



EPISODE 417

8 Powerful Ways To Manage Stress During Complicated Times

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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. I'm so excited about this episode. I think it's super timely. It is an absolutely crazy time in human history, and so many of us are experiencing a lot of stress. Now, stress is something that is obviously going to be a part of our lives forever. We actually evolved to have certain capacities to certain types of stress. Namely, when we evolved, stressors might come from things like trying to find food, for example, trying to find a safe place to sleep, trying to find an opportunity for your family to be protected from rival tribes and all these different things, escaping danger; everybody always uses the example of a saber-toothed tiger chasing after them, but I'm going to be different. I'm going to say somebody's swimming, looking for fish and they come in contact with a cuttlefish.

Cuttlefish are straight-up deadly and they're weird as well. But there's so many different dangers that we evolved and developed this sympathetic nervous system, this fight-or-flight response to evade danger, to get away, to fight or flee a situation, and then the nervous system would calm back down once you escape the danger. Now here's the rub: Today, that system is still being activated, but it's kind of at like a lukewarm, kind of low-grade fever, and it just keeps pressing us until we end up having hormone dysregulation. And when we talk about stress, we're largely talking about our stress-related hormones, which are important; cortisol, adrenaline, noradrenaline. These hormones are critical to having a healthy functioning human body.

For example, cortisol is responsible for helping to regulate your thyroid function, the thyroid that helps to regulate your metabolism, your ability to burn calories, your ability to store energy if necessary. Cortisol is necessary to help regulate that whole process. So if your cortisol is out of whack, it's going to throw off your entire metabolism in ways that put you into a hyperthyroid condition or even a hypothyroid condition. And so it's just important to keep this in mind that all of our hormones are important and they have value. We just want them to be in balance.

And so when we're talking about stress, we're talking about a physical feeling in our bodies, and what are our feelings really based on? They're based on what's



happening with our hormones, right? So when you're having an angry thought or anxiety, and you feel that feeling in your chest or maybe you feel like some turning in your stomach when you're nervous, this is all being activated by hormones, just kind of communicating and doing their things in the body. What are hormones? Hormones are essentially little chemical messengers that communicate information from different cells throughout your body, from your brain to various cells and from cell to cell.

It's kind of like a low-key... It's kind of like an email system or like digital... It's like texting, right? And so you want those text messages to get to the appropriate place. Have you ever accidentally sent a text to the wrong person? Oh my goodness! Hopefully, it wasn't anything inappropriate. But it happens. So you want the right message to get to the right person, or in this case, the right cells. And so today, again, with all the different things we're exposed to because prior to this quarantine experience, many of us had the typical kind of low-grade fight-or-flight activity, the sympathetic dominance of just racing around. Our alarm clock goes off in the morning they were just, boom, we're on-the-go from there. It starts our day off on alert, getting the kids where they need to be, or getting to where we need to be with work, and getting to the office, and doing all the office work and the different projects, and just dealing with people at the office. Right? This reminds me of the movie Office Space, classic. So the guy had the boss. He's trying to get those TPS reports. Where's the TPS reports?

Hello, Peter. What's happening?

We have sort of a problem here. Yeah, you apparently didn't put one of the new coversheets on your TPS reports.

Oh, yeah. I'm sorry about that. I forgot.

mmmm. Yeah...

Shawn Stevenson:

And there's a one-line, it was like, "Yeah, I'm going to need you to go ahead and come in on Saturday." That guy, that actor, see him at the gym. Well, the gym's closed right now, but I see him all the time at the gym. It's like, "You're that dude. You're the jerk." But he's probably an awesome person. And he's in there, he's always got the biggest smiles, like a permanent smile on his face. 'Cause in the movie, he's a little bit of a skadoosh. But in seeing him at the gym, he's just got this smile, just walking around smiling, got his headphones on. He's a whole vibe, you know what I mean? So that was previously. Now we have the stress of, "Am I healthy? Am I safe?" We go out there in the world now, even if you go to the stores, it's like going out into like the Mad Max situation. You know what I mean? It's like apocalyptic. Or if

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you want to get into like the low-key, most people don't know about movies, Paint Girl situation, right?

It's just like you're surrounded by strangers, you're surrounded by people in masks, and it just generates more fear. So we've got that. We've got dealing with being apart from our loved ones. We've got some people being crammed in with their loved ones on top of them, and many people have become teachers for their kids all of a sudden, and trying to do their work while trying to manage their kid's education. It's just like so much is on top of us right now, and it's okay. At the end of the day, that's the message I really want to convey is that we are people and we are resilient, but we're also human, and that means that we're subject to getting stressed out, even the very best of us.

If we miss out on some of the fundamental things, our routines and our practices, which for so many of us, our routines, life just took a gigantic monkey wrench and just threw it right at our face, right? I'm... Like a monkey wrench in the machine. Never mind. But that just remind me of the movie Dodgeball; if you could dodge a wrench, you can dodge a ball. So we've got to be able to upgrade our dodgeball skills because there are more monkey wrenches to come. And that's what this episode is about. So today I've got eight experts for you to share some of their best advice to help you to modulate, and manage, and even overcome stress and come out better. Alright. Some of these are very practical things and some of these things are just going to make you like, "Holy moly, I can't believe that your body can do that."

I'm so pumped about this episode and can't wait to jump right into it. But first, we're going to jump into the Apple podcasts review of the week..

iTunes Review:

Another five-star review titled "Always on point" by Susieq4538. "I've listened to this podcast for years and have never been disappointed by an episode. Thank you for always speaking the truth, getting factual information to your listeners, and keeping it fun. Everyone should listen to the last episode on human viruses. It was a gut check for us all to put our biases aside and be thoughtful about what we believe and what we put out to the world. Thank you for what you are giving this community every week."

Shawn Stevenson:

Absolutely amazing, thank you so much for that Suzyq4538. Yeah! I appreciate that so much. And listen, if you get to do so, please pop over to Apple podcast and leave a review for the show, it means everything. It really does keep me juiced up to keep



it coming and we've got some incredible stuff coming your way very soon as well, so make sure to stay tuned. But today, this compilation from eight experts is going to be something that's uber valuable, but also something that's very practical and you could start to apply stuff right now to help to get stress in check and start to feel better. Get your mind clearer and practical tips to help to manage the stress of COVID. And this virus is just really taken over our society in more ways than one. And we've talked about some of the minutia and some of the meta perspective on many of the past episodes, but today I want to talk about the topic of stress because, in reality, stress is something that we all deal with, but stress can also be deadly. If you look at some of the data, we see that physician visits right now, over 80% of all physician visits are for stress-related illnesses.

Stress causes, obviously, we talked a little bit about dysregulation of our hormones, but this can throw off so much. This can lead to obesity, this can lead to blood sugar dysregulation and diabetes. This could lead to inflammation and problems with our heart and the list goes on and on. And so stress is something that we need to take seriously, but at the same time, we need to know that we are resilient and our bodies are well-designed to handle stress but we need to have the right mindset as we go into it. And I don't think anybody's going to be better to help kick this show off than Dr. Rangan Chatterjee, and he's the author of the best-selling book, *The Stress Solution*. He's a physician, best-selling author, and he also starred in his own BBC show called *Doctor In The House*; hit show over in the UK. And in this clip, he's going to talk about how stress can add up in our lives and push us past our stress threshold, so it's something you definitely need to know about, and he's going to share some important insights about switching off. So let's jump into this clip from the incredible Dr. Rangan Chatterjee.

