

EPISODE 194

[INTRODUCTION]

[00:00:10] AVH: Hello everyone. Today's podcast is a pretty special one, today I'm talking with natural medicine pioneer Dr. Joseph Mercola, he is the owner of one of the most popular health websites on the entire internet. And, he's the author of a number of New York Times bestselling books, like *The No Grain Diet* and his new book, *Fat For Fuel* is all about how a high fat, whole foods diet can help increase energy and brain power and even combat cancer.

In this interview, we dive deep into the book, we also get into the dangers of EMFs which is another one of his big areas of expertise and we talk about some of his personal and very effective life hacks, we talk about grounding and how to make sure you always have an avocado handy which is a very important piece of advice as far as I'm concerned.

There's a lot of content in this interview and it's really great food for thought I think and inspiration as we start to close up this year. You know, folks are going to start thinking about developing some new habits in the new year, maybe you've got some resolutions on the go.

This is going to be our last podcast of 2017 so on that note, thank you everyone for sticking with me and I hope that you join us in the new year where we have lots of new exciting guests and stuff to talk about. We're going to get to the interview but before we do that, I want to talk for a minute about our show sponsor Barista Boost.

The guys behind barista boost want to make your coffee more delicious and nutritious and help win people off all those artificial flavors and sweeteners and terrifying Starbucks frapuccinos but still having delicious coffee that tastes great.

I can relate to this because I'm going to give you a confession right now, I don't drink black coffee, I'm not into it, I need to put cream in it or maybe some butter or definitely some kind of cinnamon, stevia, something, I cannot drink it black, I don't enjoy it but I do enjoy coffee.

It kind of has to taste like a treat for me. Anyway, Barista Boost has this powdered additive that has collagen, maca, coco, cinnamon, elthianine and stevia so basically, all of my favorite things combined. It has eight grams of protein per scoop, it's gluten free, dairy free and artificial flavor free.

You're basically getting protein, antioxidants, vitamins and minerals that are going to make your coffee even more useful and make it taste delicious. I also think it's a great replacement if you're maybe not into the Bullet Proof fat coffee thing like maybe you don't need 300 calories in your coffee first thing in the morning, but if you do like fat coffees, you could add a scoop of this and make it even more decadent.

Anyway, that's my kind of personal endorsement. I'm a big fan of the new company and if you want to try it out for yourself, they have kindly given us a listener discount of 20% off when you order on Amazon if you enter the code BB as in Barista Boost, BBpaleo1. You'll get 20% off Barista Boost, check it out, it's awesome and now on to the interview with Dr. Mercola.

[INTERVIEW]

[0:03:13.8] AVH: Dr. Mercola, welcome to the podcast, thank you so much for being here.

[0:03:17.5] JM: Great to be joining you today.

[0:03:20.6] AVH: This podcast is going to come out a couple of weeks from now but this is Thanksgiving weekend. I really appreciate you taking the time out of a long weekend I suppose. Did you have a keto Thanksgiving meal this weekend or what?

[0:03:33.8] JM: I did, it wasn't very too much from my normal dietary strategies but, yes. I had a few more calories than I normally do but I'm fasting for the next five days.

[0:03:44.5] AVH: For the next five days. Starting today or starting tomorrow?

[0:03:46.7] JM: No, I started yesterday. I mean, after my last meal, I haven't eaten since maybe 4:00 yesterday.

[0:03:52.8] AVH: Wow, that's water only or is that one of the — we're going to get into this but it's sort of like a fat only fast where it's like reduced calories?

[0:04:00.9] JM: This is water only. Yeah, if you want to get the biggest benefit, that's the way you need to do it.

[0:04:04.8] AVH: Man, okay, we're going to get into all the fasting questions as we go along because I have so many for you. I was actually able to hear you speak for the first time about your top bio-hacks at the bullet proof conference which is really great.

I'd love to ask you a little bit about some of that but I want to get into the book first, your book *Fat For Fuel*, I just finished reading it and there's so much good information in there, I almost don't know where to start but I think generally just sort of high level, and correct me if I'm wrong but what we're talking about here is how a high fat, low carb, low to moderate protein diet is beneficial for longevity, mitochondrial function, overall health.

You specifically prescribed this MMT or mitochondrial metabolic therapy plan and can you talk about this and talk about how — based on the understanding that we generally know what a keto diet is and maybe how it differs maybe if at all from what people think a keto diet is?

[0:05:05.5] JM: Well, there's two primary differences, of course you know the composition and the primary motivation for writing the book was really after having read the book, Travis Christofferson, *Tripping Over The Truth* because I had interviewed many of the leaders in the field before and I was glad that they were promoting this type and I never really understood its profound significance until I read his book.

Which really captures the tragedy of the way that conventional medicine approaches cancer. As an enlightening view of how to understand that most disease is really a mitochondrial metabolic disease and it's direct conflict with conventional medicine which believes that it's a genetic disease, it's clearly not a genetic disease.

It's a metabolic mitochondrial disease. That's why I came up with the term mitochondrial metabolic therapy because it addresses, from a dietary perspective, a way to radically reduce the oxidative stress in the cells by optimizing a pathway where you're burning fat as a primary fuel supposed to glucose that generates far less oxidative damages and secondary free radicals.

There are other ways to do that other than diet. So, MMT is a bit more comprehensive of a strategy than just using your diet. The primary difference, really, the point that I'd like to emphasize is that — the mistake that I made, you know, sort of taking the covers off the kimono, is that it's easy to believe that eating keto can be, is an ideal form that everyone should embrace and pursue the rest of their life. I started to do that and if you do, you will get sick and you will die prematurely, I'm convinced of it.

Because, at least in a conventional keto where you have very high fat, very low carbs, continuously and low protein, that's not the way we're designed to live. I think it's a strategy that it's very useful for the vast majority of the population because it's a really powerful way to address insulin resistance.

If you do very sensitive insulin testing but basically do an insulin glucose tolerance test, you'll find that over 80% of our population is insulin resistance, 80%, that is just incredible. This approach that optimizes the mitochondrial function to dietary choices is probably one of the best ways to reverse that but if you make the mistake and follow it continuously like I did, you'll eventually get sick.

It's not a matter of if, it's when. Because your body was designed to have carbohydrates. Carbohydrates send out intrinsically evil. You need them, you just need them, not as much as most people are eating them and you need the right types of course. Ideally, they're best suited when you're a few times a week when you're having, involved in some extra exercises.

Hopefully anabolic activities like strength training and that extra carbohydrate will not only provide the fuel for that and give you an anabolic stimulus but it will also feed your microbiome and there's influence in connection between the health of our gut and the health of our body.

