



EPISODE 400

How Neuroscience Is
Transforming
Psychiatry & The End Of
Mental Illness

With Guest Dr. Daniel Amen

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Shawn Stevenson: Welcome to The Model Health Show. This is fitness and nutrition expert Shawn Stevenson and I am so grateful for you tuning in with me today.

Listen, I want to share why I started the Model Health Show. A big part of the reason I started this show was to help to bring some of the teachers, some of the big influences in my life, in my professional career, in my relationships, in my health, to the public at large. Many of these individuals are world renowned, and some of them, not as much, but their work has just been pervasive in impacting my life and the patients that I've worked with, my clients over the years, the millions of people that I've had the opportunity to impact and that's a big reason why I started the show.

And taking it from the one-on-one context that I was starting with, to one-on-many as I was speaking at live events too, let's package this up in these podcast episodes that anybody can have access to, at any time, with the touch of a button. And today is a very, very special episode because I have one of my great teachers, somebody that had a huge impact on my thinking and the way that I operated in my own life personally, and also how I was impacting and teaching others. And just to share the story of how I first found out about Dr. Daniel Amen. This had to be around 2006-2007, and I was traveling, I was on the road, still trying to find my place in the health and wellness field, and this is when I started my nutrition practice, but I was still just getting by. When there's a lot more month at the end of the money kind of situation. And I was traveling from St. Louis to LA, for this really interesting event and partnership that I was working on, and my wife came along with me, I think she was still my girlfriend at the time, 'cause we got married in '2007, so.

But she was very much against the traveling because again, More month at the end of the money. But we found our way out here, then we were staying at a... We'll call it a motel, we'll take the "H" off and put an "M" there. This vintage Hollywood Hills Motel, it said "Hotel" but motel. And I think it was vintage just because it was old. Let's just be honest. And I was getting dressed... Well, we were getting dressed, just ready to head out, I had a meeting to get to and there was a... The TV was playing in

the background, and it was a "Vintage television" as well, so it looked like it was from the 70s. It's probably just from the 70s. And I think we could only get one station, which would only justify for me. Why do I have it on PBS at the time? I wasn't watching Sesame Street, I had outgrown that a little bit, but PBS was running in the background, and I'm getting dressed, putting my clothes on, and I literally... I think I maybe had one arm put through my shirt and I was just stopped in my tracks and I started zombie walking over to the television, as I heard this guy talking about the brain, and that guy was Dr. Daniel Amen.

He said something so profound, he talked about how the field of psychiatry is the only field of medicine, that doesn't actually look at the organ that they treat. So, we're in this position today where we have this epidemic of mental illness. We're talking about issues with the brain, but it's literally like throwing darts in the dark, at your brain, we're throwing different medications based on a conversation. Based on a series of symptoms that somebody is verbally telling you, most of the time. Sometimes there are physical symptoms, but it's really a lot of guess work. And we can see that the industry has not done that well, at reversing or eliminating some of these issues. And again, it's just growing rapidly, and it just made complete sense to me like, "Why don't we actually look at the organ?"

And number one, it's complicated to look at, right? This is the most protected organ in our bodies as well. Our brain is housed in this very hard helmet, and it's very sensitive, it's a very sensitive organ, and highly protected, even within our own bodies, with nutrients and toxins moving and getting into and out of the brain, we have the blood-brain barrier, this protective barrier to protect your brain, alright? It is like the VIP section in our bodies for sure. And it just really... Again, it stopped me in my tracks and just made me think about, "Wait a minute, we need to learn more about this organ itself when we're talking about helping people." And he also was talking about certain lifestyle factors, certain nutritive components that can radically improve the health of this organ that determines our behavior, our brains determine our behavior.

And so, if we're talking about situations where we're struggling with anger, with anxiety, with depression, with attention-deficit disorder and all these different conditions, that again, are just at epidemic proportions today. We're missing the point that your brain determines our behavior. Are we actually taking care of our brains? And what does that even look like to say that we're taking care of our brain? And so, that's what we're actually going to be talking about today. And his new book, *The End of Mental Illness*, is an absolute game changer. And it's mirroring

back to that time, back in the Hollywood Hills "Vintage", we'll just call it a rusty dust bucket motel/hotel that we were at, and that conversation that got started then, and it's being finished today, and putting a bow on it with the end of mental illness, and I'm really, really excited about this episode. I think you're going to absolutely love it and take so much from it, and I'm just happy to be able to present some of my greatest teachers to you here on the Model Health Show.

And as you know, our nutrition is a huge player because the foods we eat, the nutrients we take in literally creates the physical structure of our brains. Your brain needs those raw materials in order to grow, in order to have communication. They're the synaptic clefts and the dendrites and the neurons and all of this incredible communication that's happening, millions of processes, every microsecond in our brain, is determined by the nutrition we're taking in, or the lack thereof.

Now, today, what's so cool is that we know food matters. Food is a huge component. But then we know that there are these classes of nutrients and nutrient sources that have seemingly miraculous impacts on the health of our brain, and the brain's performance overall, and one of those I got to share with you. Scientists at University of Malaya discovered that compounds in lion's mane, medicinal mushroom, are able to significantly improve the activity of nerve growth factor in the brain. Now nerve growth factor is essential in the regulation of growth, maintenance, proliferation and survival of various brain cells. And if you know anything about the brain, you will know that the vast majority of our brain cells, we get when we're little, when we're little versions of ourselves, when we're in the womb even, but in infancy, and as we grow into adolescents, there comes a point when the brain stops making brain cells except certain parts of the brain, like the hippocampus can continue to make brain cells. But basically for a large part of our brain, what you got is what you got.

You're going to take care of these brain cells. Now we know that there is a nutritive factor, something that we can all bring in that can help to protect your brain cells and help them to repair themselves. And that nutritive component is a lion's mane medicinal mushroom. Now the lion's mane that I utilize, I just had it yesterday actually, is a dual-extracted version of lion's mane, which means it's alcohol-extracted and hot water-extracted to actually pull all the nutrients out of the lion's mane medicinal mushroom. This is super important because if you're just getting one, you might not be getting the factors that we see as far as that brain protection and also the proliferation, growth, maintenance of the brain via these

nerve growth factors. So it's one of my favorite things. If we're talking about cognitive performance, these researchers were actually studying it and seeing efficacy for helping to heal people from traumatic brain injuries.

It's incredible. And we have access to this today. So go to foursigmatic.com/model and you get 15% off their incredible Lion's Mane Elixir, and they also have a lion's mane blend with organic high-quality coffee as well. So it's a lion's mane coffee that also has chaga in there, and chaga's the highest source of antioxidants of any food or anything you're going to find, and antioxidants are also critical for the health of our brain. Alright, so again, pop over to 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 they carry. Alright. So pop over there to check them out. And on that note, let's get to be Apple Podcast Review of the Week.

iTunes Review: Another five-star review titled, "Love the Show" by Nigerian Man Man. "As a master's in Neuroscience, and someone who is always looking to learn more about my field, along with how I can be better as an individual, this show is awesome, so much great and evidence-based information. Keep it up, Shawn. You're the man, bro."