Dr. Rangan Chatterjee: I remember, Shawn, when I sat down to write this book, I was trying to figure out how do you simplify stress? How do you really get across in a very simple, non-judgmental way what you're talking about? Because I think we ignore stress a bit. We talk about it all the time, we know that we're a stressed out culture, but I'm not sure what that means. Many of us don't know what it means or what we can do about it. So, the way I simplify it is this: The first thing to say is, we've all got our own personal stress threshold and that will vary. Yours may be different from mine. It may have been vary from day-to-day depending on how we slept and all kinds of different things. And I make the case that it's that threshold that's important. When you get to your threshold, that's when things start to go wrong. So, how do I explain that even further? Well, see, we've got two kinds of stress, right? We've got macro-stress doses and these are the really traumatic things that may happen. This could

be physical abuse, this could be a bereavement, this could be a relationship break up, these things are what I call macro-stressors. They are big hits of stress that we do need to process and we may need to see someone to help us with that. But what I'm primarily talking about is the opposite of that which is these micro-stress doses, or as I call them in the book, these MSDs.

Now, what is an MSD? An MSD, as you've just really demonstrated, is a small dose of stress that in isolation we can handle with no problem. One of these things: I've got to pick up my kids, I need to rush them and get them, no problem. It's when they start to add up one on top of another, they get you closer and closer to your own personal stress threshold, and when you hit your threshold, that's when things go wrong. That's when your back goes, that's when an innocent email from your boss suddenly becomes problematic, that's when we fall out with our partners or scream at our kids because we've hit our threshold. It wasn't necessarily the last stressor in our life that caused it, that was just the straw that broke the camel's back. It's the final piece that gets us to our threshold. And I make the case that many of us are leaving our house in the morning having already been exposed to 10 or 15 micro-stress doses. So I'll give an example, what is a common scenario these days? A common scenario is people are stressed out at work, they come back late, they don't want to go to sleep because they want to unwind, they want some time for themselves. So they start watching Netflix, okay, and then one episode turns into two, which turns into three.

I get that, I have done this before. I am not being... I'm not judging people for doing this, but let's say you go to bed at midnight because you finally feel that, "Hey, I've unwound from the day and I've got to be up at 6:30 for work tomorrow." So you go to bed. You set your alarm for 6:30. So you go to bed, and let's assume you're in a deep sleep. So you were in a deep sleep, your alarm goes off at 6:30 in the morning, boom, that is micro-stress dose number one because that's jolted you out your deep sleep. You look at your phone, you're looking and go, "Ah, I've got a bit more time. Let me just put snooze on." You put a snooze on, six minutes later, again, the alarm goes off, micro-stress dose number two. Then what might you do? You might go, "Ah. Okay, let me look at my phone. Quickly look at email. Oh man, there's 3 work emails from yesterday I didn't respond to, I need to do that today." MSD number three. Then you quickly go flip onto Instagram and you see, "Oh man, why is that person having to go at me for my last post? They're having a little niggles at me." MSD number four, then you realize, "Oh man, I've been in bed for half an hour just doing this stuff."

I'm going to be late for work, I need to get up and get out." MSD number five. And you can quickly see how before we've even left the house in the morning, we've had 15 micro-stress doses. Why is that a problem? That's a problem because it means you now are much closer to your own personal stress threshold. That means it won't take much in the day before you get and before you flip over.

So my approach is not just about reducing the stress in your life, because I get it, some people have got super stressful lives. Maybe I can't reduce all the stressors in their life. If you're a single mom with two kids and you're working two jobs, you know what, that is a significant amount of stress in your life. Even if you cannot remove the stress though, you can make yourself more resilient by reducing how many micro-stressors that you've been exposed to, but also with some simple techniques that we can all use. So, I think that micro-stressors is something that is really taking off in the UK. People really like that as an idea to help them identify and think about stress. Look, all these things, you got to understand that the brain is always responding to the information you feed it; it's always adapting. So, the more stress you have, the more chronic and un-relating your stress is, your brain's going to adapt to be able to function in that environment, but it doesn't do that good a job.

When talking about what the brain... When talking about how stress affects the brain, I think a really useful thing, a really practical way of looking at that, that people I think will resonate with, is this whole idea of downtime. Okay, so I think one of the big, big problems I see in society is that we've lost downtime. Downtime has been slowly eroded away. It's been stolen from us. Every single moment of the day, if we have nothing to do, we pick up our phones. We're now absorbing. We're reading new information. We're learning new things. We're reacting to what's going on around us. We're here in Santa Monica recording this, right? If you were here, I reckon 10 years ago, and you walked into a cafe or a bar or a restaurant or whatever, you walked into a coffee place, let's say and there's a queue. I bet you 10 years ago that people would be looking around, they'd be daydreaming, they might bump into a friend or a work colleague. They might be looking at the pastries and think, "Am I going to have this today? Am I going to resist?" But they'd be switched off of a little bit. If you go into any... If we walked out of here now and went to the nearest coffee place and you see the line, what is everyone doing?

Shawn Stevenson: On their phone.

Dr. Rangan Chatterjee: We're on our phones, right? We're on our phones. And you might ask, "Well, why is

that a problem?" The reason that's a problem is 'cause your brain needs downtime. So, we used to think, Shawn, that when we switched off from a task in front of us that our brain went to sleep, but it's not true. We've realized in the last few years, when we switch off there's a part of our brain called the default mode network or the DMN that goes into overdrive. Alright, so what does that part of the brain do? It does many things, but one... Two things it does: It helps you to solve problems and be more creative. Alright, so this is the exact reason why people so many that have our best ideas when we go for a walk or we're in the shower. I get some of my best ideas in the shower. Why is that? It's because you've switched off, your brain tries to solve problems for you. Is that making sense?

Shawn Stevenson: Yeah, absolutely.

Dr. Rangan Chatterjee: And it's so powerful. And downtime, we don't see the problem with always being on phones and always consuming information. Your brain needs downtime to thrive.

Shawn Stevenson: Yeah.

Dr. Rangan Chatterjee: And this is why I'm so keen to say even like... I go into a lot of companies, big companies, to talk about employee wellness, and one of my top tips is have a tech-free lunch break even if it's just for 15 minutes. Put your phone in the drawer, go outside, have a walk. It sounds so simple. I made a different show last year for ITV in the UK on stress, and as part of that show, we got to follow three people and we got to do... We measured their stress levels, literally, for three days, like minute by minute. And we were tracking what they were doing and how it was affecting their stress levels. We did something called Heart Rate Variability monitoring on them which I think you've covered before on the podcast. And essentially, a high HRV, so high heart weight variability, is a good thing. That means that your body is able to cope and adapt to the stress around you. A low reading, when your heartbeat is very much like a metronome is actually slightly problematic. It suggests that we've had too much stress on our body and our body is not able to cope and adapt. Now one person, in particular, he was... I'm going to guess he was around 40 from recollection. A 40-year-old guy, he was a manager in his local company, and he took his job super seriously. Super, super seriously. He came in early. He worked through lunch. He stayed late. He'd go home. When he'd go home, to unwind he'd drink more alcohol than he wanted to.