If you deprive your microbiome of carbohydrates in a long term basis, it's not going to thrive. It just simply won't. That's where you need to increase your carbohydrates as maybe as a hundred, 150 grams of carbohydrates a day or maybe even more if you're a competitive endurance athlete.

[0:08:34.0] AVH: Okay, in order to find that balance that works for you in terms of maybe cycling in and out of a keto state and we'll get into that, the different kinds of cycles that are available to us. You still have to, kind of, spend this time becoming fat adapted and doing the keto thing at first in order –

Okay, that's where people sort of have to – you have to put the work in first before you can have this flexibility, right?

[0:08:59.9] JM: Well, that's where the confusion results. If I do this initially then I need to do this the rest of my life and the answer is no, you have to cycle in out. Although, you failed to make that – to correct that mistake, you're going to suffer the consequences.

[0:09:14.0] AVH: Right. One of the really interesting things when I was reading this, and I know that most of us in the western diet, we eat too much protein and so there's a lot of talk about lowering protein, that's a key element and as someone who is sort of an on and off bodybuilder, I'm just starting to get my head around the fact that I don't need a gram of protein per pound of bodyweight.

I'm still got to get my head around it, I know. It's terrible, that's one of the things I'm working on first but one of the things that I thought was really interesting was you're talking about restricting protein being perhaps even more important than restricting carbs and that too much protein could even be worse than too much carbs. Tell us about that?

[0:09:54.0] JM: Protein is the most potent stimulus for a metabolic pathway called mTor which is short for mechanistic target of rapamycin. Rapamycin being an anti-cancer drug, a very effective cancer drug, that inhibits that pathway and the reason why it works is because when you stimulate mTor, you increase cancer growth.

That's only – basically stimulates growth of your tissues. That's okay to do, it's not like you should – mTtor should never be activated but if you continuously activate it on a regular basis without a break, you're going to cause problems, someone like using anabolic steroids all the time. It's not a good idea.

I mean, could you get good results with them? Sure, can you get great results from high protein, of course, you can build lots of lean body mass especially if you have a knowledgeable exercise strategy and you've got the genetics for it.

There's a downside to it. It's the same thing, also, if you have excess protein, you've got to deal with excess nitrogenous waste which your kidney has to get rid of and can cause kidney damage. It can also convert to extra glucose and store it as fat.

If you consume more than you need, it's definitely problematic. Just like sugar or healthy carbohydrates, you still need to have extra protein a few times a week when you're doing your strength training because you need it to combine with the sugar to give your body the building blocks to build that lean muscle mass.

[0:11:21.3] AVH: Right. Okay, I feel like that would be one of the trickier parts for some of us to adjust to, I mean, if you're following a standard paleo diet, you're probably generally lower carb than the average person anyway. But the idea of going from perhaps six or seven ounces of protein per meal three to five times a day to – I mean, really, that was my life and I liked it.

Then I'm reading your book and it's saying that someone my size should be eating like 30 maybe 40 if I'm really –

[0:11:58.7] JM: We're talking grams per day, that's correct. How much do you weigh or is that an inappropriate question?

[0:12:04.9] AVH: Well, right now I'm about 130, I did the math and –

[0:12:07.6] JM: It's 30 to 40, that's what I was going to say.

[0:12:11.3] AVH: Yeah, that's a pretty significant lifestyle change for me. I can cut some carbs, I think pretty quickly but looking at that tiny itty bitty little piece of protein, I'm on my plate would be, little bit of an adjustment but I guess that's what why this is –

[0:12:25.8] JM: Here's the upside for that too, most of the protein that people eat is really highly problematic from a health perspective, it's really damaged because they're not paying attention to the details which involves understanding that almost all the animals raised in this country are raised in something called a CAFO scenario which is confined animal feeding operations, where they're given large amounts of foods they were never designed to eat.

That are typically grown and sprayed with herbicides like glifucate and other fertilizers and they're given antibiotics, in most cases, 80% of the antibiotics used in this country are used in animals, not in humans. You're going to get a lot of stuff that are concentrated in the animal products. You've got to be careful in the protein sources you choose, now, obviously you can be a vegan and still have no animal protein but that's unusual, most people are eating the animal protein.

You just have to be careful with it.

[0:13:20.4] AVH: You mentioned, you're about to do this five day fast and I'm sure this is not your first. I know in the book, you recommend different types of fasting, maybe for different goals or whatever challenges you may be dealing with but you say that for most healthy people, you don't really need to do it more than the constricted eating window where you're maybe going 13, 15, 18 hours a day and then having that shorter sort of feeding window, right?

[0:13:46.8] JM: That's what I say in the book. But my views have changed since I published the book. Now, I believe and I have a lot of data support this belief that fasting, multiple water day fast, multiple day water fast is probably the single most powerful metabolic intervention that you could engage in.

This is not only for the 80% of the country who is insulin resistant and struggling with diseases like cancer or heart disease, diabetes, obesity, Alzheimer's, other neurodegenerative diseases. It's for all of us because I don't have any of those terms. I have absolutely no insulin resistance

but I engage in it for a number of reasons but before we explain why I think it's such a healthy strategy.

I think it's important to understand that there are two types of fasting and the one that you refer to was typically called intermittent fasting, where you're not eating for at least 14 hours a day and then eating the other times. I think it's better to go a little bit longer and what I would do regularly is to move to a point where you're not eating anything for 20 hours a day.

Keeping your eating down to four hours then if you do that for a while, then your body really becomes the highly adept at burning fat for fuel, incredibly so. So that it's easy to transition into a five-day water fast. Because when you do a multiple day water fast, typically on day two, most people go through a pretty significant hunger.

I mean, it's really – food is on your mind, it's a major exercise and discipline to do it. When you've got the 20 hour intermittent fasting under your belt, it just isn't an issue, you're not hungry, you can just do it and the beautiful thing is that it's better than free.

Because, you're not buying food, you're not preparing food, you're not eating it, you're not cooking it, you're not cleaning up afterwards, it saves you a lot of time.

[0:15:48.8] AVH: Yeah, frees up a lot of time and money I guess.

[0:15:50.8] JM: Yes it does, it's a really good strategy, obviously I'm not trying to sell anything by encouraging people to do water fasting. It's not for everyone, if you're pregnant, you shouldn't be doing it and if you're on any medication, you certainly want to do it with a healthcare professional to guide you through it because the only known deaths that I'm aware of in a multiple day water fast are someone who's been taking insulin.

