

**EPISODE 276**

[INTRODUCTION]

**[00:00:19] AVH:** Hey everybody, thank you for tuning in to Paleo Magazine Radio. I'm your host Ashleigh VanHouten and we're talking about one of my favorite topics today, which is meat. And before I even get into it., I just want to offer a little disclaimer here. I don't want anyone to think that I am personally advocating a carnivore diet or a keto diet or any other diet, right? I can tell you what I personally have tried and liked and I can tell you what is happening and trending in the world of health and nutrition.

I can share experts with you but this is not a prescription situation. I don't want you to think, "Man, she's talking about all this weird carnivore stuff and keto stuff on Paleo Magazine Radio all the time, what weirdos," I mean, you can think I'm a weirdo if you want, that's your prerogative but I'm just reflecting back to you, what people seem to be the most interested in.

If you are interested in something else or if you want me to talk about something else, it's your job to communicate that to me, so please reach out to me on Instagram, @themusclemaven or send us an email or a message across any of Paleo Magazine's social media and tell me what you want to hear because that's what I'll do. You tell me and I will deliver, okay?

With that said, I do have an awesome carnivore diet expert on the show today, his name is Dr. Paul Saladino. He's a psychiatrist and a functional medicine practitioner and he is all about getting to the source of chronic health problems, instead of just treating symptoms, which obviously I can get down with that.

He obtained his MD from the University of Arizona with the focus on integrative medicine, he completed residency at the University of Washington and he's a certified functional medicine practitioner to the Institute for Functional Medicine. In our chat which happened just a little while ago, we were both in Austin together for KetoCon and I managed to track him down and we got to chat in person.

He talks about his years of traveling pretty awesome adventures actually including a through hike of the 2,700 mile Pacific Crest Trail from Mexico to Canada. He talks about exploring the New Zealand back country. Years of skiing and climbing and surfing and all kinds of fun stuff and how these adventures, in the midst of his training and academic work, helped him realize the profound importance of nutritional choices on strength, performance and mood.

Interestingly, since he's a trained psychiatrist as well as a functional medicine practitioner, he talks about the intersection of psychiatric disease and systemic inflammation and he's noted that across his work, he seen some really rapid and dramatic improvements in psychiatric conditions as well as physical conditions from carnivore diet intervention.

Pretty compelling, pretty interesting and let's do it, let's learn, shall we? But before we dive in, I do have a new show sponsor that's pretty exciting and different. You guys probably know by now that paleo is about more than just diet and exercise, right? For optimal health and fitness, your body needs a lot of other things like good sleep and relaxation and also natural light. Which some of us are not as lucky to have access to all the time, every day, all year long, right?

That's why we want to kind of explore the idea of red light therapy and one company is looking to make that easier than ever for you, especially those of us who don't get to see the sun half the year. This is a company called Joovv and they — actually, I interviewed the founder of Joovv in Episode 271 if you want to go back and listen because there's a lot of research backing up light therapy, this isn't just one of those pie in the sky like sit in front of a light and all of your problems will be fixed.

There's research backing this stuff up and research is showing that regular light therapy can help improve skin issues, reduce joint pain, get better sleep, increase libido, all the important good things. It's worth kind of maybe digging deeper into this stuff and everyone from health nuts like Ben Greenfield to NFL and PGA athletes are using this technology. Even our favorite paleo mom, Dr. Sarah Ballantine who says she uses her full body Joovv products to ease joint pain and help her recover from workouts.

If you want to learn more about all of this, if you want to invest in a Joovv product, head over to [joovv.com/paleomag](http://joovv.com/paleomag) and once you're there, you will actually see a bonus that the Joovv team is

giving away to Paleo Mag listeners so you can actually like pick from a range of special add on gifts which is pretty cool and you just make sure you use the code 'paleomag' at checkout and you're golden.

If you try them out, I'd love to hear what you think, make sure you reach out and let us know on social media, @paleomagazine or personally @themusclemaven, okay?

That's it, on to my interview with the happy and healthy carnivore, Dr. Paul Saladino.

[INTERVIEW]

**[0:05:02.5] AVH:** Paul, thank you for taking the time, I appreciate it.

**[0:05:04.8] PS:** It's good to be here.

**[0:05:05.9] AVH:** Yeah, it's nice that we could do it in person because as I was telling you via email. I'm so used to doing this remotely and then it just worked out that we're in the same place because we're in Austin, here for KetoCon.

**[0:05:15.4] PS:** KetoCon.

**[0:05:16.2] AVH:** A little bit tired, full of keto cookies at this point. I would like to hear your thoughts about the show, whatever thoughts you want to tell us.

**[0:05:24.8] PS:** Oh boy.

**[0:05:25.2] AVH:** Listen, this is paleo magazine so you're allowed to knock all over keto, if you want to.

**[0:05:30.3] PS:** Yeah, I enjoy being here and meeting everybody, there are so many people in the space that I've connected with over the last six to eight months that I've never met in person that was amazing for me, I got to record a couple of podcasts for my podcast which is Fundamental Health and I got to give a talk which is super fun.

I wasn't a big fan of that expo hall, I think a lot of the keto world is going to 1,700 varieties of keto cookies and that bugs me. I'm not a fan of almond flours and nut flours and all that kind of stuff. And so it's just a lot of the stuff in there doesn't really move the needle for me, I walked around the expo hall a little bit and didn't eat a single thing and so yeah, it's great to have a bunch of people here who are interested in the ketogenic lifestyle and I think it's hard to create products that I'm super excited about.

**[0:06:21.4] AVH:** Well, you're also sort of on the other end of the spectrum too. Do you think that – I mean, my complaint about it is similar to yours, I'm a little bit more flexible or free in the things that I'm willing to ingest and I have a sweet tooth and that is sort of something, I have struggled with for a long time but it seemed really counterintuitive that I think at its core, for mainstream, the kind of things we want to take from keto is sort of less cravings and less reliance on sweets and snacks and treats that we bring with us everywhere.

Also kind of decreasing that sweet tooth, that so many of us have and it seemed like this was really, really counter intuitive when everything was just heavy, sweet, dense bars and cookies and cakes. It was odd.

**[0:07:05.1] PS:** Liquid fat bars and yeah, I'm just not a big fan of any of that.

**[0:07:09.6] AVH:** Do you think that there is a place for better versions of crappy things? Like are you somebody who is like, just you know, if you're going to make the switch and be healthy and just go all the way or do you think that there is, if it does bring people from like standard American diet and this is like a stepping stone.

And then they can keep going – do you think that there's value in that?

**[0:07:28.7] PS:** I do, I think we have to be careful with it, that people don't get stuck there but ultimately, any step in the right direction is a step in the right direction and I just think that it seems like the pendulum has swung a little too far and there's a little bit too much focus on it and this is kind of what you can market as a conference now. I see a lot of people doing it and a

lot of people trying to generate a lot of revenue for this so it becomes more and more available and people can get stuck in that kind of limbo.

**[0:07:56.6] AVH:** What was your talk about? I didn't get to hear it.

**[0:07:58.6] PS:** You didn't come to my talk?

**[0:07:59.4] AVH:** No, I wish.

**[0:08:01.0] PS:** It was about the carnivore diet, of course.

**[0:08:02.3] AVH:** Of course, we're going to get into that a lot, yeah. I'm already convinced, so I don't really need – I don't need anybody to convince me that the carnivore diet is a good idea because I actually like it. And we can get into that but how do people take more people asking good questions were people interested?

**[0:08:15.4] PS:** People were really interested, it was great to see it, id isn't know what turn it was going to be – it's a keto conference. But there were a number of carnivores here at the conference who are very well represented. There were four of us, I think speaking. There's William Sheffield, Shawn Baker, Amber Hern was here and I spoke and it was great.

The room was packed, it was like standing room only, there were tons of people asking me questions afterwards and it was fun. Admittedly, my presentation was a little bit last minute but I enjoy kind of doing things extemporaneously and in the moment and kind of seeing what happens and came out okay.

**[0:08:46.1] AVH:** Yeah, I mean, you kind of know your stuff, it's not like — you don't really need to rehearse this stuff anymore, right?

**[0:08:52.8] PS:** No I don't need to rehearse it and there was a little bit of a snafu right at the beginning around whether I was going to get the slides or not and I was like well if I don't get the slides, they'll just – without the slides. But it was great.

**[0:09:02.3] AVH:** It does seem like an interesting evolution from — obviously, I'm comparing this show to Paleo f(x) which is in the same place, it's a similar sort of concept, paleo, it's been around longer obviously, the conference. It's bigger but it seems like there is an evolution where people find paleo, they explore paleo and then it's like 2.0, well let's try this keto thing now, let's do this like really low carb approach and then there's almost now part three which is like just screw it, only meat, carnivore.

Why do you think that that process goes that way?

**[0:09:37.9] PS:** I think it's an evolution, honestly. It mirrors human evolution nerves we can talk about and I think that a lot of people find great benefits going to a paleo diet, I certainly did. I had a personal evolution where I didn't resolve all the things I wanted to resolve and I could tell very clearly that there were things that I had not fine tuned enough on a paleo diet.