It was impacting his relationship with his wife. It was impacting his sleep, but he wanted help. Now, I could see on his workdays that you looked at his stress



readings, they would start to go up throughout the morning. At lunchtime, because he didn't take a break, they'd keep going up. By the time he left home, he'd had a huge accumulation of stress and that would affect his relationship and an impact his alcohol habits. All I asked him to do, Shawn, was this: I said, "Listen, what I'd love you to do, at lunchtime, put your phone in your drawer for 15 minutes and go for a walk." He goes, "Okay, yeah, I can do that. Fine." He goes and does that for about a week. The following week, we re-track everything. What happens? You see on those workdays, his stress levels go up in the morning as before. At lunchtime, they go right back down to baseline. They reset. And in the afternoon, they hardly go up to anywhere near the same level. So, what does that do? That means that when he goes home, it has a knock-on consequence.

So, look, objectively, with the data, I've seen a big difference. But what's more interesting to me is subjectively what does he think, what does he feel, not what does the tech say. He says, "Doc, I feel like a different person. I've got more energy. I'm more productive in the afternoon. I'm now leaving earlier than I'm meant to finish. I'm leaving home early. I'm drinking less alcohol and I'm closer with my wife now." From a 15-minute lunch break. I'm so keen to make health accessible to people. Wellness, I think has become, for many people, they think, "Oh, that's great, but it's expensive, it's inaccessible." Every single one of us has the ability to have a 15-minute tech-free lunch break every day. And I guarantee, if people are skeptical, try it for seven days and see the difference because, yes, that's the kind of a story which you can sort of think about, but your brain, your default mode network, it wants to help you. It wants to be more creative. It wants to help solve problems for you, but you can't do that unless you give it downtime.

Shawn Stevenson:

Next up we've got a clip from one of my personal favorite episodes from the past year, and this one is with Dr. David Sinclair. And he's a professor in the department of genetics and co-director of the Paul F. Glenn Center for the Biology of Aging at Harvard Medical School. And he's also the author of the New York Times best-selling book, *Life Span, Why We Age and Why We Don't Have To*. In this clip, in regards to stress, he's going to be talking about why we need to eat foods that are stressed to help to deal with our stress. And so this episode, with all the episodes in this compilation, you can get the full show in the show notes. I definitely recommend checking this one out. And now we're going to jump into this incredible conversation with Dr. David Sinclair.

Dr. David Sinclair:

Eat foods that are stressed, stressed out. Which is a weird concept, right? But we do it naturally. We drink, some of us drink red wine, which is a stressed grape before

we pick it. We often eat colored food, so spinach is a dark green food. There's blueberries which are dark, the whiter ones are not as good. So why is that? Well, stressed food produces a lot of what we call xenohormetic molecules. And I'll explain what that means. It's a terrible word we coin, but Xeno, X-E-N-O, means from other species and hormesis is a very important word. You got to remember the word hormesis 'cause it, every day you should think about it, hormesis is what doesn't kill us, makes us live longer. And it's a term that means you've got to get your body out of its complacency. You've got to trigger those defenses, those longevity genes. So xenohormesis is, you don't have to only run and eat well at the right times, but you can also get these molecules from the right animals and plants, but particularly, plants that are stressed.

'Cause when plants are stressed, they're making these molecules of health for their own benefit. They're trying to survive. They're turning on their longevity genes. We forget plants have longevity genes too. So a stressed plant will make these colored molecules to protect from UV and dehydration. When we eat them, they trigger our own body's defenses, and you can get the benefits. So that's nutrition, colored foods, stress foods. Organic is stressed. You don't want the perfect lettuce that's been not put any stress. And we need to do more of that. We need to let our plants stress a little bit before we eat them.

Shawn Stevenson:

Alright, that was Dr. David Sinclair talking about the importance of eating foods that have been stressed, eating foods that are resilient. There's this powerful statement that you are what you eat, and right now it's not a time to be eating Ho Hos, most likely for many of us. Not saying you'll be a ho, ho. But just saying that we want to eat foods that have the capacity to make us better. And our bodies... When we talk about our hormones, for example, what are our hormones actually made of? They're made of the food that we eat. What are our neurotransmitters made of? What is our brain made of? What of all the cells in our bodies, what are they actually made of? They're made of the food that we eat, the water that we drink, and the air that we breathe. Just that simple.

So we want to give ourselves the best quality stuff that we possibly can because we're literally making our cells out of this. We're making our hormones out of these things. We're making our neurotransmitters out of these things. And with that said, there are some specific foods that are really well noted to be those foods that have adapted to their stressors and have been around literally for thousands of years. When I say that, I really hope you get that. It is remarkable to know that certain foods have been around thousands of years and been a primary food source for

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many civilizations. And one of those has a recent study published in the International Journal of Pharmaceutical Sciences and Research, and it concluded that spirulina is an outstanding anti-stress and adaptogenic agent. So what does that mean? Adaptogenic means it helps you to adapt to stress. Spirulina is clinically proven to have that capacity. It's one of the deepest green source foods in the world. Super concentrated with chlorophyll and it's an incredible source of protein. It's actually the highest protein food by weight.

It's about 71% protein by weight and also has rare nutrients because, again, this food has been around thousands of years. Like phycocyanin, it's a very rare pigment that's found in spirulina that's clinically proven to have beneficial effects on stem cell production, triggering something called stem cell genesis. Absolutely nuts. So spirulina is one of those incredible foods. Again, it's been the primary food for the Mayans and civilizations in Chad, in Africa, and the list goes on and on, and now we still... Today, we have access to foods like this that have truly stood the test of time and been stressed for countless centuries to have this kind of resilience and it passes that resilience over to us. So being super nutrient-dense in and of itself. And this is a big reason why I love the formula at Organifi is that they have the spirulina in there, but they also have something I don't talk about enough that is another powerful kind of stress modulating food, which is called ashwagandha.

Ashwagandha. A double-blind, randomized, placebo-controlled trial, which is gold standards of studies, published in 2008 found that ashwagandha was able to significantly reduce subjective stress and anxiety and reduce objective levels of cortisol and C-reactive protein in study participants. Subjectively, people feel better. Objectively, their biomarkers show it. Really, really cool. Another double-blind, randomized, placebo-controlled trial and this one was published in 2012, found that ashwagandha safely and effectively improves an individual's resistance towards stress. So resilient foods make us more resilient. The green juice formula at Organifi is absolutely top-notch. You're not going to find anything better than this. They've got the green dense superfoods. They've also got adaptogenic herbs in there, in one source, and you get it at 20% off by utilizing the code model. Just go to organifi.com/model, that's O-R-G-A-N-I-F-I.com/model. And you get 20% off their green juice formula, the red juice formula, the gold, everything they carry. Absolutely incredible, incredible company with an incredible product that I love. My kids have pretty much every day either the green juice and or the red juice. And my wife loves the gold formula. They got incredible protein that we utilize.

And the list goes on and on. They're just really, really doing awesome stuff. And the



quality, as you can see from these studies, of the ingredients are just out of this world. And especially right now, it's important for helping us to modulate stress. So, definitely head over there, check them out, organify.com/model. And now for our next clip. This one is from neuroscientist and author of the best-selling book, *Sound Medicine*, Dr. Kulreet Chaudhary. And she's going to be sharing some insights on how music can be a healing force and literally change our physiology. I'm going to be real with you, music has been super helpful for me right now. With all the different changes that I've been experiencing in my life as well and just my dedication to doing this work and to staying on top of the research of what's going on with this virus and what's going on with all the things that kind of fall out economically and socially, it takes a toll. It definitely does.

