EPISODE 371

Breaking Through Metabolic Gridlock & How Fat Loss Actually Works - With Guest Dr. Jade Teta

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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.

They say life is not a sprint it's a marathon. But I believe that life is a series of sprints and of walks, of jogs, of speed walking, of rollerblading.

I wanted to rollerblade so badly when I was a kid but we were broke so we never got that opportunity. But I did have the one size fits all skates, shout out to all the people know what those are. They can adjust for your feet, but my feet were still too big.

Anyways, right now I'm in the middle of a sprint. And at no other time in my life has so much stuff come together at one time for me to address and everything is kind of needing some part of my attention.

And I'm a big believer that there's no such thing as work-life balance, there's just integration and there's flowing with these different things.

And sometimes different things are going to have more of your attention at different spots and we're all doing the best that we can, but through this little sprint right here, not only did I move my family to another state, but within the last 5 weeks we have my wedding anniversary of 12 years, we have my youngest son Braden's birthday, my oldest son Jorden's birthday, my birthday.

And kids starting back to school, my youngest son is starting second grade and my oldest son is starting college and football right now.

So it's just been a lot not to mention all of the focus and responsibility with The Model Health Show, and I've just been really, really dedicated to taking things to another level.

And so that's why I am really excited about my guest today because today we're talking about one of the things that we're really known for health and fitness. And he's somebody who's been just a really big inspiration for me personally, I have got him here in the studio, I am going to get to him in a minute.

But listen with this sprint and all the stress on my mind, I need a little bit of nutritional support. So for me personally, I really love, and the great thing about this, and this was in plus one is a new study just came out, Turmeric and the active ingredient in there curcumin has been found to be one of those handful of things found to actually stimulate the creation of new brain cells, so neurogenesis.

And also it was found to increase brain plasticity, how powerful is that? I need some new neurons right now. And so for me, I turn to Organifi.

They use a supercritical extract for their Turmeric formula and also their Gold formula is delicious as well. And so in the Gold formula, first of all, it tastes amazing and I like the gold with the smoothie or with almond milk but you can add it to how water, a lot of people do it before bedtime because of the calmative effects.

It also has some Reishi in there which is found to improve your sleep quality, improve sleep latency so it means you fall asleep faster and also improve your deep sleep and REM sleep as well.

And so that formula is something that I love and I use all the time as well. But the big thing about it again is it's organic, it tastes good and it's easy to use. And so they've got the daily Turmeric product which is a supercritical extract of Turmeric or the Gold formula which you can add to your different beverages.

So either one give it a try if you're not using it already, so many people that use the Gold absolutely love it, they tell me that they sleep better, they have more energy through the day and, of course, those things that we've been talking about helping to reduce inflammation is what Turmeric is really known for.

So pop over there, check them out, it's Organifi.com/model, you get 20 percent off everything that they carry. So that's O-R-G-A-N-I-F-I.com/model, 20 percent off everything that they carry. Get yourself some new brain cells, Organifi, check them out.

And now let's get to our Apple podcast review of the week.

iTunes review: Another 5-star review titled "Love your story" by CUSA. "You're honest and you have an amazing story. Thank you for sharing your past experiences. I can relate to you, it's reassuring and I will share your podcast with everyone I know. Keep it coming. I'm listening, learning and appreciate your honesty."

Shawn Stevenson: Awesome, thank you so much for leaving me that review over on Apple podcasts, I appreciate it so much. And thank you for allowing me to be a part of your life, it means the world to me.

And listen, if you've yet to do so, please pop over to Apple podcasts, leave a review for the show, and just no matter what platform you're on, leave a review and if you're watching this on YouTube and hanging out in the studio with us, make sure to leave a comment and let me know what you think about the episode.

And me and my guest will definitely pop in and reply to you. Speaking of which, let's get to our special guest and our topic of the day.

Our guest today is Dr. Jade Teta and he's an integrative physician and one of the foremost voices out there in real health in nutrition.

And again, he's been inspiring me for a long time, he's the author, co-author along with his brother, he's got a family of doctors and Jilian has been on the show, we've got to get your brother on at some point too. Jilian Teta too has been on the show several times, one of our all-time favorite guests.

And the two books are "The Metabolic Effect" and "Lose Weight Here" 2 awesome books, I highly recommend you add those to your library, chock-full of some powerful stuff.

And he's also the co-founder of Metabolic Effect which is a health and wellness company that provides a lot of different services and resources, so you can check them out.

And just head over to jadeteta.com and get all of the information, his social media, definitely follow him because he's always dropping knowledge bombs. He's back on The Model Health Show, my man, Dr. Jade Teta.

Jade Teta: Good to see you, man. Welcome to sunny California.

Shawn Stevenson: Thank you. Yes, it's good to be here. We're just talking about Seattle, which I'm going up in just a couple of weeks, this will probably be out that week that I'm up there, but if so happens, I'm going to be up there for the Vigor Fitness Summit and I think it's right around the 13th is when I'm going to speak in September. Just big shout to them. But you were up there going to school?

Jade Teta: Yes, 6 years in Seattle, I was in Kirkland Bellevue area. I loved it, I loved it but as we were talking about, it rains a lot, it's what you hear. So I'm glad to be in Southern California, I'm glad you're with me now.

Shawn Stevenson: It's so crazy that people like, "You're going to miss the seasons, you're going to miss the change." Really? Have you missed the seasons?

Jade Teta: No. I like the one season, just spring all the time.

Shawn Stevenson: Yeah, facts. And what's so crazy to me is that where I am at, I just drove just a little over 20 minutes and it's a 20-degree difference.

Jade Teta: It huge, the valley to this side. It's a big difference.

Shawn Stevenson: So it's all just getting readjusted man. And this is actually leading to one of the things I want to talk to you about. And it was kind of a great framework that you gave

was based on you were traveling, taking a car trip from here to North Carolina and so you do that every year?

Jade Teta: Pretty much, every year, multiple times, actually. Usually twice a year I make the trip back and forth.

Shawn Stevenson: And so you shared a story about metabolic gridlock to kind of demonstrate a point about how our metabolism can kind of get gummed up. So can you share that analogy when you got in your car and you had to pee?

Jade Teta: Yeah. So it's basically like this, look our metabolism is exposed to lots of different things and it likes to have a clear path. It's kind of adaptive and reactive. So you drove across from the Valley over here, right.

