EPISODE 208

[INTRODUCTION]

[00:00:10] AVH: Hey everybody, welcome. I had a lot of fun talking to my guests today. They are Dr. Nasha Winters, and nutrition therapist Jess Higgins Kelley, who collaborated on a book called *The Metabolic Approach to Cancer.*

Now that may not seem the most light-hearted topic in the world, but these two women are so smart, so positive and the book is so full of actionable advice and information that I know I finished this interview feeling good about the information that's there, the work that they're doing and everything they're providing for people to be healthier and even help prevent and reverse cancer.

Dr. Nasha has been working in the healthcare industry for 25 years. She's nationally board certified naturopathic doctor, licensed acupuncturist, practitioner of oriental medicine and is a fellow of the American Board of Naturopathic Oncology. She has incredible story; she was motivated in this area by a terminal cancer diagnosis 25 years ago where she was basically given months to live.

Now she lectures over the world, and among many other things she discusses the benefits of a whole foods, nutrient-dense therapeutic ketogenic diet for cancer patients. This is just the tip of the iceberg in terms of what we cover in this interview, but we talk a lot about for example the difference between keto at all costs diet, i.e. eating whatever, just like your keytone meter gives you a good reading.

I talk about this a couple times and I hope that I'm not pissing anybody off too much, because look, we all have our own journey as – you see that stuff on Instagram and it's like people eating bacon covered in melted cheese, or a McDonald's patty covered in something. It's like #keto. I don't know.

Anyway, there's a difference between that and a real nourishing whole foods version of a ketogenic diet that actually actively helps treat disease. Basically, we talk about how not all keto

diets are equal. We talk about why cancer loves sugar and ways to detox your diet and incorporate all these natural and anti-inflammatory elements, and how to approach cancer and chronic disease with a combination of functional and holistic medicine with western medical approaches.

I think that that's a really important conversation to have, because even as someone personally who, knock on wood, thankfully is not dealing with any of these major issues right now, sometimes I can become overwhelmed with how best to combine the reactionary medication-based approach that is prevalent today, which is sometimes absolutely necessary with the more proactive connected holistic approach that functional medicine has.

I think that this is a really, really beneficial chat and I felt smarter after it. I hope you do too. I think everyone knows somebody who can benefit from this information. I hope you get a lot out of this interview with Dr. Nasha and Jess Higgins Kelley.

[INTERVIEW]

[0:03:07.8] AVH: All right, Dr. Nasha, Jess, thank you so much for being here. I appreciate you being on the podcast.

[0:03:13.0] NW: Thanks for having us.

[0:03:14.7] AVH: It's okay. We're going to have lots of talking over each other. This is what happens with lots of people on the podcast. That's okay. You guys feel free to do as much talking as you want. I'm going to try and talk as little as possible, because I have a ton of questions for you.

First, I'd love if you could both just give us a little bit of intro about yourselves and who you are and your background and how you came to write this book together.

[0:03:35.8] NW: I've been at this for myself for over 25 years of trying to navigate my own terrain, my own healthcare. Then of course moved in to private practice and over time realized

that a better way to do this was in teaching the masses versus a one-on-one approach, which then led to me facilitating cancer retreats.

That is where Jess and I's lives merged together in that she helped come out and do some teaching at some of these retreats. We became really pushed by our patients to put this information in writing, especially guide them with all the confusing information out there about food and about how to eat for health.

I think Jess and I – I can't speak for her, but she'll say this as well, I think we got tired of answering the same questions over and over and trying to spend so much time debunking myths, but it was time to get a good book out there on this. Yeah.

[0:04:29.5] JHK: Exactly. Similar path, I've just always been incredibly drawn to and passionate about nutrition and always felt like it was just a missing link as part of the standard of care in oncology. Just over the years switching my private practice from just a general family practice of its evolved from the days when gluten-free was hip and we went from "Well, you should try to the gluten-free bread."

Then like, "Oh, my gosh. We realized that all grains are bad and this whole paleo is not bad." You know what I mean, this whole paleo movement started addressing all these different health things and diving in deeper and deeper for people, but that was really met with such resistance by RDs and conventional nutrition wisdom, but at the same time we're seeing all these amazing results that's backed up by research.

This transition into really focusing on oncology, but also across the board to all chronic illness and seeing, like Nasha said it's like I spent half my time consulting with people trying to explain why a vegan diet is not supportive for a chronic illness case. It was like repetition, repetition and so over time it was like, "Okay, let's just get this out there and let's have it reference to the gills and so that we can stand on every single point that's made," and it's been really nice to be able to just point people back to the book and have a really solid nutrition guide out there, because there's so much misinformation about best diet.

There is no one-size-fits-all. Everybody's different. Everyone has their own unique bio-individuality, and that's why our book crosses the borders in a lot of different ways. I was so fortunate to have connected with Nasha and been able to work together on this project. We call this book our baby. It's just been wonderful, just to watch it all unfold and be able to reach so many people.

[0:06:21.9] AVH: That's awesome. Well, I mean, I'm sorry that you're going to have to be repeating yourself a little bit more today in this podcast, but at least there will be a good information, the good stuff and the stuff you want to get out there. I appreciate that. Dr. Nasha, I know that you have a really personal story behind this too, because you went through some of these health issues yourself. Did you want to talk to us a little bit about your story?

[0:06:43.3] NW: Sure. I mean, I think probably anybody drawn to medicine in general especially when it comes to something scary, like cancer or any other chronic illness, we have an intimate personal relationship with it, whether directly or indirectly with somebody that we're very close to.

Jess and I are really on the same page that it was life experience that also birthed this book concept as well. For myself, I was pretty much born with terrible health and it just progressed as I got older and older and especially as I got into my menstruating years. By the time I was 19-years-old, I pretty much spent every other weekend in ER in the hospital. I was really sick and no one could figure it out.

By the time they finally did diagnose me, it was so late stage and so far down the road that they had nothing to offer me. That diagnosis was a stage four terminal ovarian cancer process that had gone amok in my body and was shutting down all my organs and pushing off important things in my body. It wasn't working anymore.

That's the short story of it, but because I was given no conventional options because I was basically sent to a palliative Hospice type of ending and given just a few months, because I was also pre-med at that time and have always been inquisitive and very interested in science, I started doing my own research. In fact, at that time, this is long before Dr. Google, long before

any resources that we have are literally at the tip of our fingers, or the tip of our voice if we're talking to Siri today – I ran across some old biochemistry books in my library at my college.

