

Announcer: Bulletproof Radio, a state of high performance.

Dave Asprey: You're listening to Bulletproof Radio with Dave Asprey. Today's cool fact of the day is about adrenaline. It turns out it has short term superpowers. Adrenaline, also known as epinephrine, is a neurotransmitter. It's made mostly by your adrenal glands, and your body secretes it in a moment of crisis, and it gets you ready to meet an emergency of say, a tiger eating you, your boss yelling at you, someone cutting you off in traffic, or whatever you perceive as an emergency even if it's just something that really wasn't an emergency. It makes your heart beat faster and it increases blood flow to your muscles and it helps you use oxygen more efficiently. It turns on your nervous system in interesting ways that causes the neurons in your brain to fire two to three times faster.

Dave Asprey: That could be interesting, because in a study, [inaudible 00:01:02] rats who were exposed to a maze in a previous day could navigate the maze with more correct choices when they were injected with adrenaline. Does that mean adrenaline is a form of nootropic or a smart drug? Maybe sort of, because adrenaline does act like a chemical messenger in your brain to make you more alert during those stressful times. It can distract your brain from sending pain signals, and redirect your attention on your immediate task, like that running away from a tiger thing even if you stub your toe.

Dave Asprey: It can stop an allergic reaction by increasing blood pressure and relaxing muscles in your airways so you can actually breathe. And you get something called hysterical strength from certain amounts of adrenaline that allows, say, mothers to lift cars off their injured children. It even gives you better eyesight by cuing muscles of your iris to contract so that your pupils can expand, and no, you don't have to eat carrots to do that, or even take Eye Armor. Pretty interesting that adrenaline can do this, and yes, you may have guessed that we are going to be talking about adrenaline today on the show.

Dave Asprey: Now today's guest has spent a very long time looking at adrenaline and other neurotransmitters and other parts of aging bioidentical hormones. A board certified internal medicine specialist with about four decades of experience working directly with patients, everything from medical groups to elder care to health research, and he runs something called The Platt Wellness Center in Rancho Mirage where he's looking at the root causes of illness.

Dave Asprey: This whole show is going to be about one of his things he's studied in his life's work. I'm talking about Dr. Michael Platt, by the way. But in his 40 years of practice, he's looked at what happens when we get excess adrenaline, and what he's come up with here, which is also in the literature of course, is that things like fibromyalgia, autism, ADHD, bipolar disorder, depression, anger, weight gain, and addictions are a part of excess adrenaline. And how another hormone that's typically used in hormone replacement therapy for women, called progesterone, can help to fix the problem.

Dave Asprey: So if you're listening to the show going, "What the heck?" Here's the deal. If you're alive and you have social media, you probably have excess adrenaline, or maybe even not enough adrenaline because you've burned yourself out. Listen to the show. It is going to describe you or someone that you know. Michael, welcome to the show.

Michael Platt: Thank you for having me.

Dave Asprey: All right. Did you get interested in adrenaline just because you're a native New Yorker and New Yorkers are always angry? Is that how it works?

Michael Platt: That's a good point, but I've been doing hormones for a long time, and one of the advantages that I had is that when I saw patients, I sat down and talked to them for about two hours. When you sit down and talk to a patient, you learn a lot, and I started seeing a certain pattern. So I started putting things together, and I came up with excess adrenaline as the underlying cause of a lot of conditions, and some of them [inaudible 00:04:15] to be incurable.

Dave Asprey: Why isn't everyone talking about this?

Michael Platt: You know, that's an excellent question. I don't really have the answer for you. But part of the problem, if you allow me to vent a little bit, is that doctors are not trained to treat the cause of illness. They're basically trained to give out band-aids to treat the cause of illness. They actually get very little training in hormones. So part of this is probably related to our friends, the drug companies, who control what doctors learn in medical school. They control the FDA. They control the medical boards. They control medicine.

Michael Platt: If you don't mind my saying so, and I hope they're not part of your sponsors, but for the most part drug companies have no interest in people being healthy.

Dave Asprey: No, there's no drug company sponsoring Bulletproof Radio. I don't think you have to worry about that.

Michael Platt: Okay. Well yeah, so I've written a book, as you may know, called Adrenaline Dominance, and as far as I know it's the only book that's ever been written that talks about adrenaline and the clinical consequences and the conditions related to it and why it happens and how to fix it. So doctors, it's a whole concept that has not been taught to doctors.

Dave Asprey: One of the things that brings me great joy is just finding these things that are massive problems that we just didn't see for whatever reason, and then shining a little bit of light on them, because it changes sometimes millions of people's lives. Toxic mold is an example of there. In fact, there's a tie with adrenaline there where toxic mold will cause an adrenal response, and people are sensitive to it. You walk into a moldy building, you get a surge of adrenaline as your body is like, "What do I do with all this?" But people don't know about that generally,

so they just wonder, "I don't know, I have a headache and I don't feel good," and all these weird problems happen.

Dave Asprey: I know the incidence of that, but how big of a deal is adrenaline dominance? Is this 5% of the population? Is it 50% of the population?

Michael Platt: Well, if you look at the number of people with ADHD-

Dave Asprey: It's kind of growing.

Michael Platt: Yeah. And then you mentioned fibromyalgia, there are 10 million people in this country with fibromyalgia. They've all been told that there's no cure for it. In fact, doctors don't even know what causes the pain of fibromyalgia. But it's an easy condition to actually eliminate once you treat the cause of fibromyalgia. You can actually get rid of ADHD by treating the cause of ADHD.

Dave Asprey: And you're saying it's always too much adrenaline that's causing fibromyalgia and these other conditions? Is it some of the time, always, what's-

Michael Platt: Well I'd say ... I don't want to say 100%, but certainly well into the 90s.

Dave Asprey: Interesting. All right, so given that we've got a ton of people listening with ADHD. In fact, the majority of entrepreneurs seem to have ADHD. In fact, it might make you a better entrepreneur. All of the people seeking a flow state through extreme sports, generally ADHD correlates very highly with that. What is adrenaline dominance? Walk me through it, but say as if I was new to the idea listening to the show and saying, "How would I know if it's me or my spouse or my kids or whatever else?"

Michael Platt: All your listeners have heard of adrenaline. And basically they know it as what they call the fight or flight hormone and it's released in times of danger or whatever. But the fact is that danger rarely occurs, and if it does occur, it's short lived. What people don't understand is that the primary reason why the body released adrenaline is to provide fuel to the brain. You know, the brain per weight uses more sugar than any other part of the body, and when you take sugar away from the brain, they call that hypoglycemia, low blood sugar, and people get sleepy, especially between 3:00 and 4:00 when insulin peaks, a lot of people get sleepy when they're driving. In fact, some people fall asleep when they're driving, go off the road, hit a tree and kill them self.

Michael Platt: So you can see from a survival standpoint, the body always wants to make sure the brain has enough fuel. So the thing about adrenaline, so it's normal for people to release adrenaline at certain times, but I use the term adrenaline dominance to indicate where those people have excess amounts of adrenaline, to the point that it actually has clinical consequences.