And you were using ways and ways, because you were telling me, "I got ways, the ways that get me where I want to go." Where your metabolism likes to adjust and adapt that way, right, so it says, "There's an angle I can go, there's an angle I can go. Oh, Shawn's feeding me this, I'll use that fuel. Oh, Shawn's eating this way, Jade's doing or working out this way, I'll adjust to that." That's how our metabolism likes to function.

Now when we start feeding it the same things every single day and doing the same behaviors every single day, day after day, week after week, month after month, year after year, we start to create problems in our metabolism, especially if we're doing the standard American overeating.

And so this happens, you can kind of think about this imagining all these fuel sources coming into your system. You've got carbohydrate from let's say you eat a pizza or something like that, you got fat, you got carbohydrate, you got adjuvants, these sort of irritants to the gut lining in tomato, you've got gluten if you're sensitive to that as well.

And your mitochondria and your gut have to handle all of this stuff and all of this information. And you essentially begin to create what I like to call "metabolic smoke" so to speak in these mitochondria, these little energy factories in your cell, that then begin to damage themselves.

And so what ends up happening is if you can imagine it's just like if you're driving down the highway and you're constantly slamming on your brakes right or you're in the park and you're revving your engine in idle all the time.

You may not necessarily be moving, but you're doing damage to that system, and that's what all this stuff is essentially doing to our metabolism.

And the gridlock sort of way of thinking about this is literally when we're on a diet let's say or we try to do something, when we first go on a diet, it works, right. I remember the first time I did I was like 19 years old, I was like, "Hey, I want to do a bodybuilding show," I got super lean super fast.

But what happens is when I repeat that again and again, I end up getting less of a response. So it's not just the overeating aspect, but it's also, and this is the part, it's also the under eating and overstressing aspect.

Either one of those extremes causes this kind of metabolic gridlock. And so we have to be very aware and the end sort of thing that is for me Shawn, just to kind of drive home for people, the one message is that we have to be flexible with our metabolism because it is an adaptive reactive system.

And so we cannot keep doing the same thing over and over again, either on the one side, we're overeating constantly or on the other side where we're under eating and over exercising constantly if that makes sense.

Shawn Stevenson: Absolutely, man. Guys, so you already see why I love having you on here and talking to you. It just makes so much sense but also so with that metabolic flexibility just to kind of dig in a little bit deeper, this is also considering the fact that your body can use a lot of different types of fuel sources, but we commonly just think of those main 3 macronutrients. But there's more, alcohol is one, for example.

Jade Teta: Yeah. All these things go down to a sort of a common endpoint right, so it's sort of like when you dump these, if you dump carbs into your system, fat into your system, alcohol into your system, they all come to acetylcholine.

And then that, the amount of that acetylcholine is a signal to your metabolism, "I've got enough fuel or not."

And so to make this simple with alcohol let's say, it's not that it's a fat-storing sort of macronutrient so to speak, and it's not technically a macronutrient, but it is a fat inhibiting, it inhibits fat burning because when you drink alcohol you basically have a very quick sort of breakdown to acetylcholine and the body sees that goes, "I don't need to burn sugar, I don't need to burn fat, I've got plenty from alcohol," and it will use that source of energy.

And that's the first thing to understand about metabolic flexibility, what you give your body it will learn to burn.

So if you're eating mostly carbohydrates it revs up all those enzyme systems to burn carbohydrates, you become a sugar burner as a result.

If you're eating mostly fat, the body revs up all those enzymes systems to begin to burn mostly fat. If you're doing lots of the mix, this is where the gridlock begins to happen.

As soon as you dump carbohydrates on top of fat, on top of alcohol, on top of protein, the body is not a good multi-tasker, it's kind of the biochemical equivalent of rubbing your head and tapping your tummy or what is it rubbing your tummy and tapping your head.

Either one, so that's what we have to kind of keep in mind, what we eat we can train our body to burn. But when we overload it with lots of things all at once, this becomes a problem.

There's a really interesting science behind this at the level of the mitochondria that essentially says that those mitochondria do much better when they have a straight path to energy, carbohydrate right down to the mitochondria, fat right down to the mitochondria.

It's sort of like a funnel. So we all know what it's like if you start dumping a lot of water into a funnel very quickly, it will eventually overflow.

And so this is where some of the new stuff about maybe some intermittent fasting or small frequent meals, both work by the way, but this large frequent meal mentality or one continuous meal mentality that we currently have going on with a lot of people is the major problem.

And just real quick so everyone sort of knows, carbohydrate for the body it's kind of like jet fuel, it's very quick energy, it likes to use that. Like if you and I hit the gym together and we do some high-intensity interval training or CrossFit, it is going to grab that energy system.

Fat is sort of like diesel fuel, alcohol is kind of in between the two of them, we can use that as energy but it doesn't give us any nutrients as a result of that.

And protein to me is sort of like the more like the infrastructure of the car— it can use protein to go to fat or carbohydrate so it's kind of like a flex-fuel, but it likes to leave that for sort of muscle development.

So the rule here then, if the first rule is you know sort of the metabolism is adaptable and reactive and we need to be aware of that, then the second rule is it's also not a good multitasker.

And so for the vast majority of us, we have to be very clear on not overloading it with lots of stuff and lots of different macronutrients all the same time.

And I think this explains a lot about the stuff that you and I tend to read about and geek out about the keto diet, think about that diet, it's a one macronutrient diet. It's also interesting it's a one flavor diet too, which kind of brings a whole other sort of aspect to this.

One flavor tends to shut down some of the brain sort of desire for craving other foods. There was, I don't know if you ever heard the Shangri-La diet and the studies about the— did we ever cover this, I'll cover it really quick for the listeners because I think that might be interesting.

So one of the things about our brains, when we tend to overeat, is if we get lots of different flavors the brain will begin pinging and want those flavors. So we know what that's like right if we're eating very clean and then we go get burgers and French fries, the next day we want cheesecake and more burgers and more French fries and more pizza, right.

Well, this one experiment what they did is they took essentially the cream of Wheat, put it in a thermos, covered it up and said, "Eat as much of that as you want."

So we all know cream of wheat or cream of rice is very bland, and they said, "You can eat as much as you want but you only get this one texture and this one flavor."

And so what ends up happening is they started to see that these people's hunger shut off, they ate until fulness but now they're only consuming 800 or 1000 calories because of this one flavor approach.