I don't think everybody experiences that on a Paleolithic diet. I think a lot of people do and they look for the next step and whether their goal or their metric is weight loss or it's an autoimmune issue or it's a sleep issue or it's libido or whatever.

I think a lot of people who come into this space are doing so intentionally, they have a curiosity and then going to keep going down the rabbit hole and I do think there is kind of a progression and it is funny how people progress, sort of paleo and then keto and then often to carnivore.

**[0:10:29.5] AVH:** Yeah, there's a huge overlap. I mean —

**[0:10:31.5] PS:** Which I think is why all of the spaces sort of are kindred. They're all cousins and they all can benefit from each other.

**[0:10:40.8] AVH:** I don't want you to — I'm sure you find it boring to kind of introduce yourself with a bio in every podcast that you're in so you don't have to do that because that's available but one thing that I saw looking at your website that I'd like for you to kind of talk about, you talked about how you sort of came to this diet or came from paleo and through it.

How you kind of came to functional medicine through, you were kind of doing this cool adventures and nature journeys and through that, you were kind of realizing like how important food was and how important connecting with nature and being outside was and that brought you to functional medicine.

Can you kind of talk to that a bit?

**[0:11:15.7] PS:** Yeah, I think that it's a natural progression, I think if people spend time outside in the wilderness, they begin to think about how we connect with the wilderness and how we ate as humans before we were cloistered in cities. I'm not saying cities are bad things but I'm also suggesting that –

**[0:11:31.8] AVH:** They're not good things necessarily.

**[0:11:34.0] PS:** They're not invariably good things. Before we recorded the podcast, we were talking about you living in New York and Canada and this idea that I think a lot of great things happen in cities, we're in a city right now, we're in a hotel, we're in a concrete building, it serves a purpose.

New York where you live is somewhere that I've always been a little bit trepidatious to approach because of how frenetic it is but I think there's a lot of incredible people there and a lot of incredible ideas and then people come together in cities, they can do amazing, amazing things. On the flip side is that we have come from a wilderness lifestyle as humans, clearly. We need that, I think there's a lot of wisdom in that as well, there's a balance there, no surprise.

When I started spending a lot of time in the wilderness, I can quickly sort of not intentionally just sort of naturally began to discover was that I was curious about how to get food out there. How the heck am I supposed to get food in the woods all the time or if I'm climbing mountains. Of course I was bringing food with me a lot of the times. But I had a curiosity, how did my ancestors get food, how do indigenous people get food?

Then you start to think about a lot of the norms or a lot of the questions that people raise in biohacking circles about light, circadian rhythms, water, exposure to EMF's and that's kind of a

whole 'nother story. But in terms of the food, the questions were, how did my ancestors get food, what were they eating, what was available and how do I do this?

I've done it a little bit here and there, it's progressed over time when I lived in Arizona, I did some hunting which was quite revealing and I did a season of hunting with a bow. I have never hunted with a rifle but it was fun to learn to shoot the bow and then to stalk deer and think about how I related to the animal spiritually and then to get, to kill a deer.

**[0:13:17.8] AVH:** You learned how to dress them and everything as well?

**[0:13:19.5] PS:** Yeah. I had a patient at the time who was a taxidermist and he showed me how to – we field dressed it and then we taxidermy the whole thing and we actually only carved it up together and I mean, the most profound experience in that whole process was seeing the deer that I had killed and immediately, knowing that that animal and I had kind of made this exchange.

A lot of people I think have an uneasiness with this exchange and we were talking about I think it was a Ben Pakulski about this earlier in the conference that we don't do that enough anymore as humans and many people get squeamish about that and that is a real bad thing.

That exchange changed me as a human and I want more of those exchanges. I think we need to know that if we are eating animals and I think we should be eating animals as humans and we always have eaten animals, that eating animals comes with a responsibility, it's kind of like the scene from Batman or something, you know, with great power comes great responsibility, I think that's a quote from Batman.

**[0:14:18.9] AVH:** We are Batman, in this situation.

**[0:14:20.6] PS:** Yeah. You know, we have the responsibility and for me personally, that responsibility translated as how am I going to get with my life, how can I remain true to people, how am I going to use this food, how am I going to use all of this food that I've harvested and then, you know, what am I going to do with this nutrition that I have been gifted, by however we

imagine, this sort of larger paradigm of the universe and you know, our environment, how we interact with that, to exist.

That was a really profound thing for me, was really sacramental in a unique way. That was the beginning of sort of this interest in food and interest in animals and how we get them and the ironic thing was that, when I hunted that animal, maybe nine years ago in Flagstaff, I left most of the organs in the woods.

**[0:15:10.2] AVH:** No, blasphemy.

**[0:15:12.4] PS:** I know. As we'll talk about, I'm a huge fan of eating organ meats and eating those parts of the animal but I made the mistake that most hunters make. I would suggest these days, which is that we will – as hunters, we'll just field dress the animal, the liver, the spleen and the heart and the organs and everything right there, it's the gift to the cougars.

**[0:15:30.8] AVH:** They get the better meat, give them the choice cuts.

**[0:15:33.0] PS:** Yeah, this is great, I don't know why people are just leaving me all these goodies, it's like bear KetoCon, bear keto cookie but in a much more evolutionary consistent way. The cougars will come in and eat that stuff but I just took the meat and I also did not eat the connective tissue, nor did I eat any of the bone marrow or the brain.

**[0:15:55.3] AVH:** The tasty stuff.

**[0:15:57.2] PS:** I know, in retrospect, there were so many pieces that I missed and I want to go back and take it full circle and hunt again maybe this year, we'll see how the schedule works, I'm in Southern California now. I'd like to hunt an animal and eat the whole thing, eat absolutely as much as I can and use it in different way.

**[0:16:13.6] AVH:** Was that the – you spoke to that being a pretty transformative experience when you did that whole process from beginning to end, was it hard for you emotionally? Was it something that you are thinking like, "I couldn't really do this regularly. I'm glad I did it to have

the experience and the understanding and the respect for the process," but it's not like – does it take a lot out of you?

**[0:16:34.5] PS:** No, it's in it. I had had some preparation for it in the sense that I – at that point in my life had spent a lot of time in the wilderness. I mean, I graduated from college 1999 and at that point, started on a six year journey of just kind of exploring.

**[0:16:55.0] AVH:** You did a lot of adventures.

**[0:16:56.6] PS:** Yeah.

**[0:16:57.3] AVH:** I want to ask you about the Pacific Crest.

**[0:16:59.3] PS:** Yeah, I'll tell you about it.

**[0:17:00.2] AVH:** That's epic. We could have a whole talk about that.

**[0:17:02.9] PS:** Yeah. I had six years of that kind of thing and –

**[0:17:07.1] AVH:** Why that? That's a fair bit of time to take between I guess school and whatever comes next. Was it like, I'm just going to do this one sort of adventure and that turned into six years or did you always plan, I'm going to take some significant time and have these experiences?

**[0:17:21.4] PS:** I had no plan to return to school when I graduated college, I was burned out and I'd been nose to the grindstone, sitting in chemistry and thought I was going to go medical school, my father was a physician, I thought I was going to go to medical school at that point. My father was a physician and I just – I don't know, I think that I had some great professors, I started reading a lot of philosophy, I read a lot of Buddhist authors and I was just having my early existential crisis as a 19 year old and 20 year old.

**[0:17:50.0] AVH:** Yeah, that's pretty young to have one of those.

**[0:17:51.3] PS:** Maybe a 21 year old, you know? Eventually, 21, 22 year old having existential crisis and how do I fit in the world what am I doing? I just wasn't ready to get in line and join the ranks of the working world and at that point, that process took six years from me. It started with the Pacific Crest trail. Well, it started with a few adventures, in New Zealand, I worked for an education company in southern California.

I went to New Zealand for four months and hiked all around New Zealand and then I came back and spent summer hiking the entire Pacific Crest trail from Mexico to Canada. That process had begun, sort of the wilderness exploration and over those years, I kind of built up this interest in how we connect with that.

**[0:18:36.2] AVH:** Okay, I do want to ask you about carnivore and spices and stuff but I really want you to talk about that experience with the Pacific Crest because it's what? 2,700 miles. Did you do it all by yourself?

**[0:18:51.0] PS:** I had a friend named Broxton. I haven't connected with him in a while, maybe he'll hear one of these podcasts one day and be like, there's Paul. I don't know where he is. I think he's teaching geology somewhere. But I had this friend Broxton who I'd met at a camp.

So right after college, I went to Maine and worked at a place called the Chewonki Foundation which is a really cool space up in Maine and I met Broxton and we kind of went in separate ways and I got this crazy idea to hike the trail. He and I went and did that and so we hiked it all together and we did it pretty rapidly.