Shawn Stevenson: I love it so much. And this episode is going to be perfect for you. Everybody, thank you so much for leaving me these reviews over on Apple Podcast, I appreciate it so very much. And if you've yet to do so, please pop over to have Apple Podcast, leave a review for the show. If you're watching on YouTube, make sure to leave a comment, let me know what you thought about the episode. And I appreciate you so very much. And on that note, let's get to our special guest and topic of the day. Our guest today is Dr. Daniel Amen, and he's a double board certified psychiatrist and 10-time New York Times best-selling author with such blockbuster books as "Change Your Brain, Change Your Life", "Healing ADD", "Memory Rescue", "Change Your Brain, Change Your Body", and "The Daniel Plan", as well as his brand new book, "The End of Mental Illness". Dr. Amen is the founder of Amen Clinics, which has 8 locations across the United States. Amen Clinics has the world's largest database of brain scans related to behavior and scans on patients from more than 121 countries. Dr. Amen's research team has published more than 70 scientific articles, and he is the lead researcher on the world's largest brain imaging and rehabilitation study on professional football players.

Dr. Amen has also hosted 14 national public television shows about the brain,

which have aired over 100,000 times across North America. That's where, fortunately, I was able to catch one of them and it changed my life and led to this moment of him is sitting here with me today to share his insights with everybody. And very grateful to have him on, and we're going to jump into this conversation with Dr. Daniel Amen. Where were you born and raised?

Dr. Daniel Amen: Not very far from here, actually, in the San Fernando Valley.

Shawn Stevenson: Okay.

Dr. Daniel Amen: In Encino, where I have a new clinic.

Shawn Stevenson: Then you went to the military, right? Were you deployed?

Dr. Daniel Amen: I went to Germany, thank God, rather than Vietnam, cause I was in during Vietnam. I loved Germany. It helped me grow up a lot.

Shawn Stevenson: Oh, I could imagine. So that's where you got interested in medicine. Yeah, okay.

Dr. Daniel Amen: And imaging.

Shawn Stevenson: How so?

Dr. Daniel Amen: As an X-ray technician.

Shawn Stevenson: Okay.

Dr. Daniel Amen: I was initially an infantry medic, and then realized I didn't like sleeping in the mud and I didn't like being shot at.

Shawn Stevenson: Right. Not on my list of priorities either.

Dr. Daniel Amen: Some people can get used to it, I'm like, no.

Shawn Stevenson: Oh man. And so, that was fostered in the military. And then did you get, I guess maybe some grants or assistance to go to school afterwards or...

Dr. Daniel Amen: I had the GI Bill.

Shawn Stevenson: Yeah. GI Bill.

Dr. Daniel Amen: And then I went back and did my psychiatric training in the military at the Walter Reed Army Medical Center.

Shawn Stevenson: And so you were an X-ray tech. How did the SPECT imaging come about?

Dr. Daniel Amen: Well, when I was an X-ray tech, our professors used to say, "How do you know unless you look?" When I decided to be a psychiatrist and joined the only medical specialty that never looks, and that's wrong.

Shawn Stevenson: Yeah. You changed my life when I was... I was traveling with my wife, and there was this rinky-dink hotel in Hollywood, Vintage, and it was just old style. And we were getting ready, and there was... It was just... I think maybe it might have been the only station we could get and it was PBS. And then I heard you, and I was just... I got closer and closer to the TV, and I was going to be late now for where I was trying to go, and I was just captivated because you said that, that the field of psychiatry is the only profession that treats an organ that they never look at. And it was just based on conversation, basically. And it just changed my life. It changed my perception about reality in this field. And I love the fact that in this book, you are very adamant, and justifiably so, about changing the conversation from mental illness and psychiatric disorders to brain health. So what is... Can you talk a little bit about that? Why is that so important to us?

Dr. Daniel Amen: When I decided to become a psychiatrist, I hated the term "mental illness" because I thought it's so bad that nobody would want it. It's like you lose your mind, and it completely ignores the organ of behavior which is the brain. And when I started looking at the brain, I'm like, "Oh, these aren't mental. They're brain." And when you get your brain right, your mind follows. And then I had this great case early on when I started imaging. He called himself the "Anger Broker of the Sacramento Valley". And I saw him after he got out of a psychiatric hospital for a suicide attempt. His wife left him because he was abusive, and he was mean to me, he was mean to my staff. And I just started scanning people. And I told him on my third visit, I'm like, "You need to go get scanned and you have to pay for it because I'm not going to treat you unless I understand what's going on because I need to get you better quickly 'cause you're mean. And I don't like people being mean to my staff. It's like these people are my family." And he went, and he had damage to the left side of his brain.

And I'm like, "Did you ever have a brain injury?" And he said no. And I learned quickly, "Are you sure?" And so I asked him 10 times. And riding a bicycle down the Rocky Mountains, he crashed and broke his helmet on the left side. And I'm like, "Oh." And I put him on a combination of medicines targeted to his brain. And within three months, he's the nicest person. He brings flowers to my staff, he's bringing candy before I knew that was really a weapon of mass destruction. But get your brain right and you're kinder, you're more loving, you're more thoughtful. So his wife had no idea. She just thought she was dealing with a jerk when he was brain-damaged. And when I got his brain better, he was more loving, more thoughtful. And so I'm opposed to the whole, "You have a mental illness." What the hell does that mean? It's like you have a brain illness, and if I get your brain better, you're better.

Shawn Stevenson: Yeah, yeah. That's so powerful, just that simple distinction. Because, as you talked about in the book, there's a big stigma around it and people even saying this statement, and I've heard it as well, "I'm not going to see a psychiatrist. I'm not crazy." But we're talking about brain health, not a mental illness. And we might wonder, well... Well, let's talk about trauma, because a lot of times if we dig around, even me, I've got a big scar on the back of my head from a little tussle when I was a kid, and that could be a cause and a factor for brain issue, like falling off a bike or smaller things, even childbirth potentially. Am I right?

Dr. Daniel Amen: Childbirth. The day you're born is one of the riskiest days of your life. 3% of children have problems with that. And if you were born with the cord wrapped around your neck, or your Apgar scores aren't good, your brain is the most oxygen-hungry organ in the body. It's 2% of your body's weight for most people, but it uses 20%-30% of the calories you consume, of the blood flow, of the oxygen. And any deprivation state can give you learning problems, can give you ADHD, can give you emotional problems. And people aren't thinking about it because they don't look. They look at your behavior. So I'm also a child psychiatrist. And during my training, no one ever talked to us about the brain. That's insane.

Shawn Stevenson: It's insane, totally insane. And so I just want to plant that seed for people, for parents, for other family members, for yourself, that adult ADHD is a big, growing thing today as well. And your behavior doesn't necessarily mean that there's something wrong with you as a person. Because we look at it as a character defect versus there might be something wrong with your brain. And if you could talk about how do you get in there and take a peek with the SPECT

imaging, what does that tell us?

Dr. Daniel Amen: So when I was in the Army... So I was in the Army twice, once as an enlisted soldier, and then as an officer. I ended up being the chief psychiatrist at Fort Irwin. It's in the middle of the Mojave Desert. And there I learned bio feedback which is I can use instruments to measure your body and then teach you how to change them. Like I can teach you how to warm your hands and relax your muscles or breathe with your diaphragm. All very helpful. But I learned about quantitative EEG where I could look at the electrical activity in your brain, and then once I knew your signature I could change it.

So I got really excited about imaging around 1987, 1988, but in 1991 I went to a lecture on brain SPECT imaging, SPECT looks at blood flow and activity. It looks at how your brain works. And it gives you these beautiful 3D images of brain function. And so I just got obsessed with it and I really literally started scanning everybody I knew, because I came to realize, how the heck do I know what's going on in your brain unless I look at it. And SPECT basically tells you three things; Good activity, too little or too much. And then my job becomes balancing your brain because if it's working too hard you want to calm it down. If it works too hard, you can be anxious, you can be irritable, you can be rigid and inflexible and if things don't go your way, you got upset.