Part of the reason that the Keto diet may be working as well is because it's also a one-flavor and one-texture diet, it's a very creamy diet and it's a very umami flavored or savory flavored diet.

It's also I think one of the reasons why when you start seeing people putting a bunch of stevia and sweeteners into their Keto diet, they don't get the results as much as the people who are sticking to those one flavors. So this is another aspect of metabolic flexibility.

One is, be adaptable, change your approach. Two is realize that your body is not a good multi-tasker and you want to sort of also understand that the brain, when it gets lots of different flavors, is going to continue to crave and so we can begin to shut that off if that makes sense.

Shawn Stevenson: Yeah, there is so much to unpack there. I want to start at the end when you just mentioned sweeteners. And I just came across a study last week and this is just something that has been seen consistently is that artificial sweeteners actually trigger insulin release, surprise, surprise.

So even though there are no calories along with the sweeteners, still triggering this process. And so the jury is kind of out still on these natural non-caloric sweeteners as well and for me, it's just logical, like we still need to be a little bit easy with that because it's still telling your body mixed messages. What do you think about that?

Jade Teta: Yeah, the cephalic phase insulin response is the term for those you want to sort of geek out on this, and essentially it's a neural lingual sort of connection so the tongue touches that sweet, sends a signal to the brain that says "Expect sugar", the brain goes, "Okay."

And for some people and it's probably like most things that you and I talk about, it's probably some individualization that goes on here, some people will release an awful lot of insulin, that insulin then lower blood sugar, the brain then goes, "Oh we've got low blood sugar we better crave some more foods," and so it can lead to sort of overeating.

And so this thermostat nature of the metabolism is important. And I would say for me this would include things like stevia which is high for sweetener, it's a natural sweetener, but it's still high for.

That's the one thing that Splenda, Acesulfame and Sucralose and all these, Splenda Sucralose, Acesulfame, Aspartame would be equal. That's the one thing they all have in common, they are hundreds of times sweeter than sugar.

Stevia may be having this same role, but you and I think talked about this several times. To me I go, if you look at the research, then you say, "Will, are they associated with weight gain or weight loss?" Well, they are associated with weight gain partly because overweight people will use these sweeteners.

However, when you look at controlled diets where people actually put these things in place, they do help people have a lower calorie diet and result in randomized control trials result in weight loss.

However clinically, I see that they can be helpful for some and hurtful for the majority, in my opinion. And I am a more natural medicine biased, obviously, so that's a little bit of my bias, but that's that particular story.

And again, it goes back to this idea that the metabolism is a thermostat, it is not sort of this static system that is just calorie sort of measuring, it is measuring based on what it tastes, the temperature that it feels, how well we're sleeping, all of these things. And to a very high degree the macronutrient mix that we're eating as well.

Shawn Stevenson: Absolutely. This just got me thinking about I saw somebody making a recipe, this was a while back, and instead of using sugar they're using like a cup of xylitol or something, and I am just like, that looks familiar, it's kind of the same thing and not to disrespect especially if it's working for you, but we just have to keep this stuff in context. Because it's still, we're getting out of the realm of food, of real food and that complex information that it gives your body versus this little bit of trickery.

Jade Teta: Yeah, I love what you're saying because it's hard for me too. I do it as well but essentially, the Paleo diet, the Keto diet, all these things and then you say, "Well here's a Keto cupcake, and it's got like these high force sweeteners and it's got stevia in it, it's got xylitol, and it's got Erythritol in it.

That really is kind of a different thing and it may work just fine for some people, but I would say for the listeners who are experimenting with these things it may actually be the thing that's slowing the process down.

And this sort of brings me to, I don't think you and I have talked about this before. but we have been speculating about this idea of sort of intermittent dieting, this idea that you spend some time dieting and then you spend some time sort of recovering from that diet in a sense.

And I've been doing this in my clinic for a very long time, so I think last time you and I spoke we talked about the idea that you had these different metabolic toggles, you can eat less and exercise less or you could eat more and exercise more.

You could eat less and exercise more which is the diet or and you can eat more an exercise less which is the couch potato. And really we want to be grabbing all these sorts of different sort of toggles.

But we now have a study that actually tells us that this is actually the best way to go about this, it was released earlier last year called The Matador study and I forget what Matador stands for but essentially was looking at overcoming metabolic adaptation, so this idea that we hit plateaus and that we regain our weight we know that happens in 95 percent of dieters and 2 thirds get back even fatter.

So this study was trying to be like how do we sort of control that? And so the Matador study essentially showed that they took 2 groups of individuals, one group they said, "We're going to put you want to standard, 30 percent calorie reduction diet for 16 weeks."

The other group they said, "We're going to do that diet for 2 weeks and then give you 2 weeks off and then we're going to do it again for 2 weeks and then 2 weeks off." And they compared these 2 groups.

Now just so everyone's clear on this because it can get a little bit sort of tricky when you look at science, 16 weeks straight of dieting and then basically 16 weeks interspersed with 2-week breaks. So one program lasted what would that be, 32 weeks, and one program lasted 16 weeks.

However, both programs had an equal 16 week period of calorie reduction, one just had these little breaks in it. What you saw in the weight loss was that it was significantly different, about 15 pounds more in the group who essentially did this intermittent approach.

But what I thought was beautiful is you and I know, "Okay, you can lose weight but can you keep it off?" What happened was about half as much regained.

So this is a beautiful response and speaks to what you and I are talking about metabolic adaptation, you want to push your metabolism to a point and then you want to sort of back off and then you want to push again and then you want to sort of back off.

So to bring this full circle, when you're using things like high force sweeteners and things like that, I would say that when you're in your losing phase, you probably want to stay as pure as you're saying Shawn as you can, limit those things, use Whole Foods, don't use a lot of these sweeteners, these paleo recipes and things like that.

But then come back when you're on these off times, then use those things, then get a little bit more tasty with your nutrition.

Don't make the mistake of going back adding extra calories, but that's when they're appropriate, I think that most people who aren't getting the results that they want are slowly but surely adding these kind of things in and this taste effect and it starts pinging the brain and they end up overeating and/or creating plateaus for themselves.

So I think that's the rule that we want to be looking about, metabolic flexibility is in itself to about taking some time off.