**[0:19:23.7] AVH:** How quickly is that?

**[0:19:24.8] PS:** Like three months.

**[0:19:27.8] AVH:** What kind of breaks were you taking? Were you staying in hotels ever? Were you taking – were just on the trail the entire time? How does it work?

**[0:19:36.4] PS:** We were on the trail the entire time.

**[0:19:37.7] AVH:** You were in tents every night?

**[0:19:38.6] PS:** It wasn't in tents, it gets to be – this is what's so cool about the Pacific Crest trail. That became a new normal. Sleeping on a bed became very uncomfortable and sleeping in a bed felt very unnatural. This is a metaphor for so many pieces of a carnivore diet, so many parts of the paleo diet or so many things in our life in general.

What we consider to be normal and radical is all relative. And it's all based on our experience. But the nice thing about the Pacific Crest trail is it's along the mountains, it's on the coast of California, Oregon and Washington and many times in the summer, it's really good weather. It was pretty easy from a weather perspective, we had a few days, I think we have like four days of rain in three months.

We had a few days that were cold. But not much, it wasn't – it was actually really just a nice time to be in the mountains and in the wilderness and there were some desert which is probably the hardest part of the trail. Being in the wilderness became the new normal. We slept on a literally, two-centimeter-thick blue pad. Not even a thermorest, it's like two-centimeter-thick blue pad, it was totally comfortable. I'm sure [inaudible] wasn't even around then, if they'd had it, I'm sure I would have had amazing sleep, so I imagined.

There were definitely nights that were more stressful than others, we had a couple of like really bad bug nights, in terms of mosquitos. In Northern California, that were traumatic and I'll never forget to this day. But generally, it was really neat to feel that sleeping under the stars and the moon and on the ground became the new normal. Then, when I returned from the Pacific Crest trail, I didn't want to sleep inside and I didn't want to sleep in the bed.

**[0:21:19.6] AVH:** Would you like sleep on the floor for a while?

**[0:21:20.7] PS:** I was sleeping outside. I slept outside, I just had a tent, I didn't even sleep in a tent, I just had a sleeping bag and slept on the ground outside for probably weeks to a month after the Pacific Crest trail. Yeah, it was a hard transition back to the sort of westernized world.

**[0:21:37.6] AVH:** How did it change you physically from start to finish? Did you average a certain amount of miles per day or –

**[0:21:43.7] PS:** Yeah, it was close to 30 miles a day, which sounds like a lot to walk a marathon a day but it's really not. It's pretty reasonable, you get used to it. The first couple of days of the trail, we were surprised at how big our feet got. By the end of the trail, I think I was wearing size 12 or 13 shoes and I wear like 10 and a half, 11 now. Your feet just expand when you're walking, you need like huge shoes.

**[0:22:08.8] AVH:** Turn into a hobbit just to –

**[0:22:10.0] PS:** Yeah I did, I turned into a hobbit. My feet got super hairy too. I had to cut the front of my shoe open many times because my feet were just crushing the front of the shoe. By the end of the trail, we figured it out and I had shoes that fit me. But it was a strange thing. The feet got really big. My body composition stayed about the same. I mean, I was always been pretty lean and at that time I wasn't doing a whole lot of resistance exercise.

I wasn't maybe as muscular as I am now. Our diet was not exemplary on the Pacific Crest trail by any stretch of the imagination. I tried – this is a funny story, I don't think it actually talked about this in the context of the carnivore diet. I wanted to do it in a vegetarian way. At the time, which was you know, 18 years ago, 19 years ago.

I thought, I want to do this on plants. Within three days of the trail, I was like, that's the – I had all the food prepared and if I had thought about the fact that – of course my understanding of nutrition was very different and that was developed at that point. But if I'd thought about the fact that I wanted to have animal foods, I would have prepared very differently but before the trail, you create all of these resupply boxes, you send to yourself along the trail.

**[0:23:24.5] AVH:** Do you have to change that whole thing because you had all vegetarian stuff?

**[0:23:28.2] PS:** There was no meat in there, there was no jerky, if I could go back and do it again, it would just be tons of jerky and I'd have to think about how I would get fat on the trail and I would get organ meats and all the things. I would do it very differently now, be very simple.

The way we did it, it was quite complex, we had all this plant food and some animal foods, you know, some cheese and some things you have to get fresh but you know, we sent ourselves things throughout the trail and you can send a general delivery to the trail. We had all these boxes that were in my friend's aunt's garage. She would send them to us at specific times.

Yeah, this is an interesting thing. I actually have talked with this on previous podcast. I got sick of all the plant food. I never thought I would get sick of peanut butter and I got sick of peanut butter. I got sick of everything that was not processed plant food. I didn't get sick of processed plant food because we have figured out how to make that hyper palatable but I got sick of everything that was not animal food.

I never got sick of cheese, I never got sick of jerky or meat. Even within the first four days of the Pacific Crest trail, I was like, "Screw this stuff," my buddy got a hamburger, "I'm getting one of those." That was amazing and every resupply I was getting hamburgers and meat as much as I could. It was a foreshadowing but I had not prepared enough with jerky throughout the trail, so I did not have enough jerky and my buddy had gotten some ration out but I was definitely not eating enough protein on the Pacific Crest trail and probably right types of fat.

By the end of the trail, we were just doing – I would literally go into town because what you walk on the trail and then you go into town for a day to resupply or an afternoon to get your box and maybe to buy some fresh food and we would buy like a big hunk of cheese and I would buy eight ounces of cream cheese and I would just put cream cheese on bread and that's what I was eating toward the end of the trail. It's gross but –

**[0:25:14.6] AVH:** Just to get calories.

**[0:25:15.4] PS:** Just to get calories.

**[0:25:17.0] AVH:** Was your initial plan to do it plant based just for what – did you at the time think it was sustainable, moral or healthier or what was the –

**[0:25:26.0] PS:** I thought it was healthier. I don't remember what sort of things I was reading but yeah, I had a phase. Then I had another phase later which we could talk about.

**[0:25:34.1] AVH:** A different phase?

**[0:25:35.2] PS:** I had a vegan phase.

**[0:25:36.8] AVH:** I feel like everybody who is now a proponent of carnivore or even just keto, they all went through these crazy, weird, vegan vegetarian phases first. It's like almost you have to experience all of it to eliminate what doesn't work.

**[0:25:52.6] PS:** It's not surprising, I think the people who make intentional choices with regard to diet are doing the right thing and sometimes it takes time to deepen that understanding enough to really appreciate the nuance. There's a lot of propaganda out there in my opinion, there's a lot of people selling ideas that sound good on the surface and they can come twist the data and I mean, I had a vegan phase 10 or 12 years ago before I was a physician assistant and that was based on an understanding of nutrition in my opinion now.

But there was a lot of messaging around the fact that animal foods will hurt you and there's a China Study and that's I think part of the problem we have today is that there's so much incorrect presentation of information out there. People that are scientists and genealogist can twist the data in a way that's not accurate and the consumer just doesn't know where to turn.

I got caught up in that and so I experimented with it and now they talked about it on talk yesterday, KetoCon. I was 30 pounds lighter so I had very little muscle, I got –

**[0:26:53.8] AVH:** 30 pounds lighter than you are right now?

**[0:26:55.2] PS:** Yeah.

**[0:26:56.1] AVH:** You're pretty lean right now.

**[0:26:57.5] PS:** I know, I'm about 170 pounds right now at 5'10". 140 pounds and I was a runner. So I probably held up a body dysmorphia and in the running community, you see people

who are very skinny, running very fast. I came from a community of cycling and so again, you see people who are very skinny doing amazing things and it's just context is everything you do, that's what I want to do.

I wanted to be a very fast runner and I never was a very fast runner but I aspired to that.

**[0:27:27.8] AVH:** Talking about the sort of misinterpretation or even mis-presentation of research and findings and it's funny because we were, I was spending some time with Dr. Ken Berry at this conference too and then I had him on the podcast but his book is about how – it's doctors that don't understand either because they don't have time or maybe the inclination that they aren't encouraged to read the research and actually interpret the research beyond the sort of summary and what brought you to functional medicine and a really strong approach with diet?

**[0:28:02.0] PS:** I think it was hearing – I remember the actual moment or the time in my life when it happened. I was a raw vegan at the time, I'd been raw vegan for about seven months.

**[0:28:13.0] AVH:** Vegetarian, vegan, raw vegan. You're just trying to go to this like restrictive and crazy as possible.

**[0:28:19.6] PS:** I'm interested in the edges of things.

**[0:28:23.0] AVH:** Raw vegan, what was the least pleasant of all of these diets with the experience for you?

**[0:28:29.3] PS:** I mean, being a raw vegan was pretty hard socially. I farted a lot.

**[0:28:34.2] AVH:** Raw vegetables, that's it, that's all you're eating?

**[0:28:36.9] PS:** Yeah, I mean, there's ways to do it that make it palatable but man, I was severely calorie malnourished, I'm sure I was protein malnourished. It was a bad time in my life. It was very hard to be around people socially for a lot of reasons and yeah, it's challenging times.

