

The Paleo Solution

Episode 74

Robb Wolf: Hey folks, Robb Wolf here, back, broadcasting from Reno this time. Greg, how're you doing man?

Greg Everett: I'm doing pretty well just getting over a cold here, so forgive me if I sound kind of weird.

Robb Wolf: It gives you kind of Debra Winger kind of a, you know, sexy kind of thing going on.

Greg Everett: Well, Debra Winger, that's what I've been going for my whole life. So I'm glad to hear that.

Robb Wolf: Sweet.

Greg Everett: That's real absolutely a goal of mine.

Robb Wolf: Cool, you're doing -- you're on the spot on then. Sweet.

Greg Everett: What are you doing in Reno?

Robb Wolf: Hanging out with Nikki's dad.

Greg Everett: So we're just up here probably that much gambling, probably just recovering because I'd be doing...

Robb Wolf: Did you do all week with the Glenn Cordua's lifting some weights, I kind of like volume, way back on the Olympic glimpse on the gymnastic stuff but even so, just 4 days of doing jets and this getting mashed around the mat. I am knackered. Anything coaching more on the gym to just getting up earlier and Dude, it's Friday for sure and I am done.

Greg Everett: Yes, working pretty much ruins everything.

Robb Wolf: Yes, damn it.

Greg Everett: Just across the board. I recommend you avoid that as much as possible.

Robb Wolf: I'll try to weave that into my gig here soon, so, well, what's new with you, are there any news worthy events?

Greg Everett: Yes, well, the girl I got the cold from is one of my lifters, Kara Doherty formerly Kara Yessie and she brought the cold back from Toronto where she was breaking her own Ontario snatch for the second time in the month. At the Arnold, she broke her own Ontario snatch record, cleaning jerk record and total record.

Robb Wolf: Nice.

Greg Everett: So she had to go up to this meet kind of funny, she had to go up to this meet to qualify for Canadian Nationals in May. So, even though they recognize her Ontario records that she set at the Arnold classic, they, for some reason, did not recognize that meet as making her eligible for Canadian Nationals. Very confusing.

Robb Wolf: Canadians have very high standards.

Greg Everett: Yes. So, pretty psyched about that, so we have high hopes for her going into nationals.

Robb Wolf: Cool. I am just in Toronto to do the PSS there or what I lacked last weekend, the weekend before that, so it's all kind of running together but...

Greg Everett: I'm sure it was last weekend?

Robb Wolf: Yes, I did it...

[Cross-Talk]

Greg Everett: ...last call and catch you up there.

Robb Wolf: Yes. Ok.

Greg Everett: So, we recorded from up there.

Robb Wolf: Ok. It's funny, it all really does run together. It's kind of like "which town are we in now? So I think we've got the links ready to go on that Wylde on Health TV show which actually turned out really well, the PSS was well attended, so that was cool. Amber is still chipping away just a ton of stuff on the back into the bargain. I think we have the transcripts going up now for the podcast?

Greg Everett: Yes.

Robb Wolf: Yes. So just tinkering with all that, that sort of stuff have some new things that we're getting ready to roll out soon. So, just chipping away and try and understand top of the whole thing. people with plates spinning so...

Greg Everett: Well, you want to talk about some podcast questions?

Robb Wolf: Yes, let's do that.

Greg Everett: We don't have to if you don't want to.

Robb Wolf: No, it seems like a good idea. We just make all those stuff up anyway so, really, yes.

Greg Everett: I'm just sitting here and typing up fake email questions.

Robb Wolf: Exactly.

Greg Everett: Alright. We'll talk about Atkins because that's always a favorite diet topic. You get such a weird response to that word, Atkins. Few would either love it or they want to punch you in your face.

Robb Wolf: It's almost like throwing out child molesters something like that. It's just like....

Greg Everett: That's a weird analogy but I guess yes. I don't know but I can only ask favorably to the term child molester.

Robb Wolf: And you know, that's the funny thing, it is possibly a weak analogy there but the kind of emotional betrayal that you get is...