And one more thing I'll say and then I'll shut up here, but when you take time off what is going to happen is that you will gain some water weight and maybe a little bit of weight during that time, and people don't like that.

But what happens is it's better to take 2 steps forward one step back that what most people are doing where they go 4 steps forward and then 6 steps back.

And so this is the approach that I think we need to use and I think it's important to pay attention to the quality of food, including some of the things that might be hidden, like these sweeteners.

Shawn Stevenson: Yeah, absolutely. Now just to go back to this idea and I was just talking about this the other day, we've been indoctrinated with this concept of eating 3 square meals a day, right.

And first of all we've got to understand that our nutritional concepts are largely just invented and they're invented with modern man in mind and the 9 to 5, the school from 8 in the morning to 3 in the afternoon. It's kind of based on the structure that the powers that be kind of creative for us.

And within that 3 square meals, we're looking at a barrage, a mixture of all those macronutrients, right. And you're saying that when we have that complex barrage of macronutrients all together, this is one of the things that can kind of gum up our metabolism.

And so this is why we're seeing so much success with people shifting gears and doing a higher fat approach or we've seen success in the past decades with some folks shifting gears and doing a high-quality carbohydrate approach, and it works for some people, both things work for some people.

But I want to dig a little deeper because I think what I hear you saying is that for all of us we want to strive to be metabolically flexible so that we can keep our body fresh on using those different energy sources, we just need to structure it differently.

Jade Teta: Yeah, and actually I'll use an example. So let's use you and me, just so everyone can kind of follow. I'm going to give Shawn one meal type and I'm going to give myself another meal type.

So Shawn is going to get the typical in vogue intermittent fasting approach right now, so we're going to have him skip breakfast and then he's going to do lunch and dinner.

Now what I am going to do is I'm going to induce the old bodybuilding approach, the Arnold Schwarzenegger approach, 6 small mixed meals throughout the day. Wake up at 8, I eat from 8 am to 8 pm, but they're small, frequent meals.

Now what's going to happen is you're going to get a lot out of this because your system is going to have a break from food, it's going to get 2 big mixed meals but you're going to have a long period of time for the mitochondria to sort of work with that and not get hit again and again and again.

Shawn Stevenson: That funnel.

Jade Teta: Exactly. that funnel is going to have time to drain. Now me, same thing, so we put a bunch in, we just fill up the funnel just enough, it drains; we put another meal and fill up the funnel, it drains. You're fine, your metabolism goes, "This is good, this is working for me."

By the way, your hunger, your energy, your cravings, your sleep, your mood will be nice and stable, telling you that you're doing well on that approach. For me, it's the same thing, for me, we put in a little bit, it drains, we put in a little bit more, it drains, we put in a little bit more, it drains.

So that's the approach and actually, but there's one other thing that we both have to do— for a little while that's going to work for Shawn, for a little while that's going to work for me, but the way the metabolism works it will eventually even adapt to that.

And sooner or later what is going to happen with Shawn is those 2 meals are not going to satisfy him, his workouts in the gym are going to begin to suffer, then he can benefit from moving to my, more frequent eating and I can benefit from moving to his, less frequent eating.

So now what we know is, you know our brains are Shawn, what we do is we like to create dichotomies everywhere, that's what humans do.

Ultimately what this information means for all of us who are trying to live this lifestyle is that we can use both, we just have to remember that lots of very large meals are the problem, so 6 large meals no, 3 large meals no, one or 2 larger meals probably okay.

6 very small meals probably okay, and then add on top of that what I'm going to do with single nutrient meals, I'm going to do Keto for 4 weeks and you're like, "Well, Jade, I'm going to do a higher carb vegetarian approach for 4 weeks."

And then we're going to switch, we're going to get better results that way by teaching our body, "Hey, let's run on fat for a little bit. Let's run on carb for a little bit. Oh, let's run on frequent eating for a little bit. Oh, let's run on less frequent eating for a little bit."

And now we're creating a metabolism that goes, "Oh, I can adapt to that, I can adapt to that and I can adapt to that," instead of doing the eat less exercise more approach day in and day out, which is probably the only reason it's a bad thing, there is nothing wrong with it, it's just that we do it for too long.

So that's what I mean by metabolic flexibility. So I'll say one more thing here, and I want to see what you think about this. So this really to me means that we can really benefit, all of us, from spending times in different metabolic states.

Maybe in the winter, we do a Keto approach. You just got to L.A, me and you, let's train, let's eat more, let's get after, let's train like an athlete. And let's spend other times where we're doing lots of fasting and our bodies and our metabolism will benefit from that.

Shawn Stevenson: What I'm getting from this is that it just makes so much sense because the kind of just human nature, we don't like to be imprisoned with any kind of these crazy structures, we get very religious with our beliefs about food.

And that's great because when somebody grabs on to that religion, it's usually because it helped in you know for a phase but at some point, it can become a barrier for communication with other people who might be in a different state or a different diet or a different tribe.

And so this gives us permission to know, because there are going to be points that matter what diet you pick when you want to do something else, it's like you gave that example of the thermos and just being on that one track, you're giving us permission to try different things.

But do this intelligently, like let's stick with something for a little while and I think this also creates a level of freedom in our thinking because we know that, "Okay, even though I'm doing this for a while I get to try something else in a little bit," versus like, "I have to do this forever or I'm going to die."

Jade Teta: Yeah and what's beautiful about this too is like we as we do this process over and over again, I'm sure you've gotten here naturally and so have I, you get to a natural place where you go, "I know in general what works for me. I also know in general what I want to tolerate."

Like for me, I want to have a little pasta and a little bit of wine, so I just tolerate that, my body might not look exactly how I want but I get to feel the way I feel I make those sacrifices. Lots of people though, I would ask everyone listening to check in with this, do you have that same level, the expertise in your own metabolism that Shawn and I do?

This is hard-won, it's sort of like as easy as earn process like you and I have put in, we put in the miles, we've paid attention, we've probably had periods where we weighed and measured everything, we've been in the gym we've done pre-workouts and post workouts, and enter workout supplements and this supplement and that and different— lots of people have not done that yet.

So by exposing yourself to different protocols, each one has something to teach, and so you can slowly build your own diet that way.

I would say the mistake that a lot of people make is they read the latest book and to your point, it becomes their new Bible, until they read the next book and then that becomes their new Bible.

What I'm saying is make your Bible the idea that I'm going to try on lots and lots of different things and slowly learn my metabolism.