You have to be careful there. Insulin is of course a medication but there are others that can be problematical, high blood pressure drugs because your blood pressure will go down, if you're taking them, you could essentially have too low a blood pressure or hypoglycemic state, that will lower your blood sugar. You've got to be careful.

[0:16:32.1] AVH: If you have – I know this is the case with you. If you have no weight to lose, in fact, do not want to lose weight, how do you avoid that with these fasts.

[0:16:40.5] JM: That's a great question, you know what the answer is? You don't. You're going to lose weight, yeah, every time I do it, I lose about 10 pounds and I don't want to lose 10 pounds, I'd rather gain 10 pounds of lean muscle mass but it's just doesn't happen on your water fast and I think –

Good question. When you're emptying your bowels, you're able to do some other things that you normally can't, at least I can't and I know a number of people do coffee enemas and I've always envied them because every time I put – try to do an enema, I just cannot retain it but when you have no stool in your bowels, it's easy to retain a coffee enema. And you get some really great benefits, I incorporate that into my five day water fast.

Let me describe the reasons why I do it, someone like me who doesn't have insulin resistance and absolutely does not need to lose weight. I do it for two important reasons. One, is that a large number of people now, maybe in the paleo community are looking at stem cell transplants as an interesting bio-hack to improve their health.

They are not inexpensive, typically 10 to \$20,000 would do those. That's not covered by insurance, it's a pricey intervention that may be problematic, at least Thomas Siegfried who is one of the major researchers in this area has some concerns and he's seeing problems even in autologous stem cell transplants with people having increasing the risk for cancer.

The way around that is to actually a free stem cell transplant would be to do multiple day water fast because it radically increases your body's ability to generate new stem cells, which is good.

[0:18:22.7] AVH: What about for someone who – because I was just interviewing Mark Sisson about his new book, *The Keto Reset Diet* and he offers some sort of, let's just say, I guess, softer kind of entry into the whole idea of keto for people who might find it overwhelming or might find it intimidating.

What about – for someone who is maybe overweight and having issues losing weight, fasting and keto are probably for many people, a great option. But if it's somebody who is overweight, is maybe eating 500 grams plus of carbs a day and wants to get into ketosis and get their fast and they want to do this – even a 24 hour fast at the beginning. Is that something that is recommended when – like to go straight from this crazy high carb to nothing?

I mean, I know they wouldn't die.

[0:19:10.5] JM: Probably not a good idea because they cannot burn fat at all, at those levels. At least their primary fuel. As a result, they're going to become – have significant cravings and be hungry and irritable and lack of energy. I think it's wiser to go, be a little more, gentler with it but – and really, probably the key for those situations is intermittent fasting to just restrict the windows that they're not eating and even if they didn't change their food intake, almost even have the same amount of calories and macro nutrient composition.

They still would push their body to burn fat for fuel. Because they're running on lower glycogen stores and then the only other option is to burn fat. They're nudging their body to regain that metabolic ability and flexibility.

[0:20:01.2] AVH: Okay, that actually leads me into my next question and I don't want this to come across as I'm trying to find ways to cop out here but if you're already doing, let's say a standard sort of paleo whole foods diet and your carbs are lower, they're not – you're in ketosis level low, but you know 100 to 150 grams a day and you're not really willing at this point to go down into the 20, 30, 40 grams a day range.

But you want to play with intermittent fasting. Would that work or would that be, it always seems like they go together, you got to be keto and then you can fast. But what if you're not quite ready to do the keto thing but you want to try this fasting, can it still work?

[0:20:40.4] JM: Absolutely, yeah. I mean, the shift is to move your dietary or food choices to the point where they were healthier. You know, get rid of the garbage, get rid of the processed foods, make real food choices and that will have an enormous benefit but the other major strategy is to pay attention to the time, just gradually restrict the time that you're eating in a day.

That's not just – you know, two hours in the morning, two hours in the evening, now. I mean, the window is a specific time window, it's a four hour window, you're only eating that four our period, you're not eating the rest of the day, it's a six hour window, same thing in an eight hour window. You should just pick a window, eight's a good one to start with and you gradually work your way down.

That alone will produce dramatic benefits, radically reduce insulin resistance and improve their ability to achieve an ideal body composition.

[0:21:32.6] AVH: Okay. You also talk about in the book this feast - famine cycling which sounds like something that maybe is a bit more sustainable for people, you can kind of incorporate it into your lifestyle and make it something that you can do sort of forever.

If you could talk about that a little bit and then in addition to that, the thing that's still kind of catches in my brain when I think about, "Okay, let's try this, let's do this MMT, let's do this keto thing." You know, you even mentioned that it's not a good idea necessarily to stay in ketosis for long periods of time and I know personally lots of friends who have found great success with it until they didn't.

Then they were having problems with you know, they're losing muscle mass and they're getting tired. You mentioned this in the book.

[0:22:15.4] JM: They look on health, they look on health, they keep their friends and relatives, they tell them that, yeah.

[0:22:21.1] AVH: Then it's confusing because then people like see, we told you keto isn't good because now it's bad. How do you find the balance for yourself? Where you can catch it before you start feeling these negative returns.

[0:22:32.2] JM: That is an absolutely excellent question and it's really simple. For most people, they only really need to do hardcore keto for a few weeks, especially your audience, the paleo

people. Maybe even less, especially if they're athletes. Essentially, for others who are metabolically damaged and pretty seriously overweight, that might be months or even longer.

Essentially, the way you know that you can go to this feast, famine cycling or cyclical targeted ketosis is probably more professionally accurate term would be to find – measure your ketone production. Once your body starts making ketones, that's a good clue that your body has become fat adapted. Now, obviously, the higher the ketone levels, the more fat adapted you are because obviously there's clearly different levels to that.

Once you start making ketones and the least expensive way to do that is to pickup for 10 dollars, you can get a hundred strips of Test Your Urine, now that's only going to measure acido acetate and with time, it's not going to be as sensitive as just a screen but it's cheap. You can pick up \$150 meter, the Ketonics that will measure breath, acetone which is another type of ketone and that's a lot more sensitive and gives you a pretty good objective barometer which you use. That's what I use.

If you want the ultimate, the gold standard would be the blood ketones but they're really pricey and who wants to stick their finger. Any one of those, when you start making real ketones, that's the time that you need to shift over. Get those healthy carbohydrates back into your diet.

You know, typically, hundred to 150 grams of the healthy carbs, not the breads and the pastas but the sweet potatoes and the fruit. Hopefully you do that only not every day but just a few days a week. For most of the week, you're still doing keto but for those two or three days, you know, you're having the extra protein and having extra carbohydrates.