I started reading about Dr. Otto Warburg and his theories and understanding of the metabolic aspect of cancer, which of course was not in any of the more up-to-date textbooks at that time, because it had basically been buried for over 50 years. Pretty interesting to stumble upon this man who now really give voice to a lot of the work that Jess and I do.

That's set me off on a 27, almost 27-year learning curve of learning how to keep tweaking my own body, enhancing my own terrain, optimizing my own health, being a living laboratory for myself, but then also having enough people in my life and my practice as tens of thousands of people with hundreds of thousands of labs that I've reviewed in my quarter or century or more of practice, to help me learn and see and understand and see patterns and know what to expect with the types of treatments we are recommending.

[0:09:10.8] AVH: Amazing. Okay, so I have a lot of questions and I want to try and start high-level and work our way in if we can. One of the first things I'd love for you to describe for us is the term that you mentioned in the book called deep nutrition. Can you tell us what you mean by that?

[0:09:27.3] JHK: I'll fill this one in. This is Jess. There's such a broad world out there when we talk about nutrition. There is surface level nutrition that says "meat is bad, meat is good." Now we take this to go into the whole concept of deep nutrition as Cate Shanahan has done in her book, but this is looking at not just a ketogenic diet, but therapeutic ketogenic diet, or other metabolic diets, where we actually also integrate the power of phytonutrients.

Deep nutrition is looking at activating and regenerating on a mitochondrial level as opposed to just food in your mouth to get into ketosis. That's where we see a lot of ketogenic diets falling a bit short is because the only thing that is in people's mind is the number on their keytone meter. Certainly, in the oncology world and across any chronic degenerative illness, we want to know that not only our people in ketosis, but they're also consuming foods that contain a vast array of polyphenols, flavonoids, all these different things that have been researched and proven to affect the terrain on a cellular, deep, genetic level.

That's why we're taking in a lot. We have to take nutrition far deeper than saying "Eat tomatoes." We're saying, "You don't just eat tomatoes, you eat locally, organically, bio-dynamically grown cherry tomatoes that have a bit of purple on them, because those have the most nutrition. Those have the most phytonutrients," and that is where the magic happens with nutrition therapy.

We have to take it deeper today with these chronic and complex cases. Sadly, we see cases like, Nasha's all the time now, where it's like people get diagnosed, they're already stage four. We have to harness the most potent nutrition elements in order to really see change, and that's where the whole concept of deep nutrition comes in is really getting down to the nitty-gritty of what type of carbohydrates are you eating, what type of protein are you eating.

It's not just like, "Hey, go out and eat some salmon." No, it's we have to work very hard to find high-quality foods, because sadly most of our mainstream food sources have become so contaminated. It really becomes a struggle to find these deep nutrition sources and locally has more nutrition sustainably, organically, bio-dynamically grown, heirloom, they have more nutrition and so that's where our concept of deep nutrition comes in. This is not just a diet book. It's actually using the bio-chemical science of nutrition therapy. That's where I think our book really is different than other "diet books."

[0:12:29.6] NW: I'd love to add a tiny bit to that if I could. This is Dr. Nasha. Kelly just nailed it, because I think that she and I have done this long enough that we can see that people can easily get into ketosis. They can do that with supplements. They can do that with fasting. They can do that with going out and just eating the patty of a McDonald's burger and foregoing the milkshake and the French friends. People can get there, but can you get to a metabolically sound, fat-adapted, deeply nourished state that is actually disease treating. That is what she and I focus on.

[0:13:03.0] AVH: Okay. Yeah, I really appreciate this conversation around therapeutic ketogenic diet, because keto is gaining a lot of ground these days. It's getting really popular, and especially I feel like in the paleo whole foods space, because it almost seems to a lot of people

like it's the next step. You go from a standard diet to this whole foods, unprocessed primal ancestral-based diet. Then when you want to level up even more, you move to this keto diet.

I guess, we can have the conversation later about whether it's appropriate all the time for all people, but it's also human nature that you see people want to have shortcuts. They want to do things quickly and easily and people here, "Okay keto, high fat, no carbs, you lose weight, you get ripped fast," and it's like the immediate gratification of checking your keytones. I'm on Instagram looking at people who are eating just like bacon covered in cheese # keto.

I really get where you guys are coming from with this, and I'd love for you to talk about really get into a bit more of the science, but at a layman's level here, because I'm not a doctor. How the ketogenic diet does help treat cancer? I guess, by starting too with why cancer cells love sugar so much and how that works, because one of the things that I was shaking my head when I was reading this book was when they were talking about folks who are undergoing chemo and they're feeling sick and they're nauseas and doctors are saying "Just eat whatever you can, just to get some calories in."

They're like encouraging people to eat Oreos and stuff and how that's directly hurting the work that they're trying to do. I'd love for you guys to yeah, talk a little bit about the connection with cancer and sugar and then how the ketogenic diet really helps.

[0:14:50.2] NW: Well, I'll take a first little stab, because I know Jess could speak on top of this in a crazy awesome way. The piece that I keep in mind is this all comes down to our mitochondria. The mitochondria, the little power houses of ourselves, these are what make ATP – this is what makes our energy. You cannot drive a car without gasoline, just like you can't drive a body without ATP.

Ultimately, what has happened in the last 250 years or so is we have really altered the fuel source in our gas tank. We can still sputter down the road just fine. We're belching and farting out our gas tanks along the way, literally and figuratively, but ultimately what has happened is our mitochondria have been damaged more and more and more in the last few centuries.

I use the analogy a lot in talking to patients. I think of our mitochondria as a bucket and that is where Jess and I dive deep in the book, is what goes into that bucket are these terrain 10 concepts. Is it something that you got from your parents, so your epigenetics is that you live on a golf course, so you're being absolutely poisoned by pesticides, fungicides, herbicides? Is it that you are in a toxic relationship, and so you're being assaulted with toxic emotions on a regular basis?

What is going into that bucket and damaging those mitochondria at the cellular level. That's one facet of this that gets really overlooked when we talk about starving cancer is that we forget that it's not just about starving glucose, it's about changing the fuel source for the mitochondria and it's about making the mitochondria heartier, so that they can ward off all disease processes, so that they can ward off damage genetics and prevent outcomes such as cancer and chronic illness.

[0:16:30.7] JHK: Yeah, that's great. Just to tag on to the back of that, I think so many people end up going in and they hear, "Well, this is all such a myth. Cancer doesn't feed on glucose." We say, "Why don't you ask your doctor why their PET scans work." The way a PET scan works is you ingest a glucose-based radioactive solution and it gets gobbled up by actively and rapidly reproducing cancer cells.