Here's what's going to happen in practice though. I can guarantee some days, because you have kids I don't, I don't know what that's like, it must be crazy at times, like you're going through this 5 week period right now where you just moved here, you got birthdays, you got your 12 year anniversary, it's a lot of stuff sort of going on. I guarantee that at times you're not going to be able to eat the same every day.

So to me, in addition to having your Plan A that works mainly for you, you should have a plan B and a Plan C. Like for me, I know when I travel, I know that that's a different type of eating for me.

When I'm home I actually do really well and just eating when I get hungry, that can happen at 10 am or that can happen at 3 pm. I just eat my first meal when I'm ready to eat that first meal, but when I travel I have to eat small, frequent meals because if I don't I am ravenous by the time I get to where I'm going and I will eat everything in sight.

So in addition to slowly finding what works for you, it's also finding multiple things that work for you. And one thing about that Matador study that's really interesting just so people can understand, this is a big mistake I think a lot of people make in our field when they undergo diet and exercise stuff.

These diet breaks are not meant to be feasting sessions, they're meant to go back to normal. So when you push your metabolism for 2 weeks in a deficit let's say, or a Keto diet, or something like that. You come back to a normal Plan A nutrition. You don't go Plan "eat everything in sight" and this is which really bothers people.

So the point that I'm making here is that Plan A nutrition becomes a powerful place for you to return to, so that you go this is where I maintain and then I'll push on my metabolism a little bit with intermittent fasting or a Keto diet or a vegetarian diet or whatever it is and then I come back to Plan A, the Shawn diet, the Jade diet, whatever the listener has decided is their diet.

You don't go back to this whole thing where you're overeating, that's the problem that people make, that's the 2 steps forward, 3 steps back scenario instead of going 2 steps forward, half a step back. I think that's the important sort of concept to understand here. And just to begin to play around with that.

Shawn Stevenson: Man. I think one of the big issues with it though, and you kind of alluded to it a little bit is that we're reluctant to have that half step back or one step back.

Because again, I just think it's psychological for us, it's number one it can be a little bit deflating or confusing and number 2, it gives an opportunity to quit.

And this speaks to, I mean we can get into a conversation beyond diet about resolve and you know just a bigger pictures thinking, meta-analysis of things, but at the end of the day I think that we have to be comfortable with not being perfect which is tough, in and of itself and also giving ourselves permission to experiment.

And the biggest thing that you're sharing today and I think that, and I've been trying to talk about this in different ways and have different people say it in a different way is that you are unique and the biggest goal for you with your nutrition is just finding out what works for you, listening to your body, getting in tune with that. And this is something like I literally have this down, it's like breathing to me, like I know how stuff feels.

And it becomes more difficult when other things are happening for sure, just like anybody. But for me, it's like stress, in a high-stress situation all the stuff going on— You know how good bread tastes now? It tastes good, but do you know how good it tastes now?

You know what I am saying, so it's just like those conditions your sleep, your stress levels, and all these different things can make it more difficult to listen to your body, so it truly is a holistic approach, it's not just the food and paying attention how that makes you feel, but putting yourself in a right state so that you can actually hear these signals from your body.

Jade Teta: And not only that. I agree with everything you just said and then I'll throw another wrench into the mix here to bother the listeners and bother you.

You and I also know it will change too, so that's another thing about the metabolism, the people don't understand— not only will you have to have times where you kind of slide back but, the what worked for you.

So Shawn and I are in a groove a little bit right, where we know what works for us right now, but I'll tell you what was working for me in my thirties does not work for me in my forties. And so for me, it's a whole different ball game and I had to figure it out again.

And women, in particular, have this happen because they know this, because with menses, their metabolism changes within the month. Us dudes don't figure that out. A lot of my clients even have a different way of eating for the first half of their menstrual cycle versus the second half of their menstrual cycle.

Go through pregnancy, things are going to change. We go through andropause and menopause, things change. The great thing about this approach is that you learn a process along the way that you can repeat when the metabolism changes.

So there's this false idea that, "I'm supposed to find the diet and once I do, then I just stay with that diet." What you and I are saying is you don't find a diet, you create it, but you still can't stay there, you might have to create it again.

So in your lifetime, you're probably going to have to create diets that work for you every 3 to 5 years or so, as your metabolism changes, as it ages.

One of the things I just recently saw a recent study looking at menopausal women and essentially those women were basically shown that they regardless of how active they are and everything else, and this makes sense, you'll kind of be like, "Yeah, no dah, Jade" but they are more insulin resistant as a result of just aging, despite how much they move and everything else.

And you can look at the carbohydrate meals if you give them a standard dose, a 40 year old woman versus a 60 year old woman, a standard dose of carbohydrate you will see on average that the glucose response and insulin response is far higher in those 60-year-old women, looking even at activity levels and equating for age and body composition and all that kind of stuff. So then we have to say, "Okay, well that approach means that menopausal women and maybe andropausal men necessarily have to go to a slightly lower carbohydrate diet."

So maybe they have to attend to carbohydrates more than calories more now, and this is a game that we will play throughout our lives if we want to sort of stay in shape.

Shawn Stevenson: Can we talk a little bit about, since that the topic came up, about kind of cross-training your cycle for women and just understanding truly.

Because there are these big, cultural understandings about cravings and different things like that and it's a joke, but the reality is your body is really changing and your metabolism is adjusting each month.

Jade Teta: Yeah. Here is an interesting thing. Estrogen and progesterone, the female sex steroids are just I think they're amazing in what they do, and the best way to think of them, the easiest way not to give everyone a biochemistry lesson, is think of them about as 2 twin sisters but not identical sisters, so they're twins, but they're not identical.

And estrogen is the twin who's like, she's a little rambunctious, she's adventurous, she is powerful, she just pushes forward, she's like ready to go, she's like go, go, go, let's do it.

So when estrogen is dominating in a woman she feels very stable, she is more insulin sensitive which means that she gains more muscle and less fat when she's in calorie surplus.

And it also means that when she's in calorie deficit she burns more fat and less muscle. So estrogen is sort of this building sort of hormone. And this makes sense because what the female metabolism is literally like, is it safe and appropriate to have a baby, that's literally what it's programmed to do.

So estrogen is about "Let's build-up for the first 2 weeks, we're going to build up a system". progesterone is sort of the worried, anxious, sort of on edge sister. "Let's leave some food around for a potential baby, let's be careful, let's not over exert ourselves".