If you engage in that, I think that is a healthy long term strategy that you can do indefinitely.

[0:24:29.3] AVH: Got it, okay. But a lot of it, it really does revolve around, for at least for while, paying pretty close attention to your body's signals and knowing whether you're in ketosis or not, figuring out how you feel, being able to adjust your macros depending on what you're doing that day. Like workout wise.

[0:24:49.5] JM: It's not so much being intense into how you feel because you're going to – most people, when they transition to it, they're not going to feel good, depending on how rapidly they're doing it because they're just not fat adapted. They've lost their metabolic flexibility.

They're going to feel uncomfortable but just a simple test of strategy, testing for ketones, when you're ready to switch over. I mean, obviously, should want to listen to how your body's feeling overall. It's a bit deceptive when you're making that transition phase.

[0:25:18.5] AVH: Okay, one of the reasons I've been interested in this kind of diet for a while now, because I feel like I generally enjoy pretty good health and fitness, I eat like pretty low carb but not super low, I don't really have much weight to lose but I know that I have an issue with inflammation and I work out a lot, I've done all these 23 and Me and DNA fit test that are telling me I'm more susceptible to inflammation and free radical damage, maybe even average, I need to work extra hard to combat that. This diet works to reduce inflammation, right?

[0:25:50.1] JM: Yes it does, let me tell you how, because especially if you do the most powerful way to reduce inflammation is to five day water fast. The way that it does that, obviously I would mention it increases stem cells but it also removes cells from your body that are damaged in diet, they're called senescent cells.

Senescent is a derivative of the word senile. These are old aged damaged cells that have lost the ability to reproduce. Either through directly a gene or through oxidated damage. They're clogging up their system and guess what they're doing? They're causing inflammation.

Most of us have really impaired abilities to remove these cells, in fact, there's some really interesting longevity strategies that scientists are doing now to go in and remove these senescent cells. You can do that for free and get all the other benefits by doing the multiple day water fast, you will rapidly accelerate a process called 'autophagy' which is Latin for self-eating.

Essentially, your body digests these cells which yourselves of course there's protein in these cells. That's one of the reasons when you're water fasting, you're not going to lose much lean muscle mass.

You lose weight but most of the weight is water and stool in your gut. You know, you're not losing muscle. Actually, you become leaner when you start to refeed after the fast is over. Inflammation is a very important point and that's one of the benefits of getting keto.

The ketones themselves are H-deck two inhibitors I do believe, which are potent counters of inflammation.

[0:27:29.1] AVH: In your experience, what are the biggest mistakes people make when they're attempting to become fat adapted or to switch to a higher fat, lower carb plan. What are the biggest things people are doing wrong and how can we combat them before we make those mistakes?

[0:27:46.5] JM: Actually, pay attention to the timing, you know, as I mentioned to eat within the specific window and being very careful not to eat late. I challenge Mark on this, Mark Sisson when he interviewed me a few weeks ago. He tends to eat at seven which I think is too late but you know, he goes to bed later which I still, doesn't think as ideal. I mean, I like to go to sleep by nine. You want at least three hours from your last meal to the time you're going to bed.

Because when you eat food. Food is fuel, your body is going to need to not only break it down and digest it but once it's done that, you've got fuel in the fire and its making energy that you do not need in those levels at that time, you're going to radically increase oxidative stress and secondary inflammation so you know, at least three hours before you go to bed, you should not eat anything.

That's a mistake that many people make. You know, I can appreciate the fact that for many that is also an important social time with their family but maybe just something very light or just even a beverage, a glass of sparkling water with a lime in it.

You know, you can become creative and change your schedule so that you can achieve all those goals and that compromise your health. Other mistakes would be not recognizing that keto is something that is not designed to be done long term.

At least continuously, to cycle in and out of it on a regular basis.

[0:29:08.7] AVH: I agree with what you're saying too with the timing because it's funny, I was chatting with him about you know, he skips breakfast and he doesn't eat until 12 or 1 and I'm like, I've done a little bit of playing around with intermittent fasting. I have a hard time leading into lunch because I just find myself getting hungry in the morning because that's when I'm up and I'm running around but for me, I'm like you.

I can eat dinner at 6 and then go to bed at 11 or 12 even and feel okay because I'm winding down in the evening, right? I'm not doing as much. But when I get up in the morning, I want to eat relatively soon because I'm running around. I think that I guess it depends on schedule wise but that kind of make sense to me.

[0:29:45.1] JM: I used to kid audiences when I would lecture that breakfast is the most important meal of the day and I would say, right? I would say wrong, no. This isn't. Actually, it is important, it depends on the timing, it all depends.

Really, your biggest meal of the day, no question should be probably mid-day, there's really strong clinical evidence for that and even ancient evidence from Ayurveda that you want to eat the majority of your calories when you're going to be having your largest energy output.

You going to want to have a very light dinner if you're going to have dinner at all. I don't have dinner.

[0:30:21.8] AVH: For your five day fast that you're doing right now. You have worked up to this, right? You started with intermittent fasting and then maybe you did a one day fast. I mean, I know that there – or at least I've read that there are – it's kind of like cheating the system a bit where you basically only do like a very reduced calorie –

[0:30:39.3] JM: Thank you for bringing that up. Very low calorie and complete water fast are two different animals. In fact I've never eating Valter Longo next week who developed The Fasting Mimicking Diet which still benefits, that's a very low calorie diet but once you – the moment you put calories into the system, you're really going to not get the maximum benefit because you're still going to be stimulated mTor even though at a much lower rate with those.

You're not going to – your body is not going to actively be as aggressively motivated till you get rid of those senescent cells. You really want the full water fast. They are two different animals.

[0:31:19.9] AVH: What would be the benefit?

[0:31:21.5] JM: I'm sorry?

[0:31:22.2] AVH: What would the benefit be then for the reduced calorie fat only fast, what would be the benefit of that?

[0:31:28.6] JM: From Valter Longo's perspective his clear answer is compliance. He has a thick Italian accent and he's at the university of California and San Francisco I believe. Maybe San Diego. It's definitely some southern California university.

His thick Italian accent I believe probably limited his ability to compel people to be motivated to try this. It may have been an issue but he had very low compliance but once he was able to give people, sort of take away the choices and give him a diet, a packet food deep for five days and his compliance went through the roof.

That would probably be the biggest issue.

[0:32:05.9] AVH: Okay, basically, you're saying that the water only fast is going to be much more effective but this reduced calorie fats also works maybe not quite as well but it's a lot easier to do.