We know that the outside, or the receptor sites for glucose increase the rate of [inaudible 0:17:06.2] increases. Cancer cells, they're rapidly dividing, right? They're trying to grow as fast as they can. It's like they're trying to run a marathon or climb Everest. They need a ton of fuel to sustain this rapid growth. Glucose, great. It's like keto on a candy bus. They love that glucose. That's the preferred fuel source.

Now, over time and this flip-flops a little bit into the appropriateness in the ketogenic diet all the time, up until 200 years ago, certainly more or so about 12,000 years ago when we started domesticating greens, the human species would go naturally into times of fasting, naturally into times of ketosis in the winter months, or when there wasn't a deluge of food.

Humans have been keto-adapted for millions of years. Now, we have big gulps and we have just calorie tidal waves coming in every day. That just doesn't provide the type of protection for our mitochondria that we're used to on a cellular level. Cancer cells are extremely opportunistic.

They can say, "Wow, look at all these extra fuel hanging out." We all have cancer cells, but it just takes a hearty push from one or combination of the 10 terrain elements that we've identified in the book to really give those guys a, "Hey, we can do this. Let's get bigger. Let's divide and let's grow."

I tell people that the ketogenic diet is not necessarily a cure for cancer, but what it does do is it helps to destabilize those cells. If your cancer cells are climbing Everest and then all of a sudden you take away their hot chocolate with butter, they're going to poop out. Could they still summit? Maybe, but it's going to be a lot harder for that to happen, because that fuel source has been taken away.

It really compliments other therapies and other approaches as well, but cancer cells is the preferred fuel source, so it really helps to destabilize them. The ketogenic diet is the optimal destabilizer for a wrap of the evolving cancer process.

[0:19:18.5] NW: I love that you bring that up just because the other piece that's so key about this that we forget and that we're finally starting to really get the research around is that mitochondria themselves are what keeps apaptosis in check, which means programs cells up. When your mitochondria aren't working, you're not killing off the weaker more damaged cells as you should be, and cancer is pretty much just cells that do not have any apaptotic signaling anymore because their mitochondria are so damaged.

That's the one cool thing that a ketogenic diet absolutely can do is it can upregulate that apaptotic nature, as Jess said, that it can enhance other therapies. The other side of it is when our mitochondria aren't' working well and we are leaning more into the burning fuel of sugar – sugar and insulin specifically desensitize cancer cells to almost every therapy out there, conventional or otherwise.

The idea of this being a team player is so key to bring onboard, because we do hear people say, "It didn't work for me." I mean, there's so many reasons as to why, because it's never meant to be a standalone. It's meant to help the whole process respond better as a whole.

[0:20:27.2] AVH: Okay. You mentioned that human beings have existed in a fat-adapted and a fasted state throughout history. Would you say that – I guess, you guys have alluded to, there's a lot of different ways to go about this, but that ketogenic state that may be ideal for people in addressing health issues may almost have more or equal amount due to fasting versus the actual food that they're – I mean, the food that they're taking in is important, but the fasting element of this may be important too. I know you talk about it in the book, different ways that people can fast and what may work best for folks who are undergoing cancer treatment?

[0:21:10.0] NW: I'll say one piece related to chemo and then I'll have Jess run with the rest. Basically, we've been able to show through people like Dr. Valter Longo's work that fasting around chemotherapy, so basically a long fast. Upwards of 48 hours prior to the day of chemo, plus the day of chemo and up to 48 hours after.

You're looking at a five-day window of fasting. Nothing by mouth, but water, herbal tea, perhaps bone broth. The very basics, right? Very, very basics, that actually increases the response to the treatment. Just if you did chemo by itself, or fasting by itself, fasting wins. When you put chemo and fasting together, that wins exponentially over the others.

That's the layman's version of that. We also find that when our patients do fast around chemo or other conventional therapies that their side effects are better and they tolerate the treatment better and longer. They're able to stay on track with the timing of their treatment and they have a better quality of life, and then their healthy cells start to get even healthier, because the sheer fact of fasting increases biogenesis of new healthy mitochondria, and that is another kind of bolstering up of the good to outweigh the evil.

[0:22:23.7] JHK: Yeah. When it comes to the implementation, every person is going to respond differently than another when it comes to fasting. We have folks more like "Wow, I love my five days a month, where I just do a water fast." I'm talking from a preventative level.

Then we have folks who do really well, say with a two 18-hour windows a week, and this has also been shown to prevent breast cancer recurrence in some cases. Some people may want to do this intermittent fasting, where they get a great window; 12 to 24 hours a couple times a week. That works really, really well as well. What it does is basically there is so many systems at play. There's so many biochemical reactions that occur in the body, that you're constantly trying to metabolize food.

It's like, sometimes you got to drain the pool and clean it, right? Fasting drains the pool, allows the scrubbers to come in and get all of the dirt and grime and old cells and nasty stuff that's starting to overgrow. It allows those cleaners to come in and let your immune regenerate and do all these other things. That's where we see this really protective mechanism of fasting. That's very helpful to give the body a bit of a break.

People do need to think about how it fits bets into their lifestyle. Are they better to skip meals in the morning? Are they better to skip meals in the evening? Are they better to do a weekend fast? There really is a lot of customization, I should say to figuring it out. We also certainly look at labs in tandem with this to figure out what's the best fasting plan for people, because there are several nuances, but as a whole it's just – it's everyone should be doing it.

Emotionally visits a big – it's a hot button for people, because we've gotten so addicted to food that people, they don't know how to feel hungry. Feeling hungry for people is like a deep survival, emotional – it's very challenging for people. We have to work on that emotional level, to let people know that it's okay to feel hungry. It's actually a really good thing, because it actually increases brain power and energy and all these other things, because when your body is deprived of food, you better rev up your engines so that you can get out there and find more food, or else you're going to pass away. There is so many different cognitive immuno, many, many different benefits to fasting that we see in addition to disease prevention. It's a powerful tool.

[0:24:51.6] AVH: Okay. I'm glad that you said everyone should be trying this or attempting this, or working this into their lifestyle somehow, because it leads to my next question. Circling back to keto approaches for everybody. Not just people who are actively sick. I think it's safe to say that most of us and the listeners who listen to this podcast know that the standard American diet and the huge volumes of processed foods and sugars and grains and things like that in our

modern food landscape are not good, and that we should be minimizing that extra added sugar and nasty stuff as much as possible.