Dave Asprey: One of the things that I wrote about in my blog on sleep hacking, people who tend to wake up at 4:00 or 5:00 in the morning and can't go back to sleep, they oftentimes have had a blood sugar crash. Then the way the body responds to a crash in blood sugar is adrenaline and cortisol, because those are the fastest ways to raise blood sugar back up. Then of course you can go back to sleep after an adrenaline surge. Is that the source of this excess adrenaline, or is it these are traumatized, fearful people, or is it some environmental thing? Why this change in our population? Or has this always been there throughout history?

Michael Platt: Well first of all, the primary source of adrenaline is in relationship to low sugars in the brain. Adrenaline actually peaks at 2:30 in the morning. That's the classic time that it's released, because that's the time that the brain basically runs out of fuel. All this advice about not eating anything before going to sleep is actually incorrect. Part of the treatment, and we'll be getting into treatment, is to eat something before going to sleep so the brain has fuel, so the body doesn't have to put out adrenaline to provide it.

Michael Platt: People that have insomnia, people that their brains race or people have trouble falling asleep, staying asleep, people that grind their teeth at night, people that keep their jaw clenched, restless leg syndrome, people that get up at night to urinate, all related to excess adrenaline. You mentioned adrenaline does create stress. Almost all stress is related to increased adrenaline, and the body does respond to stress by putting out cortisol. You're right, these two hormones come out at night, and they both raise your sugar levels.

Michael Platt: Adrenaline raises sugar levels for the brain, and cortisol raises sugar levels to deal with the stress. It's probably the number one cause of weight gain, and nobody ever talks about this. People diet and exercise during the day, but they put on fat during the [inaudible 00:11:11] because any excess sugar that the body does not burn up is stored as fat in the fat cell.

Dave Asprey: So if we have low sugar at night, we're going to have adrenaline. If we have high sugar at night, we're going to get fat.

Michael Platt: Right.

Dave Asprey: That sounds like blood sugar regulation might be the key here.

Michael Platt: Well it's the key to it, you're absolutely right. It's why ... That's adrenaline. That's its main function.

Dave Asprey: What I've found worked, and so for 10 years I've slept with sleep monitors on my head and various other parts of my body, and really dug in the physiology of this. There's a group of people who if they have a tablespoon or maybe a teaspoon or two of raw honey, which tends to raise liver glycogen, they do that before bed, they don't wake up in the middle of the night and they sleep better.

Dave Asprey: Then there's another group of people who will have Brain Octane or even just a little bit of coconut oil, which isn't quite as effective, but it raises ketones. And having slightly higher ketones, which is an alternate source of energy more for the neurons versus the glial cells, then they sleep better.

Dave Asprey: And there's a different group of people that may overlap those two who have a small amount of protein that doesn't raise insulin too much, like a collagen protein, and between experimenting with those three buckets, people who have a hard time going to sleep or staying asleep oftentimes just by changing a small snack, we're talking less than 100 calories, totally changes things. But the circadian researches like Dr. Satchin Panda say, "Don't eat anything after dark. That seems to work best for people who are metabolically healthy."

Dave Asprey: How the heck do you unravel this after 40 years of clinical practice? What do you see? Because I'm confused, I know what works for me and I know what works for different buckets, but I don't know how to put someone in a bucket.

Michael Platt: I take a very logical approach to getting people better, and I know that the brain actually can use up fuel within three hours, so that's why people that have problems with adrenaline, they have to eat throughout the day. The problem is adrenaline actually takes away the appetite. In fact, it can cause nausea and vomiting. So a lot of people with excess adrenaline don't eat breakfast because they don't have an appetite.

Dave Asprey: That would be almost all intermittent fasters now, right? Because I mean this is something I do. I skip breakfast.

Michael Platt: Well, yeah. I don't recommend that, because you have to remember breakfast is the first meal that somebody's had since the day before. If they skip breakfast they're going to be living on adrenaline. Yeah, so I don't recommend intermittent fasting, even though for some people they can get away with it. What it comes down to is whatever works, but people with excess adrenaline should not be doing intermittent fasting.

Dave Asprey: I actually, when I was much younger, was diagnosed with fibromyalgia and chronic fatigue and all these other things. I discovered through just the process of elimination and talk with a lot of people, there were things in my environment that were affecting my metabolism. I fixed my metabolism, I don't have those problems anymore, and I intermittent fast most mornings. Does that mean I fixed a high adrenaline problem, or does that mean something else? I'm just putting myself in the mindset of someone listening that's going, "But I've been intermittent fasting all this time. Should I stop? But I feel better." What's going on?

Michael Platt: Well I hear that, but maybe you've had access to some MCT oil somewhere along the line.

Dave Asprey: That's right. I made it popular.

Michael Platt: MCT oil [inaudible 00:14:43] part of getting people better, because as you know, it converts into ketones, and ketones are one of the two fuels that the brain uses.

Dave Asprey: Oh, I love this. All right. How long have you known this?

Michael Platt: For quite a while actually.

Dave Asprey: Okay. Thank you for saying that. MCT oils were like a 1980s body building thing. And they were largely forgotten, and now they're popular, and Bulletproof Coffee I think did that. I guess this goes back to my original question, Michael. The knowledge about excess adrenaline, the knowledge that you had about MCT oils going back a long time, you didn't hear about it at The American Academy of Anti-Aging Medicine. You didn't hear about it in medical school. You didn't hear about it in dietician school. How did you hear about it? For people listening who want to hear about things ahead of time the way you did, how did you do that?

Michael Platt: You know, I do a lot of reading and whatever, and so somewhere down the line, and I don't remember where, I read that the two fuels the brain uses are glucose and ketones. And I understood that the reason why the body puts out all this adrenaline is just to raise sugar levels or fuel for the brain. So because of my interest in ketones, basically MCT oil and coconut oil, which can convert into MCT oil, there's not a whole lot of other choices. People can go on a ketogenic diet, but again, that's a tough diet for a lot of people, and it cuts no slack.

Dave Asprey: And also, one thing that happens on unending long term keto is you're going to get low insulin levels over time, and low insulin levels are correlated with higher all-cause mortality than high insulin levels. So it seems like an unending keto diet is not a good way to keep your adrenal glands healthy. You'll even get insulin resistance from it.

Michael Platt: Well, but remember part of the fuel that the brain uses is glucose, so that's carbohydrates, and actually the best source of glucose comes from vegetables, which are not a big part of a ketogenic diet, but they are a good thing to add for people that have trouble with adrenaline.

Dave Asprey: Yeah, the whole coconut oil MCT thing is a little bit of a controversy too. The anti-aging group that I ran for a long time in Silicon Valley first started talking about this in the late '90s and started doing a lot of work with coconut oil and all, but it wasn't until about three years ago that Dr. [inaudible 00:17:33] at UC San Diego came out with really definitive research that said, "Hey. Coconut oil raises ketones as much as not eating for eight hours." MCT oil is the broad category of all four kinds of MCT oils, essentially doubles that. Then the one

MCT oil, caprylic acid or C8, the one that's in Brain Octane oil, that one raises ketones four times more than coconut oil or then just sleeping for eight hours.

Dave Asprey: I certainly feel different when I can raise my ketones up like that, but I'm not on a zero carb diet. I'm on a very high vegetable diet, something that wouldn't be possible. It wouldn't be a ketogenic diet if it wasn't for the addition of Brain Octane. Do you have a number for how many ketones someone needs to deal with adrenaline problem, if you were to do a ketone measurement? Is it .3, .5, 1, 2, 3? Because the numbers are all over the place.

