

## Paleo Solution - 383

[0:00:00]

Robb: Hey, folks, welcome back another edition of the Paleo Solution Podcast. This one is guaranteed to be a train wreck of epic proportions, but it's because you guys asked me to do it. So here's the deal. We asked a number of you, folks, what do you want from the podcast, and what we received from you was a request for the old style Q&A format which we had kind of done away with. I thought that maybe people were a little bit bored of it, but apparently a lot of folks missed that. I kind of missed doing it. It was a lot of fun. I searched high and low to try to find a qualified co-host, I couldn't find one and so instead I'm dragging in my wife and she's going to be participating with us. Wife, also known as Nicki Violetti, how's it going?

Nicki: I'm going fairly well, thank you.

Robb: Would you back up a little bit? We're trying to keep Nicki's spastic fore and aft movement. So when Nicki drives her car, she tends to surge.

Nicki: I do not. I do not surge.

Robb: She uses the gas and then she lets off the gas and uses the gas--

Nicki: Only when I'm talking and driving. When you're not in the car, I drive fine.

Robb: I'm sure you do, but the only time that the kids have become car sick is when Nicki drives. The only time I've become car sick is when I've let Nicki drive and she's doing a similar fore-aft process right now. But anyway, you guys didn't show up for the podcast for that, I honestly don't know why you show up for the podcast at all but you're here so let's get down to bidness. Do we need to tell people anything else? We're doing the same Q&A format.

Nicki: We're going to cycle through some Q&A formats mixed in with some other episodes where you have a guest, so it won't all be Q&A.

Robb: We're going to do significantly fewer of the say, like author interviews. One of the feedback that we had, people enjoyed the author interviews but it basically turned into every single week was a sales pitch for a new book which I hadn't really thought about it that way but that was some of the feedback that folks gave us. So we'll do occasionally an author interview when the book is particularly compelling or if they have nude photos of me from my college days and they're going to extort me and they'll do some extortion with that.

And then also something that I want to do is interview folks who are right at the cutting edge of research, they're doing research in this evolutionary biology, ancestral health scene, or just something that's really pertinent and we'll bring those folks on. We did that for the autoimmune Paleo diet for the gastrointestinal issues and really had a good time doing that and it got this brand new information out to folks. I will also occasionally do my own takedown of various scientific papers that I think are important and try to provide some context.

We are also looking into the possibility of doing a separate podcast.

Nicki: But we're not going to spill the beans on what that's about yet.

Robb: Yeah, we are.

Nicki: Are we?

Robb: We're going to tell people that it's going to be a multi-episode story arc, we'll put various topics. Nicki hates telling people what the fuck is going on; the communication in her family sucks.

Nicki: See, this might be the only episode that I co-host because I might get fired from this.

Robb: It may in fact be because I'm already fucking annoyed. So the communication in the Violetti family goes like this. There's a family function going on and I ask Nicki, "So when is everybody showing up?" "I don't know." "Have you talked to your sister or your dad?" "No." "When are you planning on doing that?" "I'm not sure." And I'm like, "You know there is a phone and text and email and all this."

Nicki: Highly exaggerated, folks, highly exaggerated.

Robb: It's not exaggerated in the least.

Nicki: Let's talk about something they're probably wanting to hear about.

Robb: I don't know. They probably want to hear some of this back story of how we dysfunctionally interact with each other. But anyway, we are looking at possibly doing a separate podcast. So the Paleo Solution Podcast will not go away, this will be kind of the hub for specifically health-related things, fitness, a little bit of medical stuff and this other podcast may be a little bit of a longer format. Quit playing with your button, you're making clicking noises. That's going to be several months down the road.

Nicki: I may actually just quit. I don't need to get fired from this job. I'm going to just quit.

Robb: Hey, it's the best-paying gig in the world. Okay. So without further ado, let's jump in to today's questions. Also, we will be pinging you folks to let you know where you can send questions. These are some questions that Squatchy kind of dug out of the current email bundle. We still get a lot of questions and I try to stay on top of those as best we can. We will, again, let you all know where to send that and we'll be moving forward on that. Okay, partner.