However, because – again just because keto is such a big topic in our world these days and I'm hearing it so much and I'm talking to people so much, it is hard sometimes for people to find the nuance and find the personalized approach that works for them, because we like to just be told simple steps and say, "Just do this. Just fast and do this fast and eat just this food and do it," because it's easier and then we don't have to think about.

Then there is the black and white, well it's like, okay, now all carbs are bad and – every carbs and carbs – we should never do that. That may not be appropriate for everybody. I guess, what are some high-level concepts, or things to think about or places to start for people who want to obviously have a healthy diet and something that's going to encourage healthy cells and discourage cancer cells.

Is this keto fasting protocol that people can figure out for themselves, is that a preemptive thing that people should be doing to ward off this kind of injury, or this disease? Just talk a little bit, like bring it full circle for people who are healthy, active, fortunately not suffering from these kinds of issues right now, but want to have the most optimal diet. How do we approach this?

[0:26:44.7] NW: First of all, one of the things I really want to point out is when Jess and I wrote this book, of course the initial audience was written for somebody dealing with cancer, or trying to prevent a recurrence. By the time we finish the book we realized, "Holy cow. This is a handbook on how to live well." This should be called the metabolic approach to living, or layer to health, because we realized as we started teaching this, like this should be standard issue for everyone understanding how to take care of themselves.

That being said, of course when someone is dealing with a very chronic disease process needing to be in a certain state of metabolic function for a specific period of time with a specific end-goal in mind of perhaps elongating life, enhancing treatment response etc., they look very different among the cancer world than it does among just fitness, or longevity.

I do want to make sure that point is made, that of course when Jess and I are working with folks, we're usually helping people survive. Today, because one in two men and one in 2.4 women in the United States will have cancer in their lifetime; let that sink in for a moment. This is very important that folks start to get hip to not waiting until they're a hot mess and have to see somebody like Jess or myself, but to start pre-empting, to really start to be proactive.

That is where you look culturally – every culture on the planet had a window of time of fasting, whether it was Ramadan, or whether it was lent, or whether it was Fridays giving up red meat and just doing fish in the Catholic world. There have been cultures for millennia that had some just so elegantly discussed, or have took out the garbage, gave that much needed break to the body.

Then when we're sick, we tend to fast, because we don't feel like eating. Animals in nature, they don't eat when they're sick or they eat certain things. These are the places we're coming back to tapping back in to our natural resources and our natural rhythm and our natural way of being on this planet and we've gotten so far from that, because we are on literally 24/7 every day of the year, food access, constantly light access, constantly living and breathing by the blue light of our existence and that throws a whole bunch of things into the mix.

You have to do your best today to clean up the garbage and I'll let Jess dig in deeper as to why this is a very beneficial thing to bring in for even the healthiest of people and maybe strategies of how to individuate that.

[0:29:17.9] JHK: Yeah. With the research we're finding it's really interesting, is that there is different pathways that are more active in the winter, that are different in the summer in human bodies. A big part of our book, one the chapters on biorhythms, is we need to – I look at ketogenic diet from a preventative standpoint with a big seasonal spin. Ketogenic diet, we are genetically programmed in the winter to – there is not as much light, so people wouldn't have been out fishing or gathering, or all these other things.

There is typically less carbohydrates. As I dive more into the world of foraging for food, you realize it in the winter people are naturally geared to be more in ketosis, right? Summer time, there is more sunlight, there is more glucose available from what is sprouting in your backyard,

what you have access to. When I'm working with people from just a prevention standpoint, we really work towards thinking about more of the paleo-centric plant-based focus in the summer time where there is a lot more abundance glucose, but there is also more sunlight, so you have more time to burn that off, whereas we're not sitting inside by candlelight reading books in the winter where we should be eating less fat.

I think that that we've gotten flipped with our biorhythm, so in the winter now the sun goes down, at least for where I am, very early, but people are staying up with this artificial light and they're eating whatever it is. Even in the paleo world, it's like maple syrup is cool. No one should be eating maple syrup until these maple trees start producing sap which is this time of year.

Even in the paleo world, we need to adapt our diet to be more seasonally tuned, and this is how we really connect with that primal way of being is we've got so set. I'm like, "I follow this diet 365 days a year," but no. No human ever did that. Things have to adapt and they have to change, but they really should change on a seasonal basis and be based on the food that you have available to you and the climate you're in.

I mean, what we're going to tell someone in Hawaii to do, versus someone who's living on the Canadian border, may look very different because we really – there is a big element that's so overlooked in the role of our geography, in our geopathic awareness and our body's awareness. I think that that's to me where we really see this awesome way to fine-tune our health to become seasonal and adapt our diet seasonally, based on light, based on glucose.

[0:32:01.5] AVH: Okay. I'm Canadian. Does that mean I get maple syrup year round, or just – There's so many good paleo desserts out there, but I hear what you're saying. I totally hear what you're saying.

Okay, so both of you, you've mentioned earlier and I'd like to get into this a bit more because I think it was really eye-opening for me and I think will be helpful to our listeners. You talk about the 10 areas to look at and measure of the 10 hallmarks of cancer, and then related these terrain questionnaires that help you figure out where you are and maybe some areas that you need to be focusing on more that you maybe need to be more aware of.

It is a lot more than just food. Food is crucial, but there are a lot of other components. Can you talk to us a little bit about those hallmarks and the terrain that we need to be looking at for ourselves and discovering?

[0:32:49.3] JHK: There is the hallmarks and then there is our terrain 10, which they're sort of a bit – there's some crossover, but there is a little bit of difference. In the allopathic western medicine world, they have identified 10 hallmarks of cancer cells that cancer cells use to basically hijack the system and allow their frenzied growth.

It's not just, hey the cancer cells just start growing. It's like, they're able to overcome several different elements that our body has in place, all these security systems is how I explain it. These security systems include evading the immune system. Cancer cells are able to do several different things and it gets super science, but they can evade detection by the immune system.

They also have a way to extend their telemeter, so they are able to reproduce more times than a normal – generally can go through mitosis 40, 50 times before it does self-destruct. Whereas cancer cells, they become immortal. They do all sorts of these 10 different things and we're constantly learning more that cancer cells are incredibly, incredibly complex.

That's recognized and that's where allopathic conventional medicine designs drugs to target those specific genetic actions that cancer cells do, and to say, "All right, well lets target that telomere function." Bam, they do one drug, one target. Whereas, we're looking at cancer from a biological, holistic, complimentary, whatever you want to call it, where it's like okay, well we're going to look at all these hallmarks, but we're also going to translate that into more of a global approach, which is where we came up with the terrain 10. Nasha.