Or if it's not working hard enough, you have brain fog, you are impulsive, you don't make good decisions, you can't focus. And so I'm always working to balance someone's brain, but I want the image. I mean I'm treating this one woman and I just adore her and her brain was a disaster when I met her, because she grew up around a toxic chemical plant. And yes, she had emotional trauma and yes, there were psychological work to do, but imagine it like hardware and software. If the hardware doesn't work right in a computer, you can't program it. And so she had been going to therapy forever but it wasn't taking because she didn't have the hardware, the brain function to take care of it. So using things like hyperbaric oxygen and supplements and really working on getting the organ healthy, then gave her the opportunity that psychotherapy would have a lasting positive impact for her. So I'm never opposed to psychotherapy, I'm not opposed to psychiatric drugs, I'm just opposed to doing all of that in the dark and calling it a mental illness that shames people.

So when I told my dad in 1979, I wanted to be a psychiatrist, he asked me why I didn't want to be a real doctor. Why I wanted to be a nut doctor hanging out

with nuts all day long. And my dad would never get father of the year award, but 40 years later, I sort of get why he said that. Because we don't act like real doctors. Do you know of any medical specialists that never looks at the organ they treat and they end up putting you on powerful medications in the dark. So I'm in a new docu-series, with Justin Beiber, so he has a new series on YouTube called Seasons...

Shawn Stevenson: Seasons. Yeah.

Dr. Daniel Amen: And I'm in Episode five, as his brain health doctor, so I've been a psychiatrist for five years. And when he first came to me another doctor has diagnosed him with bipolar disorder and put him on Lithium. And when I looked at him, I'm like, "He doesn't have bipolar disorder, his brain is sleepy. He has terrible ADD and he has a left temporal lobe problem." And it came out that he also had an infection like Lyme that was attacking his brain. And so if you don't really see the big picture easy, especially for someone like Justin, call them bad, call them spoiled and you do that with rock stars. But he's not bad. He was damaged. And through the program, he's just better than he's ever been.

Shawn Stevenson: True story. I was watching Seasons last night for the first time and I didn't know that there was this connection. And you can see also the change in his demeanor, in his communication, in his behavior, and we just attribute it to, "Oh he's just maturing," but he was actually getting his brain healthy.

Dr. Daniel Amen: Oh no the darkness that that poor boy went through. And often the issues we have, they're not ours, they're our parents or our grandparents. He... Mother was a single mother when she got pregnant with him and she went to live at the Salvation Army, because the grandparents were pretty unhappy with her. And she was a child when she had him, and she was in a conflicted relationship with the dad, so he's basically bathed, born in stress hormones and then he played hockey, there were concussions, there's early drug use. From a brain health perspective, it's a disaster and fame wears out the pleasure centers in the brain. Which puts people at risk for substance abuse and high-risk behaviors. So yes, it's taken a while to get him back, but it's possible. How exciting is that, that you're not stuck with the brain you have? And I have five of his scans and you could just see them progressively get better.

Shawn Stevenson: And you've done that for so many people and it's just so amazing. Something really cool in the book, and I was pleasantly surprised to see it in there. You took

us through a brief history of the field of psychiatry and where we're at today with SPECT imaging. But you went back and talked a little bit about ancient civilizations approach to this. Up to Hippocrates and beyond. Can we just go through a little brief like, where did this start? In the beginning it was spirits and drilling holes in people's heads.

Dr. Daniel Amen: So actually chapter one, and I really like chapter one because I talk about this boy Jared who was just a mess, hyperactive, restless, impulsive, aggressive. The doctor put him on five medications, they all made him worse, and then we came and he had a pattern that didn't respond to those medicines and, on supplements and lifestyle changes he got his life back, and now, he's been on the honor roll for like 10 years. And so I imagine, "Well, how would we have treated him throughout history?"

So in ancient civilization 6,000 years ago, they very well may have drilled a hole in his skull to let out the evil spirits, something called trepanation. 400 BC, Hippocrates, who got it mostly right, he would have changed his diet, got him to exercise, put him with inspiring teachers, got him a job that fit his restless nature, and then they would have bled him to release the excessive fluids in his body. Okay, so I don't like the bleeding part.

Shawn Stevenson: And Hippocrates really was one of the first people if not the first to really highlight how important the brain is.

Dr. Daniel Amen: Yes, along with lifestyle changes. Right? If you're depressed, take a walk, if you're still depressed, take another walk. And what we know, head-to-head against anti-depressants, exercise is equally effective. Think about that. And then in the middle ages, odds are they would have put Jared in an asylum and beaten him, trying to get rid of the evil spirits. They'd have prayed the devil out of him. In the 18th and 19th centuries, they would have placed him under suspicion in the eugenics program, and his family under suspicion going, "There's something the matter with his genes, we need to get him out of the gene pool." So they may have sterilized him.

This... It actually started in the United States, and was the precursor for Nazi atrocities. In the 20th century Freud would have put him on the couch four or five times a week talking about his internal conflicts, especially his relationship with his mother who was very stressed when she first came to see us. If you don't really understand that insanity really is hereditary, that you get it from

your children, right? When you have children... Well, you're a parent, so when your children aren't right, it can make you more irritable, more anxious, more temperamental, and Freud would have talked about his relationship with his mother, but it wouldn't have worked, because it's a brain health issue.

And, we talked... I talk in the book about ECT and prefrontal lobotomies, and Jared probably would have had all of those at different stages in time. And then now it's the 15-minute med-check. It's... The doctor will talk to you for an hour based on your symptoms, you have ADD or bipolar disorder, you have depression, you have a personality disorder, and then, just start drugging you with no biological information and it's like, "Who acts like that?" Right? I mean, psychiatrists, we are medical doctors and we should be better.

Shawn Stevenson: Yeah, yeah. It's scary.

Dr. Daniel Amen: This has not gotten me a lot of friends.

Shawn Stevenson: But the right friends though, the right friends, and the impact, and it's amazing. I think you've done... You're getting close to 200,000 scans? Incredible, it's by far the biggest database, but, it's really again shifting the conversation. You're in a position where you can shift the conversation, and say, mental illness, and the stigma attached to that psychiatric disorders, the stigma attached to that... It's brain health, that's where we need to move the conversation to, that's what we need to talk about. And one of the things that you highlight in the book are personality types. What is your brain's personality type? Can you talk a little bit about that?

Dr. Daniel Amen: Well, one of the things... One of the first things I learned is everybody's brain is different, and, my first book on types was on ADD, it's like ADD is not one thing, it's seven things. Stop calling it one thing because stimulants help two of the seven types and they make five of the seven types of worse. And then, I wrote a book called 'Change Your Brain, Change Your Body', which was a big best-seller and I'm like, "Obesity is not one thing, there are impulsive over eaters, compulsive over-eaters, sad over-eaters, anxious over-eaters, know their brain type, and you can help them get their bodies right."

And then I realized, "Well, all of us have our own type, and, in the book I talk about, there's the balanced brain type, the spontaneous brain types, my ADD group, my persistent brain-types, my OCD group, this cautious, or me when I

was growing up were the anxious group, were the sensitive type of sad group, and there are really 16 different types. Knowing your type can lead you to the right strategies, to optimize your life, and know if you're spontaneous but your boss is persistent, there's certain things to balance out or, what's common is the husband's spontaneous and the wife is persistent, and, it causes no end of trouble at home.

Shawn Stevenson: Oh my gosh. And, we don't even know what's happening though. That's the crazy part.