Nicki: Okay. So Question 1 has to do with ketosis and carbohydrate timing. Ryan says, "Hi Robb. I don't know if this will reach you, but while listening to your podcast and reading your first book, a hundred questions popped into my head, and this is one of them. I thought about asking my doctor, but I knew a blank stare and a sweaty forehead would be his answer, so here goes. Does frequency of carb intake play a role in disrupting ketosis? For example, if I am going to eat 150 grams in total of carbohydrates today, will eating all 150 grams of carbs at the same meal knock me out of ketosis for an equal amount of time as eating 15 grams every hour for 10 hours?"

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My theory is eating 15 grams of carbs an hour for 10 hours will be just enough to keep a person out of ketosis for a longer period of time than eating all 150 grams in one meal while carb-fasting for the rest of the day. I could be wrong, but that's why I'm asking the master. Thank you in advance for any time you can dedicate to this question. Have a great day."

Robb: And then he had a tagline on there. "Let's assume we are talking about starchy carbohydrate, rice, potatoes, et cetera, not leafy green vegetables or other low glycemic veggies." So, Nicki, you had a question around this right from the outset.

Nicki: I know that when most people think of ketosis they think they're limiting carbohydrate intake somewhere around 25 to 30 grams of carbs and here he is talking about eating 150 grams of carbohydrates. So I wanted you to address that. Can someone eat 150 grams of carbs and be in ketosis?

Robb: Yes, but it's going to be transient, and that's largely where I am doing Brazilian jujitsu in my physical activity, comparative leanness, relative insulin sensitivity allows me to kind of dip in and out of ketosis fairly frequently, but Ryan's gut sense on this is pretty good. One of the things that we are also doing as part of this Q&A format, I'm actually going to try to dig around and get some relevant research or article references to go along with the answers where they make sense. So I pulled up a paper, "Meal frequency and timing in health and disease."

This is from the proceedings of the National Academy of Scientists. We have a link on that. It basically talks about how a 16 to 18-hour fasting period allows folks to get into a comparatively decent state of restoration or ketosis. This is where that time-restricted feeding window comes into play. Lots of folks are talking about this. There seems to be some pretty laudable characteristics to it.

So yeah, the gut sense here that if we were to eat that 150 grams in say, like a breakfast bolus and then the remaining meals were basically protein and fat, we would almost certainly have a six-to-eight-hour period in which we're probably out of ketosis. Near the end of that period we would likely see the individual start sliding into some degree of nutritional ketosis. This would again depend on the total amount of protein consumed, physical activity, sleep status and a host of other variables. But this is kind of an interesting way of finding a middle ground. I almost said hack but God, just pour boiling lead down my pie hole if I say hack too frequently around here. I just hate that term. But it is kind of an interesting middle ground perhaps between the normal fed state that we see or maybe the overfed state that we see classically in kind of Westernized populations and more of an ancestral eating pattern, so this kind of punctuated meal timings, decent period of time between meals.

Not to belabor this one too much because we have some pretty long questions here in a little bit and I actually have some very long answers to some of these stuff in a bit. But there's some great research that suggest just eating two meals a day tends to -- isocaloric, so folks who are divided into different groups. One group was eating two meals a day, one group was eating six meals a day, they ate the same number of calories, same macronutrient ratios and whatnot. In the two-meal-a-day people had better insulin sensitivity, lower inflammation, less endotoxemia, basically translocation of nasty stuff from the gut into the circulation which is going to be something that we talk about in the next question. So there's a pretty good argument to not do the very serious recommendation of six meals and four snacks throughout the day and instead to something like perhaps a big breakfast, lunch based around your relative physical activity and then perhaps a very modest or no dinner could be a way that we really optimize that meal frequency, get in enough nutrition to support physical activity but also get some of the benefits of the time-restricted feeding window. So Ryan, good question and thanks for asking that.

Nicki: All right. The second question also has to do with keto but with regards to genetics. Charles says, "Robb mentioned in the Paleo(f)x keto interview that he had some genetics, SNPs, that perhaps made keto not a great diet for him, yet he gets around it somewhat with some supplementation including carnitine. I dabble in keto and have made lots of progress with my health as a result. I plan to sign up for the masterclass too. I have done genetic testing already with 23andMe. I wonder if Robb could tell me the SNPs to look for to see what kind of

genetic fit keto is for me. I have a feeling I will find out in the masterclass, but would love to hear what Robb has to say or perhaps there is a link to an article or podcast that would do the trick."