[0:34:50.1] NW: Take it away. You're awesome. This is why we are each other's baby book mammas. I feel like you're wishing me breathing exercises now. On to that piece, like with Jess, I'm really glad she brought up the fact that we have drugs now that are coming out to treat these particular 10 hallmarks of cancer. Just a few examples of that so I can leave this under the terrain 10.

One of the hallmarks is tumor promoting inflammation. We have a lot of pharmaceuticals. We've got NSAID, so acetaminophen, ibuprofen. We even have things like cox 2 inhibitors like Celebrex that we'll use to support that process. We've got a void into the immune destruction, so we've got things where we might use immune therapies, or we might use immune suppressive therapies depending on the day and time, but we have other therapies that we allude to in the book, such as CBDs, so the cannabis family and mistletoe that are immune modulating.

They're like the smart drop bombs here that can help the body determine the best route. Of course, metabolism is one of the hallmarks. That's where we thought initially ketogenic diet was only working there, but thankfully to people like Adrienne Scheck and Dr. D'Agostino and others in the research world, we are finding that the ketogenic diet itself directly addresses all 10 of the hallmarks of cancer; from those cell proliferation issues, to the anti-growth signals, to apoptosis, to the inflammation, to genomic instability, etc.

That's where even when Jess and I had this book come out at that time, there were only three or four that we were able to see that ketogenic diet was addressing. Now we know it hits all 10. That segways into when folks like colleague Dr. [inaudible 0:36:31.6] who really understands this is a metabolic disease gets excited about our book. It's because he realizes that it takes a lot more than just starving the body of sugar to make the mitochondria happy.

I mentioned this earlier about the bucket. That bucket is your mitochondria and the things going into it. I started to describe this, but one of the big things is epigenetics. We're already finding that a ketogenic diet is an age dock inhibitor, which in the world about the genetics means that it changes the way we methylate. That is a big bang deal.

We also know metabolic processes. Jess and I had spent a lot of these interview talking about we've been a duel fuel system for so long, being able to burn glucose and fat within the last 200 or so years and become predominantly sugar burners instead. Putting us back into hybrid engine mode is what we teach in the book as well.

Environmental toxicants. This is one that Jess could go off on for days, because this is one of her areas of expertise and passion is that we are living in a toxic suit today and it's very

impossible that you can find a clean place on the planet. We're exposed just so much within our environment, what we're breathing, what we're drinking, what we're eating as we go integrate detail of that.

Our microbiome, hello. I mean, when the book came out, microbiome was just becoming a hot topic, and now you can't shut up about it. It's everywhere. We know now that our immune systems don't work well if we don't have a good microbiome. We know that certain pharmaceuticals do not work if you have dysbiosis, if you've got messed up microbiomes. We know we need to put a lot of attention there.

Then it rounded out, our mental and emotional body. This is why its last chapter in our book, because it's often the last thing people address, where if we could have a perfect world, Jess and I would put this at the beginning of the book. We know that turns people off, that freaks people out to dive into the ghost in the closet right from the get-go, that that's a place that changes your epigenetic expression, that keeps the body in a high state of alert, that keeps the body in a high state of inflammation.

Even as the driver as Jess mentioned and a lot of our food choices, because we often use food as love, or ways to self-soothe. Then things like hormone balance, Jess already mentioned the circadian rhythm. I've alluded to inflammation and then of course, the immune system. These are all the things that we talk about in these chapters within the book that go into the bucket and impact the way our mitochondria thrive, or die.

[0:38:51.9] AVH: Okay. I would actually Jess, I would love for you to get into detail on some of these, like the toxic factors of our lifestyle, because one thing I will say as scary and overwhelming as it can be to contemplate just how toxic our lifestyle is, the positive side of that coin is that there is so much that we can immediately do to start lessening the toxicity of our life. There are a lot of things we can do that are going to improve our health and get rid of some of the stuff.

Before you do, I just wanted to talk about a couple of specifics and Dr. Nasha you mentioned CBD and I'm like super on the CBD train right now, so I just want to talk to you a little bit more specifically about it, because I have learned about it through the podcast and through various

people that I've talked to. I was reading about it mostly for fighting inflammation and also helping with sleep issues and calming issues and things like that, and I've been playing around with it and I've been finding a lot of success with it in some of my lifestyle challenges that I was not having success with before, and that was like down-regulating and calming. I think even a little bit with physical muscle recovery and things like that.

Can you guys talk a little bit about the CBD thing and how that's being used? Are there products, or are there ways of implementing it that are better? I guess, one other specific question is a lot of the stuff that I'm seeing these days is CBD, hemp-derived CBD that is completely THC-free. It's legal, it's easy to get people's heads around it, it doesn't have any of the psychoactive properties etc., but then I'm also hearing that it maybe not as effective as products that also contain THC, because that helps the CBD work. Anyway, I don't want to keep ranting, but if you can talk to me a little bit about the CBD and how people use it and what your thoughts are on that.

[0:40:42.0] NW: Well, what I love about this is that just like [inaudible 0:40:44.5], we're talking about *The Metabolic Approach to Cancer*, CBD fits beautifully in this. That it could be in its entire book on metabolic approach to cancer and health, because it too addresses all 10 of the terrain 10, as well as the 10 hallmarks of cancer for what we're finding in the literature.

The first thing that people need to understand is that we all have an in-born endocannabinoid system. We came pre-packaged to this planet with a system that recognizes how to utilize things like cannabis from nature into our body to use it for good. Again, just like food, just like we started doing the gluten after the cold war and we thought, "Hey, we're going to make more. We're going to make it grow faster with bigger heads and higher content of gluten," that's what we've also done to the cannabis world with our hybridizing of THC into higher strains of THC.

People love the high, and yet really the real medicine is around whole plant extract combination, and in fact, if it gets really down to it and my husband's an expert in this so you should have him on some time, and he's speaking on this worldwide and has a book working on this, is terpenoids. Terpenoids are the actual real medicine of cannabis medicine and this is where Jess and I groove out in the book about plant medicines, about the polyphenols and about all these things.

Well, guess what? The things that you love about food, like the smell of rosemary, or sage, or the savory herbs, or the things you smell when you cook your curry, those are terpenoids. That is where the real medicine lies. When we start to really get into a pissing contest between too much THC, too little THC, too much CBD, too little CBD, we actually are missing the real element of where the healing takes place.