[0:32:17.9] JM: For many people, yes. You know, part of the reason is because there's so much fear around this and the two primary fears are that they are going to be hungry. I already addressed that earlier, if you work up to 20 hour, daily intermittent fast for a month then the hunger won't be there. The other is the thing, you're going to go into starvation mode, you're going to actually lose your muscle mass, that doesn't happen.

Anyone who is interested in this, I would highly recommend the book, *The Complete Guide to Fasting* by Jason Fung who is a NIFologist out of the University of Toronto. Really has – I've interviewed him twice now, although the next interview won't be until January because he has a new book coming, *The Diabetic Code* which is essentially the cure for type two diabetes which is fasting.

He goes into the great details and expands them in far more depth than some of the points that I've mentioned.

[0:33:10.4] AVH: What about the myth and this is another one that I have a hard time getting over as a woman and as someone who is always terrified of being hungry because I was told that for women especially, because we are more hormonally complicated and we tend to want to – our bodies want to have more fat obviously than a man's that if we starve ourselves essentially - if you're not eating for days on end that your body will go into survival mode and hold on to fat because it's saying, you're trying to starve me so I need to hold on to this to live.

[0:33:40.4] JM: Well that's actually far more likely to occur if you're on a very low calorie diet and less likely if you're fasting. Just think about it, you know, our genetics and our metabolism is adapted from our ancestors, for however many hundreds of thousands of years you think humans have been around.

We have not had grocery stores and access to food 24/7. It would be beyond irrational to conclude that if we didn't have access to food for a day or two that we are going to somehow go into starvation mode and have no energy and lose our ability to find food. I mean, that doesn't make any sense.

No, our brain actually works better and one of the most profound benefits that people know when they're water fasting, we actually – truthfully, one of the reasons I do is my mental clarity goes up. I'm in process of writing a book on EMF's that I hope to publish in early 2019 and I need some solid time and my brain is really activated.

I'm not a huge fan of nootropics. I like to do it naturally and water fast is the way to really radically up regulate my brain and it's just like a rocket fuel.

[0:34:47.2] AVH: Got it, okay. I can't use the being a woman thing as an excuse anymore?

[0:34:51.4] JM: No.

[0:34:52.3] AVH: Okay.

[0:34:53.5] JM: It's only three days. It's three, four, five days. Let me make another point too, some people say, "I'm not going to do five days, it's way too long." Well most the magic I mention really occurs after the third day. So that's when you really improve these systems and you know my blood sugar goes down to like low 40's even to 30's and my ketones are up in the 8 range on the last day of the fast. So it's a pretty radical improvement of what you can do and with respect to giving your body different types of fuels and really activating these important metabolic processes.

[0:35:29.0] AVH: Wow, so you are not a fan of nootropics, why not?

[0:35:32.6] JM: Well I am not opposed to them, I just like to keep things naturally. I certainly take a lot of supplements, I mean that's a big thing that we do on our side is we sell resources to help people and they certainly could be beneficial but I like to get most of that from food and natural activities. So you know, I don't like to trick the brain into doing things that it wasn't designed to do with stimulants and things so.

[0:35:55.0] AVH: Got it, so what supplements do you take and or would you recommend in general for folks who may need them if they are doing a higher fat lower carb diet? Like I know one of the big things is people become dehydrated because they are not getting as much sodium?

[0:36:14.2] JM: Yeah, so one of the things if you are going into keto or if you are going into water fast, the single most important nutrient that you absolutely have to have is salt and if you are eating and you are doing keto, you can just merely put it on to your food just season it to taste but you know, it's just 10 grams of salt a day, two teaspoons easily but if you are fasting

you absolutely have to do this and interestingly when you're fasting, adding salt if you're not eating food so you can't salt your food.

So what, you salt your water? Well, I don't think most people like putting salt in their water. It doesn't taste good, I certainly don't. So what I do is I pour the salt shaker into my hand, I just lick it and it just taste like popcorn so that's what I do and I do that five, six, seven times a day and if you fail to do that, you will wake up invariably almost everyone wakes up in the middle of the night with intractable leg cramps. You don't want that because you need high quality sleep if you are going to be healthy.

And you don't want that to be interfering that with leg cramps. So the other thing is magnesium. I think that's probably the single most important nutrient most people need and a hidden reason is that people aren't aware that it is a natural calcium channel blocker and calcium channel blocker have been shown in dozens of studies to lower the impact of the dangers of EMF exposure which are pervasive and every one of us are exposed to.

So high doses of magnesium much higher than RDA. I'd say is a high dose of magnesium you can tolerate without getting disaster pants. But here's the thing, if you are going to do multiple day water fast, do not take magnesium otherwise you will have disaster pants and really serious ones because it is a laxative and when eating food it is not a problem but when you aren't it is. So you cannot take magnesium when you are fasting not a good idea but you have to take the sodium. Sodium doesn't cause any problems like that.

So with others, I mean we literary could talk for another half hour about supplements but magnesium and salt are the two key ones. They are really, really important but other supplements depend on what your circumstances are. If you are young and healthy then you probably don't need any specific mitochondrial support but if you are over 60 like I am or if you are suffering some metabolic issues then you might want to consider things like Ubiquinol or coenzyme Q10. PQQ is another good one.

[0:38:24.4] AVH: What about Vitamin D?

[0:38:25.2] JM: Well Vitamin D that is probably the single most important one for most people but for someone like myself who put a high priority on lifestyle, so I moved to Florida and I get to walk on the beach nearly every day and I have not swallowed any vitamin D for about 10 years and my vitamin D level is over 70 nano grams per milliliter typically. So I am convinced you are designed to get it from the sun hitting your skin and if you don't do that and you just swallow it, you're missing some of the benefit.

Which is exposure to other wavelengths like red and the infrared which could also regulate mitochondrial function through enhancing cytochrome c oxidase. So you've got to be somewhat careful there and there is nothing wrong with antioxidants but I'd be cautious about taking them continuously because they're indiscriminately or non-selective free radical reducers and you need some pre-radicals and if you are doing strength training most people understand this.

You don't want to take a lot of antioxidants after you workout. You are going to reduce the benefit you get because you need – the benefits of exercise are mediated through free radicals. So if you indiscriminately suppress them you run into problems but I like herbs like Ashwagandha is a good one too. I take that pretty much every day and other minerals like zinc and selenium. Most people are low in selenium and iodine. Selenium you don't want to overdose on it like 250 micrograms but it's important component of glutathione. So I take the minerals even when fasting because obviously there is no calorie sources there.

