reduce your cortisol. If you work night shifts or a split shift, you may need to take some naps during the day to help. Sleeping in a dark room, a cool room is helpful for better sleep, keeping all sound and distractions away, eating well, being hydrated, all of those things help with sleep as well.

Having a pet. Now, right now, mine are quiet, but I have two dogs. Research shows that pets are useful in helping us lower our cortisol levels, so if you have a pet, taking time out to connect with your pet, even just touching your pet and breathing with them is a way to lower our stress response. Eating healthy fats, omega-3 fats are known to be connected with lowering cortisol, so making sure that your omega-6s and omega-3s are in the right balance.

Laughter and fun, that's an awesome one. We find that people who have more fun involved in their life tend to respond better to cortisol work through it more quickly, not hold onto it. We even find that laughter can affect that, even faked laughter. There's something about the physical act of laughing that can help lower cortisol.

People who have hobbies. A lot of us in this community talk about food and eating as one of our primary things that we do, and when we stop doing it as often or stop eating certain foods, we struggle with what to do. Having hobbies is connected with more life satisfaction, but also lower cortisol levels. Relationships, social interactions, touch, hugging someone gives us oxytocin, which is a calming hormone.

Doing breath work, slow, deeper breaths, longer exhale than our inhale. There are hundreds of different breathing strategies, but just paying attention to breath, slowing it down, taking deeper breaths, and again, especially slowing down the exhale. The inhale is kind of invigorating and the exhale is relaxing, so sympathetic and parasympathetic. Many things with mindfulness, meditation, tai chi, qi gong, yoga all can be part of a mindfulness practice, but studies show that people who have great impact on their overall health can definitely lower cortisol.

Staying well-hydrated helps people lower cortisol. We can actually keep our cortisol levels up by playing out negative emotions too much of the time, guilt and shame, versus couples have been studied and when they've been taught forgiveness strategies in couples therapy, they've also been measured to have lower levels of cortisol, so forgiving yourself and learning to forgive others, finding positive connection.

Relaxing music can be a way to lower cortisol, playing an instrument, humming, singing. I know this sounds weird, but even gargling. Part of what I mentioned the other day was the vagus nerve and the vagus nerve has connections in our throat, in our neck, in our mouth, and so sounds that we create in our mouth, humming, chanting, singing can be a way to activate that calming system.

I wanted to talk a little bit about stress since I'm talking about cortisol. There are some life stressors that we cannot avoid. We're going to have stress. We have financial stress, we have family stress, we have career stress, we have pandemic, we have different things going on. Some stressors are unavoidable, and so for me just to say, "Just have less stress in your life," that's not very realistic.

But what's more important than just trying to eliminate stress is to change the way you process stress. Stress is one of these weird things that's kind of paradoxical in that it can be damaging for us, but lower levels of stress are actually helpful. It's actually a positive thing. It gets us to act, it gets our body to move and do things. Even fasting is a stressor, but it's a good stressor, unless overdone, and then it becomes problematic. Working to shift how you

see or think about the impact of stress in your life, there are studies shown where if people are taught some of the benefits of stress, they fare better. They show better biomarkers based on their stress experiences.

Identifying what part of a stressful situation you can handle. Maybe I can't control how someone is acting, but I can manage how much exposure I have to them or how much I listen to the negative things they say. I might have a difficult situation at home and I need to spend certain amounts of time doing certain activities and avoiding certain amount of time doing other activities, so what parts I can control, taking back our control of the parts that we have control of is really important, and there is research to show that having a sense of being able to control these pieces is really important in how the stress affects us overall.

When things that are stressful to us have meaning for us, we tend to think of the stress less negatively. For example, if you have raised children or grandchildren and they drive you crazy, they leave their clothes on the floor, they ask for things a lot, they forget to do or homework, whatever it is, so it's stressful, but they also bring you pride and joy and fun, and so when you see those stressors as having importance to you, the impact of the stress can be less negative, so working on identifying, "This is important to me. There's value in this. This also brings me important things."