So after ovulation when progesterone starts to dominate, the female becomes less insulin sensitive and this makes sense too, right, because insulin drives nutrients into the body, into

the cells, progesterone goes let's be more insulin resistant so that we can leave some food for potential baby that comes along, the metabolism is smart that way.

And so you have this dual approach, so what that means for a woman is she can train harder, eat more carbs, tolerate more calories when there's estrogen around from the first day of bleeding to ovulation.

But then from ovulation to menses again, this is a time where she might want to chill out and not train as hard, cut carbohydrates, down a little bit and spend more time doing yoga and meditating and taking long walks versus crushing it in the gym. And this is a very nice way for women to sort of doing this. And then you alluded to this, right at menses, both estrogen and progesterone fall pretty drastically.

What's really interesting about this is that is very much like if any young woman wants to know what the hormonal state of menopause is, well, every time you have menses, you're essentially in a mini menopause.

And at that point you have receptors for estrogen and progesterone all over your body including in the brain, progesterone impacts GABA, so to remember Gab A it's the relaxing neurotransmitter, so without progesterone, you start getting kind of anxious.

And estrogen has to do with dopamine production and serotonin production which is sort of this focus and just I love life and that's why she's the sister of sort of like let's go out and just attack life.

And so at that point in time, you have to be very careful because when those brain chemicals drop, all of a sudden you're going to potentially want cravings and have cravings for sweets and you're going to want to feed those brain chemicals in other ways.

One beautiful thing actually that can help with this and you mentioned it, curcumin can help with this, cocoa can help with this, we have lots of herbs that can actually bolster some of the negative brain effects as progesterone and estrogen fall off.

And by the way, not to leave you men out of the discussion, when testosterone levels fall we get some of the same thing.

And of course, women have a testosterone peak right around ovulation, and you also have a testosterone unmasking right around menses, this is why sometimes a female libido will rise at ovulation and also rise at menses, because at ovulation testosterone goes up, makes sense, time to have sex, right, you just released an egg.

And then there's an unmasking of testosterone when estrogen and progesterone fall at the end, they also can get sort of an increase in libido.

So it's a very interesting science here, but the point then goes back to what you and I were talking about, you can live 2 different sort of states here and understand that your metabolic

flexibility changes based on these hormones, so you can now change your approach, if that makes sense. And hopefully, that's not too complicated for everybody.

Shawn Stevenson: It's beautiful, fascinating, fascinating stuff. And next up we're going to talk about how your body actually burns fat. How does your body do the process? We're going to do that right after this quick break so sit tight we'll be right back.

Today we're in the midst of a new revolution with our understanding of food. We used to just be focused on this macronutrient paradigm proteins-fat-carbohydrates. Carbohydrates and proteins got a pretty good name, but fats were drug through the mud.

Why is that? Because it's called fat! The name implies something different than the other 2 because when we hear the word fat we think about fat on our bodies.

Fat in food and fat in our bodies are 2 totally different things and it's like thinking, "If I eat blueberries I'm going to turn blue," when you think that eating fat is going to turn you fat. It just doesn't work like that.

And any of those 3 macronutrients can actually put fat on your body if you eat too much or the wrong types. Healthy fats, which I'm proposing that we start to call lipids or even energy are incredibly important for every single function in your body.

Your cells, every single cell in your body, we have upwards of 100 trillion cells that make you up require fats to just maintain the integrity of your cell membranes, we're talking about the thing that holds your cells together and enables your cells to communicate. It's very important.

Also your brain, your brain is mostly fat and water, this is why fats are so important. When you're deficient in fats especially the right kinds of fats, you can see some big issues.

So in order to address that some of my favorite things today are MCT oils and specifically if we look at emulsified MCT oils that actually taste amazing and these are medium-chain triglyceride oils that are extracted from things like coconut, palm, and these medium-chain triglycerides have a thermogenic effect on the body which means they are able to positively alter your metabolism.

That's number one, the thermogenic effect from MCT oils, positively altering your metabolism.

Number two MCTs are more easily absorbed by your cells, so unlike conventional food of any type that has to go through a pretty arduous process of digestion turning that foodstuff into you stuff, MCTs are able to go directly to your cells and provide almost instant energy.

And number 3, MCT oils are very protective of your microbiome, there's so much research today about the importance of having a healthy microbiome and the integrity of our gut. MCT oils are one of those things that help to support that because they are especially effective at

combating viruses, parasites, bacteria, there's so much goodness that is able to be found in these MCT oils but you want to get the good stuff.

And for me, that's why I go to onnit.com/model, that's O-N-N-I-T.com/M-O-D-E-L to get the emulsified MCT oils which is like a coffee creamer. These are great to add to your coffees and teas, smoothies and things like that to get in a little bit of extra flavor plus all the benefits of MCT oils.

They're easy to stir, so you don't have to throw everything into a blender just to get a nice coffee drink, but also they taste good and they make the process of being healthy fun and enjoyable.

So head over check them out, they've got vanilla, coconut, cinnamon swirl, and strawberry, it's one of my favorites.

So go to onnit.com/model for 10 percent off your entire purchase, not just for the MCT oil but all of the health and human performance supplements that Onnit carries and all of their fitness equipment, gear and so much other cool stuff.

Head over there, check them out, onnit.com/model. Now back to the show.

Shawn Stevenson: Alright, we're back and we're talking with one of my good friends Dr. Jade Teta and before the break, I mentioned we're going to talk about how does your body actually burn fat for fuel.

We know about all these different diets, we know about this concept of burning fat but how does your body actually do the process. I know that you shared there are 4 stages to this process, it isn't just like your body just grabs fat and just burns it disappears into the ether, there are 4 steps to process.

Jade Teta: Yeah and actually once we understand these 4 steps you'll sort of understand why people have such a hard time burning it, because we have to have, we have to be very clear about sort of the steps and understanding of them.

So let's go through them one by one to burn fat. The first part is you have to release that fat from a fat cell.

That is not fat being burned yet and this is why it's important because a lot of people would be like, "Oh this supplement helps you burn fat," or, "You should do fasting exercise because you'll burn fat." Or, "If you're stressed out and you release the stress hormones you'll release a lot of fat."