And my heart has been heavy, just seeing what's going on around me. And so music has just really, really been there, because true enough, music, as she'll discuss it, is effective at changing your physiology. But for me, it's just catching a vibe. It's just catching the vibe. And music, there's a resonance there that... And we talked about this in this particular episode. So again, definitely check out this full episode. It is so freakin good, so, so good. But how music actually helps to entrain our brains, and we get wired up specifically for memories and things that we've experienced in our lives, get deeply ingrained. How do we learn the ABCs? We put that mess into a song. Put a little melody to it, it gets deeper ingrained and deeper connected in our memory. Certain songs will take you back to certain moments, certain places, certain feelings, right? So being able to tap into that instantly by putting on a song and changing the vibe, how powerful is that? So on that note, let's check out this clip from the amazing Dr. Kulreet Chaudhary.

Dr. Kulreet Chaudhary: People always say, "Well, what's the data in sound?" I said, "You have to remember that studies are done when people start looking." Studies are done when science starts to change, and they start looking for evidence of something, that's when you start to find it. So the absence of evidence for something doesn't mean that it doesn't exist, it means we haven't been looking. And so as we started to look at the significance of sound as a medical tool, then studies start to come out that looked at, "Well, how is this really happening?" And so there was a study done that identified the primary cilia, which is an aspect of every single cell on your body, and it actually picks up the frequency in the surrounding environment. Now remember, we're mostly water, and water picks up frequency, and the surrounding fluid of every cell is aqueous; it contains water in it.

And so these primary cilia will actually vibrate in response to... They'll resonate with



a frequency, and they will change the charge of a protein, and then the cell itself changes. That is so unbelievably profound that sound can change cellular structure because cellular structure will actually change the function of an organ. And they're starting to see that defects in the gene for this primary cilia can lead to medical conditions such as cancer, arthritis. And as we start to look at this, we'll probably see more and more things that are associated with an inability to pick up frequency correctly through the primary cilia.

Shawn Stevenson: Yeah, oh my goodness. So essentially, we have trillions of cells.

Dr. Kulreet Chaudhary: Yeah.

Shawn Stevenson: And these primary cilia are like little antenna...

Dr. Kulreet Chaudhary: Yes.

Shawn Stevenson: That are picking up sound, picking up vibration, picking up these frequencies, and it can literally change the conformation, the shape of the proteins, how they're performing.

Dr. Kulreet Chaudhary: Exactly.

Shawn Stevenson: All of them, based on sound.

Dr. Kulreet Chaudhary: All at once too, because when you have... Think about it. If you had a trillion employees, how quickly would you need to get a message out to them? And so sound traveling through our body is an extremely efficient and effective way to get a message out of what's happening in our environment. It's also a very efficient way to send a message to all of our cells when we use sound purposefully. So resonance is when the frequency of one object causes a second object to begin vibrating at that same frequency. And so, the kind of most common example that people give are with tuning forks, that if you have tuning forks of the same frequency, if you tap one, it will begin to cause the second one to vibrate just because through the process of resonance. The reason why this is so important is it opens up this entire possibility that if... And we now know this, that all of our cells actually have a resonant frequency. They have a resonant frequency when they are healthy.

And so if we know this, if we know that everything has a resonant frequency, when it goes out of its harmonious frequency, the property of resonance brings up the

possibility of bringing that tissue back into resonance. And so entrainment, which is associated with resonance, but entrainment is when, like for example, when your brain starts to fire when your brain cells begin to fire in response to an external rhythmic pattern such as music or such as sound, it actually changes the pattern of firing in your brain, it changes the electrical pattern of the brain.

Shawn Stevenson: Now, in the book, when you're talking about brain entrainment, you actually give an example of folks coming back, veterans after World War II.

Dr. Kulreet Chaudhary: Yes.

Shawn Stevenson: Can you talk a little bit about that?

Dr. Kulreet Chaudhary: Yeah, absolutely. So, for veterans coming back from World War II when... And to me, it's surprising that this happened so early in history that we're dealing with all of the horrors that happened to us as individuals when we have to be exposed to that. They used music therapy to help with the traumas that were suffered by these war veterans. And this is where some of the work in brain entrainment started to come out because they were having these profound shifts, again, without involving the conscious mind, the way that we typically would like through therapy, but it was just simply through changing the firing of key areas of the brain, such as the amygdala that is associated with emotional trauma, through the use of music, through the use of sound.

Shawn Stevenson: Alright, that was Dr. Kulreet Chaudhary talking about sound medicine and how music and sound can truly impact our biology and change our state, help us to modulate and deal with stress. So, I've got a question for you: What song do you put on when you want to change your mood and to feel better? What song makes you feel good? No matter what you're going through, you put this song on and it's just a vibe, it makes you feel good. I want you to share with me on the YouTube channel in the comments section what song does that for you? And by the way, if you're not subscribed to the YouTube channel, we're doing giveaways all the time. One of the last episode that we did on the history of cereal, I did a giveaway for a \$100 Amazon gift card, and that went to David Bevel. David Bevel was the winner of that Amazon gift card. So, I'm just doing random giveaways. We do a random number generation for folks that are dropping in and leaving comments on the YouTube channel. So, make sure you subscribe, number one, and make sure that you leave a comment below and let me know what song always put you in a good mood.

Alright, I'm going to pick another winner for a \$100 Amazon gift card just to help lighten the load right now when dealing with some of the stress. Add that \$100 to getting whatever you might need. Maybe it's just something to have a little bit of fun with. Maybe it's something you need for your family right now. I just want to help to give and to be of service in that way. So, definitely pop over to the YouTube channel and do that right now. Pop over there and leave a comment. Okay, we're going to jump into our next person here, our next expert, and this one is a clip from an episode we did with Aaron Alexander. And he's a celebrity movement coach and the author of the book, *The Align Method: 5 Movement Principles for a Stronger Body, Sharper Mind, and Stress-Proof Life*. And he's going to share with you one of the fastest ways to switch your nervous system from the sympathetic dominant fight or flight activity into the more relaxed, healing, restorative state. And it's something that is so easy to access. But the question is, are you doing it? Let's check out this clip from Aaron Alexander.

Aaron Alexander:

So play is another one of those self-tuning mechanisms that the human-animal has had on board since forever to heal itself. Kind of like the stuff we're referring to before, like naturally, there are certain positions that you want to go into that many cultures do, such as spending time on the ground, that they call them archetypal postures of repose. There's a guy, Phillip Beach, *Muscles and Meridians* book, is what he referred to that as, and we kind of mirrored that in *The Align Method* book. Naturally, the body wants to go into these positions. Look at your dog. Look at your kids. They do these things and you're like, "Oh, what's that dog doing that down dog position? He always does that." Is he trying to be cool? It's like, "No, no, his body at a deeper subconscious level knows that that's helpful with opening up his lungs, and his shoulders, and all that." Why do those ducks, or penguins, or dolphins, or humans, why are they inclined to play with each other? What a waste of time. What you find out is that if we can create that, which you do really what with your family, again, and just yourself in your life in general, it seems like you perceive the world from more of a filter or a lens of play, which I think is one of the most invaluable things that any person can learn from just experience in life.