[0:39:55.3] AVH: Okay and maybe it is a case of get your lifestyle factors sorted out first in terms of sleep and stress and trying to get access to the sun and eating and all of that and then maybe from there, you can start looking at the supplementations, some things that you may or may not be lacking but I supposed those are bonus rounds once you get the big stuff sorted out.

[0:40:17.8] JM: Yeah and probably the single most important one, well maybe not the single but one of the most important ones would be omega three fats and by that I mean animal based omega three fats from fish or sea food but I don't take any omega three supplements. If I were to take supplements, I would probably take Krilux. I think that is the best one because of the phospholipids which improve absorption and penetration and also the integration of astaxanthin.

Which prevents the oxidation of these perishable fatty acids that are in there and potentially susceptible to oxidative damage. So how do you get your omega three fats? I like to get it through food. So I'll have sardines and I was told today, I just did another interview that today is National Sardine Day as we are recording this.

[0:41:01.3] AVH: Look at that, there is a day for everything.

[0:41:04.4] JM: Yes there is, but sardines, I like wild caught shrimp in Alaska otherwise you would have to be careful. I think shrimp is America's most popular seafood but most of these comes from Indonesia so you've got to be really careful. That's CAFO shrimp and you want to avoid that because of what they feed them but other sources would be fish row, healthy fish row which are fish eggs and they have grown up and have time to bio accumulate most of the toxins or other small fish like anchovies.

So that is the ideal way, when you get the omega threes that way in it's natural format then you also get the beneficial micronutrients that come with them and other things like resolvance and protectance which also lower inflammation.

[0:41:44.9] AVH: Right would you say another thing to consider when you are trying to do a keto or a high fat diet and this is not to make judgments on anybody and maybe I just spent a little bit too much time on Instagram and I see people with keto in their names and I see the food that they are eating and a lot of it is basically processed meat covered in cheese and all these things because they are like, "It's keto. There's no carbs" and obviously you can bastardize on almost any sort of diet.

[0:42:13.3] JM: Sure it is easy to do.

[0:42:13.9] AVH: But it is important and this is something that I am trying to consider too is reframing keto as something or high fat as something that involves a lot of vegetables. So it doesn't have to be just getting your minimum fat requirement and that is it but most of your meals would look really very vegetable heavy right?

[0:42:33.7] JM: Absolutely, I only have two meals a day and some snacks with Macadamia nuts. So that's where I get most of my fat is probably from Macadamia nuts. So I just got 25 pounds today of Macadamia nuts so.

[0:42:44.2] AVH: Where are you getting your bulk Macadamia nuts?

[0:42:46.9] JM: Well I can't disclose that otherwise their price goes up like crazy. Once I start sharing, I will tell you offline, once I start sharing it then the price goes up through the roof because it's only \$13 a pound is what I pay.

[0:43:00.2] AVH: Wow, okay and you are a big avocado fan too I know that.

[0:43:04.1] JM: Yeah, absolutely. I've cut it out a little bit, I only have one a day now but I live in Florida so I grow a lot of my food. I got avocado trees and mangoes and acerola cherries and each one of those has 80 milligrams of vitamin C and mulberries. It was our dessert last night, it was mulberries for Thanksgiving so I like to get it from food.

[0:43:23.2] AVH: Right, yeah. I feel like people think as long as I am hitting sort of my fat requirements I don't need to do anything else.

[0:43:30.0] JM: No, it's not. One of the books I am writing, actually co-writing it with another author is The Fat Fix which really is an entire book, 350 pages devoted to addressing the quality of the fats because there is a lot of confusion on this. You can't have the industrially processed omega six vegetable oils. That's not good and even a lot of other dairy fats too can be problematic because most dairy is full of – well it's CAFO raised and it also has lectins because it has A1 proteins instead of A2.

They were ideally designed doing that could be problematic especially if you have immune diseases so you've got to be careful.

[0:44:08.8] AVH: Right, so you said earlier that the MMT strategy is a more holistic approach. It's not just about the food and that there are other ways to improve mitochondrial function as well. Can you talk about some of these other ways that aren't necessarily food related?

[0:44:24.9] JM: Sure, sleep would be a massive one and also that's integrated with EMF exposure, electromagnetic fields, and one of the most pervasive ones that people have and one of the most important is when they are sleeping at night. If you are exposed to electric fields like almost everyone who are listening this is when they are sleeping, that will interfere with your body's ability to maximize melatonin production and it will also impair your ability to go into deep sleep.

Which is restorative sleep so the simplest strategy for that which it doesn't cost much is to go to your circuit breaker in your home, identify which circuit controls your bedroom and then turn it off before you go to sleep and you can turn it on again once you get up. Now that works for most homes, if there is a room adjoining your bedroom or they are above, below or on either side then you might have to check that other room too or at least measure the electrical fields in your bedroom but that is a really important strategy. Another thing is turning off your WiFi at night would be really helpful.

[0:45:28.0] AVH: Yeah, would you say that people generally underestimate how much EMF's are affecting us? Because it seems like it is one of those things that everybody is talking about at least in my world, everybody is talking about this now but it is one of those intangible things because if you just feel crappy sometimes when you are in your house or you are having a hard time sleeping, there are so many things that could be affecting that that people maybe don't take it as seriously as they should.

[0:45:54.4] JM: Well I would absolutely agree because you can see, hear or feel it at least most of us can't. There is about three to five percent of the population are electromagnetically hypersensitive and they can actually experience symptoms from exposure to these fields but most of us aren't like that and I certainly was in that category because you can't see hear or feel it, you're oblivious to it and you think well I am healthy. Actually I am doing keto or I am working out or I am young, I'm healthy.

It's not going to effect me, you can be father than the truth. In fact the title of my book is called EMF Extinction because we know it radically contributes to neurodegenerative diseases like Alzheimer's. So it has taken half the population at one side and then there is a number of things

that can contribute to autism but EMF exposure is one of the bigger ones. Probably EMF's and glyphosate and then probably the vaccines, the cherry on the top.

So he has taken off people at the beginning of life, the end of life and in the middle, it is 50% of males are infertile and that can be largely related to holding their cellphones in their pockets. So the exposure we have is just enormous but one of the things that you – I guess I can ask you a question because I have asked this question to probably about 10,000 people now and no one has come even close. Not even close. So there's native electromagnetic fields.

So if we just pick a frequency say the cellphone frequency and the microwaves about one to five gigahertz and we are to measure them what the level was 100 years ago, end of World War One okay? And then measure them now, how much do they increase?

[0:47:33.5] AVH: A thousand percent?