That doesn't mean just because fat is released, it doesn't mean it will be burned and this is the first sort of thing that people don't understand, it can get restored.

And this happens a lot in the day, if you're sitting around and your boss comes in and yells at you or you almost get in the car accident, you will release some of these stress hormones that will release fat, cortisol is one of them by the way, a lot of people don't know that.

And then if you don't use that up that fat will just get restored. So that's the first step. The second step is this fat then has to be taken from that area where it's released and shuttled to through the blood, to the working muscles or the tissue that is going to use that fat for energy.

So blood flow has an awful lot to do with this, so this is why movement can actually be critical because that speeds up sort of blood flow.

But the next step is the idea of that fat now getting into the other cell, into the muscle cell which has an awful lot to do with how insulin sensitive you are and how those membranes and that cell architecture, how healthy it is.

Then the final step is that fat actually getting broken down and we talked about this in the beginning into acetylcholine which then flows through the Kreb cycle, goes into the electron transport chain and then essentially when you breathe out CO2 you're essentially breathing out your fat, you're also making water in that process as well, so the end result is literally CO2 and water but it is this sort of process of release blood flow entry and then lipid oxidation is the final step.

So think about all the places where that can get slown down in the body and a lot of people don't understand that. One of my pet peeves is we oftentimes talk about lipolysis which is the release of fat, as lipid oxidation or fat burning, and they're not the same thing.

So people get confused with this because they are like, "Well, I am releasing fat from sort of exercise," or, "I am not eating and I might be releasing fat", but you're not necessarily burning that fat and that's an important concept to understand.

Shawn Stevenson: Yeah, I want to share this with everybody because this is something I found as a valuable tool for myself as far as exercising is concerned, and you obviously are just an expert in that domain. You've been lifting weights for how many years?

Jade Teta: Yeah man, it's been since 11 years old.

Shawn Stevenson: So like you've got a lot of just literally reps under your belt, to understand this stuff. But you mentioned how just getting that surge of stress hormones like adrenaline, like cortisol, these can go and cleave off and create this lipolysis effect. So fat is getting released to be used, but it can also circulating reabsorbed.

And so one of the things high-intensity interval training is obviously one of the most popular forms of exercise now, it took us long enough to figure this out, but again, you can release a lot of the fat but it can be reabsorbed.

And so this is why so it's a 2 step process for me, and I just wanted to share this with you guys, if you do high-intensity interval training which literally can take you 10 minutes, leave some time to go for a long walk afterward.

So your body, because you're shifting gears when you're walking your body is much more, it has a much bigger propensity to go and use stored fat for fuel. And so now you've released a lot of this stored fat through the HIIT training and then going for a walk afterward is just a really great 1,2 punch. So I wanted to throw that in there.

Jade Teta: Yeah, agreed, a 1000 percent. And I also think it also brings up another question about training is that a lot of people like in fasted training, right, it's sort of the same thing so to me walking is, and it's funny that we talk about walking because if you told my 20-year-old self that I'd be advocating walking, I'd be like, "That does nothing," but you're absolutely right.

Walking is to me the most critical aspect of fat loss for all the reasons you just said, and also because it is the only, one of the only forms of exercise that actually controls cortisol levels and insulin levels at the same time.

So it has both a hormonal effect and a slight calorie sort of burning effect, but it's also something we can do all day, every day, and we're built to do.

So we're not built to run we are built to walk though, so if you compare people who sit all day and then go work out versus people who move all day but never work out, the people who move all day are probably going to end up being leaner and healthier.

So to me, it's critical and if someone had to say it's funny you brought that up because if someone said, "Jade, what's the one thing that you could tell me about working out that would make the biggest difference?"

I would be like, "Honestly, do you work out and spend a lot more time walking." Just like you, first thing fasted in the morning if you want to do that but after your workout, a nice long walk.

Shawn Stevenson: Yeah, man, same here. When I was in college if I was to tell myself, I wouldn't have slapped myself just saying that I'm going to walk to lose weight, but I would really give myself a good shake.

It just didn't make sense to me that that would be something, and I would see people, like consistently, people would even come to the gym they've lost 50 pounds and they're just walking.

And it just didn't make sense, I'm just like it's going to take you a long time, they're making changes to their metabolism as well. Going back to what you talked about in the beginning with that metabolic congestion that can take place walking is such a healing factor.

Jade Teta: Yeah and actually it brings up another point that is one thing that I can, I think will maybe be a new concept not for you, but for a lot of your listeners and that is the concept of metabolic prehab.

So we all know sort of this concept of prehabbing, athletes will prehab before they go into the season or have spring training or something like that to get their physical body ready for the training season.

In the end, what we need is sort of this prehab system for our metabolism as well and walking is the best thing for that.

So the idea that you're going to take a couch potato and make them sort of a cross fitting paleo person like in one week is an issue right, we all see that in the spring, all these people out there running like crazy and then we don't see them 3 days later because they've injured themselves and they feel horrible. So to me walking is a critical path to prehab.

And just real quick the prehab has to do with one getting the brain correct, the hypothalamus-pituitary, adrenal, thyroid, and gonadal axis and this has an awful lot to do with stress reduction.

So this would be time in the sauna, walking is another way to lower stress, time with family, creative pursuits, anything that lowers stress.

Number 2 is gut function, this would be lots of fiber, cleaning up the diet, decreasing a lot of these heavy foods that mix carbs, fat, and alcohol and all that kind of stuff.

Number 3 is sort of the mitochondria, this idea that we are going to put nutrients in place to support the mitochondrial health.

Walking actually does all of those, so walking actually will prime the brain, take some of the stress off the hypothalamus, it will actually balance the sympathetic an parasympathetic nervous system taking some of the stress off the GI system and it will actually help the mitochondria do their job better through aerobic respiration.

So to me, when I think a metabolic prehab, now my prehab protocols deal with like things like curcumin and other things as well but walking is the thing, so I don't take anyone who hasn't done anything for a long time and stick them in the gym doing high intensity interval training and CrossFit style circuits.

I go, "You're going to walk, you're going to start fasting 12 to 16 hours per day," most people just 12 because they can't go to 16, their metabolism is too inflexible or rigid to do that, "And you're going to take some of these supplements add some water, and then we're going to do that for about 4 weeks before we now put you into some of the training protocols."

Because it really is flexibility if you think about a cold frozen rubber band that you try to stretch, it is going to snap. So you want to warm that up slowly and walking is critical for that as well. So it's hugely important.