**[0:10:16]**

Robb:

Yeah, so really great question. And there are a number of different resources these days where you can take the raw data from 23andMe, you can download a CSV file or can actually communicate directly via API between some of the analysis tools like, oh, man, I'm blanking on the one but the one that I have here, the one that I did is from Dr. Rhonda Patrick's website, Found my Fitness Genetic Interpretation, that is [www.foundmyfitness.com/genetics](http://www.foundmyfitness.com/genetics). And when I put my raw data into that this is a piece that came back that relates to the FTO gene. The FTO gene is called the fat mass and obesity-associated protein because it's a gene that is a major risk factor for obesity. The particular genotype, which I'm not going to read that, it's super long, it's associated with a 1.3-fold increased obesity risk, saturated fats may have a negative effect on blood glucose and insulin levels and increased Type II diabetes risk in individuals with this genotype.

So that is one piece of this, so I'm going to kind of unpack the front end of this and then talk a little bit more. When I ran my genetic testing, the kind of 30,000-foot level on this is that on the front end I have this FTO genotype mutation which would suggest that saturated fats maybe are not great for my insulin sensitivity, may increase insulin resistance. But then on the back end of this, all of my other fat-mobilizing genetics are good. And so I would likely be one of these folks that could do well if we're trying to manage lipoproteins and cholesterol levels and insulin sensitivity, I would likely do well on a ketogenic diet that is really focusing on monounsaturated fats and not going crazy on saturated fat sources. So that's a thing.

But not all saturated fats affect this system the same way and nobody really asked the question, "Why?" And one of the big questions that I like to ask around any of these genetic polymorphisms like you have celiac disease. What are the genetic variables around celiac disease and what's the evolutionary advantage? Like far too few people ask that question because it's really important. Saturated fats tend to increase endotoxemia to some degree and endotoxemia is the movement of products like lipopolysaccharide which are the inflammatory kind of coat around gram-negative bacteria and when they make it into the circulation of vertebrate critters it makes vertebrate critter immune system super cranky, tend to get an inflammatory response and all kinds of hell tends to break loose.

And so I have a paper linked here, dietary oil composition differentially modulates intestinal endotoxin transport and postprandial endotoxemia, this is in nutrition and metabolism. What it talks about is that certain saturated fats mainly palmitate being perhaps the worst, stearate being the least problematic,

so not all saturated fats are created equally. But saturated fats tend to preferentially move LPS and similar products from the gut into circulation and this absolutely is a pro-inflammatory process. Now what's interesting is that in the type of genetic polymorphism that I have, the tendency is for saturated fats to increase my lipoproteins and cholesterol. Now generally people would kind of freak out, they're like "Oh, that's bad, I should eat a higher monounsaturated, lower saturated fat diet." Maybe there are arguments for that but nobody asked why does that happen. And the reason why this happens is that the LPS and these pro-inflammatory endotoxemic products are actually removed from the circulation by lipoproteins and the small dense lipoproteins actually remove the LPS more effectively than what is otherwise kind of affected by the larger more buoyant variety. So if you think about metabolic syndrome and what happens with that, elevated cholesterol levels, elevated triglyceride levels, elevated lipoproteins tend to be a smaller denser lipoprotein profile. What that profile looks like is actually a selective advantage trying to deal with infectious agents so it's not just a bad thing. It's not to say that we necessarily want to cultivate that situation but it definitely had an evolutionary advantage. And I provided a link here which, again, all the stuff will be in the show notes.

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And this is actually just a Google search of LPS clearance and lipoproteins and so you'll find a whole host of information around this if you want to dig in. Big picture deal on that is there are multiple mechanisms for removing LPS from circulation. One of them is LPS priming protein in which it's part of our lipoproteins. There are multiple hepatic cell receptors including the LDL receptor which remove lipopolysaccharide from circulation and, like I said, small dense lipoproteins tend to work better. In total this overall FTO mutation is beneficial in dealing with endotoxemia and infection. It's consistent with other SNPs, single nucleotide polymorphisms, that I have like celiac disease. I have a mild tendency towards iron accretion. This shows a pretty direct influence to the adaptation of agriculture. And interestingly, dairy really increases lipoproteins for me. I am one of those folks for whom like butter and cream and stuff like that tend to dramatically elevate my cholesterol and lipoproteins. And this would make a lot of sense in the context of living in a Neolithic farming scenario where I'm exposed to the infectious agents of many more people, many more animals than what you would experience in a hunter-gatherer scenario. So this is actually a really smart adaptive mechanism or adaptive mutation that was likely of benefit in a Neolithic farming environment and could be problematic today. So that was a long, long answer.