I was raw vegan and I heard Jeff Bland talk about concordance between the book of life which is your genetics and the environment. He just said something that resonated to me which is the idea that humans have eaten meat for our entire evolution which is three to four million years, depending how you interpret the anthropologic data.

I thought, wait a minute, that makes a lot of sense, why have I been doing this? I really can get behind the idea that that is really written in my genetic code that meat, animals are an integral piece of what we know about human nutrition. I should start eating animals again, it just kind of clicked, you know? I think I had run my course with raw veganism, something was going on psychologically perhaps. I'm going to start eating animals. Immediately I gained probably about . 15 pounds of muscle back, immediately and then once I stopped doing excessive running, I was training for ultra-marathons at the time.

I then gained another 15 pounds of muscle or depending on what I do, I fluctuate five pounds of muscle here and there. In that process, I was also starting to discover functional medicine which I would just really characterize as root cause medicine. There's not great wording around this, right? I'm not excited about the verbiage, I don't really like the word functional medicine. I think it has a lot of connotations, but the alternatives are no better, integrative, holistic, whatever.

The notion that in allopathic medicine which is mainstream western medicine, we are really taught to know which pill to give. It's an over simplification but it's really what we're taught. We are very rarely taught about what might be causing the root of an issue. We're not taught or encouraged to ask those controversial challenging questions, a little bit of ego tied up in that because as a physician, it's really hard not to be able to fix someone.

It feels efficacious to give someone a pill. As a physician, you feel impotent if you cannot provide someone something. To begin to imagine that you are looking for the root cause, raises the possibility that you are not going to be able to fix someone or you are not going to be able to give them something that is going to go through a cause.

I think that is why repeatedly, across medical disciplines and I'm talking naturopathic disciplines, chiropractic disciplines, [inaudible] plans and allopathic disciplines, we often will say, we will use rhetoric to say that we are trying to get to the root cause of something. Then we will just treat

the symptom. This drives me crazy, it happens even in naturopathic medicine and happens in chiropractic, it happens in every – it happens in functional medicine too and I think that is not what I want to do. I disagree with that.

We do it all the time and if people really think about the treatments that they're getting from their 'functional medicine practitioner', a lot of them are in bad symptoms and that is where it stops. I think it is because as humans, we are not – I'm not saying that physicians and any disciplines are not super intelligent or well-intentioned.

But I think that we are driven by ego, we've all invested a lot of time in this and we want to be able to help someone or we want to feel efficacy. It's very challenging to step away from that and say, "You know what? If I can't address the root cause, then I just need to step aside or do more research and figure out what I do here but I don't want to treat the symptoms."

Sometimes the symptoms are so intense that we have to treat them or we have to be very aware that we're just treating symptoms. Too often, we rely on symptomatic treatments and that is where the treatment stops. We never look for the root cause. You know, people with constipation should take magnesium for the rest of their life. That's treating a symptom, you don't have a magnesium deficiency, you might have magnesium deficiency in the beginning, that's probably not the cause of your constipation.

Magnesium is a fairly benign treatment for constipation but there's something else going on there that you need to treat if it's constipation. People with eczema or something might use a topical cream and this is in the allopathic realm, you know, will use a steroid cream, that's a symptomatic treatment and you can get rid of your eczema with the steroid but that's not the root cause. You don't have a steroid deficiency and we do this over and over and the root cause is where it's really powerful but it's the most challenging and sort of ego challenging position we can be in because sometimes we don't fix it.

**[0:33:19.3] AVH:** Also, I would imagine it would be very daunting because finding the root cause of a problem takes a hell of a lot longer and a lot more work and a lot more understanding and a lot more patience and doctors don't always have that kind of time and especially if they have – this is another kind of cultural thing, like having more and more clients and getting through

things faster and being more efficient instead of – if you were going to do a holistic or functional sort of approach to fixing somebody, it's going to take a lot longer than just giving somebody a pill for an obvious symptom.

Is there room, is there space for every doctor to suddenly be a functional medicine physician, can we do that or there's too many people who need help?

**[0:34:03.4] PS:** I think there is. I think that it's all about supply and demand and the fact that some people sadly don't want to treat the root cause of their illness either, right? If a patient – I think if patients wanted to treat, if people who are sick wanted to get to the root cause of their illness, there's plenty of space and time to do that, it's just, you know, the medical model has to change.

That's a little bit of a sort of overarching political questions around how to pay for this and how do physicians get compensated for their time and it's time consuming, the education is time consuming and we are a society that's dependent on privatized insurance, which may not be the best thing but people are not used to investing in healthcare, people in general, I think it's not the greatest thing that people are not used to investing in health, in general.

They're not willing to, they don't see the value in investing in health which I think is – that doesn't make a lot of sense to me. But if you go can't get something tangible, that's going to happen in the next 30 seconds, you're going to hand someone a book, hands someone a cookie, you're going to hand someone a steak, they're often not willing to invest in it which is probably an evolutionary thing in terms of humans.

It handicaps us and we know that those – that many people who are very successful are able to have the long term vision. They will step outside of that row and see that this is going to be a long play. This is the long game. The long game is investing in your health long term and thinking, I'm going to seek out functional medicine practitioner, it's going to be more expensive, I'm going to have to pay out of pocket usually and it's not going to happen in the next week.

But it's going to start in the next two to three weeks and it might progress over the next six months to a year and then it's going to get me where I want to go. That is an investment in your

time and your money but that is how you get to where you want to go and there is no shortcut there. That's what everybody's trying to sell you. Is shortcuts, it doesn't really happen.

**[0:36:01.3] AVH:** Yeah, lots of people would rather take a pill than do the hard lifestyle changes that they have to do to be healthy. And it's also as you mentioned too, I think the foresight of I could be looking to work with you right now and I'm healthy and I have no problems. I still have to have the foresight to make that investment because just because I don't physically have any severe symptoms that I need immediate treatment for like you said, it's an investment without necessarily immediate gratification. But yeah, that's interesting.

**[0:36:29.1] PS:** People are really only motivated by pain or desperation or severe issues with health, they have to become extremely obese to the point that it interferes with their activities or in a lot of pain or have an autoimmune condition that really changes their lives.

That's how we are as humans, not all of us but that's generally how we think about things. And so desperation or fear motivate us and that's not the best place to come from, into those things. Because a lot of people, this is a nuanced topic that we don't have to go into. But there is an idea of optimization and I'm not saying that everyone has to be optimal and I've talked about this idea of overall quality of life and solving for the highest quality of life at all times in your life.

I think a lot of people are living lives that could be higher quality and they don't know it. That's okay. I mean, who am I to tell them to change their life, I'm not going to run in and try and improve their life if they're not interested in that. I think a lot of us could be better and we are too caught up in our lives, for whatever reason, we may have responsibilities and make it hard to do that but I think it was a higher ceiling for any of us than we imagine.

**[0:37:38.9] AVH:** Yeah, I think a lot of people, it's like, you don't know how good you could feel. Do you miss, this is again kind of off topic, but you mentioned it earlier, do you miss endurance running and that kind of athletic endeavor or are you over it?

**[0:37:55.4] PS:** I don't miss it anymore, it was a phase in my life, it allowed for meditation and a lot of, probably, internal work that I had to do. I mean, I would go out and spend three to four hours running from five to six.

**[0:38:09.5] AVH:** It's like a resiliency practice as well too.

**[0:38:11.7] PS:** Yeah, it was not unusual to spend six hours on the trails and –

**[0:38:16.5] AVH:** What do you do to replace that now?

**[0:38:19.2] PS:** I have a variety of things now, I have gotten into martial arts in the last few years, in medical school, I got into Jiu Jitsu. I do some resistance training, not a ton and recently, surfing has become my fascination. I still spend a lot of time in the mountains.

**[0:38:34.4] AVH:** That's a meditative one though, the surfing. Jiu Jitsu is one I hear a lot because I've kind of gone through my sort of fitness journey and done a bunch of different things and I've sort of landed at that too and it seems like an oddly common denominator for a lot of people who are looking for something that's going to really kind of stimulate their mind and challenge them but it's also this very challenging physical endeavor too. Martial arts seems to be sort of a natural fit for that.

**[0:38:57.2] PS:** Yeah, have you tried Jiu Jitsu?

**[0:38:58.5] AVH:** Yeah, I've been doing it on and off for a few years. I only did because I actually came to it as an MMA fan. So I have only gone No-Gi. I haven't done any actual Gi training yet but I am actually re-dedicating myself to it this summer. Ben and I were talking about this offline too because I have a body building background. So I come from just the meathead like throwing gym or throwing weights around the gym and I love that but I am a hitting a saturation point and it makes me sad.

Because when it is something that you've loved to do for so long and you don't feel that passion anymore, I am sure you have this with the running too, it is like a loss, a little bit. You're like, "Why don't I feel the same way about this than I used to?" But I am also a big fan of just always learning new things. You just move around and I have a hard time reaching elite status at anything because I do something and I like it and I get pretty good at.