Dr. Daniel Amen: Nobody thinks about their brain. Why? 'Cause you can't see it, you can see the wrinkles in your skin, or the fat around your belly, and you can do something when you're unhappy with it, but because nobody looks at their brain, it's just not part of the conversation and it needs to be because your brain runs everything. It controls how you think, how you feel, how you act, how you get along in your marriage, what kind of father you are, what kind of business person you are, and if you don't take care of it, you begin to make poor decisions 'cause your brain is the organ of every decision you make and so... And you know this, if you don't sleep right, well your brain doesn't work right, and then your decisions the next day, including how you talk to your spouse are not as good as they could be, which then has a snowball effect of negativity.

Shawn Stevenson: Yeah. What if we could see a brain scan before we decide to get into a relationship? This was when I stopped and I would just broke out laughing reading this part of the book because you were divorced for a few years, I think maybe six years and you determined within yourself, "I'm not taking a relationship to the next level, until I see the person's brain." And it made me think about, if somebody's a police officer, they're going to do a background check on the person or a woman might want to do a credit check. You're like, "I'm going to see your brain." And you met Tana, your wife and you really liked her. You're like, "I'm going to get her in here and check her brain out." And you did and she had a beautiful brain. But it also spurred on some other events that you didn't realize at the time which was, one was, helping her father. And I think he was recently diagnosed at the time with... Mis-diagnosed with early onset Alzheimer's, I believe, but it wasn't that...

Dr. Daniel Amen: Your memory is really good. I'm so grateful.

Shawn Stevenson: Well, I've listened to you.

Dr. Daniel Amen: And I learned, the best way to get a woman to fall in love with you, is to do something special for someone they love, and so yes, there's no way I was falling in love with Tana without seeing her brain. She was like, way too beautiful, and my heart just went pitter-patter when I was around her. And I know, new love is a drug, it's just like cocaine. And so, I needed to see her brain and she's a neuro-surgical ICU nurse. And so, part of our bonding was over the brain. And when I looked at it, I'm like, "Ah! She's got a great brain. I can be in a relationship with this woman." But then shortly thereafter, just a couple of months, her dad who she was estranged from, her half-sisters called her up and said, "Dad's been diagnosed with Alzheimer's disease. We have no idea what to do."

And Tana looked at me and I said, "Well I know what to do, we should bring him down." Which she was resistant, 'cause it's like, this is not a nice person in my head, but when I scanned him, he didn't have Alzheimer's disease he had something called pseudo-dementia, which is a depression that's masquerading as Alzheimer's disease. Actually, it's why I fell in love with imaging, one of my first patients, Matilda, 69, diagnosed with Alzheimer's disease, nearly burned down her house, her kids want to put her in a home, and she didn't want to, so there's this big fight. And so they hospitalize her, by random chance, I was her doctor and when I scanned her, she didn't have Alzheimer's disease.

In 1991, the pattern for Alzheimer's disease was already described in the imaging literature, and she didn't have it. Her emotional brain was working too hard and on an anti-depressant, that I like, Wellbutrin, she got her memory back and I've never had that experience of, taking someone in a dementia-like state and just watch her blossom into a normal human being. I mean, that made me pay attention to imaging, how do I know what's going on in your brain unless I look? And her dad had the same pattern and six months later, he's doing all day seminars at the local church. So someone diagnosed with the Alzheimer's disease, just blossomed and then they made up, if you will, and he ended up dying six years later, of cancer, but he died in her arms, and it was cool.

Shawn Stevenson: Wow. And to somebody who was a strange to that, wow, such a great story. And I know a lot of people are wondering, "Well, do I need to get my brain scanned?" And you have clinics across the country and I think some in, some other countries as well?

Dr. Daniel Amen: Not yet.

Shawn Stevenson: Not yet?

Dr. Daniel Amen: But we have eight across the country, soon to be nine, and because we want people to have access and they're SPECT cameras in every major hospital in the world 'cause they do SPECT heart studies, SPECT bone studies. But the reason I should come to us is our experience, and we know how to put them in the context of your life and that's why we're special. But a lot of time, I realize not everybody can get a scan. So based on thousands of scans, we developed questionnaires to help you predict what your brain might look like. Like what's your brain type. And then if you want to keep your brain healthy or rescue it, if it's headed to the dark place, you have to prevent or treat the 11 major risk factors that steal your mind, which makes up about I think 50% of the book, so I go through each of these risk factors and go, "Okay, how do you know if you have it and what do you do about it?"

Shawn Stevenson: Yeah, that's what I love about the book too is again, we might not have access to getting a scan done at this time, but you're just like, forget that, not literally, you want to remember, but you've put together this protocol, the bright minds and are targeting these specific things that you know are proven to work, again, tens of thousands of patients, hundreds of thousands of scans almost, I think you're getting close to 200,000 and this for me was really eye-opening because it's so simple, but I think we overlook so many pieces of this. So I want to go through some of these... And this is an acronym, BRIGHT MINDS. And the first one, the B is blood flow, and that's something that you can actually take a peek at and see where the circulation is happening in the brain.

Dr. Daniel Amen: Yeah, and SPECT is a study that looks at blood flow and activity. And so why is blood important? It brings nutrients, but equally important, it takes away toxins. So if you don't have healthy blood flow to your brain or any organ really, it prematurely ages that organ because it can't get rid of the toxins. And so how do you know if you have low blood flow to your brain if you don't get a scan, if you have hypertension, high blood pressure? And 60% of Americans are either hypertensive or pre-hypertensive. If you have any form of heart disease, if you're sedentary, if you have erectile dysfunction, and it's like 40% of 40-year-old men have erectile dysfunction. 70% of 70-year-old men have erectile dysfunction, which means 40% of 40-year-old men have brain dysfunction, and 70% of 70-year-old men have brain dysfunction. 'Cause if you have blood flow problems anywhere, it likely means they're everywhere. And in the book, I have

these checklists. Well, how do you know if you have blood flow issues? And then, well, what do you do? You exercise. Walk like you're late, 45 minutes, four or five times a week, lift weights twice a week. Keep it simple.

And then I talk about racquet sports, because people who play racquet sports live longer than everybody else. People who play football and soccer live less long than anybody else, but... 'Cause of the head trauma. But racket sports, because they activate the cerebellum. So the cerebellum is this cool... Cerebellum is Latin for little brains, about 10% of the brain's volume in the back bottom part of the brain, but has 50% of the brain's neurons. And it's like the CPU, the central processing unit of the brain, and when it's not right, the rest of your brain doesn't work right. So coordination exercises, my favorite is table tennis, can really help. And then there are foods, foods like beets increase blood flow. Cayenne pepper increases blood flow. Oregano, rosemary, cinnamon, all have been shown to increase blood flow. Supplements like ginkgo and vinpocetine can increase blood flow. So none of this is hard.

Know which of the risk factors you have, and then just choose to do one thing for them because you love yourself, right? Getting well is never about, "I should do this, I shouldn't do that." It's a sign of how much you love yourself.

Shawn Stevenson: I love that. I love that so much. Simple things we can all add in one or two of those things. And I definitely... I think you'd agree, the biggest thing here is the movement. Our genes expect us to walk, and it's... I get into this conversation. We can do some amazing things with the human body. We could do all these different flips, and we could squat hundreds of pounds. But what are we really designed to do? We're designed to walk. And walking elicits so many benefits, and one of those is helping to normalize blood pressure, blood sugar, because that's another one of these that we talk about here. So with BRIGHT MINDS, you've got blood flow, retirement aging, which I want to talk about in a second, but inflammation is the next one, the I... So we'll come back to the R, but let's talk a little bit about inflammation. Because again, that's one of those things that seems to be invisible, but we do have some markers we can look at. And inflammation can just terrorize our brains.