Nicki: And I realized that I should have said snips instead of SNPs when I was reading the question.

Robb: It's okay, rookie.

Nicki: I know, total rookie. Okay, on to our third question, familial history of cancer and the ketogenic diet for prevention. So Clint writes in, "Hey, Robb. When I look back into my family history, a boatload of people have had various forms of cancer. We've run the gamut of colon cancer, breast cancer, cervical cancer, et cetera. I've listened to quite a few podcasts with Dominic D'Agostino in regards to the ketogenic diet as a tool in the toolbox for combating cancer and lessening the effects of chemo. I've also heard on various podcasts the use of periodic multi-day fasts to help expunge faulty cells from the body in hopes for cancer prevention. I've been looking into these methods of cancer prevention and wanted your two cents on the matter. I'm 32 years old, 6'2", 180 pounds. I'm an endurance athlete-run coach and compete in races from 5K to 100 miles. If, in your opinion, these are good tools in regards to helping keep cancer at bay, at what age should I start implementing them? How would I go about balancing a ketogenic diet and being an endurance athlete without completely frying my adrenals? I'm not necessarily against reassessing my performance goals to include goals of health and longevity. It's not like I'm being paid to be an upper-midpack runner. Thanks for all that you do! Really looking forward to the new book."

Robb: So clearly this one's a little bit of an old question but a good one.

Nicki: Yeah, still very relevant.

Robb: So I pulled up a medium post so this is not a scientific paper, but it was a really nicely-written article that references a number of people that are quite knowledgeable in this space, including Dr. Ted Naiman, so some of his work is referenced here. And Ted makes an argument that a sweet spot for intermittent fasting, specifically for autophagy which is really the big important thing in the story, in my opinion, from a cancer prevention standpoint is about 18 to 24 hours. And so I could make an argument that maybe once a week we do an 18 to 24-hour fast, maybe 10 to 14 days, something along that line. Dr. Thomas Seyfried also makes the case that maybe once or twice a year we do a longer fast, as long as perhaps three to five days.

But what's interesting to me in all this stuff is we have the potential of getting some kind of compounded benefits from a variety of things. We know for a fact...-And let me back up a little bit. The reason why autophagy is so important in the story is that damaged cells tend to go through a process called senescence where they're still technically alive but they're not really beneficial, they tend to kick off a lot of proinflammatory-signaling molecules. It's kind of like one bad apple spoiling the whole bunch that that one cell can then make all the cells around it senescent, it tends to kind of propagate from there. And there's most likely a mitochondrial metabolic underpinning for this whole process and this is where ketosis or fasting or ketosis and fasting can be really beneficial because

it's shifting the fuel substrates and the oxidative environment in such a way that it's beneficial for healthy cells and not so good for damaged or senescent cells.

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So what we're trying to do is get out in front of that potential cancer process, reset the healthy cells to an even healthier younger kind of profile, intervene in the damaged cells and not let them go forward. There is likely going to be some pool of cancer, some variety of cancers that are benefited either singly or in combination therapy with ketogenic diet and there is almost certainly like there's good data to suggest that a ketogenic diet is likely negative or non-beneficial, possibly antagonistic towards other cancers, like it is not going to benefit one to do those.

So it is not a one-size-fits-all kind of approach. We have lots of research underway. We're going to learn more about this as time goes on. But I can make a pretty strong argument that the fact that you are highly physically active, if we were to do a little bit of fasted training, drink some coffee, maybe take some resveratrol, lift some weights, again do some physical activity in a fasted state, do a little bit of cyclic intermittent fasting, that's moving things in a really good direction and all of those things tend to enhance cellular autophagy. So again, that could be something where maybe day-to-day it's pretty easy to do a 16-hour fast and then maybe once every ten days you do an 18 to 24-hour fast, maybe once or twice a year you get into a fully ketogenic state and you do maybe a three to five-day fast. I think that that is doing some really incredible work as far as preventing the possibility or the probability of developing cancer. And then the other feature is getting adequate sleep, adequate vitamin D and all those types of things.