Ultimately here is this, there is no such thing as a 100% pure CBD without any THC, because they're part of each other. You're getting a low percentage. That's how it's legally able to cross around borders, if you will, state borders. You are in fact, getting a little bit to enhance the effect and make it more bio-available.

However, certain people, certain conditions, certain endocannabinoid blueprints, certain epigenetics, this is what's so cool, of ourselves will need and respond differently to a certain mix, if you will, of terpenoids cannabinoids, even CBNs and THC and other components of the cannabis medicine.

I guess, I'm trying to help people understand it's not black and white, it's not sativa versus indica, it's not more THC, less THC, it's about you and your endocannabinoid system. For women, we tend to need a lot more of the immuno modulating hormonal regulating chill out the system, because many women are dopamine deficient and essential fatty acids deficient and actually need the pure CBD to get the best benefit or a higher CBD strain.

Whereas, a lot of men and again, this goes for both sexes as well, but there is a lot of people who are excess dopamine. Women like us who are more amped up, we have too much dopamine and a lot of people on the planet who feel better with a bit of THC have too little dopamine. There is relationships to your neurotransmitters that also relates to your hormones, that relates to your fatty acid synthesis.

Low fat diets, my husband could go off on this, have created major disruption in our endocannabinoid systems. This is why I think ketogenic diet is so powerful. It's up-regulating our endocannabinoid system. There is this incredible balance when you have a good omega 3 to

omega 6 ration, that you will respond better to everything around you, but especially to the cannabis medicine if you were using that as a tool.

If people are still on a super low fat diet, and they're trying to grow out on super high THC to fight their cancer, or fight their sleep patterns or their pain patterns, it may not work as well for someone still eating a standard American diet than if they're eating a really high-quality fat diet.

That's a whole mouthful right there and we could literally group out on any topic, but I think it's just good to make your listeners and you aware Ashley, there is a lot more to do this and we are learning so much, it's so exciting to see what's coming down the pipe.

[0:44:52.4] AVH: I appreciate that you recognize me as a fellow amped up woman, because that's absolutely – I'm seeing lots of amped up women on this podcast today. I love it at that is a part of it. I do. I totally think that this could see a separate podcast and we should talk offline and you can connect me with your husband, because I think this is something that people are really not only are increasingly interested in, but really finding a lot of relief.

I know as someone who's in this industry that's always experimenting and trying new things and being sent all these brain-boosting and calming supplements and natural products and stuff, I mean I'm hopeful about this CBD thing for everybody. It's a big deal. I'm really excited.

Okay, so next, I wanted to talk a little bit more about some of the toxicity in our lifestyle, but also some of the ways that we can address it. I know you mentioned in the book, you talk about things like as well as fasting and the ketogenic diet, you talk about medicinal mushrooms and hydro-therapy and sauna and forest-bathing and all of these cool things.

Can you guys get into a little bit of what some of these other major lifestyle factors are that are problematic, and then some ways that everybody can start to address them.

[0:46:05.0] JHK: Well, I think the biggest things are the things that we can't see, especially in conscious, for folks who are already aware of this and these are things like water and air are the two that I think people underestimate. That they're drinking water in our water sources,

especially if people are on city water or drinking out of plastic water bottles. The toxicity that that confers to us, and also our environment which ultimately comes back to us is really huge.

Our skin absorbs 60% to a 100% of what's applied to it depending on the part of the skin. If you're in the shower and you've got a lot of chlorine, or you're on a well but you haven't tested your water. I think you really underestimate the water we're consuming internally, but then also the water that were around externally. Really paying attention to water sources is a very big deal.

Then air. This is really as we see lung cancer just cascading globally. I think we underestimate what we're breathing. One of the things that I have all of my clients make sure that they do is go outside for at least 30 minutes a day, and that sounds like probably pretty easy to most of your listeners. Many people don't do it. We go from office to gym, to home and inside is the most toxic place we could be, because of the off-gassing that comes from paint and all of our different building materials.

For the lucky folks who are able to build their home completely with sustainable and low toxic materials, fabulous. Getting outside and having fresh air sources is so massive, because our lungs are just under such an assault from airborne toxins and we don't even see them. That can come on the form of flee stuff on our pets that come and lay on our beds, or a little bit of nail polish that we're going to breath in that some of those off-gassing things.

I think it's what we're breathing in and what we're drinking in goes beyond toxic food. Everybody knows that most foods that you find in the grocery store are – if they're processed they're likely not very good for you. I think we really got to start thinking about our air sources. In fact, there has been a couple studies that we talked about in the book that showed the closest that you live to an airport, so the closer you are to an airport, the higher the instance of cancers.

Then that dissipates the further out that you go. Nasha and I were on a flight one time and the got on the line and they were de-icing and some got out of the line and said, "Don't worry. It's not toxic." Nasha and I just lost it. We're like, "Yeah, right. Really? It's not toxic." Which is why anytime that you're traveling or you're in airports, we're really big on – or I tell people to make sure that they're using some essential oil stuff that's going to help get into their lungs.

If you're living in an old house and you've got old heating systems, you've got all these mold stuff that could be coming through the heating systems. People just need to think about being proactive, especially if it's elements that they don't see, like air. There is amazing the tiny, tiny particles that we don't even see floating around that can have very toxic effects.

Essential oils diffuse. I just read another great thing about sage and smudging and how that really clears the inside of your home and improves air quality, there is so many different things and that's just air.

[0:49:37.6] AVH: That's cool. It's cool you mentioned essential oils, because I actually just had a woman on the podcast recently talking about them. It was something I always interested in, but I wasn't sure like is this just some sort hippie dippy placebo effect, but there's actually like a lot more to it and there's a lot of science behind it. I think it's fair to say that even the people that are working the hardest to avoid these toxic environments are still going to come in contact with them.

There's a lot of ways, like you said obviously get rid of, like don't eat and drink out of plastics, like try to be outside and get fresh air and be in nature and things like that that are really good.

I have another question that you talk about sauna and sweating and things like that and that's another trend that I'm seeing people get more and more into and using that for therapeutic benefits. I actually just recently splurged and bought my own at-home infrared sauna that I've been using a lot that I'm really enjoying. But I'd love if you guys could come walk through a little bit like the science behind when they're talking about like sweating out toxins. Is that really a thing that's happening? What's the science behind it? Because I don't know if that's another thing that people are like, "You can't sweat out toxins. That's not a thing that happens." Talk to me about the therapeutic benefits of sauna and what that's really doing for people.