Shawn Stevenson: Yeah, this is a good segue into one of the last things I want to ask you about. I've just seen so many people get hung up on this and just truly not embodying it

because it for us with our mindset today of like, "I have to do something in order to get something," you know, "I've got to work harder on my diet, I've got to work hard in the gym".

To understand that your stress level can actually inhibit your ability to lose fat and can even add fat, let's talk about that. Let's talk about the impact the stress has on the body when we're talking about metabolism.

Jade Teta: It's huge and I think for people a you and me, it's one of those things that the more you look into the literature and the more clinical experience you have, the more you become convinced that this is everything.

And by the way everyone can kind of do this, I mean I don't know, in clinic, I will oftentimes see someone change their diet around and I'm doing blood sugar levels first thing in the morning and you'll see high blood sugars or their hemoglobin A1C, a marker for those who are listening who don't know that of average blood sugar over 3 month period of time is high despite the fact that they've cut carbs or cut down calories.

This is what cortisol and stress does, it will essentially say, "I need this fuel," and it basically doesn't allow you to then burn it, so it will release it like we talked about but it won't allow us to burn that fuel, because cortisol will make you more insulin resistant, cortisol will also make you shut down the motivation centers in the brain, increases the reward centers of the brain so it makes you crave things as well.

So it is one of these things that does everything possible to counteract a starvation response because as far as our metabolism is concerned, we have an ancient program in us. We might live in the modern day but our ancient program says, "Resist starvation."

And stress, so any kind of stress, this is what is horrible about this, any kind of stress we're under usually triggers the starvation response which is going to release some of our stored fuel, get a whole bunch more fuel on top of that, and be craving like crazy and regulate our energies, make it unpredictable and unstable.

And so we then go, "Well then, all I need to do is just try harder, eat less, exercise more or do the paleo thing or go work out." And what I'm saying is you have to move into a woosah state right, it's sort of like rest and relaxation.

So to me, for many, many people who are dealing with this an hour in bed is better than an extra hour in the treadmill. And time in the sauna, relaxing is better then time in the CrossFit gym.

Creative pursuits are going to be something that is going to be more beneficial to lower stress then being out there jogging, an hour during the day. It's critical and there's a bunch of science we can talk about.

You wrote one of my favorite books on sleep that this is the major reason sleep is so powerful, you know all the science behind it, it does everything.

Part of the reason is because it's the major break, takes the break off of sort of our ability to rest and recover. Stress is essentially pushing against us, sleep is critical in that regard.

Shawn Stevenson: Absolutely. Dalai Lama said, "Sleep is the best form of meditation." And, man, it's just so remarkable and I'm so grateful because today we have some of the science behind it, because I know a lot of listeners were very analytical and science-minded we need some proof to listen because there's a statement of something being counterintuitive, that sounds counterintuitive but even within those words intuitive it's not counterintuitive because your intuition knows you need to take your ass to sleep.

Your intuition knows you need to slow down instead of trying to go faster. Your intuition knows that it's addressing the lifestyle factors of the context of your relationship or your work life.

Those are the things potentially that are holding you back from the body changes. I know many of folks who they're even at a level of fitness, their abs started getting a little blurry when they started getting too stressed.

And giving yourself permission because like you just mentioned, we can be struggling with this stuff and then we think we need to diet harder, but the reality is that diet is adding another level of stress.

And so getting ourselves, and this is the great thing about this, I am so grateful for having you on today is getting ourselves to this place where we have permission to be flexible in our diet and understand our metabolism can become flexible and our lifestyle overall.

And so man, this has just been super fascinating, enlightening and we've got to have you back on, of course, to talk about more stuff. I've got like 20 other questions for you. But can you let everybody know where they can connect with you online?

Jade Teta: Yeah, the best place to get me is probably right now Instagram is still the place I always say that I'm like, it you DM me I'll do my best to get back to you with questions, but @JadeTeta on Instagram and then JadeTeta.com. And I love you, man, thank you for your work.

Shawn Stevenson: I love you too, dude. Thank you so much. Everybody, thank you so much for tuning into the show today, make sure to go follow Jade over on Instagram it's @JadeTeta, that's J-A-D-E-T-E-T-A. Alright.

So much good stuff and you know, today there are so many different aspects of this, but the biggest one for me personally is understanding that we need to adapt. There's going to come a time and a place no matter where you are on your fitness journey, your "fitness journey", your nutrition journey that things are going to change and you've got to give yourself permission to change.

Because what's working for you right now might not work for you in the near future. And that's all good, because it gives us the opportunity to try new stuff, to experiment, to read

another book, but we're doing it from a different place, we're doing it from a place of discovery and enlightenment versus "I have to". And so it's just a simple shift in mindset.

And I think that for me, starting this episode off and talking about the stress that I'm experiencing, I've been more prone right now and I'm noticing myself being drawn towards foods that I normally wouldn't eat because of the level of stress.

One of the biggest things and you can do this check-in for yourself, the only time that I'm really hungry in the morning is when I didn't get a good night's sleep.

So there are so many different factors in this equation but learning how our body actually burns fat today, learning that we have so much opportunity to try different diets and marrying it all together with our lifestyle factors to take care of our sleep, to take care of our movement, adding in more walking, these are all simple things that we can do. But you don't need to do them all, just choose one and start to get good at it.

And definitely remember that tip that I shared, if you are doing HIIT training, adding in some of that just kind of slow, relaxing, walking at the end leave yourself time for that and for me personally, again another reason that walking I didn't feel as productive is that it takes time to do that.

You can leverage that time, it could be a good time listening to a podcast, have a conversation with a friend, hang out. You can do meetings, walking meetings, we might do that right now, we might go walk and talk, it's actually really nice outside.

So just find out how these things can fit into your life and make sure to share this with the people that you care about as well. So tag me, tag Jade over on Instagram and let us know what you thought about the episode.

I appreciate you so very much, we've got some powerhouse stuff coming up so be ready. Take care, have an amazing day and I'll talk with you soon.

And for more after this show, make sure to head over to themodelhealthshow.com, that's where you can find all of the show notes, you can find transcriptions, videos for each episode, and if you've got a comment you can leave me a comment there as well.

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And take care, I promise to keep giving you more powerful, empowering, great content to have to transform your life. Thanks for tuning in.