Michael Platt: You know, it's a good question. I don't have a clue. I go by tablespoons. So usually I recommend, at least in the beginning, that people have at least three tablespoons of MCT oil.

Dave Asprey: Not all at once I would hope.

Michael Platt: No, no. Throughout the day.

Dave Asprey: Okay.

Michael Platt: No, the brain uses up fuel very quickly, so that's why throughout the day you have to continue to provide fuel. But what's interesting, if I could digress just a little bit.

Dave Asprey: Yeah.

Michael Platt: Is that people really are not aware of how adrenaline affects lives. It starts right after childbirth, babies that have colic. That's adrenaline. What's interesting, there's a hormone called progesterone that actually blocks adrenaline, and rubbing progesterone cream on the abdomen of the baby with colic, it goes away in about three minutes. Then later on in life, the terrible twos, which are also related to excess adrenaline, and bed wetting in children is only related to excess adrenaline. You only see that in creative type children because creative people have the most adrenaline. We'll talk about that. But-

Dave Asprey: Whoa. Aren't you messing with the kid's hormones by giving them progesterone cream? I mean we're talking about formation of sexual characteristics is done by estrogen and testosterone. Progesterone can get in the way of that.

Michael Platt: Well, progesterone's not a sex hormone.

Dave Asprey: It interacts pretty closely with estrogen.

Michael Platt: Well, actually it blocks estrogen. It's an anti-estrogen hormone.

Dave Asprey: Right.

Michael Platt: But keep in mind that the fetus, when the fetus is in the womb, gets exposed to incredibly high levels of progesterone. And the fetus has all the receptor sites for progesterone, [inaudible 00:20:20] deliver it. All of the sudden there's that sudden drop in progesterone, and so if the baby inherited a tendency toward excess adrenaline from the mother, then that's where the colic comes from. It's the same thing that happens with postpartum depression. It always relates to excess adrenaline and that drop in progesterone. So what's interesting is that postpartum depression can be eliminated with progesterone just like colic can be eliminated.

Michael Platt: The thing about adrenaline and depression is that there are two types of depression. There's what's called a reacted depression, where somebody dies or loses a job and so they react to that. But probably the most common type of depression is endogenous, where it comes from within. People are depressed, they don't know why they're depressed, and the most common cause of this is internalization of anger. And adrenaline is an anger hormone. That's where road rage comes from.

Michael Platt: Other things that people should be aware of is, first of all, how easy it is to fix excess adrenaline. But there are so many other conditions, irritable bowel syndrome. Adrenaline is a survival hormone and it cuts off blood supply to areas of the body that are not needed for survival. That includes the intestines, and that's why people get cold hands and cold feet. It's not a low thyroid, it's adrenaline.

Michael Platt: People with excess adrenaline, they always carry tension in the back of their neck. This can cut off blood supply to the ears, and that's where tinnitus comes from. Tinnitus can be eliminated just by putting progesterone cream on the back of the neck. Also, eating correctly, which includes the MCT oil and vegetables. I'm trying to make people aware that all these little problems in life are fixable.

Dave Asprey: All right, so we've got ADHD, addiction, fibromyalgia, interstitial cystitis, teeth grinding, neck tension, anxiety, cold hands and feet, insomnia, even tinnitus. Each of these I know other causes and other things that will get rid of them, almost all of them.

Michael Platt: Well none will eliminate tinnitus as quickly as putting progesterone on the back of the neck. I mean here we're talking about five, six minutes.

Dave Asprey: And this works for almost everyone? Half of people with tinnitus?

Michael Platt: I would say more than half. I'd say probably 95%.

Dave Asprey: Very interesting. How do we know that adrenaline is not a symptom, that it's a cause?

Michael Platt: No, I hear what you're saying, but no. I think it's a cause. I don't see it as being a symptom.

Dave Asprey: Here's why I'm asking. Fascinating interview in the first 100 interviews on Bulletproof Radio with Dr. Dwight Jennings, and he's found through 25 years of neurological dentistry that if he adjusts the height of someone's rear molars, he can get rid of tinnitus and sleep apnea and a bunch of other conditions. ADHD, a list that's probably a 50% overlap with the list we just talked about. The mechanism of action he describes is that it reduces substance P, like the pain signaling molecule in the body, which allows the body to relax. People who have a jaw misalignment will routinely have sympathetic nervous system over activation, and thus excess adrenaline. So he corrects the jaw, adrenaline drops, symptoms go away.

Michael Platt: Well I hear that, but I think the proximal cause of the people that he's dealing with have excess adrenaline to begin with, and cause the misalignment. Because TMJ is one of the problems [inaudible 00:24:10] excess adrenaline, and teeth grinding.

Dave Asprey: Oh, so if you fix adrenaline, people's TMJ just goes away?

Michael Platt: Yes, that's-

Dave Asprey: Oh, that's cool. Okay, that would point towards adrenaline being a core cause. All right. Now we're getting somewhere. This is fascinating. Okay, there's a drug called a beta blocker, and I've recommended that to a few friends who are unable to speak in public with any other thing, they just freak out. So I'm like, "Hey you should go talk to your doctor and see if you can get a prescription for this stuff and see if it's medically safe and all that." Then they do it and it suppresses their excess adrenaline, they're fine. Should everyone with this list of symptoms just take a little bit of adrenal blunting medication and be done with it?

Michael Platt: Well, again, here we're dealing with band-aids again. Well, beta blockers block adrenaline, there's no question. But they also have their own little list of side effects, including impotence as one of the side effects, and they're anti-thyroid drugs. But wouldn't it be better just to lower adrenaline to begin with?

Dave Asprey: Of course.

Michael Platt: I'm just saying, I may be wrong, but-

Dave Asprey: You have 40 years of experience experimenting with this and seeing what happens clinically. That's why you're on the show, that's why I'm listening to you. The wisdom of my elders is something I'm a huge fan of. All right, so beta blockers aren't the answer. What about, say, taking adrenal extracts? You can get glandular extracts. I've used those quite extensively, where you have the

raw ingredients to at least make adrenaline. Are those a good idea or are those not a good idea?

Michael Platt: I wouldn't recommend them. Well, it's just that [inaudible 00:25:54] the term adrenal fatigue. It's a condition that actually doesn't exist. It's a naturopath diagnosis, and the thing about naturopaths, primarily they do what are called saliva tests. The problem with saliva tests is that when people have excess adrenaline, remember adrenaline is a survival hormone, and it's cutting off blood supply to certain areas of the body not needed for survival, which includes the salivary glands. Because it cuts off blood supply to the salivary glands, hormones don't get into the saliva, so when they do a saliva test and get a low cortisol, they diagnose adrenal fatigue.

Michael Platt: If they did a blood test, they would actually find that the cortisol levels are high. Part of the problem is, is that they approach adrenal fatigue, what they try to do is actually raise cortisol levels, and even give Corte, which is cortisol, as part of the treatment, when they already have high cortisol levels. So everybody knows about adrenal fatigue, nobody knows about adrenaline dominance.