[0:50:51.7] NW: Well, first of all you've got a couple of incredible experts in the field that I could also send your way to just talk specifically to this, but the sauna sweating is a thing. It's a real thing. Here is why. Many of the things that we are exposed to today are water soluble and are fat soluble. The water soluble stuff pretty much just avoiding contact with it and drinking,

hydrating well and flushing out your kidneys by good hydration can just keep what we call this low residue toxic and it's just moving on through the building.

It's not fun to have in there. If you don't hydrate well, it's going to absorb into your tissues and that's what a lot of people are seeing when they're [inaudible 0:51:30.5], when they're swelling, things are puffy, if you wake up puffy in the morning. That's like the toxins are storing up. Flushing it with water and sweating helps a lot, but things that stick – by the way, glyphosate for instance is a water soluble toxicant.

The main thing is that it's not – doesn't give you permission to go out and keep eating things that are drenched in glyphosate or Roundup as its known, but at least it's to say, "Hey, if you test high in your urine for glyphosate, make sure you know where your exposures are coming from, avoid it, mitigated and drink, drink, drink, drink, drink water to flush it out, because you will get it out of the building." You can retest the pee and see you make a nice difference in that, and that makes a huge difference in a lot of people's symptoms of GI issues, endocrine issues etc.

Today, the highest rate of glyphosate I'm seeing in my patients are in my vegetarian and vegans who are still eating a lot of legumes and grains and a lot of my paleo community who are still drinking a lot of their wines. So you've got to get good quality wine people. I think that we've got some great vendors out there. No maple syrup, no wine, geez.

[0:52:31.8] AVH: I know. I'm taking all your [inaudible 0:52:33.5].

[0:52:34.6] NW: White warm wine with some good organic dark chocolate, which we're golden here. Those are just some things that people don't know. Things that are fat cycle, so things like certain pharmaceuticals, heavy metals, okay these things like to hide out in our fat storage, in our bone storage, in our marrow and our organs, that takes a bit more doing to get out.

That may be taking things that are fiber binding at steps, such as bentonite clay, such as psyllium husk, such as modified citrus pectin, such as any type of a form of fiber charcoal can grab, bind these things up. You need to sometimes liberate them from their hiding places. Frankly, I find no better way to do that than with a really good active sweat and preferably sweat

from far infrared saunas as the most detoxifying. The near infrared saunas are the most mitochondrial re-stabilizing.

If people have the money to afford a combination, do that. Either way, they both still do a little bit of each, so you're good with whichever you get. The goal is constant. You really want to be sauning, working your way up 30 to 45 minutes, five, six days a week if you know you've got a toxic converter. People like Walter Crinnion, who is one of my mentors in the field of environmental medicine says it's not a matter of do you have it. It's a matter of how much and how bad it is. Like how bad is it affecting you?

Taking that garbage out regularly, and again as we just said, when we Americans spend less than 15 minutes outdoors every day, you're not out there typically chopping wood, carrying water and sweating your – to the oldies. That's just not what we're doing anymore. You have to help it along and you want to be actively sweating on a regular basis, because as Jess also alluded to, our skin is our biggest absorptive organ, but it's also our biggest eliminatory organ.

There is definitely merit to getting this stuff moved out of you with help of saunas. Again, going back to ancient traditions, think of all the traditions you know out there that use sauna therapies, or heat therapies on a regular basis. That would be like Turkish baths, the Finnish, the Fins, the Japanese cultures, saunas, spas, hot springs, applications of hot and cold, jumping into cold after being in the sun, these had been around since the beginning of time as well, and we're just making a modern take on them today.

[0:54:47.0] AVH: Absolutely. I mean, it certainly feels good when I'm doing it. I'm glad that you're giving me likes and scientific basis for the fact that this is really working. It's not just making me feel good in the moment.

[0:55:00.0] JHK: What's really interesting too is that our bodies use heat to activate our immune system. There is a reason that fevers that our body heats up when we're trying to fight an infection, viral, bacterial. So when you raise that body temperature, you're like knock, knock, knock. "Hi, immune system. Let's rev it up." It really does do a big part of an immune stimulation as well.

Research has shown that the only way to reduce heavy metals, the studies that they have done on heavy metal toxicity is through fasting and through sauna. I mean, people go, "Oh, I'm going to buy an over the counter detox kit, and I'll do that for two weeks and that will totally do it." When it comes to detox, we have to look at P450 snips and know what's happening on a genetic level, because some people can't metabolize a lot of these things.

We have to know that people are eliminating. It's one thing to release these stored fat soluble toxins on a cellular level, but they have to release from the body. If you're not having great bowel movements, one to two times a day and you're not sweating, there is no way for those fat soluble toxins to escape. This is sort of – it opens up the channels and allows those toxins to release.

It's really important at the same time when you're sweating and you release these stored toxins, your immune system needs to be on point as well, because they want to make sure that they're eliminated, shuttled to the liver where the proper transformative processes take place.

I mean, the benefits of sauna, it's not a fad. It's so funny, it's all these things that have been around since – I mean Hippocrates time, where the use of heat for therapy, it's age old, I mean, it's hip and it's trendy now, but for good reason it's been used for very long time. It has several different applications on our terrain. It's just such powerful medicine.

[0:57:00.7] AVH: Yeah, it's funny. It's just like matcha and bone broth and all these other products right now. It's like we just discovered this amazing trait. It's like no actually, this has been around too long.

Well, I mean I feel like I could keep you guys here forever. I knew that that was going to be the case, but we do have to finish this up soon and maybe we'll have to have you both on for a part two. One question I'd like to end off with is more high-level and it seems to me, and correct me if I'm wrong and you can speak to this more eloquently than I can, but you both advocate for – it seems to me like a mix of both functional, holistic, proactive medical approaches, as well as obviously the more modern western medicine to address certain ailments. But can you talk to our listeners about how folks can go about combining the two? Because it does seem like at

times that holistic medicine, or functional medicine and this more modern medicine are sometimes at odds with each other.

People have all kinds of stories about talking to their doctors who either don't advocate for, or don't even trust functional medicine approaches and vice versa, and for people who really want to maximize their health and get the most out of both of these practices that they can without maybe undoing the benefits from one or the other. I think it can see overwhelming and where do we start and how do we start?

I'd love if you guys could just finish this conversation off with some hope and some tips for people who maybe dealing with some medical issues that want to draw from both sides and how they go about doing that.

[0:58:34.4] NW: First of all, I love that you're bringing this up to close, because I see both ends of the spectrum. I'm definitely a Libra, and so is Jess actually, so we're always about the balance. We'll see people who are being completely torn up by conventional medicine and we see people who are completely torn up "functional or alternative medicine."