I did also, in the show notes, include a paper from Loren Cordain's scant evidence of periodic starvation among hunter-gatherers. What this paper makes the case for is that intermittent eating was almost certainly kind of baked in the cake of our ancestral past but extended periods of starvation, like out beyond probably about 24 to 48 hours, was actually pretty rare in the ancestral environment. It's not to say that we shouldn't do that occasionally particularly considering how overfed we all generally are in the modern world, but from an evolutionary biology standpoint it's probably not super credible that we had a ton of experience for extended fasting. So that's again my kind of longwinded response to that.

Nicki:

Our next question is kind of similar but I want to touch on this with Clint because he mentions he's an endurance athlete. So when you're suggesting that he potentially does longer fast every ten to fourteen days or whatnot, would that be a day that he does not train?

Robb: You know the next question actually does basically ask this. The one thing I probably wouldn't do is super hard intervals, CrossFit-type workout. I could make an argument for some Maffetone heart rate, like 140 beat per minute, aerobic pace activity, maybe lifting some weights, but that is not the day to go for a personal record, most likely that is probably not the day to--

Nicki: Or super long distance run, maybe more of like recovery mobility--

Robb: Yeah, recovery mobility makes a lot of sense. I know some people do hit it really hard during that fasted training window and some people report some good benefits, there is apparently some good benefits in the literature. But you and I having run a gym, we've seen people just bury themselves with this, they do it too often, too hard, more is better, and the people who have a tendency to do intermittent fasting in CrossFit and low-carb. The profile ends up being that they do six CrossFit classes a week, they do recovery by doing Ashtanga yoga for two hours a day, the five grams of carbs a month and they intermittent fast two hours a day every day and this person wonders why they have like non-detectable levels of sex hormones and their hair is falling out. They just have burned the candle at both ends.

Nicki: Okay. So Matt's question, this next question is similar although he's talking about much longer fasts. Matt says, "When doing long fasts, like five to seven days, should one stop weight training altogether or keep thing business as usual?"

Robb: I think that this would be a fairly subjective thing. And again, I could make an argument for some resistance training during these longer fasts, it should help to prevent as severe of a muscle loss and protein loss specifically, or muscle protein loss.

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I can make an argument that going into the fast, one should probably be in a ketogenic state for maybe two to three weeks and then enact the fast because you're already keto-adapted, you've already gone through a period of time where normally the first 72 hours when you go from a regular mixed diet to purely fasting, that's the period where you lose a disproportionately large amount of muscle protein because it's getting converted into glucose to maintain normal blood glucose levels and then as ketones elevate during the fasting period then muscle protein breakdown tends to drop. So the way that I would tackle this is be fully keto-adapted, maybe two to four weeks of regular ketogenic diet, then you enact the fast and then if you're going to exercise during that time I would make it mainly strength training but again, like really mellow activity, you're not trying to set any records, this is just a maintenance kind of process.

And interestingly, to your point around the mobility story and whatnot, in theory, during this fasting, we are remodeling a bunch of our body tissues because we're breaking up scar tissue, breaking up adhesions and whatnot, this could be a really good time to get in and foam roll and stretch and get some ART and stuff like that to deal with possible injuries and restrictions because the body is in a really prime state for remodeling because we're reusing these damage proteins. So that would be a strategy that I would use during that time.

Nicki: Okay. Let's see, our next topic, cycling the carbs: is it supposed to suck? Kate the Great says, "Hey guys, huge fan of the podcast, although I'm only a hundred-some episodes in and trying to catch up. I eat Paleo. Duh! How could anyone listen to 100+ hours of Robb Wolf and not eat that way, which means no grains, dairy, legumes or sugar. I'm also well on my way to converting the metabolically-resistant trifecta of my Baby Boomer mother and father and my hot Cheeto-loving fiancé, which seems to be the Holy Grail of Paleo living." Okay, this is a long question. Do you want me to read all of these? Let's see.

"On low-carb Paleo, I started absolutely shredding weight and dropping body fat, 16% to 12% body fat in two weeks, which was very alarming. My body adapts pretty quickly to whatever is thrown at it, and I tend to gain muscle and drop fat easily, but this was definitely unprecedented. After seeing that weight loss, listening through the podcast, and choosing to add in a few more weekly sessions of BJJ and Muay Thai, I figured it would be prudent to add in some high-carb days. Here's the curve ball." Holy Toledo, this is like a three-page essay. Where's the question?

Robb: You got to read it, man.