But that social engagement with another being is the fastest way to jump one's autonomic nervous system, that part of their nervous system that we like, we can't control, but we kind of can, 'cause we can augment the environment, back into a more rest, digest, healing, restorative state. So, if you are, again, you're looking for these supplements, "I'm taking melatonin 'cause my sleep's off. And I'm taking 5-HTP 'cause my serotonin is funny. And I've done all... I got all the supplements, man." It's

like, "Well, when was the last time you lightened up and had some human contact and had a wrestle with somebody?" 'Cause that's all you wanted to do when you were 10. And then we got the signal that it's not so appropriate to do that because you need to stay inside the room, inside the walls, inside the books, stay still or else you have some mental disorder. And so, we learn that at a young age. And during that time, our deeper biology is pushing up against those walls and saying, "I want to grow." And the teacher's like, "Uh-huh." So, at some point, play is kind of I think shamed perhaps for some in our lives and it's considered childish or nonsensical.

Shawn Stevenson: Yeah. Right. Stop playing.

Aaron Alexander: Stop playing. Why are you playing? It's like, be like Alan Watts talks about a serious relationship. He's like, "I would never want to be in a serious relationship. That sounds terrible. I want to be in a loving relationship, a nurturing relationship, a playful relationship, a dynamic relationship." The second that you and I, Shawn, are in a serious relationship, I'm ready for the door.

Shawn Stevenson: Yeah, that's scary, dude.

Aaron Alexander: Yeah.

Shawn Stevenson: Alright, I hope you enjoyed that clip from Aaron Alexander and just reiterating how important it is for us right now is to get out of that busy, everything is so stringent and stressful mind and just play. Just have a little bit of fun because it's going to do your body a whole lot of good, and then that spillover effect can help to impact yourself, your family, and your community. And it's not just physical play, as well. It could be mental play. We just sat around a table, and my oldest son had a game, a card game, this is random, kind of simple card game that he's been playing with his friend, the Aussie football player linebacker number 44 on his college football team.

But this game is called screw your neighbor. Now, I know it sounds controversial, I know it sounds a little funky and weird. I was like, "What is this screw your..." Just a little, simple, fun card game, and it's just based on chance and luck and just making a decision about what card you're holding. So anyways, playing some card games, some board games, just doing some physical activity with people that you love, alright? If you can. Playing is always going to be a little bit fun if you got more folks to engage with and have a little fun with, so. But the thing is, especially as we get called "grown-up" we start to turn off the play button. And in this episode, I even talked about this concept from where I grew up of like, you play too much or stop



playing. And we need to get serious because the world is so serious. And the truth is, the people who are, that I know, some of the most successful people, happiest people are those who are able to carry a light spirit because we all get so much put upon us and being able to deal with stress, being able to keep a light mood and light heart can be an incredibly valuable tool.

And so, next up, we're going to jump into a conversation where we had two guests on, father and son physicians, doctors Austin and David Perlmutter. Now, David Perlmutter, the papa in this duo, he's a New York Times best-selling author of the hit book, Grain Brain. And so with his son, he co-authored their latest book called Brain Wash: Detox Your Mind for Clearer Thinking, Deeper Relationships, and Lasting Happiness. And in this clip, his son, Dr. Austin Perlmutter is going to be sharing with you a major cause of stress right now, and this is so real, major cause of stress right now, and he's going to offer some advice, it's called the test of time tool to help us to better deal with it. So let's jump into this conversation from Austin and David Perlmutter.

Dr. Austin Perlmutter: So what an important point you make, and that again is what are we doing with our time? In a given day, where are we spending our time? American adults spend around 11 hours each day interfacing with the media in one way or another, watching about 4 1/2 hours of TV on a given day, a couple hours on their smartphone, and as you alluded to, about 80% of American adults are going to reach for their cell phones in the first 15 minutes after waking up. So what does that morning routine look like? It's okay, I'm awake, where is my phone? And to be fair, our phones provide us an incredible source of information; we can learn about things happening across the world, we can get the weather report, which I could say is helpful because yesterday in LA it was pouring, so I appreciated having that update on my phone.

Shawn Stevenson: Surprise!

Dr. Austin Perlmutter: Exactly. But you've got to ask yourself, what are you getting out of that time on your phone? And so what this comes down to is just in general, what are we doing with our digital exposure? Is it beneficial to us or is it taking something away? And something that we described in the book as a mnemonic that will help people or an acronym to help people to understand how to manage their digital exposure is this test of time tool. So what is this? The test of time is a simple tool that you can apply any time you're about to engage in digital exposure, whether that's picking up your phone, going on social media, watching TV, listening to the radio, surfing the

internet, and it's really straightforward. So T, time-restricted. Set a window that you are willing to go online for or watch TV for and stick to that. So that means instead of watching one show on Netflix, you might go into four episodes. That's why you say, "Oh, I'm only going to do 30 minutes because this is a 30-minute show." And you stick to that. I am intentional. Are you intentional about going online or did you just find yourself there? And I've been a victim of this where all of a sudden I find myself on social media, I don't even remember how I got there.

It's kind of like when you're driving in a car and you aren't really sure how long you've been driving, you want to make sure the last few traffic lights were green, you think so, but you're not sure, that time is kind of gone. So it's being intentional while you're there. And that leads to M, which is mindful. What happens when you're online? Well, we get our attention picked up by all sorts of clickbait. You go online, you see some exciting story about some celebrity and next thing you know, you've been targeted for 18 ads, you've been made upset because you've been looking at polarized political messages, and if you're mindful of it from the start, you have to say, "How is this affecting me? I'm online, what is happening to me? Am I getting information out of this or am I actually just getting more upset?" And then finally E, enriching. Is your life being enriched by your digital exposure? And I think this might be the most important one. It's something that I know immediately after my digital exposure, was this a net benefit to me? Has my life been enriched? Have I been getting some education out of this? There's a huge difference between watching a Nature or Discovery Channel show and a few hours of reality TV.

Look, it doesn't mean you can't enjoy reality TV but is it enriching your quality of life? And if the answer to that question is no, then that's a good indicator that perhaps you got sucked into one of these black holes and it's really just that you've been selling your attention to whoever put that program on TV. So, again, the Time tool is really key, something that I've really enjoyed, that allows me to set myself up for success every time I'm interfacing with digital media.

Shawn Stevenson:

Alright, that was Austin Perlmutter. And on the show, the entire episode, he was along with his father David Perlmutter, New York Times best-selling author. But he just dropped some science right there, something huge because I don't know about you, but social media is just so much, it's so much and it can just suck your time like a true experienced vampire, just suck your time so quickly. But also, there's a lot of stress, there could be so much distraction and there can be a lot of conflict on social media. Some people go to social media just for the conflict. I need some drama in my life, let me find some. Alright, so it could be stressful AF, seriously, and



so having a strategy is of the utmost importance right now.

But I'm going to be real with you, managing your use of social media is not easy when you don't feel well. When you're tired, when you're stressed out, we tend to reach for our phones even more, and we've actually got some science on this. There's a study published in The Journal of Applied Psychology, and it found that the less quality sleep people get the night before, the more they are likely to wander off from their assigned task and do what is being referred to as "cyberloafing". Cyberloafing, right? You should be doing this thing over here, this was your goal, your objective, but you just pick up your phone and do what we call these just checks, like, "I'll just check real quick. I'll just check real quick." And you get distracted. And what they found in the study is that each hour of disturbed sleep on average resulted in cyberloafing during 20% more of the assigned task. Wow. So again, this isn't just about will power, this is about your biology. And if you're setting yourself up to be more distracted, your brain has got that candy now. We've got so much that can absorb our time, especially in our phones. And good sleep is obviously something important because it massively helps us to keep stress in check.