I am like, “Oh look at this over here,” and I want to move and learn a new skill but I think that there is good to be found in that because I get to just explore different ways of moving and interacting with people and learning and yeah, that is just a skill that you just will never stop learning, right?

**[0:39:59.9] PS:** I think that is a great skill, I think it serves us all. I don't think that is a foible. It's a good thing. It is good to know lots of things and not get stuck. It is one of the things that I've struggled with, with weightlifting and kettle bells. I have not found it to be engaging long term and that is why I like the martial arts and surfing, there's really no ceiling. You can never finish a martial arts practice and I don't think I will ever be as good as a surfer as I want to be.

And that can be said of a lot of things but I think I don't want to knock weightlifting and I am sure a lot of people could say the same thing. You could always lift more weights but it just doesn't resonate with me in the same way. And in terms of jiu-jitsu, I found No-Gi to be so much more interesting than Gi. I don't like the Gi but –

**[0:40:43.5] AVH:** The Gi seems like a distraction to me. It's like well now you can just pull on this and it is annoying whereas if you don't have the Gi to mess with is just you and the other person. You can't pull on their clothes the same way.

**[0:40:54.1] PS:** It changes the speed and there are submissions and they are dependent on the Gi that for me translate into real life. Hopefully I am not going to do jiu-jitsu in real life that's why. So what we do is to protect ourselves and our families but I was talking to Robb Wolf about this and I have heard other people say that the Gi slows things down, which maybe is good but I like the flow and explosiveness of No-Gi, a lot more and so it is also simpler. You aren't wearing all of these towels. It is super sweaty and stinky.

**[0:41:25.2] AVH:** Yeah and a giant rope, that's cool. Okay. All right let's talk a little bit about food stuff because a couple of things that I picked up over watching you and getting to know you a little bit more and just hearing you talk over the conference, I have a couple specific questions but we can start with you, a big proponent of carnivore diet.

**[0:41:45.5] PS:** Yes, nose to tail carnivore diet.

**[0:41:47.5] AVH:** Nose to tail and do you always quantify that? So you are not saying like if somebody said, "I want to do the carnivore diet but I want to stick to this what I am seeing on Instagram, which is steak and ground beef, that is what I am comfortable with," are there some caveats to go along with that or you're like, "Well that's still better than what you could be doing so go for it."

**[0:42:05.3] PS:** Yeah, there's two answers to that question. So if they're looking at my Instagram and other people's Instagram and they're seeing nose to tail on organs, I am really good friends with Shawn Baker. We disagree on this a little bit. I think that if people want to get into the carnivore diet and they want to try to just do muscle meat or they just want to do steaks that is a good place to start but I don't think it is a good thing for long term.

There are people who do that for elimination diets, for short term. But I think there are better ways to do it for so many reasons and I think that people – there is a lot of nuance there. From evolutionary perspective, it does not seem to be consistent to be eating that amount of muscle meat to me. And this gets back to the time machine idea or spending time in the wilderness idea.

If you look at the way indigenous tribes eat meat and eat animals and the evidence for the way the humans were eating it almost right out of evolution. We were probably almost certainly eating nose to tail that's what we know and the reason we were doing that was multiple fold, manifold. I think at the basic level it has to do with fat to protein ratio and the idea that humans are very likely fat hunters. This is an idea first to justify [inaudible] who is a paleo anthropologist and it makes a lot of sense biochemically and evolutionarily.

I have been thinking about this a lot this weekend and previously. We cannot run our human body on protein. People may think that we can. But we really can't biochemically. If we are trying to overeat protein for calories we are going to fail and that is going to create a state of starvation, which is called rabid starvation, which is a historical reference to Arctic explorers who starved and became very sick and died when they were just eating lean animals that didn't have a lot of fat.

So lean animals with just protein are not long term food for humans. We run this vehicle on fat or carbohydrates. The KetoCon and I think many people would agree even outside of this conference that the more efficient fuel is fat but we can run on carbohydrates. We know that and if you look in nature however, I would argue that fat is more abundant than carbohydrates or fat is on animals, carbohydrates are pretty rare in nature until the Neolithic revolution 12,000 years ago.

When we started domesticating carbohydrates and saw incredible declines, downturns in human health. I talked about this in my presentation yesterday. Smaller stature, increased bone lesions in the skull called periodic hydrostasis, which is usually an indication of anemia or other nutrient deficiencies. Basically, the anthropologic record would suggest that our health went into the toilet when we started living in agrarian societies. Prior to that our bones looked very different as humans.

And that would be the majority of our human evolution, again three to four million years as hunter, small letters, gatherers. We can talk about the relative portions of hunting and gathering that I think people are doing. If you look at the size of the human brain, the size of the human brain exploded two million years ago, obviously not literally but figuratively.

**[0:45:17.9] AVH:** Definitely, yeah.

**[0:45:18.6] PS:** Yeah and that correlates with the advent of stone tools, which were used to kill animals, to process animals and much later on probably came fire. People debate when fire arrived but I think that the two million year explosion in the human brain size and it is really an exponential curb. So people have seen it is a larger than the curve. It is slightly slopping and then boom, it really got much different. So something happened that I argue that was hunting.

So it was the hunting of animals, it was the eating of animals I would suggest that made us human that allowed our brains to become the incredible tools they are today. Now, we need to not ignore that when we are thinking about the role of animals in our diets today and that eating of animals would not have just been muscle meat. It would have been the entire animal. We would not have wasted an animal and when you look at where the nutrients are in animals they are distributed throughout the animal.

And then if you look over the fat is in an animal, it is around the kidneys and it's around the organs. It is in the viscera, the perinephric fat or on the kidneys. There's omental fat around the intestines and there is some fat in different parts of the body like bone marrow and brain. I believe those foods would have been our primary targets and there is evolutionary evidence for that. There is anthropologic evidence that when we are hunting that our indigenous peoples, even today or in the recent history, they select the fattiest animals.

They look for animals at certain times of the year that are fatty and this is because we are looking for fuel. First and foremost we are looking for fuel. In nature, if we are eating an animal, micro nutrients are actually pretty available and fat is what we are looking for to get us to survival. If you eat the organs of an animal, you get lots of micronutrients. If you just eat the muscle meat, you get a good amount of micronutrients but you won't get all the micronutrients.

So I am mixing micronutrients and macronutrients when I am talking about is fat, protein and carbohydrates is macronutrients and then I am talking about all the micronutrients, which are in the organ meats but to just eat the muscle meat in my opinion shuns millions of years of evolution and most of all what we know about nutritional science today. Having said that, there are people in the carnivore community who appear to be doing quite well eating just muscle meat.

But I haven't seen their labs, there is maybe some biochemical individuality. I think evolutionarily, it is much more consistent to eat nose to tail and to favor fat and to think about the fat to protein ratio. So the overarching caveat here and the thing I have been thinking about this weekend is the fact that protein probably is not very caloric for humans. People will say protein has four calories per gram but then they will adjust it down to 3.2 calories per gram.

And I think that if we really look at protein, it's probably even lower than that. I think as humans, if we are trying to get calories from protein we are making a mistake because that requires us to turn building blocks into fuel and we want to fuel as fat or carbohydrates. If we want to get fuel from protein, we turn it into carbohydrates. If we try to run on protein, they're running up carbs and this is something that people have thought about in the ketogenic movement for a long time.

And I think it led to people eating too little protein for a while in keto. And there's a sweet spot for the amount of protein that we should eat as humans and that is the amount of protein that we need to maintain muscle mass but I would prefer to not to think of protein as fuel. I think of protein as building blocks and then you can shoot carbohydrates or fat as fuel. If you choose fat as fuel, I think you will do better for so many reasons.

You will be in ketosis but that ratio is critical. And if you are only eating muscle meat, if you are only eating steaks that fat to protein ratio I think will be less than ideal and you see this clinically and I see this clinically in people who are carnivores and who are eating a lot of protein, two to 300 grams of protein a day sometimes more. The fasting glucose goes up, the post-perennial – not I mean just the overall glucose throughout the day goes up.

We don't see real high glucose excursions, mean or median aptitude glucose excursions post-perennially on a carnivore diet but we do see the overall glucose levels go up when we are eating more protein and we see the A1C go up and I see urea cycle intermediate it's like argonine when I am doing organic assess and go down. We are getting used up and we see urea go up. So we can tell the body is using this. It has to get rid of the nitrogen somewhere.

At some point, we don't need nitrogenous compounds. We need fuel for the car. At some point we have built the automobile, we just need gas for the tank and then the other piece of the equation is all of those little micronutrients that are missing, this is all contextualized by arguments about the RDA and if it is different in ketosis but I do think that even in ketosis we need micronutrients that are not found in muscle meat, copper, folate, biotin, riboflavin, these are not present in muscle meat.