[0:47:34.7] JM: That would be a common belief in many people. What if it was a million times?

[0:47:41.5] AVH: Is that even a thing? Is that possible?

[0:47:44.5] JM: Is it possible? That is right, disbelief. What if I told you it was a billion? No, it is not a billion, I was just kidding. It's a billion billion. It's one with 18 zeros after it. That is how much it went up in the last hundred years, okay? So most paleo people they ascribe and I am one of them says that we should follow our ancestral practices. So one of them is living in electrical fields that our ancestors lived in, right? Not one that is 10th to the 18th higher so a billion-billion.

That is an incomprehensible number. There is virtually no one listening to this has any concept of what that number is. Most of us can't conceptualize a trillion, let alone a billion-billion. A trillion is a thousand billion, this is a billion-billion.

[0:48:36.0] AVH: Okay, so the positive spin on this because I am going to try to find one is that we have so much exposure that it is very easy to immediately start decreasing it with some very quick and easy to-do.

[0:48:48.6] JM: Yeah, let me give you – you want to get a meter that will make it real for you and then you can start being your own building biologist going around in your personal work and home environment and identifying the sources and probably the best single meter out there and I went through many of them and I own probably \$10,000 worth of meters but for under \$200, you can go to a very obscure website and hopefully your listeners have a pen and paper handy and the name of that website is called amazon.com.

[0:49:18.5] AVH: Right, okay.

[0:49:19.8] JM: Okay and you get –

[0:49:20.1] AVH: Well we'll put that in the shownotes so they don't forget.

[0:49:22.5] JM: Yeah and you get a meter called Acousticom 2. They make a more expensive one but this one is under \$200 and it has an analog sound. It is called Acousticom because you can actually hear the actual radio frequency signals that are coming in and the signals that you hear are actually correlated with the type of device that is submitting it. So a cellphone will make a different sound than a WiFi router or a cellphone tower.

It will give you the signal strength graduate from a green dot to yellow to orange to red and obviously they would mean exactly what you think they would. So the higher up on the scale the worse it is. So then you can go around in your environment and find the sources, the hidden source that you wouldn't have even thought of like your wireless mouse or your wireless keyboard or that WiFi router that you were using for an Ethernet switch when you didn't need it.

All you need is a switch and you are using a WiFi port and you are blasting yourself with WiFi radiation. Here is the common with the most people who have no idea of and that the word diet is a code name for artificial sweeteners right? No sugar diet means artificial sweeteners as well. What does the code name smart mean? It means wireless. So if you have a smart TV, your TV is wireless. So unlike your computer or your notebook where you can go in and actually turn it into airplane mode.

You cannot turn a smart TV into airplane mode. So that means every time you turn your TV on, you are getting blasted with additional WiFi.

[0:50:56.6] AVH: And even things like your FitBit or those smart device thing that you have on your body and you are using those to make you healthier and they can be doing the opposite.

[0:51:05.2] JM: Yes, well that is a great point. I'm glad you brought that up because so many of your audience are basically a joy to my heart because they are bio hackers. I love that time and I am glad you are at my event with Dave Asprey, Bulletproof and I am looking forward to lecturing at Paleo f(x) because that's the type of community I like to be involved with, people are really passionate about their health. So fitness trackers can be good but most of them are problematic.

Like the FitBit is awful and anything, any fitness tracker that uses green light technology is bad. You want to stay away from it because you do not need green light when you are sleeping. That is a bad frequency to have. So the one you want is infrared frequencies. So there is a few that do that like my favorite is Oura, the Oura Ring and the reason why it is because it uses red light but also has very comprehensive feedback that it gives you on your fitness parameters.

Sleep being the most important ones but also your ability to recover from your exercise stress but you can also, it is one of the few ones that you can actually turn into airplane mode. So there is no WiFi radiation, believe me I've measured with very sensitive instruments. There is nothing, when it is in airplane mode there is nothing coming out of it. The only thing that it is doing is tracking. It's sensing, it is not broadcasting or communicating in any way.

[0:52:25.4] AVH: There are a lot of ways that you can reduce your EMF exposure personally like we just talked, there are a lot of things like turning things on airplane mode, turning off your circuit breaker, turning off your WiFi, things like that but when we are in cities that are talking about making everything like bus stops and parks and everything, WiFi capable and we're in office buildings that we can't really control, what do we do in that case?

[0:52:52.7] JM: Well the extension, one of the items you referred to where it was implied was the implementation of 5G where they are going to have these transmitters every few hundred

feet or yards or so and that has actually been blocked in California successfully. So it is one of my goals is to educate the public about the dangers of this so that we can catalyze similar actions and different duties to block these introduction of 5G.

I am not a technology-phobe. I took my first programming class in 1968 so I embrace technology but you just have to use it wisely, but you are right. Today is not the future and 5G will be implemented widely until at least for two or three more years even a little bit longer but the reality is today, when I travel, when you travel, when you go to Paleo f(x), we will both be bombarded with WiFi radiation. That is just the nature of the beast.

If you are in public, you are being exposed to it. So it is problematic and that's why I think things like taking high dose magnesium is really useful and there are other things like we don't have time to go into, molecular hydrogen which is a selective antioxidant which can help mediate the damage and we are doing experiments on them now. Hopefully by the time we'd present it to Paleo f(x) we would have some preliminary results that we can share.

But the other strategy is you can shield yourself not shield your phone. Most of the phone shields don't work and these harmonizers and stuff are just worse than bad because they probably make you more susceptible for the illness. So you really need to measure it and see that you are not being exposed to those frequencies. There is some shielding like silver fabric that you can wear that is not widely available now but will be probably next year sometime.

Like silver underwear that will help at least expose your torso and your groin and your pelvis to these types of frequencies. Now if you want to shield your brain, you will look foolish. You will look like a bee keeper because you have to create this faraday cage otherwise the frequencies just slip through it but one of the strategies I use is a faraday sleeping bag when I travel. So I get my levels down close to, well insignificant, biologically insignificant.

Because this fabric will reduce the radio frequencies by 99.999% so it is pretty good but still, if you get 10th of the 18th you are not getting down to that low but it is probably biologically insignificant whether that is below certain level at least according to the building biologist.

[0:55:33.1] AVH: Well you had me at silver underwear so I am definitely interested. I will look into that.

[0:55:37.7] JM: Yeah, I think a lot of people will be.

[0:55:39.6] AVH: Yeah, so okay we are coming close to the end here and I know there are a couple more, some approaches that you mentioned in the book, things like grounding and sun exposure but maybe folks will have to get your book so they can read out some of these other ones because one more –

[0:55:53.5] JM: Yeah, the book is good but they can also go to the website, mercola.com, we have a lot of good information over there.