And we've talked about this before in the show, but UC Berkeley and I love this because they actually did some brain imaging and they looked at brain scans, and they found that just one night of sleep deprivation cools off the activity, "cools off" the activity in the more evolved pre-frontal cortex. This is the part of your brain responsible for social control, for will power, what we refer to as will power, distinguishing between right and wrong, for objective rational decision-making. That part of your brain starts to go cold, activity is reduced just one night of sleep deprivation, coupled with there's heightened activity in your amygdala, right? The more primitive part of your brain is more concerned about survival of self, right? It's a much more emotionally charged part of your brain. And what does our emotions do? Our emotions lead us to getting on our phone and getting absorbed into that emotionally dictating content, right? Whether it's that or television, whatever the case might be. We can use these things, please do, enjoy them, but we just don't want them to take control of our lives and miss out on us creating excellence and bringing our gifts and talents to the world instead of just watching what everybody else is doing.

So I hope you feel that. Now, with that said, we've got to look at what are some simple easy things that we can implement to do to improve our sleep quality. Well, there's a book out there, it's called Sleep Smarter, it's an international bestseller. You might want to check that out. It's 21 clinically proven strategies to improve your

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sleep quality. And of course, we've got tons of episodes sharing some of those things. But for me, I'll just share with you right now, part of my regimen right now, just especially dealing with a little bit more stress, I make sure that I have a cup of Reishi every night before I go to bed. I love... Man, I just love it. I love it, I love it, I love it. There's a study published in the Journal of Pharmacology Biochemistry and Behavior, and it found that the medicinal mushroom Reishi is able to significantly decrease sleep latency, so it means it helps you to fall asleep faster. It was found to help to improve your overall sleep efficiency, so you're actually going through your sleep cycles more efficiently. And so this is for your non-REM "deep sleep", and also your REM sleep as well. And it just also was found to help the increase overall sleep time.

Now, not only does Reishi have that benefit, but also, let's talk about specifically in looking at stress. There was a study published in Evidence-Based Complementary and Alternative Medicine, and it found that Reishi had a direct effect on reducing symptoms of anxiety, stress, and depression for study participants. I drink a cup of Reishi tea, the Reishi Elixir from Four Sigmatic. That's my nighttime ritual, my nighttime vibe. They've also got some incredible other products. They have mushroom coffees and the Chaga Elixir, and lion's mane, which is great for stress. Pop over there, check them out. It's foursigmatic.com/model. That's F-O-U-R S-I-G-M-A-T-I-C dot com/model. You get 15% off everything that they carry, 15% off all of their incredible mushroom blends, mushroom hot cocoa, which my youngest son, that's his favorite vibe as well. It's Reishi, by the way. It's like a chill-out... Ah, so good. Foursigmatic.com/model.

Now let's jump into our next expert. Next up we've got physician and author of the bestselling book, Natural Solutions for Digestive Health, and she's ventured out into so many different areas and just so impactful in her knowledge base and her ability to communicate. And this is with Dr. Jillian Teta. She's going to be sharing with you how a certain type of exercise done outside has an impact on stress, and specifically, the benefits that it can have on your enteric nervous system, which is located in your gut. Again, we're talking about stress, it's also related to what's happening deep down inside of our bellies as well. Some people feel the stress there. And so she's going to be talking about that. And also, she's going to be sharing some profound insights about meditation and a little bit about sexy time. So let's jump into this conversation with Dr. Jillian Teta.

Dr. Jillian Teta:

Going for a daily walk, preferably outside, is one of the easiest, simplest, cheapest ways that you can balance your sympathetic and parasympathetic nervous system,

which in turn will have beneficial effect on your second brain, the enteric nervous system. There's a lot of research coming out of Japan, especially for walking in the woods, they have a name for it, they call it Shinrin Yoku, which means forest bathing. You've heard...

Shawn Stevenson: Yeah, Shinrin... First of all, the name, Shinrin Yoku, yeah...

Dr. Jillian Teta: Doesn't it sound wonderful?

Shawn Stevenson: It does.

Dr. Jillian Teta: And then forest bathing, I want to go do that. Let's go do that after this.

Shawn Stevenson: That's like... Definitely get that tattoo. You're trying to get the little symbols or whatever.

Dr. Jillian Teta: Yeah.

Shawn Stevenson: You know Ariana Grande, the singer? She recently got a tattoo, it was some... I think it was like Chinese letters, and she thought it said one thing, but it ended up saying, I don't know, "Your feet are too big," or some crazy thing.

Dr. Jillian Teta: Yeah, like, "Wonton soup with a side of lamb," or something? Okay.

Shawn Stevenson: Yeah, something to do with some food, I think. But Shinrin Yoku...

Dr. Jillian Teta: Yes.

Shawn Stevenson: It's pretty dope.

Dr. Jillian Teta: Yes, I think so. I think it sounds like something I want to do all the time.

Shawn Stevenson: Forest bathing, yeah.

Dr. Jillian Teta: So what it does is it helps... It increases what we call autonomic tone, which is that appropriate see-saw movement of sympathetic and parasympathetic, but it also decreases the harmful effects that cortisol has on the brain. I think a lot of people want to instantly demonize cortisol like it's a bad thing. It's not. Cortisol is not a bad thing. No hormone is bad. We would all be dead if we didn't have cortisol. But of

course, in excess, as we are like when we're under chronic stress, it can have harmful effects for us. So, walking slowly in the woods, strolling, get yourself a little dog or a big dog, and go for a walk. You can take it a step further, I'll often coach people to use the walk as an opportunity, like almost like a walking meditation where they can fully engage their senses.

We were talking earlier about dropping into our bodies and just allowing your body to actually tap into how you feel. And so, by engaging our senses like looking only at what's in front of you, look at the birds, look at the trees, look at the sidewalk, look at the people, look at the cars, listening, like listening to the birds, listening to whatever is there, feeling the air, the sun on your skin, breathing, and really feeling the breath through your lungs, feeling the earth through the soles of your shoes or your flip-flops, or what have you, really engaging your senses. And then when your mind wanders, as it's going to, just bring it right back. And it's a wonderful way to slowly practice self-awareness and getting your mind still, which, of course, is a major avenue in towards unlocking that sympathetic over-dominance.

Shawn Stevenson: Segue alert. Let's talk about how does meditation relates to this. I'm fascinated to hear about this.

Dr. Jillian Teta: Well, so meditation fundamentally just helps our... Well, it helps us train ourselves to be able to watch our thoughts. So, the point of meditation is not to just blank out and become like a blank, drooling void or something like this.

Shawn Stevenson: Yeah, one with oxygen. I am one with oxygen.