And when I look at carnivores and I look at their micronutrient status, if they are eating not enough organ meats I see deficiencies. Even things like glycine and the connective tissues. So if we eat nose to tail, we are really starting to fill in all of these nutrient deficiencies in a better way. It makes sense, I mean look if you eat the whole animal, you are getting the whole multivitamin. Don't just eat part of the multivitamin.

**[0:50:27.4] AVH:** Aren't you able to determine this concept that protein may not actually be four calories per gram, I thought that was a scientific fact that we figured out. Are we not able to actually tell and test and see if it really is four or three or less than that that we are actually taking in?

**[0:50:47.3] PS:** I think if you look at it, it is actually less than that.

**[0:50:50.0] AVH:** So why are we all believing that it is from –

**[0:50:52.6] PS:** Because we've rounded it up so that it is easy to say carbohydrates are four, protein is four and fat is nine and if you think about it, there are plenty of studies that show that protein has a thermic effect. It is very hard to gain weight eating excess protein and people will point to that and say therefore you should eat lots of protein and I would say, "Yeah, not really." That I disagree with and the fact that it is very hard to gain weight eating lots of protein suggests to me that we may not be really getting any calories from that protein.

Because I would agree that some basic level, caloric deficit is what really results in weight loss and there's all these people who are arguing calories in and calories out. The nuance there for me is that the quality of the calories that go in affect the calories out both in terms of metabolism and satiety and et cetera and hormones, et cetera, et cetera. I am not saying, I am definitely not in Leigh Norman's camp and people will know that because I debated him. You know I am not in the camp, are you going to eat pop tarts it is not –

**[0:51:48.7] AVH:** If that fits your macros.

**[0:51:50.0] PS:** Yeah, I really don't like that perspective but I do think that in order to create weight loss we have to create a caloric deficit. That is the thermodynamics and if you look, overfeeding protein doesn't result in weight gain for many people often because they just hit the satiety threshold and they're like, "I don't want any more of that." Or if you really push protein, you won't gain weight a lot of times and to me that suggest yeah you're not really getting any calories out of that.

Which would sort of suggest maybe we should be thinking about that in terms of calories and if we are trying to get calories out of protein we may actually be calorie deficient. There are a number of people, this is just a side discussion in the carnivore community. Not a number but there is a few people that I worked with, I did a podcast with an incredible woman named Cassie Wild and we were talking about her menstrual cycle and her menstrual cycle has a pause on the carnivore diet and I am working with her.

I think she's not getting enough calories because she's an incredible athlete and very lean. We know that women need a certain percentage of body fats to maintain a menstrual cycles but I am also am concerned that her fat to protein macros might be a little bit off. And that if we are relying on protein for too many calories and a high performance situation, we might actually get a calorie deficit and we can leverage this for weight loss but it does create metabolic stress on the human biochemistry.

Like I am saying, it uses up your urea intermediates. So I think there are better ways to do it and people may debate me on this in terms of biochemistry and the stress or non-stress of the human system getting rid of the nitrogenous groups but I think there are some nuance there where I generally recommend for people in terms of fats, protein on a carnivore diet is develop a 0.6 to 0.7 grams per pound of lean body weight.

**[0:53:33.8] AVH:** Fat's key for people not body weight, lean body weight.

**[0:53:38.1] PS:** Lean body weight and pounds not kilograms because I think a lot of people are suggesting levels of protein that are too low and then you get sarcopenia. You don't want to get losses in muscles. So that is something in there and you could even go as high as 0.8, 0.9 but to go above that I think leads to just wasting of protein in the human body and like I said, consumption of intermediate in the urea cycle and elevate it fasting glucose and elevated A1C, which I believe should at least get us thinking about whether that's benign or not.

**[0:54:09.6] AVH:** What about the fat ratio and what about tracking this in any way because if we are doing carnivore, I would think one of the positive benefits of that is that I don't have to have my tracker and putting in — because I am just eating meat but you are saying you are speaking

to a client who is a high performing female athlete and she is trying this carnivore thing and maybe isn't getting the right ratios.

So how do we make sure that we are getting the right ratios without having to track and follow every single thing we're doing on a carnivore diet?

**[0:54:40.9] PS:** I think we have to put some structure in the beginning and then it becomes easy and we don't have to structure it after that. I am not counting my calories. I am not weighing my food out now but I am thinking how much protein am I trying to get in a day and the rest is really fat and organs or organs can have protein too but I am trying to think how much protein am I getting in a day and the rest is fat in terms of caloric load and macros.

I think in the beginning, I would give those fat — those protein ranges for people and I would say 1.5 to two are the ratio of two. 1.5 to one or two to one in terms of fat to protein in terms of grams. So people are getting 100, 120 grams of protein per day depending on how big they are. We are talking about Danny Vega, he's getting more protein than I would say I want to try. I want those people to get like maybe two times that amount of protein in fat as grams in a day.

So for me, that often breaks down like a 130 grams of protein a day and I am definitely trying to get it up to 260 grams of fat a day, which isn't as hard as you think.

**[0:55:45.8] AVH:** It's not hard but it does sound like a lot.

**[0:55:48.2] PS:** It sounds like a lot, traditionally speaking but it doesn't end up. I mean I am not gaining weight, you know? It works with my metabolism and you see the fasting glucose go down and so then you just get used to like, okay a 130 grams of protein a day is a little more of a pound of meat and I am eating organs too. We can talk about the nose to tail piece in eating liver and kidneys. I am eating some liver, I am eating some kidneys that is going to go to my protein requirements.

I am eating some meats and then the rest is fat, which is comprised of trimmings and suet, which is kidney fat, perinephric fat and egg yolks and that's a whole other conversation about the fact that as westernized humans we are not used to eating animal fat in that way in which I

think is something that we should reintroduce and I am trying to make it more doable for people to reintroduce fat into their diet like real quality animal fat.

I think when people reach for fat they are reaching for the wrong types of fat. They are reaching for liquid fat. It is not the end of the world but they are often reaching for vegetable fats, which I think have lower nutrient profiles. But that won't be the way to start it off is like a 1.5 to one or two to one fat to protein ratio and obviously the sourcing matters. I think we should be sourcing grass fed especially for the fat because many of the fat soluble toxins are going to end up in the fat.

Estrogen mimickers, et cetera are going to end up on the fat so I will not eat fat that's not grass fed. And then beyond that you add in the organ meats, which I think are crucial sort of fill in the gaps or nutrients. I eat a good amount of liver every day, I am eating kidneys and I am trying to do more and more in terms of if I can source the organs. Again, people are grossed out like "I don't do that," and we think, okay this is the Pacific Crest trail metaphor again.

What are you used to doing, what is relevant and people have to do what's doable in their life but I think that there is value in thinking about the way we perceive something is very dependent on our context. And I think that our ancestors would have been eating this way and the way we're eating now is very radical compared to what our ancestors were doing. It doesn't mean that we have to do everything — our ancestors were also wearing leather loincloths, which I think will be awesome.

**[0:57:54.3] AVH:** Yeah, we should probably do that too, yeah.

**[0:57:55.8] PS:** Yeah, we can definitely do that.

**[0:57:57.9] AVH:** Well how do we — I am a huge fan of organ meats and that is actually one of the things that I am more of the biggest personal proponents and advocates for this because even more so with women, we have a harder time with this sometimes because when you go on social media it is all of these big Shawn Baker bros. They're like, "Let's eat heart," and so I have a harder time convincing my friends. But that's a question I get ask the most is how can I make this palatable.

How can I get my head around this? I want to want to do it and I am interested but I am terrified. So when it comes to eating this real animal fat and eating organs and nose to tail, how can we get more people to try? Is it literally just exposure therapy? Like the more they see people doing it and enjoying it and normalizing it, we'll get there, is that the answer?

**[0:58:43.0] PS:** That is one of the answers. We know that community is incredible powerful. We know that what's happening in our community will influence us in a positive way. There is a hashtag on Instagram, #frozenlivergang and –

**[0:58:53.5] AVH:** I got to follow that one.

**[0:58:54.5] PS:** Yeah you should follow them. There's a lot of great people here who follow that one. I mean Jamie Seamen, Brenda Scott, it's just this idea that if your friends are eating liver, maybe it won't seem so strange. Beyond that, liver has a strong taste and if we are not introduced to liver early on in our life and I mean probably a year old or less, we are not going to be used to that flavor and in that case, it just takes time getting reacclimatized or acclimated to that flavor.

I don't think it means that it is bad thing that we are not used to the flavor but I mean a lot of people just really bristle at the thought of liver, it is incredibly nutrient rich.

**[0:59:30.5] AVH:** It's so good. Liver and onions is one of my favorite meals. I am an outlier, I totally recognize that but I love brains and liver. Kidneys is one, you have mentioned a couple of times, I actually have never gotten into that. I feel like that takes some next level chef work to make that okay and not ruin your kitchen but pretty much any other organ I'm into like gizzards and tripe and eyeballs and tongues and all of that stuff.