[0:55:58.2] AVH: Right, okay and there is one more question that I wanted to pick your brain about a little bit and I think it is a good place for us to end off and it's a recent article that is on your site that caught my eye about learning from other people's regrets and this article about people's dying regrets and that there were ones that were reoccurring that were common and one of them I guess was the courage to live a life that's true to yourself rather than doing what was expected.

And I was really interested in this and wanted to hear your thoughts about this article in general because I guess the question that comes up is, "What are some ways that we can really take this to heart and start living a life that is true to ourselves? Because when people have been following what they think is expected of them for so long, it is even hard to even contemplate. How do you do that? It seems like a very risky, scary, unsure thing. What do you do with the effort?"

[0:56:50.5] JM: Well you have to have the courage. There is no question, we have to bite the bullet and get a little courage but the simple process in a way that I think would help many was to understand first of all, the clear reality that no one is getting out of this world alive.

We're all going to die. Future pace yourself, you're on your deathbed and reflecting back and you want to not have any regrets at that point. You want to have done everything you possibly could and just know that you have had the ability, that you've done the best you could do.

Usually that's being impaired or inhibited or afraid but just future pace it, you know? That's a powerful strategy, really is. My favorite movie of all time is the gosh, I forgot the name of it. It was actually partially motivated me to write the book.

[0:57:40.8] AVH: The Fault In Our Stars right?

[0:57:41.9] JM: The Fault In Our Stars, yes, that was it. Yeah, that was it. I was in a small group of men and we meet every week, we got an assignment from watching that movie and you can't watch a movie without a box of Kleenex. Have you seen it?

[0:57:58.7] AVH: I have not read it because I don't like sappy movies. I try to avoid it.

[0:58:03.6] JM: See, for people like you and me, the reason why it's so powerful and emotional is that we know that – it describes reality and to know that we have a way to change that reality but there's a powerful - the most powerful exercise we ever did is to take an example with it in the book, not in the book. Well in the book, and also in the movie is to give an assignment to your spouse, and have your spouse, write your eulogy. Then read it.

[0:58:35.8] AVH: Man, that's intense.

[0:58:39.6] JM: That's probably a good way to end but you know, it's really powerful.

[0:58:45.1] AVH: Absolutely. I think just to add to that a little bit, you were saying sort of like looking to the future and I think part of it and relates to this movie too is that, that future, not to be too morbid but that looking back on your life or being on your death bed could happen tomorrow, you don't have to think about – you could be 85, yeah.

I think having a little bit of not paranoia but a little bit of urgency and if you want to do something, do it because you don't know when you're going to look back and think, you know, I had that time and I didn't take it.

I think just wanting to be healthy and wanting to do the best that you can every day, I think that's the way to do it.

[0:59:22.3] JM: Yes, no, especially if you have platforms like you do and others, many people listening to this. I mean, if it's not a large platform, there's certainly a platform where their friends and relatives that they can make a difference and people don't have to suffer and die needlessly.

That was the thing that got me the most out of that movie is this needless, absolutely profound needless suffering and pain that's happening each and every day. Even if that was a fictionalized movie and book, it was compiled from true stories. It's really a true example of what's happening, we can make a difference. I mean, that's the key thing, not only take control of our health but help influence and controlling, others to take control of their health.

[1:00:02.9] AVH: Perfect, that is a perfect place to end at, I really appreciate you taking the time and thank you so much for this book and for talking to us today and just before we sign off here, remind us again where we can go online to follow your work and keep an eye out on these new books you're working on.

[1:00:20.1] JM: Well, you just have to type in my last name is Mercola.com. I've got the website I think in 1996 so we've been around for 20 years with the, doing our stuff and helping people – we have like 30 million unique visitors a month, we're really making changes in the world in catalyzing these processes.

We've got a long way to go, 30 million seems like a lot but there's seven billion people on the planet.

[1:00:48.4] AVH: Right, keep working. Well thank you very much Dr. Mercola, I really appreciate your time and enjoy the rest of your fast.

[1:00:54.8] **JM:** All right, thanks a lot.

[1:00:56.9] **AVH:** All right, take care.

[1:00:58.3] **JM:** All right, bye now.

[1:01:02.7] **AVH:** All right, thanks for listening everyone, I hope you got as much out of that podcast as I did. I personally really love the idea of grounding and spending more time actually connecting with the earth and I have to say, as someone who lives in a colder climate, I'm pretty jealous of his morning beach walk routine, that's pretty awesome, if you're near a beach and it's not snowing, you should get on that, that's pretty awesome.

Now I have a question for you guys, any listeners, do you have any experience with grounding mats? If so, hit me up on Instagram, @themusclemaven, tell me your thoughts, I may or may not be investing in one of these because I can't walk around barefoot half the year or I'd get frostbite.

I'm interested. But let me know what you think about grounding mats, that would be great. Thanks again to Barista Boost for sponsoring today's podcast, if you want to make a perfect drink, i.e. coffee, more perfect by adding brain boosting delicious ingredients, Barista Boost has you covered and importantly for me, it makes your coffee taste like a delicious mocha. Not too sweet but nice and rich and decadent. Especially if you blend it up in your Nutribullet or whatever you have. I love this stuff. Anything with cinnamon and collagen and coco is going to get a thumbs up for me.

Just a reminder that they are anxious to have you guys try their stuff too. If you order Barista Boost on Amazon, you get a listener's discount, it's bbbpaleo1. Try it out, let me know what you think and that's that. Unfortunately, you're going to have to wait until next year for the next podcast. The good news is, that's really pretty soon.

Our next podcast interview is actually with the founder of Addictive Wellness which is a natural vegan and paleo, raw chocolate company that is furthering the very noble cause of positioning

chocolate as a health food. I am 100% behind this as you probably already know and we're going to talk to Sage, he's the founder about super foods and adaptogens and how he's managed to put those together in a chocolate that is delicious, we talk about some of the other stuff that he's in to like cold water immersion therapy, breathing practices, all kinds of fun stuff, maybe give you some ideas for some new year positive healthy habits that you might want to try.

Until then, happy holidays, happy new year, thank you for being with me and I will see you in 2018.

[OUTRO]

[1:02:32.8] AV: Paleo Magazine Radio is brought to you by the Paleo Media Group and is produced by We Edit Podcasts. Our show music features the song *Light It Up*, by Morgan Heritage and Jo Mersa Marley, and on behalf of everyone at Paleo Magazine, thank you for listening.

[END]