Michael Platt: You mentioned that you had chronic fatigue, and if we can go back to fibromyalgia for a little bit. The thing about adrenaline, remember it's a fight or flight hormone, so people have a tendency to keep their muscles tense. When people keeps muscle tense, they build up what's called lactic acid in the muscles, and that's what causes actually the pain of fibromyalgia. It gets into muscles and the tendons.

Michael Platt: At the same time, because people keep their muscle tense all the time, they use up a tremendous amount of energy, and that's why they have fatigue, which is the other classic symptom of fibromyalgia. But just by lowering adrenaline levels, the muscles relax. Now circulation can go through the muscles and clear out the acid. So it takes somewhere between three days and three weeks to actually eliminate fibromyalgia, even though people are told that there's no cure for it.

Dave Asprey: So in the three days to three weeks, which is a very fast amount of time to eliminate something like fibromyalgia, what are you doing to lower the excess adrenaline? How do you do that?

Michael Platt: Well, remember, okay, there are two things that need to be done. Number one, you have to provide fuel to the brain so that adrenaline doesn't have to be released to provide fuel.

Dave Asprey: Okay, so stabilize blood sugar.

Michael Platt: Or fuel, because MCT oils-

Dave Asprey: There's a reason that I put Brain Octane in every meal. I carry little packets of it with me when I travel, and I feel awesome all the time when I do that. If I skip more than a day of it, my brain isn't as sharp, and you're saying that's because it's providing an alternate fuel to glucose.

Michael Platt: It's probably more important than glucose for the brain.

Dave Asprey: I would agree with you for the brain, at least for short term neuron focus, right? But the other side of fibromyalgia and chronic fatigue is there's autoimmunity, and the glial cells, the immune parts of the brain that do cleanup, they want glucose and they don't burn ketones well. So if you're only eating ketones all the time, aren't you going to eventually not take care of the immune system of the brain?

Michael Platt: Well, I don't recommend just ketones. I recommend glucose also.

Dave Asprey: Okay, got it. So you have some carbs and you have some ketones, and you do that with MCT oils in your approach.

Michael Platt: Yeah.

Dave Asprey: All right. Hey, that's what I do. It seems to work.

Michael Platt: Again, let's go back to ADHD. In my book, I talk about the good, the bad, and the ugly in terms of conditions related to excess adrenaline. The only condition that I put in the good category is ADHD. The most intelligent, successful, creative people in the world have ADHD, and that-

Dave Asprey: What were you saying? Sorry, what were you saying? Sorry, I got distracted. I'm kidding.

Michael Platt: Oh, I'm sorry.

Dave Asprey: That was an ADHD joke.

Michael Platt: Exactly.

Dave Asprey: Keep going.

Michael Platt: The most intelligent, successful, creative people in the world have ADHD, so it's not a bad thing and it's not a learning disorder even though it's branded as a learning disorder. It's an interest disorder. People with ADHD will focus if they're interested. If they're not interested, will not focus, because their mind goes so quickly. So if they're not interested, they get distracted very easily.

Dave Asprey: That is true.

Michael Platt: Now, and keep in mind that creative people have the most adrenaline, and the most successful people in the world have two different types of ADHD. The typical type, where you hear about kids that are hyperactive, and then the creative type which they call ADD. These are the kids that have trouble focusing, but they're not hyperactive.

Dave Asprey: That would've been me.

Michael Platt: Yeah. Well, and [inaudible 00:30:32] of just almost every corporation in the world have two different types, what I call the mixed type ADHD, and probably not one of them or very few of them ever finish college. These are extremely intelligent people that want to do things. They don't have time for college. You know, Bill Gates, classic. Steve Jobs, never finished college, and yet they did pretty well.

Dave Asprey: Yep, so you're saying they had a mix of creative type and typical type?

Michael Platt: Right.

Dave Asprey: So they had the extra energy that comes from being hyperactive and they had the creative type, so they were hyperactive only towards what they were interested in.

Michael Platt: Exactly.

Dave Asprey: Well, that sounds like a recipe for success to me at least. That's what I do. I don't follow sports because I just don't have time and because it doesn't ping that interest, but you give me a study on PubMed and I just can't put it down, maybe sometimes to my detriment. So all right, you follow that recipe. What percentage of the population has these different kinds of ADHD now? Would you guess? I know you may not be able to cite studies.

Michael Platt: I would say almost the majority of people.

Dave Asprey: Wow, so more than half of people have at least some of this ADHD going on?

Michael Platt: I would think so.

Dave Asprey: I think so too.

Michael Platt: It just has a bad rap, because they really don't understand what it is. For example, they teach children algebra, and people with ADHD have a real hard time with algebra because they're not interested in it.

Dave Asprey: Story of my life.

Michael Platt: The problem is, is that when they leave high school, there's no need for algebra anymore, so what they really should do is make it an elective rather than a mandatory requirement. I'm just saying, because they don't understand what ADHD is, that it's not a learning disorder. It's an interest disorder.

Dave Asprey: I very much love that perspective on ADHD. It's a beautiful thing. That brings the thought that if you were to say, "All right, it is a gift, or at least it has its upside," what about those, we'll call them 49% of people who don't have excess adrenaline? Should they be maybe getting a little bit of an epi pen so they can have more adrenaline so they can have a brain that's more interested in stuff that matters?

Michael Platt: Interesting point. You know, it's funny. The majority, in fact, just about every patient I've ever seen has had excess adrenaline. So it could be that there are people out there that don't have a lot of adrenaline, I don't see them.

Dave Asprey: That's because they're all asleep.

Michael Platt: Well, they're probably very well adjusted. Bipolar disorders are all about adrenaline, autism, children with autism have incredibly high levels of adrenaline, and they respond wonderfully to lowering adrenaline levels.

Dave Asprey: Now, one side of my family is mostly on the spectrum of either ADHD or Asperger's and things like that, and I probably would have met the clinical diagnosis of Asperger's as a kid. You know, OCD, ODD, ADD, all that kind of stuff.

Michael Platt: All adrenaline.

Dave Asprey: All adrenaline. But here's the question. What was causing my body to make all that excess adrenaline? I mean-

Michael Platt: Oh, I can tell you. That I can tell you.

Dave Asprey: Tell me, yeah.

Michael Platt: It runs in families.

Dave Asprey: It's genetic, okay.

Michael Platt: It is, absolutely genetic. If you have excess adrenaline, you inherited that from either one or both of your parents. It's just handed down always.

Dave Asprey: So these are the people who were meant to go out and fight wars and be warriors and protect the village while the people without excess adrenaline were the farmers and root gatherers? I mean I'm generalizing here, but is that why we evolutionarily came out this way, or am I being pejorative towards people who aren't wired the way I am?

Michael Platt: Well, people that do sign up to go into the military, they have a lot of adrenaline to begin with. You know, fight or flight hormone. And remember that PTSD, which is one of the problems people get from the military is all about adrenaline, and again, responds wonderfully just to lowering adrenaline level.

Dave Asprey: So your fix for this is basically MCT oil and progesterone cream?

Michael Platt: And vegetables.

Dave Asprey: Okay, well. Okay, how much progesterone cream? Because I mean you can go to any pharmacy or natural product store and they make progesterone cream that's over the counter. You don't need a prescription for it. I mean should I be slathering this? How do I know if I'm getting too much?