Dr. Daniel Amen: It's a major cause of dementia and depression, autism. It's also been associated with ADHD and PTSD. Inflammation is a disaster. It comes from the Latin word, "to set a fire". When you have chronic inflammation, it's like you have a low-level fire in your body destroying your organ. We can measure it with some blood

tests like C-reactive protein or the Omega-3 index. And I actually did a study of 50 consecutive patients who came to our clinic who were not taking fish oil. 49 of them had sub-optimal levels of Omega-3 fatty acids. A study from the CDC came out and said 97% of Americans were low in Omega-3 fatty acids which you got from fish. Now you can get plant sources, but the plant sources like nuts and seeds and avocado, they don't have EPA and DHA, which are the two Omega-3s that really work in your brain.

And so I'm a huge fan of sustainable fish, but also high-quality fish oil because it can help put out the fire of inflammation. If your gut's not right, you likely have inflammation because you end up with this thing called leaky gut, where things get inside your body that your gut should have protected you from. And that can cause inflammation. You'll also know if you have inflammation if you have rosacea. So if you have this redness around your face, or if you have joint pain. And curcumins, which come from the spice turmeric, help decrease inflammation. So Omega-3 fatty acids help, curcumins help. Another major cause of inflammation is gum disease.

When you have periodontal disease, it makes it more likely you have systemic inflammation, heart disease and brain disease. So before I read the research, I didn't really care that much about my teeth. Now I'm a flossing fool, because if my gums aren't right, my heart's not right, my brain's not right. So taking care of inflammation... So how do you know if you have it? C-reactive protein, Omega-3 index. Do you have joint pain or rosacea?

What can I do? I can take Omega-three fatty acids, I can floss, I can take probiotics, to help my gut heal and be healthy. Simple, not hard.

Shawn Stevenson: Yeah, yeah. I definitely want to talk about retirement aging. This is a big one. And I didn't think about this one until I read it in the book. So let's talk about that one. So why is this included in the BRIGHT MIND strategy? We all need to pay attention to this.

Dr. Daniel Amen: Well, I hate this. I published a study last year on 62,000 scans. It's the largest imaging study ever on how the brain ages and it's just bad news. As we age, our brain gets less and less active, but it doesn't have to. And what we discovered is, when you stop learning, your brain starts dying. And so now, think about kids who have ADHD or learning problems, they don't like school and the reason they don't like school is 'cause they're not good at it. And so, they're like, "No, I

don't want to do that anymore." So lifelong learning doesn't become part of who they are, which then increases their risk of dementia. As we age, we need to be more serious about our health, not less serious. And one of the things I discovered is, the scans can actually tell 20 years before you have Alzheimer's disease, if you're headed for the dark place. So Lisa Gibbons is a friend of mine, she's a radio television personality. I was on her show a long time.

Shawn Stevenson: Was it the Entertainment Tonight, she was on?

Dr. Daniel Amen: She was on Entertainment Tonight, and then she had her own show. And her mother and grandmother died with Alzheimer's disease. And I started going, "You need to come see me." And I love her. I mean just love her as a friend and she's like, "No, no." And then about 12 years ago, she went through a divorce, and got depressed and she came to see me and her brain was terrible. And I'm like, your brain is headed to where your grandmother and mother's brain was when. I said, "But it doesn't have to." And she did everything I asked her to. And last year, we did a program together and we scanned her and it's so much better. So, would you want a better brain, 10 years from now? Who wouldn't? I want mine to be better tomorrow but I'm 65 now, do I want a better brain at 75? You bet, 'cause I know what most 75 year old brains look like, and it's not good news, but you just have to be serious and the older you get, the more serious you need to be.

Shawn Stevenson: Yeah, yeah. This is so good, so much good stuff here. I want to talk more about the BRIGHT MIND's strategy and a few other really cool things in your new book, The End of Mental Illness. Pick up your copy today. One of the most important books of our time, and we're going to do that right after this quick break, so sit tight, will be right back.

I don't know about you, but when I was growing up, I was obsessed with juice. I'm talking about the juice boxes. Capri Suns. You remember Capri Suns came out, the complication of getting that straw into that little plastic bag and shooting it all over your oneself as a child. Everybody had experienced it, but the Capri Sun was delicious. It went from there to getting a little bit more fancy and having "Tropical punch." Became a big fan, like Hawaiian punch and that was my thing. I wasn't a big fan of sodas. I was getting the juice but here's the thing. It wasn't really juice. If you would read the package I would literally say, "Zero percent juice in the juice."

It was trickery. Trickery. And here's the thing, how can they create these flavors? There's just incredible technology, you have a gas chromatograph that you can synthesize, and extract and find those flavors and create them artificially. So what's the point in going and getting a real strawberry if you can create that flavor and that smell. And so, we really found ourselves in a nutrition black hole because of that and providing these things to our kids, in our society as if everything is normal, but it's not normal. We know now that those fake juices, were hurting us, hurting our metabolism, introducing a tremendous amount of sugar, very processed sugar, that can really cause massive issues, whether it's with our brain health, whether it's with our metabolism, in our ability to burn fat. Matter of fact, the name tropical punch, where does it even come from? It's really like a punch to your pancreas. It's a nice uppercut.

And so today though, the game has changed, now we have this updated knowledge, and we have the ability to create a juice that's really special and something that's available no matter where you go, because it's been low temperature processed to retain all of these vital nutrients and these wonderful many of them red super foods and delivering not just a similar flavor sensation. Back in the day, we had Crystal Light. Don't forget about Crystal Light, but this is something that's actually going to add to your health and not take away. My kids are also huge fans of the red juice formula, as well. And this is why, one of the hallmark ingredients here in the red juice formula is Acai, you've heard of Acai. It's hot, it's hot right now, 10 times more antioxidants than just about any fruit that you can name. It's an anti-oxidant powerhouse that also assist your body in producing its own endogenous antioxidants, which are really the most powerful forms of these things. They really help to keep us younger, longer.

We've got some cranberries in there. Cranberries are great for your digestion and for your bladder. Pomegranate again, super hot right now. Pomegranate is full of antioxidants as well and found to be beneficial and study after study for your cardiovascular health, as well as strawberry. You've got some Blue Bear in there too. Raspberry, great source of Vitamin C. Vitamin C is great for your immune system, for generating, creating new tissues. Vitamin C is great for your skin. And the list goes on and on because we've also got some other super herbs in this formula to cortices/ cordyceps, rhodiola, ginseng.

What I'm I talking about here? I'm talking about red juice from Organifi. Alright? You need to get your hands on this red juice. It is amazing. It tastes good and also it is incredible for you. This is kicking the whole concept of these barrel

juices and juice boxes that I used to get messed up on when I was a kid right down the stairs. Alright? This is the real deal. Alright? Again low temperature process to actually retain the nutrients. So you're actually getting what is promoted to be in the red juice itself. So pop over, check them out, it's Organifi.com/model. You get 20% off the red juice right now, that's O-R-G-A-N-I-F-I.com/model for 20% off the red juice formula, the green juice, the gold, everything that they carry. Alright? But I highly, highly recommend getting your hands on the red juice. I like to have it in the afternoon a little pick me up, to give a little bit of a jolt and supporting your energy. But coming from Earth-grown nutrients, real food. Alright? So again, pop over check them out, organifi.com/model for 20% off. And now back to the show.