Dr. Jillian Teta: Yeah. It helps us. It helps us to watch our thoughts, which in turn helps us to slow down our thoughts if we're willing to have that reflection and invite that stillness. And that's a very hard transition for most people coming out of our modern lifestyle. Everything is frenetic, we got to be on the grind, we have all this stimulation constantly. And so, I do think that there's a rather large barrier of entry for most people, but if you are listening and you're someone who has heard this message over and over from different experts to begin introducing mindfulness and meditation into your life, I think that that is really, really important. So, what this does, as our thoughts slow down and we're allowed to just be in space, like create that space, even having little gaps of space, then our thoughts are not actively instigating and triggering our autonomic nervous system, which is that, or the sympathetic branch of that, which is like fight or flight. So, you're not getting that alarm response. 'Cause if our inner narrative was is like, "Oh my God, I can't



believe she did this. I can't believe she said that" like, "Why is my mom like that? What..." It's mostly like this long line of complaining. That actually is not good for autonomic balance.

Shawn Stevenson:

Yeah. And it's just, it's got continuous, just happening all the time, especially if you're unaware. And I remember when I first started meditating, the first thing that happened... Well, first of all, my teachers, it was my mother-in-law was teaching a class and she, because I'm kind of analytical, so she kind of gave me some of the reasons why this will work. And I was like, "Oh, okay, I'll give it a try." And so, when I did it and I fully participated, and when I was done, I realized that I hadn't really had any conscious thoughts my entire life if that makes sense? I realized that there was all this thinking going on, but I wasn't aware of it. It was just happening. It was just happening. And I realized there's a separation there between the thoughts and it's the presence that's monitoring all of it. And one of the other benefits is, as you mentioned, to being able to witness and to see your thoughts, just potentially slow them down. You can also, and from that place, be able to transplant your thoughts. You can catch a thought, "Oh, wait a minute, I'm thinking this really terrible or ignorant thing that just has no relevance in my life or any importance, let me just put something positive there." And these are skills that you develop by having the practice of meditation.

Dr. Jillian Teta:

Yeah, you can begin to rewrite those stories.

Shawn Stevenson:

Yes.

Dr. Jillian Teta:

An expert, I don't remember who it was, I don't know remember if it was Eckhart Tolle or who, they likened it to watching your thoughts, it's like watching a movie, okay? So you're in a movie theater and you're watching the screen, on the screen are your thoughts and in your life, your whole life, and the committee, the inner judge, the inner critic, all of those things. The difference between someone who has even a modicum of self-awareness and those that do not, are that the person who has the self-awareness realizes that they are in a movie theater, watching a movie. And the person that doesn't quite realize it yet has fully invested that that movie is their life, like that is their identity.

Shawn Stevenson:

Yeah.

Dr. Jillian Teta:

When we link our identity with our thinking, we're on a slippery slope, 'cause it means you can be controlled, it means you can be provoked, it means you can be

taught to think a certain way. It basically means that you can be manipulated.

Shawn Stevenson: Ooh, this is so good. And I like Eckhart Tolle, I like how he does his hands, "And the ego is coming up." I love it.

Dr. Jillian Teta: Oh my God, the pain-body, I love him. It's just like, oh my God, I can feel my pain-body right now. My pain...

Shawn Stevenson: Thank you so much sharing that. And I want to ask about so many things, and I know that there are many other strategies for destressing our gut, but I would love, if we can, let's just share one more I let you go.

Dr. Jillian Teta: Alright, and it'll be...

Shawn Stevenson: I don't want to, but I'll let you go.

Dr. Jillian Teta: It'll be a practical one. I know I'm going to have to come back on this show. I have to come back again. So, another wonderful way to balance your parasympathetic and sympathetic nervous system is orgasm.

Shawn Stevenson: Hello.

Dr. Jillian Teta: Hello.

Shawn Stevenson: Alright.

Dr. Jillian Teta: It works on the parasympathetic and sympathetic nervous systems, whether you're a man or a woman. And I actually think orgasms are like an underutilized approach.

Shawn Stevenson: You don't say.

Dr. Jillian Teta: For stress reduction. Yeah. Yup.

Shawn Stevenson: Tell me more.

Dr. Jillian Teta: With your partner, without your partner, whatever. So the act of orgasm is activating both the sympathetic and parasympathetic nervous systems and having that appropriate action, fosters more appropriate action. And orgasm releases all kinds of feel-good hormones, right? PA, oxytocin, and anandamide, like all of those

things. And it just bathes your brain in good feelings.

Shawn Stevenson: Mm-Hmm. And your second brain... Is.

Dr. Jillian Teta: And your second brain.

Shawn Stevenson: Yeah.

Dr. Jillian Teta: Benefits from that.

Shawn Stevenson: One of those... It's like a... I liken it to a cocktail of chemicals like oxytocin.

Dr. Jillian Teta: Yes.

Shawn Stevenson: Which has been found to have a direct influence on cortisol in helping to balance that out, which is, again, and I love that you just said that there's sympathetic and parasympathetic aspects to it.

Dr. Jillian Teta: Yes.

Shawn Stevenson: One of them is Norepinephrine, which even though it sounds like this is... It's a stimulant in a sense, or noradrenaline, that is actually related to your REM sleep. So improvement in that, so... Oh, such a...

Dr. Jillian Teta: And I'm glad that you're qualifying that because I think for consumers and for listeners, it's very easy for us to pigeon-hole, "Oh, there is sympathetic nervous system is bad like adrenaline is bad, cortisol is bad, parasympathetic is good." We need both, we need the appropriate balance and the appropriate movement of those two nervous systems. It's all relevant and contextual to what is going on in your life right now.

Shawn Stevenson: Yeah. Alright. I hope that you're enjoying this compilation with some very practical tips and strategies to help us to manage all the stress that many of us are experiencing as a result of this coronavirus situation. And next up, we've got former journalist, turned health researcher and author of the New York Times best-selling book, Genius Foods. And this one is from Max Lugavere. In this clip, he's going to be talking about a cross adaptation of stress and some simple things that we can do to help to enhance our resilience to stress. Let's check out this clip from Max Lugavere.

Max Lugavere:

We live in stressful times. And I think a lot of us in the health and wellness community will say, "Look, stress is toxic. You've got to like minimize chronic stress as to the best of your ability," but the reality is, we live in a difficult world and people sometimes can't necessarily reduce certain stressors in their lives. And so what I like to do is I like to offer people both perspective shifts, mindset shifts, and then also more biological means of boosting their resilience to stress. So whether or not you can actually reduce levels of stress in your life, which I think everybody owes it to themselves to try to do, you can actually change the way that you respond to those stimuli and how your body responds, how your biology responds. So I talk about how exercise can make us more resilient. One of my favorites actually concepts in the book that I talk about, and I haven't seen this in other books, so I'm really excited to bring it into the fold for people, is this idea of cross-adaptation. So it's interesting how exercise is obviously a form of stress, but it's a really good form of stress. We know that exercise is good for us.

Sitting in a sauna as a form of stress. Coldwater immersion, whether it's taking a cold shower or getting into an ice bath or doing cryo, these are all stressors on the body, but they're actually good forms of stress. What's so cool about this notion of cross-adaptation is that by doing any one of these different modalities, it actually makes us more resilient in other areas of our life. So by exercising more, by sitting in a sauna, by exposing yourself more regularly to cooler temperatures, you actually... Your body becomes more resilient, obviously, to those different things. You acclimate and you adapt to the workload in your workouts, you're able to spend more time in a sauna or do the cold shower for a longer duration, but there's what's called a spillover effect, where those same modalities are going to actually boost your resilience to psychological stress. So this is an amazing thing, a lot of people feel like they've got their hands tied behind their back with obligations that they have in their lives, maybe financial stress, things like that, but I don't offer tips on how to reduce financial stress in the book, but I do offer ways of how to actually bolster your own resilience so that when you are faced with those challenges, which we all are sometimes, that you can actually show up as your best self and not allow it to affect you in a negative way like it does to so many people.