Let's say, for example, you're dealing with a situation at work that's very stressful. Being able to identify there are also good things that this work, this career, this colleague, whatever it is, brings to me, and if I can focus on that, I can see that get through this stress of it is doable and worthwhile. If the stressful event or the stressful thing happening feels worthwhile, we don't take it in and hold onto it as negatively.

We tend to have a lot of stressful things happen throughout our day. Let's say, for example, you go to the grocery store and the person in front of you is taking a very long time swiping their goods and then they can't get their credit card to work and so things are just going really slow. Research has shown that people who identify having a lot of stressors but who make sense of them as a natural part of life, not as a super negative thing, do better than people who identify them but hold onto them as negative, as barriers, as annoyances versus, "This is a part of life. This is a part of going to the grocery store. The line is going to take a while." In our culture nowadays, when things are so fast-paced and we're taught to hurry and achieve more and do more and be more, those daily things that slow us down, that cause us to pause, sometimes can be frustrating, but the more we can look at them as just natural parts of life, the less negative stress response they will have.

I want to talk a little bit about how does this all relate to fasting and eating in a healthy way. Much of what I've talked about is about kind of how our body works, how our brain works, and how it signals us about hunger and satiety and cravings. But the other piece of this is that the stress and the cortisol affect our ability to manage our hunger. Our cravings are going to be much higher when we're extra tired. Our ability to make good decisions is going

to be lower when we're stressed and when we are tired, hadn't gotten a good night's sleep. These things about how our body and our brain work affect our ability to fast and our ability to make healthy choices with food.

If you're super tired or super stressed, your body's not going to say, "Mm. Let's go get some healthy protein and some broccoli." It's going to want something that is a quick burst of energy, so highly processed food might be a quick choice, and it's going to want things that bring it that chemical response, the serotonin and the dopamine, and so again, more palatable processed foods rather than good whole foods. Managing our stress, bringing down our cortisol levels is important in managing that whole biological system.

We are not completely just victims to our craving and our hunger and what our body tells us it needs and wants at certain times. We have a huge role to play in creating an environment that helps our body to process those things more effectively to make better choices, to feel that better choices are even available. You may recognize this when you are tapped out with your stress level, thoughts about problematic food, or if you're fasting, thoughts about food in general will become much stronger and will seem harder to just ride out. It really does affect us to be doing a good job of managing our stress and our cortisol levels, making choices with our food that don't hijack our dopamine system, our reward system. These are all really important things as you think about your lifestyle and the skills you're developing your health and your future.

Remember, submit your questions to me for the question-and-answer session. Just email them to masterclass@thefastingmethod.com and I look forward to seeing you there and also look forward to hearing from you in the forum thread. I've been hearing from you. There have been lots of good conversations happening there, so I hope that if you haven't already shared some or processed some of how you're doing that, you can do that. Also, remember you're welcome to come to all of the meetings in The Fasting Method. We'd love to see you involved in our community, interacting with each other, and supporting each other, and asking your questions and processing through the things that are challenging for you.

The next two days, I'm going to talk about some really important topics. First, I'm going to talk a little bit about eating disorders and problematic eating patterns: overeating and binge-eating. Then I'm going to talk about some strategies that you can use for your problematic eating behaviors. This is not about treating eating disorders, but those of us who have some problematic eating patterns, I'm going to talk about some strategies to use. We're also going to talk about sugar and sugar addiction, food addiction, so a lot of important topics over the next two days.

Then after that, we're going to talk about self-sabotage. These next few days are some of the heavy hitters for a lot of us, so hopefully you've gotten a basis with all of the topics that I've covered so far, and then we're going to head into these that are probably even more the

things that some of you really are wanting to dig into. I hope you have a great rest of your day. Take good care and I'll see you again tomorrow.