Alright we are back and we're talking with multi-New York Times best selling author, Dr. Daniel Amen about his new book, "The End of mental illness." And before the break, we were talking about the protocol in the book, the acronym bright minds and all of these very simple and actionable tools that we can implement to ensure that we have great brain health moving forward and also changing the paradigm on mental illness and bringing this to something that is actually more tangible and real for all of us, which is focusing on good brain health. So we talked about a couple of the pieces of Bright Mind we talked about blood flow, retirement aging, inflammation... We're not going to go through all of these, you going to pick up the book to go through all of these. But you mentioned, of course we briefly touched on this earlier, trauma a head trauma can be a big causative agent here, but also it's not just physical trauma, but emotional trauma. You talk about Mindstorms. So we have the acronym bright and then we have minds, the M is for Mindstorms. Let's talk about that one.

Dr. Daniel Amen: So, it's abnormal electrical activity in the brain. Especially in an area called the temporal lobes. And most people don't know about it. But when I discovered early on, if your temporal lobes aren't right, a mood instability, irritability, temper problems, dark thoughts come out of the blue for no reason and actually anti-seizure medications or the ketogenic diet which is not good for everyone. It's terrible for people who have OCD. They become more OCD on it. But for people who have these Mindstorms it really helps settle them to be healthy or more normal, happier. And I discovered them from looking, but there was actually a book written in 1980 by Jack Dreyfus, the founder of the famous Dreyfus Mutual Fund, hat when he went on an anticonvulsant his depression went away. His anxiety went away. He said he'd had suicidal thoughts for

decades and three days on this medicine, he didn't need his shrink anymore. And I've just, I've had some miraculous cases, when I'm like, "Oh this is a temporal lobe issue."

And Justin, who we talked about, it's one of his risk factors. That he had it, whether it was from the infection he had or the three concussions he had, that when we stabilize that part of his brain he just did so much better. And it's just something people don't know about. Is that a psychiatric illness? Absolutely not, it's a brain illness. And so understanding the difference is important.

Shawn Stevenson: Yeah. Yeah. I don't think that we equate... And I know just in a normal day-to-day basis, we don't think about all the electrical activity happening upstairs. And that's what's creating all of this, even the thoughts that we're having. My ability to speak to you right now, it's just this electric mindstorm taking place, but we can also have severe storms if we are in a state of stress, if we're in a state of even a lower activity, because we're not being stimulated. And so what I want to ask you about is, again we've touched on this, but I really want to get more of a definitive answer, when we are subjected to being in a stressful environment, or growing up in a traumatic environment, how can that actually damage our brain?

Dr. Daniel Amen: Well it changes your brain. Children who grow up in violent homes have the same brain patterns as soldiers in war. Think about that. And when you grow up in an unpredictable environment. So when I was a child psychiatrist, I studied children and grandchildren of alcoholics. My first wife grew up in a very violent alcoholic home, and I'm like, "Why doesn't she like me?" She's the reason I became a psychiatrist. When... I got married when I was a second year medical student and then a couple of months later, just a couple of months later, she tried to kill herself. And I brought her to see a wonderful psychiatrist and I came to realize if he helped her, he wouldn't just help her, it would help me, it would help our kids. And then I found out...

And I dated her, I talked to this girl every day for three years, when we were teenagers, and I had no idea her dad was beating her mom. That the police were being called because the secrecy in alcoholic homes is so high. And then I learned that when you grow up in that chronically stressful environment, you learn not to talk, not to trust and not to feel. And it can have a big negative impact on your relationships.

But when I started scanning people who had post-traumatic stress disorder, from these dysfunctional childhoods their emotional brain, was just lit up. And so as opposed to traumatic brain injury where we see decreases on the scan, in PTSD we see increases in their emotional centers. So their amygdala becomes larger and more sensitized. Their hippocampus, their cingulate gyrus. So it's a pattern I call the diamond pattern, and I show some scans in the brain of this. And so they end up always watching for the shoe to drop. And my wife, Tana, says when she first met me, that she didn't trust me, 'cause she didn't trust I was nice. I mean, really took her 18 months. She comes, she goes, she comes, she goes. She goes, "Nobody's that nice." 'Cause it didn't fit her experience growing up with people that were unpredictable. So it changes your brain, but it also changes your mindset.

Shawn Stevenson: So powerful, so powerful. So just jumping forward a little bit here, in the acronym MIND, so BRIGHT MINDS, so we talked a little bit about mind storms. I want to talk about the D, diabetes. This one is huge.

Dr. Daniel Amen: Yes, huge. And anyway... So why is it important? Why would a psychiatrist want to talk about blood sugar and weight? So diabetes is you're either diabetic or pre-diabetic, means your fasting blood sugar's high and/or you're overweight or obese. According to a new study from the Journal of the American Medical Association, 50% of the American population is diabetic or pre-diabetic. Think about that. That means our... And why do you not want a high blood sugar? Because as blood sugar levels go up, it actually begins to erode your blood vessels, making them more brittle and likely to break, which impairs healing. And anybody who's loved someone who died with diabetes, you just know the disaster that it causes. My father-in-law got it when he was 55 and he told me he was going to kill himself if he had to take insulin, well, he ended up at 60 having to take insulin. He didn't kill himself, but the diabetes killed him. He ended up losing his legs, losing his eyesight, losing his heart, and then losing his mind. You need healthy blood sugar and healthy blood flow.

And it's just rampant because of our diets, but what people also don't know, we didn't talk much about the T, the toxins, our toxic load is damaging not only our brain but also our pancreas that produces insulin to help us. And so putting toxic products on your body, eating foods with pesticides, breathing toxic air, drinking toxic water, and we know that the water in this country is toxic in many, many areas, not just Flint, although Flint was a bad, bad example of it.

So, if we have diabetes escalating at epidemic rates, what's happened to obesity? Since 1982, obesity in children was 4%. Now it's 32%, it's gone up 800%. And when we were growing up, we just don't remember it, but now 72% of American adults are overweight. 40% of us are obese. And I published two studies that showed as your weight goes up, the actual physical size and function of your brain goes down. And just over the weekend, looking at 20,000 patients, I mapped each area of the brain by, "Are you underweight, normal weight, overweight, obese, morbidly obese?" And there's a linear correlation between weight and blood flow to every region of the brain.

Every region of the brain, as your weight went up, the blood flow and activity of your brain went down. And that should just scare us to begin to do the right thing, and the right thing is not Nutrisystems or Jenny Craig and all of that because a lot of that is fake food. It's to really focus on loving food that loves you back. And people go, "But I love doughnuts." But there's not one healthy thing about donuts. They hurt you. Loving doughnuts is being in an abusive relationship. I don't know if we ever talked about The Daniel Plan in this program I did with Mark Hyman and Pastor Rick Warren, where we got Saddleback Church healthy, one of the largest churches in the world. The first week, 15,000 people signed up, the first year, they lost a quarter of a million pounds. But we then wrote a best-selling book and thousands of churches did that. But right after we started The Daniel Plan, one of the pastors' wives came to my office and she said, "I heard your talk and I told my husband that night, 'I'd rather get Alzheimer's disease than give up sugar.'"

I'm like, "Did you date the bad boys in high school?" Because that's like a bad relationship to be in love with something that damages you. I mean, it's abuse. But we don't think about it. And in the end of mental illness... I love this writing device I put in the book, where I wrote, "If I was an evil ruler and I wanted to increase the incidents of mental illness in America, what would I do?" And there are 62 evil ruler strategies, but one of them is I'd serve doughnuts at church. Go to church to get your soul fed, these people are trying to kill you.

Shawn Stevenson: Oh my goodness. I literally remember growing up and then having doughnuts at church, and we talked about... I'm a very visual person. "Did you like the bad boys?" I pictured a circle doughnut pulling up on a motorcycle with two long john legs and a doughnut hole head and she hopped in on the bike, and he's got the ripped off sleeves. Anyways, yeah.