Shawn Stevenson:

Alright, next up is our final clip in this compilation, and this is something... I'm not going to say saving the best for last. Why would I say that? But this episode is one of my all-time favorites for sure. When I watched our guest's TED Talk many years ago, it just blew me away, helped to change my perspective instantly. You know those things you hear that instantly change your life? I had one of those moments



when I was watching this TED Talk from our next guest in this incredible compilation, Kelly McGonigal. Now, Kelly is a health psychologist and she's the author of the book, *The Joy of Movement*. And in this clip, she's going to be talking about how exercise actually sensitizes your brain for pleasure and builds up resilience to stress. And she's also going to be sharing with you how hard work and community ties into this whole equation, we're talking about movement and our ability to manage and deal with stress. So, let's jump into this incredible clip from the amazing Kelly McGonigal.

Dr. Kelly McGonigal:

So there are very few things that can do the first thing which I'll mention, which is that it sensitizes your brain to pleasure. There's nothing you can do that actually changes the structure and function of your reward system the way that exercise seems to do it, in that it teaches your brain to expect things to be pleasurable and it enhances your brain's capacity to enjoy everything from good food and a beautiful sunset to interactions with your kids or with your friends, to anything that we find pleasurable. It actually, it amps up your reward system, it makes it more robust and responsive, like endorphins work better, endocannabinoids work better. And like I said, I've literally never seen anything in the research that has that effect on the brain other than Deep Brain Stimulation, where you literally have to surgically implant an electrode into your reward system and wear like a pacemaker for your brain. And that... It's one of the cutting edge treatments for depression. And it may also help people recover from addiction because addiction can really mess with your reward system. But other than implanting an electrode in your brain and literally giving your reward system an electric shock continuously to try to wake it up, exercise seems to be the only thing that does this.

And think about what that means for your well-being if everything that feels good feels better. And it does the opposite too, right? So everything that... So it makes your brain more resilient to stress. Exercise is such a powerful antidepressant. So it works on both levels. And I feel like people have a better understanding of that side of it, at least they've heard that exercise can be an antidepressant or that it can enhance antidepressant medication and therapy. But I feel like this idea that exercise actually makes you better at enjoying things is the thing that people really haven't heard yet.

Shawn Stevenson:

When we think about exercise today, it's for no stress relief or to get fit. But humans, we're... If you're talking about the ability that we all have to dump all these positive hormones into our bodies, humans weren't doing exercise to get in shape 10,000 years ago, that can be seen as a waste of energy. You say in the book that humans



have evolved to extract the benefits from movement in order to engage with life?

Dr. Kelly McGonigal: Yes, yes.

Shawn Stevenson: So what does that mean?

Dr. Kelly McGonigal: So if you think about this like an anthropologist, and you go back to when humans first started to behave like modern humans, where we were living in groups and we started to hunt and gather and forage, that the way humans survived is they had to engage in a lot of physical labor. You had to go out and chase animals and scavenge for dead animals and collect all your berries and your fruit and your roots and all of that, that a couple hundred thousand years ago, humans really had to become more physically involved in order to survive as a species. And what anthropologists believe now is that basically the modern human brain is a brain that has evolved and has adapted to find hard work rewarding, that that's the only way humans could survive. There had to be a sense of pleasure and some kind of psychological benefit from using your body to do meaningful, hard things.

And one of the ways that this expresses itself is the runner's high, which is so interesting. We think of the runner's high as like an endorphin rush that makes you feel good for running, but why? Why would your brain produce chemicals that makes it feel good to run long distances? And the idea is that, well, that's an example of how the modern human brain is trying to reward us for engaging with life. That if you will get your heart rate up a little bit, you'll put in the effort that it might take to, say, hunt an animal or to feed your family, we'll make it feel good. And the neurochemical that seems to underlie the runner's high also helps us connect with others. And that's why I think is so interesting from the anthropological or the psychological side, is that something like the runner's high, it doesn't only make it feel good to engage with life and work hard, but it makes you a more social version of yourself.

So endocannabinoids, they reduce anxiety, they make you feel good, and they also enhance the pleasure we get from cooperating, from sharing. So if I were to get a big kill and bring it back, instead of just being like, "I got my food, get your own food." No, it's going to feel better to share. I'm going to feel good about myself for contributing to my family and to my community. And that the runner's high is basically creating the neurochemistry of making you that version of a human being. The kind of your human being who's willing to do hard things and it feels good. And I want to be the kind of person who contributes to my community, and that's going

to feel good too. That's amazing. And it's not just running, we know about it 'cause people have studied it in runners. But that's the exercise high.

Shawn Stevenson: Yeah.

Dr. Kelly McGonigal: And it gets back to this idea that movement is how we engage with life. And so we need systems in our brain that reward us for engaging with life and that functions not just like do physical things, but also be part of a community.

Shawn Stevenson: Alright, yeah, I hope that you enjoyed this compilation. And again, just to reiterate what Kelly was talking about, movement is so important for everything about the human body and human physiology, but more important probably than ever right now. Our ancestors evolved, they didn't have the concept of exercise. They were moving to live, moving was a part of life, and there were rewards associated with that which was more connection. We have to find creative ways to get that connection right now to ourselves and to the people that we love, our families, and our communities. And I want to add one more piece on here, specifically in talking about stress. Harvard Medical School reported findings that strength training also provides an opportunity to overcome obstacles in a controlled predictable environment, which has been found to help with mental resiliency, helping us to be able to modulate and manage stress. Strength training is one of those things that your body gets physically stronger and it also makes you mentally stronger. So I want you to keep that in mind as you're moving forward, making sure that you're getting some strength training in there as well.

So again, hope that you got a lot of value out of this compilation, but the most importantly, we need to put these things into practice. Alright, sometimes it's just a healthy reminder to hear information like this, but the real question is, are you doing it, your body wants to feel good, your body wants to better manage stress. But we need to put some of these things in play right now more than ever, alright? And more so, let's not just do this for ourselves, but reach out to somebody that we care about, call a friend, call a family member, just hey, check-in. If you can, even get close and go and do some exercise with them, engage in a conversation that helps to bring about some of these things that maybe shifts their attention a little bit more away from social media and into like a real connection with you or their family member in a one-on-one context or one-on-many context, right? We can build better relationships right now. We can build better health in our communities, but we need to reach out and connect because, again, it's more important than ever.

I appreciate you so much for tuning into the show. If you got a lot of value out of this, make sure to share this out with the people that you love and care about. You can share this on social media. You can tag me, of course, I'm @shawnmodel on Instagram. I'm at the Model Health Show on Facebook. And you can, of course, send this right out directly from the app that you're listening to the show on or if you're watching this over on YouTube as well. And again, remember, pop over to YouTube, leave a comment, make sure you subscribe. Leave a comment, let me know what song always puts you in a good mood, so you can enter yourself into a chance to win \$100 Amazon gift card. And just stay tuned to the YouTube channel because we're putting out some original content there as well.

I appreciate you so very much for tuning into the show today. 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 can 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.