But a lot of it is like I have been told by my friends that they don't want me to do this and trick them into eating it and then tell them what it is later but I feel like so many people if they were tricked into it a little bit and just given sliced fried tongue or heart or whatever and told later what it was that it would be okay because a lot of the stuff tastes delicious. Liver I get can be

challenging but a lot of these things are actually delicious and flavorful and so nice and you feel like you are being nourished when you eat them.

Yeah. I feel the same way like I go back to what you are saying it's all relative in perspective. I think about the cultures around the world that eat insects and I'd like to hear your thought on that because I think there is a lot of this that's sustainability conversation to have there and there is a cultural question to have there that there are millions of people around the world and throughout history that have eaten insects for protein and they're looking at Twinkies and McNuggets and thinking like actually you guys are the ones eating this terrifying food, you know? So it is all perspective but what do you feel about insect meat?

**[1:00:57.6] PS:** I don't even know if you call it meat, keratin.

**[1:01:00.4] AVH:** Protein.

**[1:01:01.2] PS:** Yeah, I think it's great. I think some people can get triggered because of the –

**[1:01:05.9] AVH:** The shellfish.

**[1:01:07.0] PS:** Yeah, image that they have because it is chitinous but generally I think it is a fantastic option. I mean the cricket flour that I've had is really good. It has some calcium in it. It's really eating nose to tail.

**[1:01:18.7] AVH:** Yeah, absolutely.

**[1:01:20.1] PS:** And there are people in the world who eat grubs and apparently these grubs in Africa that taste like bacon and –

**[1:01:25.7] AVH:** Yeah, they have ones that tastes like different fruit and there's very sophisticated flavor profiles for some of these things, you are not into it?

**[1:01:32.3] PS:** I want to be into it. I am into it. I was talking to somebody last night, I forget who it was. I am in an interesting phase in my dietary exploration where if something grosses me out

I think I have to do that. So now I'm like, "Oh, I have to eat those things." And I won't really delve into all of the things that I am thinking about eating but there's –

**[1:01:52.7] AVH:** What about that fermented shark?

**[1:01:54.4] PS:** No, I am not into shark because it's way too high in the metals, yeah and I am actually not into fermented rotten meat. I would rather eat them fresh because – fresh or raw, yeah. If they are really good, I do end up eating a lot of things raw now in my own personal experiment. People need to be aware that that can create food borne illness and I would not recommend anyone eating raw food in general unless you are very sure of the source.

And I don't recommend people eat raw ground beef. I heard of people getting sick of that multiple times, stop doing that you guys but I mean I would love to go to Africa and eat bugs and grubs and see how they eat, how they are. I mean maggots are apparently quite nutritious and people just vomit hearing that. But I don't think we need to do that. I am not advocating that we should do that as humans or that that's what we need to do but somewhere in on this discussion is this middle ground.

Where we can create a very nutritious diet that actually is palatable for people and it doesn't even have to be eating maggots or grubs or any of that stuff but I am curious about them –

**[1:02:56.9] AVH:** But it can be if you want.

**[1:02:58.7] PS:** It could be and that is where we've come from. It's interesting to me, academically. The other thing about organs is that there are a lot of companies making these desiccated organ complexes now, which is a good surrogate.

**[1:03:09.2] AVH:** Is that as good? If I am taking these?

**[1:03:11.8] PS:** It's not as, it is pretty darn good.

**[1:03:14.0] AVH:** Like it is so bio available our body is still taking it and using it.

**[1:03:17.2] PS:** I believe it is. I really believe it is because this is low temperature dehydrated. That's what desiccation is. It's low temperature dehydrated, I think it is bio available and I think it is a good option. Is it as good as a raw brain, that's fresh? No, is it good as raw liver? I would say not quite. But it's a great thing for traveling. You know one other thing that I have been thinking about recently is I am going to travel to other countries and do these awesome surf trips that I want to do.

And it is probably going to be a lot of desiccated organs. Because I am not going to be able to get liver that I am comfortable with in Costa Rica perhaps. I mean maybe I can but if I don't know then I can take those and that may translate to people here too. That is a great way to start. Egg yolks are also a great segue and if you think of eating nose to tail, I mean an egg yolk is something that feeds the embryo. It's pretty nutritious. It doesn't have everything that I would love to see in nose to tail.

But if you had egg yolks to a meat diet, you are getting some good nutrients. You are getting more folate, you are getting a little bit more biotin, you are still not going to get quite enough riboflavin in my opinion but yeah.

**[1:04:15.7] AVH:** What are your thoughts on and why do you think there isn't as much conversation in the carnivore community about a variety of, not just I suppose the nose to tail concept but also, the types of animals. I was talking to Shawn Baker yesterday and I said, why are more people talking about incorporating healthy and sustainable sort of like shellfish and seafood and small food and high quality poultry and pork and it seems like the conversation is always beef. Why do you think that is?

**[1:04:46.0] PS:** People who have done carnivore diets will know the answer to this question. Chicken is just second class citizen.

**[1:04:52.4] AVH:** Okay but a good chicken thigh and I am talking variety like for me, when I've done –

**[1:04:57.7] PS:** Yeah it's a great idea. You can do it. It's just that most carnivores find it to be less satiating, less interesting, less good. But for variety that's what I come to. If you are asking

my diet and I've started just saying is, "Hey the way I do it is not the way you have to do it. This is the way I do it. This is what works for me." I am a minimalist, I am sort of a functionalists, you know? I wanted the nutrition, I want to enjoy my food but I don't really need that variety but absolutely. For people who need variety there's all kinds of things you can do.

**[1:05:26.3] AVH:** You don't think that there might be some health benefit though to person A eats high quality steak every meal every day. Person B eats high quality steak and oysters and small oily fish, bones and all and some high quality whatever, chicken livers instead. Do you think that the variety in itself is a health benefit?

**[1:05:51.0] PS:** I think in that situation absolutely. There would be benefits to that and I have experimented with it in the past. I had salmon row in my diet and I do eat varieties of seafood from time to time. The seafood conversation just makes me a little sad because of the way we have destroying the oceans and how many things are polluted. I love oysters, I will eat scallops. I am not going to shun and get a piece of wild salmon if you put it in front of me.

And in terms of what I found to be the most efficient, nose to tail eating of remnants provides everything you need but if people want the variety, you can do that stuff for sure. And I think it is something that people can definitely do and I think in terms of scalability for people the variety is going to be helpful and I am writing a book, which is called *The Carnivore Code*. It will be out in a few months and we will have a few meal plans and I am also doing a cookbook.

And we are going to have lots of variety for people because I was talking to Ken Berry's wife and she said, "I love the way I feel in carnivore and I hate the carnivore diet because I don't have enough variety." And I don't have enough variety and I go, "Okay, there's definitely going to people in the space perhaps more women than men." I mean men would just be fine with less variety. I am not trying to be sexist I am just trying to make it –

**[1:06:56.2] AVH:** I can probably back this up yeah. I mean I am the one who asks the question yeah.

**[1:06:58.8] PS:** Right I am just making an observation. So I think that if you want to experiment with carnivore diets. We need to create tools and metrics –

**[1:07:06.3] AVH:** To make it more accessible.

**[1:07:07.3] PS:** Yeah to make more variety because I think a lot of people come to it and say, "Oh I could never do that," and I actually interviewed [inaudible] yesterday for my podcast, which will be out in a couple of weeks and she's noted specifically that she thought that she was going to be bored and then she wasn't but I think a lot of people do feel bored at least if they are only eating muscle meat and maybe that's where the organs could come in and that's with things with seafood –

**[1:07:29.6] AVH:** Textural.

**[1:07:30.1] PS:** Yeah textural changes. I hope that the cookbook that I am creating with some really cool folks will fill that void because we are doing some really cool recipes.

**[1:07:40.6] AVH:** Yeah. I am interested in that. One of the things that I have heard over some of the conversations that I have been listening to at KetoCon is an understanding and admitting that there are some universal truths about human physiology and how we operate and how our bodies work and what we need to flourish but there is a high degree of variability there in terms of how tolerant we can be of vegetables, of other micro macronutrients and other diets and dietary approaches.

So maybe there are some people and you can tell me if you disagree with this but maybe there are some people in the world who truly will flourish on a raw vegan diet. Maybe there is a couple of people, right? Maybe not?

**[1:08:24.4] PS:** I would say no and there's some nuance here. You were with me yesterday when I was talking to Ben about this. So there is some subtlety here that I will try and flush out for people. It's informed by our evolution.

I don't think that human biochemistry has changed. I don't think human physiology. I don't think human immunology, our immune systems have changed enough to allow any human on the planet to thrive on a raw vegan diet. The nuance there, the caveat is that I do think that there

are people who can tolerate more plants than others. I see plants as survival food. Earlier in our discussion, I talked about big word hunter small word gatherer. I think that humans having some plants throughout our evolution and I think we did that as survival food. I think that if we could not get the ultimate source to human nutrition, which I would argue strongly, is animals.