Dr. Daniel Amen: I love that, that's a great image.

Shawn Stevenson: And again, we don't think about this, we don't think about the relationship. And people would come into my office all the time when I was doing my clinical work and the big thing people would say without even really talking to me is, what they don't want to give up. I don't have to give up my bread, do I? Just like, all of these different stigmas and we don't realize how addicted we are as well, these things can be running our lives. But then, for many of these things, there are healthier alternatives or things like you just said, "Love food that loves you back." There's so much to love that we don't really know about. Because I grew up...

And the same thing, we grew up in a paradigm where, when we look at the store, it seems like there's all this different stuff, but it's really like the same 12 different food items packaged and processed differently. It's like wheat, corn, soy, maybe throw chicken and some oranges in there, but it's like the same stuff is most of the stuff that we grew up with.

We don't know about... There are literally thousands, tens of thousands of different foods and conversations like this open us up to try new things. And I think it's super important because the diversity in our nutrition, helps with the microbiome, helps with... And you also, of course, have been talking about this over the years, but you mentioned the leaky gut, but now we're getting into the situation where I'm hearing this term more and more of, "Leaky brain."

Dr. Daniel Amen: Because it's the same thing. So when you say think of leaky gut, the lining of your intestinal tracks are about 30 feet, is just one single cell layer thick, that is protecting you from whatever you eat, actually getting into your body and causing all sorts of havoc. But there's that single cell layer that protects your brain from anything that gets into your blood stream, from getting into your brain, and it's there to protect you. But if you have leaky gut, odds are you also have a leaky brain which means your brain's more likely to store toxins, it's more likely to be infected, it's more likely to have big problem.

Shawn Stevenson: That's so important, thank you for sharing that, because it's a distinction. Many people that listen to this show are aware or have taken action to improve situations with leaky gut. Now you understand that this is affecting your brain too and it's of the utmost importance. So, bright minds, we'll hit one more here, with MINDs who got the last piece of it is "S" and it's "Sleep." This is... We were

talking about this even before the show and how important this is in creating and sustaining a healthy brain. So why was this part of, the BRIGHT MINDS?

Dr. Daniel Amen: So teenagers who sleep on average just one hour less than their peers have higher incidents of depression and suicide. When you sleep, your brain cleans and washes itself and there's this great study, soldiers who got seven hours of sleep at night were 98% accurate on the range. Those same soldiers who got just six hours of sleep at night, were 50% accurate on the range. Think about that difference. Five hours, 38% accurate. Four hours, they were dangerous, only 15% accurate. Being sleep deprived kills more people than alcohol related accidents. We need to make sleep a priority in a 1900 on average Americans got 9 hours of sleep at night. Now, in 2020, on average, they get about 6 hours and 40 minutes of sleep. You can't go through that kind of change in such a short evolutionary period without the expectation there are serious problems being created.

Shawn Stevenson: And evolution takes time.

Dr. Daniel Amen: It takes time. And we have changed so much in the last 120 years with technology, and lights, where we're being bombarded with lights and if you just think about, for all of these risk factors and basically for the brain, it's three strategies, love it, so love your brain, love your blood flow, love your sleep, love your blood sugar. Avoid things that hurt it, do things that help it. And so if we think of, "Well, what's hurting our sleep? It's our gadgets. It's the negative news. Do not watch that before bed, that's not going to give you good dreams, it's actually going to give you nightmares.

So, it's the gadgets, it's the electro-magnetic fields, it's people, thinking of alcohol as a health food. Well, it's not a health food, it messes up your microbiome and it decreases the quality of sleep that you have. Noise, caffeine... And if I was an evil ruler, I would create a culture where you have to have caffeine in the morning to wake up and alcohol at night to go to sleep. And that's the culture we have, which is damaging our sleep, which then damages our brain, plus as your weight goes up, you're more likely to have sleep apnea and we saw sleep apnea actually triples the risk of Alzheimer's disease and we can actually see it on scans, your parietal-lobes, top back part of your brain, are decreased in our patients who have sleep apnea. So I can often go, "Oh, I bet you have sleep apnea, you need to get a sleep study and you need to take care of that."

Shawn Stevenson: Yeah, wow, that is scary stuff. Addressing BRIGHT MINDS and expanding the conversation, you also talk about... You had a section looking at mind-meds versus nutraceuticals. And again, I love your approach. This was my thinking as well which is, everything is an option, we have to find the right stuff for you. Some medications can be life-changing and saving for people, whereas a lot of times simply addressing nutrition, lifestyle factors, these nutraceuticals can make miraculous changes... Seemingly miraculous changes as well. So let's talk a little about that, mind-meds versus nutraceuticals.

Dr. Daniel Amen: So, I'm a well-trained psychiatrist. I'm board certified in general psychiatry, child and adolescent psychiatry and I'm not opposed to medication, I'm completely opposed to how it's prescribed in the United States now. 85% of psychiatric medications are prescribed by non-psychiatric physicians in seven-minute office visits. By family practice doctors, pediatricians, nurse practitioners, physician assistants, interns, gynecologists, and once you start these medications, they're insidious in that they change your chemistry to need them in order for you to feel normal.

In the book I go, "Okay. If you have ADHD, what are the 10 things you should do before you go on a stimulant medication? If you have anxiety disorder, what are the 10 things you should do before you start taking a benzo which will be very hard for you to stop. If you have depression or an addiction or you have insomnia, what are the things to do before you go on medication? So for example, with anxiety disorders, people don't know that things like Klonopin and Xanax, they actually increase the risk of dementia later in life, not only that, they're addictive, that once you start them, you're going to have trouble stopping them and you're going to have to take more and more to get the same result.

So, well how about we first have to check your thyroid 'cause if you've hyper thyroid you're going to be anxious. We need to check your blood sugar, 'cause if you have low blood sugar, hypoglycemia, you're more likely to have panic attacks. With Justin, I actually caught him with a very low blood sugar level and I'm like, "Buddy, you're going to eat four or five times a day. Healthy food." I mean it was a big discussion for us. I'm going to teach you to breathe diaphragmatically. I'm going to teach you to meditate. I'm going to teach you to exercise. I'm going to give you GABA, magnesium, thiamine, all never hurt you, scientific evidence they may help you, in that one chapter alone, so the whole

book has a 1084 scientific references.

So, if you think I just sort of pulled this out of the air, it is the best referenced work of my life, and in that one chapter alone is 286 references and I go, "So what has A level scientific evidence?" 'Cause so often, the physician knee-jerk reactions there's no science behind supplements. And of course, my response is, "Do you read?" Because there's all sorts of science, you just haven't bothered to look at it. And so there are 286 references, so what has A level scientific evidence for depression?

Saffron. The world's most expensive spice has anti-depressant qualities. There's 20 studies, randomized double-blind, placebo-controlled trials, saffron, SAM-e, omega-3 fatty acids, St. John's Wort. What has A level scientific evidence for anxiety? Magnesium. How simple is that? Plus 80% of us are low.

Shawn Stevenson: Yeah, deficient.

Dr. Daniel Amen: In magnesium.

Shawn Stevenson: So simple, so simple and important. Okay, I want to ask you so many different things, but I want to make sure that I talk about the four circles of the BRIGHT MINDS Program, because it's an encompassing thing and these four circles are really important to pay attention to. So let's go through those.

Dr. Daniel Amen: So, BRIGHT MINDS really fits in the first circle, which is the biology. When I was a medical student, our Dean, the first week of medical school he goes, "I never want you to think of your patients as their diagnosis. Always think of people in these four big circles." And he went to the blackboard and he drew the first one and he put biology, which for me is, "What does your brain look like?" The actual physical functioning of your brain and your body. And then he drew the second circle and said, "Psychology." Everybody's got a mind, what's their mind? And over time I realized that your development... So what did you grow up in? Like my first wife, did you grow up in an alcoholic home, or with a dad like mine. And that matters, your development really does matter.