Nicki: Okay, it's my first day on the job. I don't know all the rules. Okay. "Here's the curveball. I am a cop who works the road, but with a balling swing-shift schedule, four days on-four days off, 1:30 p.m. to 1:00 a.m., and we get paid an hour a day to work out. From what I hear, shift work is the devil, but I haven't had any problems with it yet. I started adding in a high-carb day, 200 grams, every eight days. It falls on my first day off. Carbs come from corn chips or tortillas at a Mexican restaurant, homemade coconut flour pancakes with banana and blueberries, and tons of raw veggies, like a party-tray of dipping veggies with no dip.

Here's the problem. On high carb days, I feel like BUTT. Bloating, fatigue, rapid heart rate, inability to focus my eyes or even keep them open, crashing and sleeping 14 hours that night, confusion, extreme thirst, muscle cramping, headaches, stuffy nose, and mental fog." Sounds like a pharmaceutical commercial. "On the following day, I'm sluggish to wake up, but fine by the afternoon, and absolutely slay workouts. I'm talking adding 20 pounds to

previous weeks' lifts, or able to go for hours nonstop in the ring. I love what the high-carb days do for me, but I hate them in the moment. This crash doesn't seem normal or healthy, and I can't figure out what it's coming from. Is it (1) a possible gluten exposure-cross contamination; (2) A downer after four days of high-adrenaline work; (3) Entirely too much fiber? (4) A combination of all the above? And am I giving myself the diabetes? What is the reason for this crash, is it a necessary part of carb-cycling, and how do I make it stop? I would go back to all low-carb, but I want to stave off further weight loss and pre-empt a hormonal cluster-f with high-intensity workouts, high-stress job, and low-carb."

Robb: Okay, and then there's some individual statistics in there. So maybe what we'll do in the future is we'll set up some sort of a forum so that the questions can be concise, concise definitely helps here. So there's a lot going on here. What appears to be happening is some carb intolerance after the four days on shift and that night shift stuff crushes people. This is one thing that we have consistently seen out of our work with the Reno police and fire folks is anybody on shift work, police, military, fire, medical personnel, new parents, unless you're like 15 years old, like it absolutely hangs you out to dry.

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So that first day may not be the smart day to reintroduce the big carb bolus. You might actually do that day two, day three, after you've normalized your sleep schedule a little bit. That would be one of the first things that I would do as far as tweaking the timing of that carb re-feed. You might also just tweak the amount down, maybe 50 grams a day, 150 grams. But the two main thoughts that I have around that are tweak it so that it's not coming directly on the heels of four days of bad sleep and to your point, highly-adrenalized kind of running gun working, and then maybe modify the amount that you're using a little bit. So definitely would be interested in hearing what your experience is if you give that a tweak and a fiddle. This one again is quite a long question, well not super-duper long, but this will be the last one.

Nicki: I got it, this is my job. Okay. Jacquelyn says," About a month ago, I began the sugar elimination Paleo meal plan. I needed to lose a lot of weight. I have spinal stenosis, severe lumbar arthritis and in the right hip. High blood pressure, prediabetes, Hashimoto's disease, lactose and gluten intolerant, et cetera. I take medication for the high blood pressure and the Hashimoto's disease. I've been going to the gym for 18 months working on various muscle groups and doing cardio. I lost nothing, but my muscles did firm up so I lost inches. My doctor and physical therapist were both nagging me to change something to get the weight off. I met with a friend of mine who has a company called Verri Well and she advised me to do the sugar elimination plan, basically meat, veggies and fruit each meal, and see how it goes, and I did. Within four days, the chronic pain I had in my lumbar spine and right hip disappeared. I continued eating meals based on the plan and going to the gym or walking every day and at the end of a

month, I went to my doctor's office for a check in. I lost 35 pounds in the first month. My doctor freaked out saying that it was dangerous for my organs what I was doing, and I needed to slow down the weight loss and put peanut butter, bananas back in my diet and lose the citrus fruits. Well, I'm not going to do that because I feel it would hinder my progress. I like the way I'm feeling. My doctor added that my heart and kidneys would not be able to take the rapid weight loss. So, I am asking you for a general opinion. If I am working out every day, and sticking to a Paleo meal plan, is a weight loss of 35 pounds for the first month unheard of or dangerous for my organs if my starting weight was 280 pounds? If so, what should the amount of pounds be for weight loss, or does it even matter? I can see my doctor's position if I was anorexic or bulimic. But that is not the case at all. Thank you for reading. I really need your help with this."