We know that, nose to tail eating of animals provides all the nutrients that humans need to thrive. They are very dense and rich in those nutrients. Those nutrients are all bio available and they dwarf plant nutrients both in amounts, absolute amounts and in bioavailability. So clearly plant foods are a distant second. Perhaps a distant third of fourth behind insects and other things, right? We have probably eaten them during survival situations.

The other thing I talked about in my talk yesterday was the fact that plants look very different now than they did 100,000 years ago, a million years ago. There was no such thing as broccoli and there is many less edible plants. If you look at indigenous cultures what we know is that even today, the most indigenous cultures will only eat seasonal fruit and tubers. They don't eat leaves and stems because those are toxic, most of the time. We know about plant toxins.

But in terms of tolerability of plants, I think that some people can tolerate more plants than others and it doesn't mean that those plants are going to allow them to thrive. It just means they can eat more of those plants in a "survival situation." My strong feeling and such is my strong opinion, my hypothesis is that our physiology, yours, mine, Ben, Danny Vega, Shawn Baker, everyone, [inaudible], has a baseline physiology that is built to eat animals nose to tail.

That a nose to tail carnivore diet will be the most congruent with our biology. This is the Jeff Bland metaphor, book of life, that the most compatible diet with a human physiology, with human book of life is nose to tail eating of animals and you might be more tolerant than I am of some plants on top of that, which means you can eat those plants for fun, for entertainment, for variety if you want. I think there are a lot of people out there and this is what's cool in the carnivore movement, we are discovering that the less plants they eat the better they feel.

These people were very sick with autoimmune disease or have psychiatric disease, which I would argue as autoimmune et cetera of inflammation, have issues with sleep and that is the magical part, right? Figuring out how much or little plant food you want to eat is the moveable

target and a lot of people are finding a lot of benefits in carnivore. One of the main messages that I am seeking to promote is that you can do a nose to tail carnivore diet and you are missing nothing from plants. You are missing nothing.

There is a whole rabbit hole around FIDO nutrients and polyphenols, which we can talk about another time. I don't believe those are any unique value to humans I think the whole story there has been written incorrectly, which is quite a controversial statement. There's a whole discussion around fiber, all that kind of stuff, which I think has been written incorrectly and there is lots of good signs to negate that we don't need fiber for anything.

Not for healthy microbiome that drives me crazy when people say that. There is no scientific evidence for that in my opinion. And so you are not missing anything from plants if you eat a nose to tail carnivore diet and then what follows from that is how to be carnivore-ish, which is the fact that some people can probably tolerate some plants and that is not going to kill them and that's okay –

**[1:12:11.1] AVH:** It goes back to quality of life and values and sustainability.

**[1:12:14.1] PS:** Quality of life and balance, yeah and I like that in carnivore we are not trying to be dogmatic. There is no moral compass here. We are not saying you're a bad person if you eat plants. What we are saying is hey, we want you to be as healthy as possible. Here is a tool, you can move yourself along down the metric as much as you want. I had a lot more conversations recently with Mark Sisson. He's actually warming up quite a bit to the carnivore movement.

**[1:12:34.0] AVH:** Yes, I notice that.

**[1:12:35.5] PS:** And he admits he likes the crunch and he might eat a cob salad from time to time. I think you know what? That is probably not going to hurt him long term but there are people I believe individuality who for whom eating lettuce or eating kale or eating broccoli will trigger them and not going to feel good and they have to do that within the quality of life equation.

**[1:12:53.8] AVH:** Do you think that humans beings in the animal kingdom are uniquely flexible and adaptable and able to eat things outside of their optimal nutrition sources, or do you think it's just because we have this higher consciousness and we can choose to do things that are bad for us in a way that other animals can't?

It seems like we do even if we had a perfect human diet, we eat so many different things in a way that other animals do not. You look at gorillas and sharks and bears and they eat a certain thing and maybe if there is other things available they'd eat Twinkies or they'd eat cob salads or whatever but –

**[1:13:27.2] PS:** You know they would. It is just availability.

**[1:13:28.9] AVH:** But do you think that our bodies are uniquely able to and I guess resilient in our ability to handle all of these lesson optimal diets chronically over our entire lives or no? Do you think we're suffering, we're just dealing with it?

**[1:13:43.1] PS:** Well, look at humans, we are clearly suffering. We are clearly a sick population. 70 to 80% of the population is metabolically unwell. If you give a bear a Twinkies they are going to eat the shit out it, right? There is no question. If you give animals junk food they'll eat them it's just it's not available. This is the Pandora 's Box we've opened and we will never shut it and in availability of food is unparalleled. I can walk – I mean I was talking to Chris Bell about this.

You can walk three blocks in a city and get 5,000 calories, donut shops, steak, churros, you know smoothie, McDonalds. Yeah that never happens in nature. You can't walk – there is no situation in nature ever unless you have like a wooly mammoth killed in front of you where you can walk a thousand feet and get 5,000 calories. And 5,000 calories that you can ingest in the course of two hours. That is just an evolutionarily inconsistent situation that is really messing with humans.

And that is where the mindfulness component comes in and that's where the idea that we seem to think about the food we are eating and be intentional about it in a different way and if we allow ourselves to be run by the food, we are screwed.

[1:14:56.1] **AVH:** Yeah, so you are working with one on one clients right now. So are you still taking clients?

[1:15:00.1] **PS:** Yeah.

[1:15:00.5] **AVH:** Okay and then what is the breakdown of the work and what you are doing right now? You are taking clients but you are also I would imagine you're – I mean you are writing this book, you are traveling and speaking at different conferences. What is the gist of the work that you are doing from day to day?

[1:15:15.7] **PS:** It is a fun job. It's all kinds of things. We got my podcast, which is Fundamental Health with Paul Saladino. I have recorded a couple of podcasts while I was here in Austin, that will be out in the next couple of weeks. This would probably be out after that and then I am writing a book, which is called *The Carnivore Code*. The subtitle is *Returning To Our Ancestral Diet for Optimal Health*." Well actually it's not –

[1:15:38.0] **AVH:** Still working on that.

[1:15:39.6] **PS:** That's not the subtitle. The subtitle – that's funny. That is not the subtitle anymore. The subtitle is *Unlocking the Secrets to Optimal Health by Returning to Our Ancestral Diet*. Yeah, so I am writing the book, doing the podcast. I see clients privately. I have a functional medicine practice based in San Diego. I see people in person. I see people virtually throughout the world and then I am also trying to cultivate my surfing, meditation –

[1:16:04.6] **AVH:** There is your work-life balance.

[1:16:06.1] **PS:** Yeah. Many other things while also talking to people on social media and sharing the message there. I am on Instagram and all of these good companies.

[1:16:15.9] **AVH:** Are you sleeping well?

[1:16:16.7] **PS:** I do sleep really well. And I have to protect my sleep. Conferences like this are challenging because there is lots of people who you want to talk to and people to connect with

but I have a client who told me that sleep is business and I thought, "That is freaking true," so yeah. I've been sleeping pretty good. I'm excited to get back to San Diego to my space and just chill out a little bit but yeah.

**[1:16:38.2] AVH:** Yeah, I agree with you. These conferences are fantastic ways to network and learn and connect with people and I always feel invigorated, at the same time, dehydrated and tired from this kind of things. But yeah, I am looking forward to getting back to my routine and we are going to have to do a part two because I know our time is up now but I want to talk more about the fiber discussion. We got to talk about spices. We got to talk about some other experiments.

We got to talk about fasting. We didn't even cover that. But we did cover a lot and I think this was super helpful. I am very excited to read your book and try some recipes and hopefully, if we are having this conversation 10 years the idea of people eating liver and kidney won't be so weird anymore.

**[1:17:18.7] PS:** I think it will not be. I think people will be doing more and I think that will be a step in the right direction. So yeah, if people want to find me they can go to [paulsaladinomd.com](http://paulsaladinomd.com). On Instagram I am @paulsaladinomd, Twitter is @mdsaladino but basically [paulsaladinomd.com](http://paulsaladinomd.com) will get you most of that and check out my podcast on ML.

**[1:17:37.0] AVH:** Awesome. Paul, thank you very much. Happy belated birthday, enjoy the rest of your time in Austin.

**[1:17:41.5] PS:** Yeah, thank you.

[END OF INTERVIEW]

**[1:17:46.8] AVH:** All right that's it everybody. Thank you for listening. Thank you for being open to learning new things even if they sound weird and thank you to our show sponsor, Joovv.

Head to [joovv.com/paleomag](http://joovv.com/paleomag) and use the code 'paleomag' to get yourself some light therapy technology treat yourself and please join me next week.

I am going to be talking all about olive oil, all of the delicious health benefits. How to make sure you choose the right stuff because apparently there is a lot of crappy olive out there and it makes a big difference. So very practical episode my friends. I hope you join me. I hope that you share this podcast with your friends who could benefit and that's it.

Thank you for spending some time with me and have a great week everyone.

[OUTRO]

**[1:18:32.8] AV:** The intro music for Paleo Magazine Radio is a song called Stronger performed by Alter Ego and I hope you love it.

[END]