Michael Platt: Well actually, one of the nice things about progesterone, you can't overdose on it. But in order for it to be effective, 5%, which means 50 milligrams per pump, is the exact strength you need to block adrenaline. Most of the over the counter progesterones are 1.6 or 2%. I happen to actually have a 5% progesterone cream on the website. It's also on Amazon.

Dave Asprey: What's your website?

Michael Platt: Plattwellness. P-L-A-T-T. Plattwellness.com. So it's a therapeutic strength of progesterone that's available without a prescription.

Dave Asprey: And people use one pump of that and it blocks this adrenaline?

Michael Platt: Well, and before every meal.

Dave Asprey: Oh.

Michael Platt: Well the reason for that is that as soon as people put food in their mouth, the body's putting out insulin. When insulin goes up, blood sugar drops. Remember, when blood sugar drops, the body puts out more adrenaline. So one of the ways of controlling adrenaline is to control insulin, and that's what's nice about progesterone, is that it controls both insulin and adrenaline. It's really a miracle type hormone that is not really well understood by the medical community.

Dave Asprey: So progesterone will keep your insulin down, and one of the biggest things. So, I know that you're also interested in anti-aging. My new book on anti-aging, it just hit pre-order on Amazon. It's called Super Human. But one of the big things that helps you prevent aging is stopping post-prandial high blood sugar. In other words, after you have a meal, your blood sugar spikes and that causes some of the problems in aging. Are you proposing that putting progesterone cream on before a meal could help with that spike in blood sugar that happens after a meal?

Michael Platt: Well I don't necessarily think it's that excess sugar that speeds up the aging. I think it's the production of insulin.

Dave Asprey: So extra insulin's there, but low insulin is actually more dangerous than high insulin isn't it?

Michael Platt: Well, I'm not talking about low insulin. I'm talking about insulin is a hormone that speeds up the aging process.

Dave Asprey: Yeah.

Michael Platt: So I think it's what you're talking about from an anti-aging standpoint, well, here you're going to the field of what they call telomeres.

Dave Asprey: Yep. We've definitely had several episodes on telomeres. I think a lot of the audience knows, but define them for the people who maybe are new to the show.

Michael Platt: Well, it's just a segment on the end of certain chromosomes, or probably all chromosomes, called telomeres, and the shorter they are, the shorter your lifespan. But I just want to say that stress is one of the major factors that actually shorten telomeres. Again, blocking adrenaline prevents stress, or eliminates stress. So from an anti-aging standpoint, I would say that progesterone is way up there in terms of anti-aging.

Dave Asprey: There's definitely a big role for that, and I actually did a bunch of research on the post-prandial problem, but also talking about the role of progesterone during hormone replacement therapy and all, apart from its effects on adrenaline. So I mean do people, you said a very big thing, and I'm not sure that I fully understand it to the extent you do. But I feel some of the anti-aging experts I've interviewed, if they heard you say there's no such thing as too much progesterone, they might do a back flip and be like, "What are you talking about?"

Michael Platt: Well, remember, I've been doing hormones for a long time, and what I have found is basically there's only one problem in using progesterone, is when people have what's called Type 3 Diabetes, which is insulin resistance in the brain.

Dave Asprey: Yep.

Michael Platt: One of the characteristics of progesterone is that it actually causes some degree of insulin resistance, which is a good thing because it prevents people from getting sleepy, and people don't get sleepy when they're driving or as a passenger when they start using progesterone. Myself, I used to slap my face when I was driving trying to keep my eyes open, but it was just the low sugar from too much insulin.

Michael Platt: Anyway, so the point is, is that when people have what's called insulin resistance in the brain, and then they use progesterone, right away they get even more insulin resistance, and the body has even a harder time getting sugar into the brain cells, and there's an immediate release of excess adrenaline. So in that situation, that's the only downside to using progesterone, but it's also a good thing because there is no test for insulin resistance in the brain. You only find out about it once you develop Alzheimer's-

Dave Asprey: Right, and Dale Bredesen would agree. He wrote The End of Alzheimer's, has been on the show. So what you're saying is now entering the mainstream, which is awesome.

Michael Platt: So basically the only test there is to determine if somebody has Type 3 Diabetes or insulin resistance of the brain is using progesterone. So if somebody uses progesterone and they get palpitations and increased anxiety or whatever, then the likelihood is that they either have Type 3 Diabetes to begin with, or they just have no fuel in the brain and the progesterone is actually hindering getting sugar into the brain. But other than that, I have not run into any downsides of using progesterone. So it's a relatively safe hormone when you compare it to other hormones.

Dave Asprey: You mentioned using it with kids. I mean so children with ADHD, would you say a pump on the back of the neck before bed or before meals? I mean-

Michael Platt: Well, you know kids with ADHD, they can actually tolerate progesterone four times a day to begin with.

Dave Asprey: Oh my goodness. But people should talk to their doctor first, even though the stuff's available over the counter, or you think it's so safe and-

Michael Platt: Well, let me remind people, doctors don't get training in hormones.

Dave Asprey: Fair point.

Michael Platt: And right away as soon as you mention hormones in children they'll say no, but the question is what are they doing to help. I don't know-

Dave Asprey: Okay, that's a fair point.

Michael Platt: Well it's just like there's nothing for children that are bed wetters, nothing. They used to give vasopressin, an antidiuretic hormone, until they FDA made them stop. But right now they have nothing to treat children with bed wetting, but like I say, you can get rid of bed wetting in 24 hours just by lowering adrenaline. You have to use progesterone to do that. You weigh the downsides and weigh the upsides. My feeling is that if the fetus can tolerate such incredibly, I mean incredibly high levels of progesterone, why can't children tolerate it?

Dave Asprey: I hear you. You only have 40 years of treating patients, I'm presuming including children with this, so this clinical experience of safety is something that you're comfortable with.

Michael Platt: Well, when you compare it to other drugs on the market in terms of safety, there's no question that progesterone is a lot safer than most drugs on the market.

Dave Asprey: And progesterone is also, you mentioned PTSD. It's really interesting. When JJ Virgin was on the show, she talked about using progesterone after she saved her son Grant's life. He was given like a .1% chance of living. I also, I had a pretty substantial TBI a few years ago, and one of the things that we did right afterwards was high dose progesterone for a week after a hit to the head, which seems to be an emerging thing to do for traumatic brain injuries. But it's interesting that there's a high correlation of TBIs and PTSD, to the extent that Mark Gordon, who's been on the show, would tell you that there is no such thing as Post Traumatic Stress Disorder unless there's a brain injury, even an old one.

Dave Asprey: And progesterone may be that missing link there that says if you hit yourself in the head, progesterone maybe through its effects on adrenaline is doing good things for the brain. Are there other reasons people might want to look at progesterone?

Michael Platt: Let's just take it one little step further. Progesterone is actually the drug of choice for traumatic brain injuries, and the reason for that, it immediately reduces swelling in the brain. Just about 90% of progesterone actually winds up in the brain, so you're absolutely correct. It is wonderful for traumatic brain injuries. But women that have been raped can sometimes wind up with PTSD without having a head injury, so I don't know. I don't know if there has to be a head injury to correlate with PTSD, I don't know. Logically I don't think so.