Robb: Yeah. So for me the really important stuff is right there at the end. So her starting weight is 280 pounds, she doesn't mention how tall she is or anything, but for most people that's pretty sizable. If she's 6'5", that might wear pretty well, if she's 5'4" she's significantly overweight. And 35 pounds lost in a month is only a little bit over a 10% weight loss in that first month and we all know that when we're shifting from kind of a standard mixed Western diet to a lower carb Paleo-esque type diet one of the big things that we see is significant water loss during that period. So it possibly as much as like 20 pounds of water may have been lost during this process. Her inflammation likely plummeted. Her insulin decreased. If her insulin decreases, then aldosterone decreases. If aldosterone decreases, you don't retain sodium, and so you pee out a bunch of water. And so a huge chunk of this weight loss is more than likely coming from just water shifting.

So doctors freak out from really huge weight shifts because it can mean someone has developed diabetes, someone has cancer, like there are some really nasty disease states that in your intake form frequently it will say, have you experienced significant weight loss in the last six months, and if it's a yes then it really perks the healthcare provider's ears up because that matters, it can mean something pretty nasty, again, like cancer or something like that. More than likely this is not the case here. What the case is is somebody who's pretty overweight started a lowish carb Paleo-type anti-inflammatory diet, almost certainly lost a ton of water weight as a beginning place with this. So if we saw let's say 20 pounds of water weight loss which wouldn't be unreasonable at all, that's less than 10% of her total body weight in this scenario, and then 15 pounds of fat loss during that period which, again, wouldn't be crazy in the beginning stages of a weight loss plan, that's pretty reasonable.

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And so I can, on the one hand, understand why your doctor would be pretty concerned about this but it also is tough because these folks don't see what can happen when you actually have a motivated individual use a technique that's

really effective like kind of a low-carb Paleo type diet. So as always, it would be great if before you enact a change like this we have blood work before, you go 30 or 60 days with your blood work afterwards, maybe we'll track some basic blood work every 30 days, just to keep an eye on that. But the whole notion that your organs are going to fail because of healthy basic weight loss seems kind of ridiculous to me. You're actually reducing the load on your heart and kidneys by going through this process.

Nicki: But maybe it's just not that standard advice, like you shouldn't lose more than one to two pounds a week for what they call "safe" weight loss.

Robb: Right. The funny thing with that is that we definitely have people who developed disordered eating and they can have some really kind of crazy approaches to food and that can lead in to some problems down the road. But the vast majority, we have kind of oriented our whole weight loss intervention and the counseling that occurs from doctors and dieticians oriented as if every single person is a disordered eater and that is just not the case. What the case actually is is that we have estimates somewhere perhaps as high as 70% of the US population is insulin-resistant, insulin-resistant heading towards diabetic. That has the potential to bankrupt our economy and cause incalculable amounts of suffering and problems. And so I really think we've got the emphasis misplaced in that regard. Yes, we do need to be mindful about people adapting strategies for healthy lifelong eating and all that type of stuff, but the disordered eater is not the process that's going to upend Westernized economies. The diabetes epidemic absolutely is and having nervous nanny hand-wringing over effective fat loss and weight loss is not really a smart thing.

Nicki: Cool.

Robb: Well, wife, how did you enjoy your first episode as co-host of the illustrious Paleo Solution Podcast?

Nicki: I don't know. Will I be back for a second one? That is the question.

Robb: We'll see. We'll see. We'll put it up to the vote of listeners. So in the comments--

Nicki: Right, vote me off the island or keep me.

Robb: Nicki Violetti, hot or not, as co-host of the Paleo Solution Podcast.

Anything else? Let's see here. If you want to follow me on social media, the main places I hang out are Facebook, that's RobbWolfOnline on Facebook, Twitter is @RobbWolf, and Instagram is @dasRobbWolf. I think that's it.

So, folks, thank you for your continued support. Looking forward to doing this Q&A process. It's actually pretty fun, even though Nicki and I spent--

Nicki: I know you want to wring my neck.

Robb: Even though I want to wring Nicki's neck, but she's doing jujitsu now so I get to do some really nasty side control on her every once in a while.

Nicki: And I get to try and choke him out.

Robb: Yeah. So again, thank you, guys. Thank you, wife, for helping me, and looking forward to the next episode.

**[0:38:44] End of Audio**