The problem is is there's no one medicine. There is a bunch of tools that we've learned over 5,000 plus years from the Ayurvedas, to the Chinese medicine, to the homeopaths, to the nature paths, to the osteopaths, the chiropractors, you name it, the vitalistics, all the way up to our conventional medical paradigm today. It's all good. It all fits in the basket together.

The key is when and where and how to use it. When and where and how to apply it. Thankfully, to the miracles of modern medicine, we no longer have to guess. We can as I say in my mantra always, we can test, assess and address, and there is a million in one ways of how we do that, but one of the easiest cheapest best places to start to get a sense of where your terrain is in this moment is where Jess and I start off the book, which is the terrain 10 questionnaire.

That is a good way for you to find out what may be brewing under the hood of your own car that could be causing you problems that you're not aware of until it's too late. That may be a good starting point for you to dig a little bit deeper, with maybe some functional medicine labs, or

some traditional lab testing to find out if that's – if something is going on there and then address it accordingly.

[1:00:01.4] JHK: Yeah, that's great. I think the biggest thing that we're seeing is there is – we've become too specialized in medicine and we've got the gastroenterologist who doesn't talk to the neurologist, who doesn't talk to the oncologist. You've got patients bouncing around from specialist, to specialist, to specialist and then they bring on like a holistic, or a naturopathic, or a bio-regulatory medical specialist and they're like, "Well, why are we looking at the whole body?"

We become too specialized in medicine and we have an education and a communication gap. Allopathic medicine, they have their standard of care. This is their prescription. You have this cancer, well there are frontline therapies, these are second line therapies. That's what you're going to do. They don't look outside that box, because that's not really their world. Now what I have my clients do is show them the research. Our book is designed as an education tool where when doctors say, "Oh, there is no evidence that ancient medicine really impacts cancer." Well, here is over 200 references from the *New England Journal of Medicine* and other highly esteemed in the allopathic world journals that actually shows that it does.

What we need to do is start breaking down these bridges of specialization and getting everyone A, to talk to B, because your body doesn't know that your digestion isn't attached to your brain. In fact, we know without a doubt that they're two in one, that gut brain connection.

Medicine needs to hopefully and we're seeing it now. We're seeing a lot of allopathic doctors who are willing to bridge the gap and look at the whole body as a whole, but it's education and it's communication. I tell people "Your doctor works for you. If they're not interested in looking at your big picture, fire them and find a new one, because you're paying them."

I think the languaging and a lot of the way that people seem to take communication when they're sitting in their oncologist office is that well – "I'm just going to be told what to do" and really a part of the call to arms for our book is patient empowerment, where we really hope that people start learning about body and getting back into their body, standing up for their body and not viewing it as their enemy.

Like the women that have the shirt, like “My boobs are the enemy. Get these off of me.” I saw that I just crumbled. I’m like, “No.” We have to start loving our bodies, knowing that we can create a terrain that makes cancer overgrowth in a hospitable environment and really encourage it, because we vote with our actions and with our dollars. If people don’t like that their doctor is going to be really myopic and specialist and not talk to their other practitioners, fire them. Find another one who’s willing to be open and educated and who’s actually up on all the research that’s happened in the last 10 years.

If your doctor hasn’t been to medical school in the last 10 years, or hasn’t been up reading or staying abreast of all the new advances that we’ve made, I mean, boy, we have to expect more from our medical teams. It’s really what I think, and patients need to feel empowered that they can speak up for themselves and demand more, because they’re paying a lot of money to see these people.

[1:03:14.7] AVH: I love too that you say that these are all tools. It’s not like one approach versus another, because I think that that’s a problem we have in society in general is that when we want to take sides, that doesn’t help anybody and it doesn’t move us forward. I love the idea that you’re talking about these, or it’s just a – we have so many tools more than ever to approach these issues and that empowering ourselves and educating ourselves is the first and best step to getting better.

I think that your book is a massive step for people to in empowering people. I thank you both very much for taking the time for writing this book. I guess, the last question I have is if people want to read your book, if they want to learn more about you guys, where do they go online to do that?

[1:03:57.8] NW: Well, *The Metabolic Approach to Cancer* is found on Amazon, your local book stores. It’s also in all of the natural brochures across the country and a bunch of whole foods, which we’re really proud about. That’s one place, and then Jess and I also have a Facebook page of the same name, The Metabolic Approach to Cancer, where we try to keep bringing up data and research and information that keeps backing and validating what it is that we’re sharing in those pages.

[1:04:21.9] AVH: Great. Well, thank you. Thank you again both so much for your time and for all the information you've given us. I think it's going to be very, very helpful to our listeners. We'll have to have you back again, maybe digging down on some of these don't drink wine, but you can have CBD [inaudible 1:04:34.9]. Thank you again and we'll be in touch soon.

[END OF INTERVIEW]

[1:04:44.3] AVH: Okay. Thank you for listening. If you're enjoying the podcast, if you enjoyed this podcast, please do us a solid. Leave a nice review and rating on iTunes, so that I can rule over the paleo podcasting world with an iron fist, or I don't know, keep my job like one or the other. That would be great if you can leave a nice review and let us know how we're doing.

If you leave a review and I read it on the podcast, which I am going to start doing that, we'll send you some free stuff. Everybody loves free stuff. All right, next week's podcast is an interview with a fellow podcaster, Josh Trent. He hosts the Wellness Force Podcast. It's all about mental health and spirituality and we talk about all of that stuff and self-actualization and growth and emotions and feelings and ayahuasca, yeah drugs and hallucinations, all of that good stuff. Getting a little queasy just thinking about it.

That's why we got to do it. That's why we got to talk about it, right? You know this chat is going to be good. You don't want to miss this one. Make sure you're subscribed so that you can hear all about Josh's story. It's pretty incredible.

A final reminder that PaleoFX is coming up very soon. Paleo Magazine will be there representing, as well as the who's who of smart folks and the health and wellness and ancestral worlds to talk to you about being your most primal and healthy and connected self. You don't want to miss it. It's always super, super fun. Go to paleofx.com and get your tickets.

Or if sadly you will not be attending, you can follow along at all of our social media accounts at Paleo Magazine and you can follow my own at Muscle Maven, because I'm going to be just taking over in general and posting all about the fun people and stuff and food and things and all the good stuff that's going on with the show, so you can follow along if you aren't going to be there. That's it and I'll see you here next week.

[OUTRO]

[1:06:26.7] AVH: 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]