Dave Asprey: Yeah, I found that to be hard to believe as well. He had some pretty interesting and convincing data about that, so I'm not saying that's the case or not, but just that there's a definite high correlation of brain injuries. So when you fell and hit your head as a kid, something isn't quite working the way it ought to be, and then if you have a metabolic disorder, to your point, where you don't use glucose or you don't have enough ketones in your brain, and then something bad happens and your pattern matching system gets screwed up. Who knows, but progesterone, it's interesting that it comes up throughout all of that thread, and you're the guy who's looking at adrenaline and progesterone.

Dave Asprey: What happens though, I have experimented many years ago with beta blockers because some people put them in the category of nootropics, in that your brain can work better if you're not dealing with too much adrenaline, especially in those public speaking things. Fortunately I don't have that problem, but I wanted to experience them. I felt like crap on even just a low dose for one day of beta blockers. It was like walking through mud all the time, and when I talk

with doctors who prescribe these, they've said the same thing, if you give these to someone who's doing public speaking, they might calm down enough to speak, but if they get a hard question from the audience, they'll be flat footed and unable to bring that energy that a good speaker has on stage. So if we take progesterone to blunt our adrenaline, are we going to lose our adrenaline superpowers?

Michael Platt: No, absolutely not. It'll actually enhance focusing and whatever. They can actually concentrate more on what they're dealing with. Children with autism, they're extremely intelligent because of all the adrenaline, and they can memorize a phone book, these kids. But they have so much adrenaline that any kind of stimuli is too much for them, that's why they avoid a lot of things. But once you give them MCT oil and vegetables and use progesterone cream, all of a sudden those kids that don't talk will start talking.

Michael Platt: I want to address pretty creative type people, because remember, creative people have the most adrenaline. Creative people are very intuitive about other people, and they have premonitions and deja vu type feelings, and when the phone rings they'll either know who it is before they answer or they'll say, "I was just thinking about you." People that are creative, animals and small children are very attracted to creative type people, and this is all because adrenaline as a neurotransmitter not only creates creativity in the brain, but it allows people to tap into the energy that goes through the air.

Michael Platt: They have the same ability as psychics, clairvoyants, dog whisperers, horse whisperers. They have the same ability, creative type people. But going one step further, if you look at the music industry, the amount of drugs and alcohol in the music industry-

Dave Asprey: It's rampant.

Michael Platt: Even in Hollywood, and again, we're talking about creative people having the most adrenaline, and nobody ever talks about this. Michael Jackson was on Propofol to sleep and benzodiazepines, and Elvis Presley, I mean all these music people that have died of overdoses. So when people with addictions go into rehab or detox, whatever, they get them off the drugs, but as soon as they're released they go right back on the drugs or alcohol, because they're not dealing with the reason why they get addicted in the first place. So my feeling is that creative type people definitely should be aware of adrenaline.

Dave Asprey: I recently interviewed Rick Rubin, a very famous music producer. To my knowledge, the drug and alcohol addiction is not something that has been a part of Rick's life. I know him reasonably well, and he's never mentioned anything like that. But as we all know, they're common in the field. Rick talked about being something called a highly sensitive person. I was asking about how he identified music that had the thing in it, and then he looked at me and said, "Dave, you're a highly sensitive person in a different domain than me, but I

know other people like me." Is being high adrenaline the same as being a highly perceptive, highly sensitive person? Or is it a different thing?

Michael Platt: There are some people with excess adrenaline that are super sensitive to everything. You know, the EMF things. They can't use cell phones and all this type of stuff.

Dave Asprey: Yeah, EMF sensitivity, right.

Michael Platt: Yeah, and people have chemical sensitivities. I'm pretty sure it's all related to excess adrenaline, because these are usually very creative people that have all these kind of problems.

Dave Asprey: It definitely seems to coincide with creativity. My experience of chemical sensitivity in particular is that there's almost always an environmental toxic mold approach, which causes excess adrenaline hormonal dysfunction, which then has all these other downstream effects, including large increases in inflammatory cytokines. Does excess adrenaline increase inflammatory compounds in the body? Does it decrease them? What does it do?

Michael Platt: Well, I'm going to have to pass on that, I'm not sure. But it could be that when people have excess adrenaline to begin with, they're just more super sensitive to all the toxic molds and things in the environment. I'm just saying that.

Dave Asprey: Okay, and the incidence of that is about 1/3 of the population, and they have a variance in their HLA-DR subtype. Have you found any genetic markers that say, "Hey, these are the genes that get passed down from family to family that make for these creative families full of maybe autoimmunity and high amounts of creativity and ADHD?"

Michael Platt: Well, if somebody is creative, then one or both of their parents had to have been creative.

Dave Asprey: So there's a creative gene.

Michael Platt: There has to be.

Dave Asprey: You don't know which one it is, do you?

Michael Platt: No. I'm not allowed to tell. No.

Dave Asprey: I would like to know. It would be interesting so you could test someone for creativity and use CRISPR to insert or subtract the gene, if they wanted it.

Michael Platt: I'm not a scientist. I'm more of an observer.

Dave Asprey: Yeah, you're an [inaudible 00:50:40]

Michael Platt: Yeah.

Dave Asprey: Okay. So I mean you've got this, in your book you have just this amazing list of these things that affect more than half the population, at least one or two of these things. Things like road rage. I had a major issue with this in my 20s, like I was total jerk when I was young. Certainly we talk about excess adrenaline, I could see that being a part of this, but there's a flip side. When Nick Foles was on the show, this is a Super Bowl MVP, we talked about his wife Tori's condition called POTS, which is essentially a low blood pressure disorder where you stand up, you get low blood pressure. There's not enough blood flow in your brain, you feel like crap, you can't pay attention. The body will compensate for POTS by increasing adrenaline in order to get your blood sugar up so you don't pass out. What's the role of progesterone and adrenaline in this surprisingly common condition?

Michael Platt: Well again, because adrenaline is involved, I think the cause of POTS is actually due to increased adrenaline to begin with.

Dave Asprey: Oh, so you think too much adrenaline causes POTS, but lowering adrenaline makes the symptoms worse?

Michael Platt: Well they have a, what do they call it, positional hypotension. But all the symptoms of POTS are related to excess adrenaline, so my feeling is that to treat the symptoms ... I've never had a patient with POTS, so it's hard for me to ... But when it comes to road rage, sometimes people wind up going to anger management class, which does absolutely nothing.

Dave Asprey: I think that's actually kind of funny. Understanding that emotions happen before thoughts, I always find it kind of funny. Like, "Oh I'm going to think my way out of an emotion." That was how I tried to live my life for a long time, and I have a different mindset on that now. But yeah, reducing the source of the rage is probably going to be more effective than learning how to think harder about the rage. That's been my experience.

Michael Platt: Remember, it only takes 24 hours to get rid of road rage. That's all it takes.

Dave Asprey: And you're saying progesterone will solve that problem.

Michael Platt: And eating correctly.

Dave Asprey: Okay. Granted, all right, and maybe that's a core part of this.

Michael Platt: It's a real important part.