And I also put your moment by moment thoughts, and the quality of your thoughts, and I called the negative ones, ANTs, Automatic Negative Thoughts. The thoughts that come into your mind automatically and ruin your day. And we live in an undisciplined thinking society. So, we're loaded with the ANT. So I

teach people how to develop an internal anteatery, to get rid of the bad thoughts.

The next circle is the social circle. It's, who do you hang out with? And what are your current stresses? But you become... And you know this, like the people you spend time with. If you want to do anything great in life, find somebody who's doing it and make them your friend. Find a way to be of service to that person because you become like the people you spend time with. And then the last circle, he wrote "Spiritual." Now, I went to a Christian Medical School, I went to a Oral Roberts University in Tulsa, Oklahoma so I loved that. I learned medicine in the context of my faith. But all of us have a spiritual circle whether we admit it or not, and the spiritual circle is why are you on the planet? What is your deepest sense of meaning and purpose? And I do it and organize it like a cross.

So it's my relationship with the past, so for me it's my grandfather that was so important to me. The future, my grandbabies, my relationship with God and my relationship with the planet. And it's basically, I ask all of my patients the same question, "Why are you here? And what does your life mean?" Because if you're purposeful, you live longer. Your brain is sharper. You recover from things like depression, faster. But so many people these days, they're really living for themselves and not... They don't have any idea where they fit in the context of this world.

Shawn Stevenson: Yeah, I haven't shared this but we did an episode dedicated to how purpose controls our health and there's this radical decrease in mortality from all causes as you just alluded to, when somebody has a strong sense of purpose and it's such a simple thing but we look past it and because it's a driving force of all the decisions that you make, it's leading you to participating in that purpose. And so I love that you talk about that because that wouldn't seem like it's outside of the paradigm. Because... And this is why we have those four circles of biology. One part of our brain's health is the biology piece.

And that strong sense of purpose, community, we also have the psychological, and we have the spiritual. And so whatever that looks like for you in grounding yourself in a sense of spiritual connection or purpose or just a mission, something that drives you, the beautiful part is we get to choose, we get to choose. But I think that oftentimes, when somebody like yourself is giving permission to people that they can choose. And so thank you for bringing this up and talking about that. Again, so many different things I want to talk to you

about. I know how...

You've created some paradigm shifting books and impacted a lot of lives, but I saw it in your eyes, this book is... It might be your favorite and most important book. And if you can, in closing, I just want to ask you about the way that we get and create massive change in our society today, and you talked about this in the book, is getting educated about brain health. Why is that so important for the average person to get educated about it?

Dr. Daniel Amen: I was invited to the White House to talk about mental illness in America, the opioid epidemic, and they knew I've been on public television a lot. My shows have run over 110,000 times across North America. I love when you got to see one of my shows. And they said, "So what's the big idea?" The end of mental illness begins with a revolution in brain health, that if you want to get on top of the opioid epidemic, you have to teach people who love their brains so they make better decisions. If you want to get on top of homelessness, it's brain health that get their brains right, and they can keep their jobs, and they can find a place to live that's not on the street. Did you know that 50% of homeless people had a significant brain injury before they were homeless? If we're going to solve these epidemic challenges of incarceration at levels that are just insane, an addiction, it starts by falling in love and optimizing the physical functioning of the brain. The end of mental illness begins with a revolution in brain health.

Shawn Stevenson: Perfect. Dr. Amen, you've been such an inspiration for me. That day, seeing that PBS special, of the hundreds of thousands of times they've been running, it caught me and it changed the way that I think about my brain, and it changed the way that I related to the people in my life, and changed the way that I related to the patients that I was working with. You are somebody... You created a snowball effect. And to have you here and to sharing your latest work, and again, we're creating a new paradigm, it's just really, really inspiring for me, and I just want to thank you so much. I know what it takes to create something like this. Like you said, all of the medical research and looking through some pretty dry journals to pull out these nuggets for people, it takes a lot of work, and I just want to thank you for that.

Dr. Daniel Amen: Well, Shawn, I'm grateful to you for helping me spread the message and for all the good you do.

Shawn Stevenson: Thank you, I receive it. Can you let everybody know where they can pick up your

book?

Dr. Daniel Amen: So it's going to be available everywhere, March 3rd. But I would love for them to pre-order the book and then go... Or order the book and go to endofmentalillness.com, endofmentalillness.com. And if they just tell us they pre-ordered it, they can download all sorts of gifts including a 50% discount at our supplement company, BrainMD Health. So we want to get this book in the hands of as many people as possible to create the revolution.

Shawn Stevenson: Awesome, awesome. Guys, you've got about a day or two to take action on this. We're putting this out maybe a day or two before the book is released. So go and get those bonuses ASAP. And again, thank you so much for hanging out with me today.

Dr. Daniel Amen: Thank you.

Shawn Stevenson: Everybody, thank you so much for tuning in to the show. I hope you got a lot of value out of this. This is one of my all-time favorite episodes already. I just learned so much. And going through this book is just very enlightening, and also very tangible and actionable, very simple, practical thing, but things where we have science to now back it up. And just going back and talking about the BRIGHT MINDS, the S, in the sleep component. It's not just having great brain health, but for some of us, it's just like, how do we get... We might think that we have good brain health, but we're looking for that edge, we're looking for, "What is that thing that can help me to perform better?" And this is one of those pieces of the recipe. There was a study that was published in The Lancet not too long ago, and there was a study done on physicians. So they took them and they had them to complete a task, then they sleep-deprived them for just 24 hours, which is not uncommon in that field, and have them to come back and complete the same exact task again. Here's what happened: They ended up making 20% more mistakes doing the same exact thing, and took them 14% longer to do the same exact thing.

When he gave the example of soldiers, this radical decrease in their ability to be accurate in their shooting, just think of how dangerous that is. Shift over, we look at those who are dedicated to public service, whether it's law enforcement, whether it's our physicians, how their brain performs can impact the lives of so many people as well in a different context. And so that physician who's making 20% more mistakes because he's sleep-deprived, that doesn't make me

confident, makes me a little nervous. And so we need to have these conversations and create systems where this is just the norm. I think we're going to be looking back on this in the upcoming decades that, "I cannot believe that we allowed ourselves to go to work sleep-deprived, or to try to parent sleep-deprived to relate to each other." And all of us working together to support each other to make sure that we're getting great sleep, that we're nourishing our brains properly, that we're putting our brains in good environments to grow and to reach their best potential. I appreciate you so very much for tuning in again, and if you got a lot of value out of this, make sure to share this out with the people you care about on social media. You can tag me and... You're on social media, right?

Dr. Daniel Amen: I am.

Shawn Stevenson: What's your name...

Dr. Daniel Amen: Dr. Amen.

Shawn Stevenson: Dr. Amen. At Dr. Amen. Let him know what you thought about the episode, alright? And pick up The End of Mental Illness today. I appreciate you immensely. Take care, have an amazing day, and I'll talk with you soon.

And for more after the show, make sure to head over to themodelhealthshow.com. That's where you can find all of the show notes, you could find transcriptions, videos for each episode. And if you got a comment, you can leave me a comment there as well. And please make sure to head over to iTunes and leave us a rating to let everybody know that the show is awesome. And I appreciate that so much. And take care, I promise to keep giving you more powerful, empowering, great content to help you transform your life. Thanks for tuning in.