Dave Asprey: It's a huge thing, and the template, and I want you to correct me if I'm wrong here, but this is where I ended up after many years. This is the genesis of the Bulletproof Diet book, but it's a plate covered in vegetables that don't have a lot

of toxins in them, covered in the right kinds of fat that are not damage fats and seed oils and stuff like that, and a moderate amount of high quality protein. And that if you do that on a regular basis, you'll probably over time remove a lot of the things that are triggers for excess adrenaline and many of these other conditions. Am I missing anything in that basic recipe?

Michael Platt: No you're not. Not at all. Scrambled eggs cooked in MCT oil put on a bed of spinach is like a perfect breakfast.

Dave Asprey: All right.

Michael Platt: It sounds good.

Dave Asprey: Okay, good deal. We agree on that one, and lots of veggies. [inaudible 00:53:52] A keto diet of bacon, pork rinds and diet soda does not work long term. You'll lose half your weight, you'll keep the other half in inflammation, and you'll probably need some extra adrenaline along the way.

Dave Asprey: Okay, now, Fen-Phen. You write about this in your book. This is that pharmaceutical combination that they shut down. What's your take on Fen-Phen? It's very different.

Michael Platt: First of all, just to remind people, Fen-Phen was used as a weight loss type combination medication. It was extremely popular at one time, there was almost a Fen-Phen clinic on every corner. The problem is it's a combination of phentermine and fenfluramine, which are two drugs that are actually used to suppress the appetite. But doctors, they only know what drug companies tell them, and these were two generic drugs that were not promoted by any drug companies. So they went to the PDR to look up the dose, and so when they prescribed it, they gave the dose for the individual pills rather than the combination. So people right away were overdosed on Fen-Phen.

Michael Platt: The problem is, is that they are two appetite suppressant drugs, so people took these pills and stopped eating, and they wouldn't lose weight because if you're not eating, your metabolism stops. So they would go back to the doctor, say, "I'm not losing anything." So the doctor would keep on prescribing higher and higher dosages. They did one study that was paid for by a drug company who wanted Fen-Phen off the market, and they rounded up 24 women from around the country that were on an 18 times the normal dose of Fen-Phen.

Dave Asprey: Whoa.

Michael Platt: This was the only study ever that showed heartfelt damage, but based on that study, the FDA took it off the market. Because the FDA would never take a drug off the market based on a study with people on 18 times the normal dose, but yeah, FDA is just responsive to what drug companies want. Now, the thing

about Fen-Phen, it took away cravings. It took away cravings for food, that's why people would take it and they would actually be able to eat anything healthy.

Dave Asprey: Yeah. Removing cravings is massive.

Michael Platt: But it took away cravings not only for food, it took away cravings for alcohol, cocaine, cigarettes, heroin. It didn't matter what somebody had a craving for, within 24 hours it was gone. In other words, there was nothing ever more effective for people getting off cigarettes or alcohol, heroin, anything. So not only that, the combination of the two pills were better than any blood pressure pills on the market, and it took away asthma. It took away migraine headaches.

Michael Platt: This is why the drug companies wanted it off the market. It was good for just about every illness there was, in addition to helping people lose weight. But in order to lose weight, they had to use the correct dose, which was part of a study done by [inaudible 00:56:55], who's the one that invented Fen-Phen, if you will, but doctors never read the study so they didn't know what the dose was. But it was the only thing ever, ever, that people with morbid obesity where they could actually lose weight without any problems. So my feeling is they should at least reintroduce it just for the morbidly obese, because they have nothing.

Dave Asprey: I just fundamentally believe that it's my right to decide what I put in my body, and no regulatory agency has the moral authority to tell me I'm not allowed to use something. I appreciate the warnings, but to ban a substance like that because some sort of a nanny that I did not appoint believes that they can tell me I don't have access. So if I was morbidly obese I'd be like, "That's it. I'm making Fen-Phen in my bathtub," if there is such a thing.

Dave Asprey: You can replicate Fen-Phen. I mean the P-H-E-N in the second part of this is Phenylalanine, so there's amino acids that get you some of the way there if people are deficient in aminos. Do you have a stack of amino acids that help with excess adrenaline?

Michael Platt: No. I want to thank you for asking.

Dave Asprey: In fact, this goes back, geez, a good 17 or so years in memory. There were definitely people, someone who's listening to the show right now will probably Google this and find it, but there were people who were replicating the vast majority of the effects of Fen-Phen for weight loss using just amino acid stacks. So I would suggest that that's worthy of things. I'll see if I can find a reference to this, but man, this goes way back in my memory of biohacking.

Dave Asprey: We're coming up on the end of the show, and I've been sort of fishing around what are the downsides to just slathering progesterone on, and so far there aren't any in your clinical experience. But what I haven't asked you, where do I put it? I know with both testosterone I'd put it, number one is perineum/scrotum if you don't mind a little bit of greasiness there. Number two

would be armpits, if you have a lot of hair there that's a problem, and number three would be abdomen. But that's for testosterone. Does that same location set work well for progesterone or does it need a different type of tissue to absorb?

Michael Platt: Well actually with progesterone you want it in the blood stream, and so you don't want to put it over fatty tissue.

Dave Asprey: Interesting, so over muscles or the back of the neck there then.

Michael Platt: Well, the back of the neck is an excellent place for people that have a lot of tension in the back of the neck. That's one of the two places to put it. The primary place is on the forearm, and you rub the two forearms together. Because the skin is thin, there's a great blood supply there. You can actually put it on the upper chest because there are a lot of blood vessels that some people when they blush, the upper chest, the back of the neck, the face. But basically the forearm and the back of the neck if there's tension at the back of the neck. People that have cramps in their legs at night, in their calves or their feet, they can just massage some progesterone cream in. It'll go away in about 40 seconds. People with restless leg syndrome, who have a discomfort in their thighs, they just have to rub some progesterone into their thighs, and that'll go away in about 30 or 40 seconds.

Dave Asprey: So this is powerful timing. Those times sound incredible.

Michael Platt: Now testosterone, by the way, you should not be putting, as you know, around hair follicles because there's a certain enzyme, alpha-reductase, around the hair follicles. So the upper inner arm is probably a better place than the axilla, because there's less hair there. Or as you mentioned, in the perineal area. The hair there doesn't have those enzymes, by the way.

Dave Asprey: One thing you talked about here is something my wife, Dr. Lana does fertility coaching. Her first book was the Better Baby book about what to do before and during pregnancy, and we did talk about progesterone in there. But she does do testing, and you highlight in your book that progesterone can help women to conceive and/or prevent a miscarriage.

Michael Platt: Right.

Dave Asprey: Does that mean that some conception problem and miscarriage problems are a result of excess adrenaline in the mother?

Michael Platt: No. No, that's completely separate.

Dave Asprey: Okay, that's what I was guessing, but okay.

Michael Platt: Yeah, the number one reason why women have trouble getting pregnant is low progesterone, and the number one reason for miscarriage is low progesterone. However, women very often get nauseated the first three months. They call that morning sickness, but there are some women where the morning sickness persists throughout the entire pregnancy, and that's caused by adrenaline. That responds also very wonderfully just to lowering adrenaline levels, and they call that hyperemesis gravidarum when women vomit throughout the entire pregnancy. There's a thing called cyclical vomiting syndrome in children, where they start vomiting, they can't stop, have to be hospitalized. Again, that's caused by adrenaline.

Michael Platt: There's another condition called PMDD, premenstrual dysphoric disorder, found in 5-8% of women, and these are women that nobody could live with for 10 days out of the month. They have severe anger issues, severe mood swings, also called by excess adrenaline. But there is so many articles that keep on saying there's no cure for it. They put them on antidepressants, which do nothing. I'm just saying, adrenaline is just, not even an afterthought. It's just not thought about at all.

Dave Asprey: Something happens to a lot of the doctors who are the most innovative and the ones discovering new things like this. They oftentimes get listed on websites of ill repute like Quackwatch.

Michael Platt: Right, that's me.

Dave Asprey: Well I mean one of my career goals was to be listed on Quackwatch because I'm not a doctor, and I'm like, "I don't qualify." Because every doctor I respect has been, like the people who have changed the world, they all get targeted by the guy who runs that thing. So one of my most happy career achievements was when the USA Today wrote a piece about the Bulletproof Diet and they had the Quackwatch guy as the, "Dave doesn't know what he's talking about." And I'm like, "Yes. I finally got my Quackwatch certification."

Michael Platt: Congratulations.

Dave Asprey: Thank you. I literally mean this. The world-changing people do that, and so what you're talking about here, using progesterone, adrenaline dominance, Fen-Phen had benefits and it wasn't just a bad thing and all that, flies in the face of popular but probably wrong thoughts. You wrote about this in your book on adrenaline dominance, and you actually, this is very unusual, but I think noteworthy, you voluntarily surrendered your medical license in 2011, which allows you to just go out and say things that are true, because they can't hold it as a club over your head anymore. What drove that decision for you?

Michael Platt: Well what happened was doctors in my town put in complaints at the medical board, and the reason for that is that when their patients came to see me, I took them off all their drugs, because when you treat the underlying cause of illness,

they don't need drugs. So they put in complaints to the medical board, but the medical board could not act on complaints from doctors, they needed patient complaints and they didn't have any patient complaints. So they sent in undercover patients to initiate complaints, because they needed three complaints.

Michael Platt: So they went after me probably more aggressively than any other doctor ever in California, even though I've never had a complaint, I've never harmed a patient. So for five years, they arrested me twice. They did everything they could to discourage me. I spent half a million dollars trying to fight these people. I finally gave up, and what they wanted me to do was to stop taking people off drugs, because medical boards are 100% funded by drug companies.

Dave Asprey: Shocking.

Michael Platt: And here I am taking people off drugs. So when I refused to stop taking people off drugs, anyways, so the upshot I just surrendered my license, just to try to get them out of my life. I've never stopped my approach.

Dave Asprey: Yeah, so after about 40 years of clinical practice you're like, "I don't really need this license to help a lot of people. I'm going to just talk about what works." It's a common pattern. People who come up with a new cause, they usually get essentially demonized. We used to just burn them at the stake like a Galileo. Then usually a generation later everyone's like, "Oh yeah, it's obvious." You're like, "It wasn't obvious when I put that out there, now was it?" So what's happening now though, which is the whole point of this, is that it doesn't take a generation anymore. It takes about five years, thank you social media and people talking about what works. So it's becoming very difficult to suppress the reality of how the body works, even if it isn't good for certain business models.

Michael Platt: You know, Semmelweis and Lister got in a lot of trouble in the turn of the century because they were telling doctors to wash their hands before surgery. They were destroyed by the medical system. One of them committed suicide. The doctors in the early '80s that said that H. pylori caused ulcers, I mean they were beat. But actually in the 1990s they got the Nobel Prize for Medicine.

Dave Asprey: So it's one of those things. I just want to say thanks for sticking to your guns and saying, "Hey I found something that works and I'm going to talk about it and I'm not going to stop talking about it, because I have the data and I have the clinical experience, and doing what helps people." Same thing, eating some saturated fat might actually work for you. Hey, it's not a popular thing amongst certain populations, but when you're willing to talk about it and people try it and they see that it works and they get the data, it's very hard to keep a truthful idea down in today's environment. It was much easier 25 years ago.

Dave Asprey: Now, I have another question for you, the final question on the show these days. I mentioned earlier Super Human, my new anti-aging book. I've been very

public, even in Men's Health (magazine), about, "Hey. I'm going to live at least until 180." I think we can do it with given what we know today. My question for you is, I mean you're further along, you've got more mileage than I do. You're further along. How long do you think humans will live, and how long do you think you can live with the knowledge that you've got? What's achievable?

Michael Platt: I'm just happy every day that I wake up and I'm still breathing. I don't know what's achievable. You know, I say if you stay away from doctors you'll live forever, but that's probably not the only answer.

Dave Asprey: There are some really good doctors out there, many of whom are friends one of whom I'm married to, who will form a team with you to help you get the results you want, which is you want your body to behave and do what you want it to do. Because you don't necessarily want a prescription for a bunch of drugs, so I would temper that with stay away from the doctors who spend three minutes with you, unless of course you have a broken arm and you just need to get that fixed.

Michael Platt: My first book was called The Miracle of Bioidentical Hormones, and the experts for the medical board felt that the ideas in that book were so dangerous I shouldn't be practicing medicine, and all the book talked about was treating the underlying cause of illness and getting people off medication.

Dave Asprey: I got to tell you, bioidentical hormones absolutely changed my life. In my mid 20s I had less testosterone than my mom. I had almost no thyroid hormone. I was broken, and getting those back in line completely gave me back enough energy to solve the rest of the things and then to go beyond just solving problems into, "I didn't know I could do this," land, which is where the biohacking movement came from. So at this point to say bioidentical hormones are dangerous or whatever, there's just no evidence to that, and the people who say that are looking back at horse urine, which is where they were getting the first hormones that weren't bioidentical. So it's like a basic level of research will inform anyone that you were right in your book a long time ago, and that's a genie that won't go back in the bottle. I don't think they can put that one back.

Dave Asprey: Well, Dr. Platt, thank you. Thank you for your work over the last four decades and for continuing to talk about adrenaline and progesterone and how it all works. Your book is fascinating, and I do know people personally who have said, "I'm going to try some progesterone," and they felt massive improvements in their life. I have yet to try progesterone before a meal, but I will after this interview. I certainly have borrowed my wife's progesterone cream on occasion for inflammation, but I'll give it a shot again.

Michael Platt: Okay.

Dave Asprey: All right. Thanks very much. Again, the name of your book is called, or sorry, the name of your book-

Michael Platt: Yep, Adrenaline Dominance.

Dave Asprey: Adrenaline Dominance: A Revolutionary Approach to Wellness, and that's available on Amazon and places like that. Thank you so much for your work.

Michael Platt: Been a pleasure, thank you.

Dave Asprey: You're welcome.

Dave Asprey: If you liked today's show, you know what to do. I'm going to suggest that you follow me on Instagram, because I put a lot of cool stuff about this up on Instagram, especially on my stories, and I'm doing a lot of work sharing things there. If you haven't had a chance to pick up your copy of Super Human, or at least to preorder your copy of that, I go into a lot of details here on what you can do to live a lot longer. Definitely pick up a copy of Adrenaline Dominance, and as always, if you read a book, take the 10 seconds to show the common courtesy of instead of tipping your author, just leave a review so people know the book was worth their time. Have a beautiful day.