Greg Everett: Yes.

Robb Wolf: ...is similar but you don't typically find anybody whose kind of like "yes, ok I like that". Though occasionally, you find somebody who understands a little bit of nutritional biochemistry and understands that the Atkins approach is completely sound but that aside, ok, I've horrible analogies folk. I'm barely hanging on by my fingertips and I haven't had any coffee. I'm on decaf. I don't know if life is worth it. Here we go.

Greg Everett: Alright. You got to try the liver buster complex that I'm doing right now which is like [00:04:44][Inaudible], ibuprofen, and just a whole lot of training.

Robb Wolf: Nice. Ok.

Greg Everett: It's going to work.

Robb Wolf: I'll drop it next week and I'm sure I will die from it, given the amount of sternum compression I had from Glen this week. I think that that probably will rupture a spleen and my liver, both.

Greg Everett: A spleen? One of your spleens?

Robb Wolf: One of my very, very mini spleens.

Greg Everett: Oh, you don't need that anyway, so, it's one of those extra organs.

Robb Wolf: Yes.

Greg Everett: Alright. That was another 5 minutes of talking not about Atkins diet. So, Jay says, "Hey Robb, I was talking to a friend the other day and she mentioned that after 15 years on Atkins, her aunt developed type 2 diabetes. And she and the doctors blamed it on Atkins. That sounds very personal. I pressed her for more info but that was all she knew. This seems weird to me given that a lot of people reverse type 2 diabetes on low carb diets.

Can you speculate, given the limited info I could provide, on how one could get diabetes from a low-carb approach? If it's not actually possible, can you speculate on why someone would attribute Atkins to diabetes?

Robb Wolf: Oh man.

Greg Everett: I can speculate why they would do that because people just hate on Atkins just like they do every other diet.

Robb Wolf: And then people are jackasses and, you know, doctors included. Although we have great docs out there, the Peller Physician's Network is growing rather quickly. We have some great people doing some really good medicine out there and they understand the new ones is of this stuff.

But it is hilarious, you can sit down -- one thing, what I was thinking about this from **[00:06:20] [Inaudible]** shocked me these questions and I was looking at them, the thing that popped into my head is that, you now, so we have this claim here that this woman was doing Atkins 15 years and then developed type 2 diabetes.

I don't know why, and this was actually at a point when I was rested and not delirious like I am now. But the thing that popped into my head was I was reminded by the fact that I had a crazy uncle who swore that he had been abducted by aliens. Swore.

And complex story, and as a kid, I remember it was very compelling although we were never supposed to like spend too much time with this crazy uncle and all the source stuff, but you know, it was very very convincing and, you know, kind of like drove this picture of like alien abduction into my head.

And the thing is this the story of alien abduction has more credibility to it than the potential that this woman -- 1, was on Atkins for 15 years, or 2, that if she was on Atkins for 15 years, that she developed type 2 diabetes out of the gig because the basic keyology out of this type 2 diabetes is some form of inflammation, some form of disregulation of leptin and insulin signalling such that you become more and more insulin resistant and you can't really do that on a low carb diet.

I could may be think of some ways that you could do it by staying up all the time, having a tiny amount of carbohydrate be made completely of fructose, and the primary fact that you consume is going to be omega 6 linoleic acid. You could probably screw yourself up pretty good but you -- I'd be almost be more inclined that you die from cancer or something from the linoleic acid before all this stuff went down, you know.

Greg Everett: That seems like a very complicated approach.

Robb Wolf: Yes, I mean, there's way easier ways to kill yourself and, frankly, a lot more fun. Like if you're going to try to off yourself with food, I could think, you know, Hagen Daz and all kinds of other stuff besides doing this. So, long and short of it, this is just ridiculous.

And then the medical community's position on the Atkins stick is still just so ridiculous. If you have metabolic derangement, if you do not have proper insulin signalling, if you respond poorly to dietary carbohydrate then it is the most jackasstic thing in the world to recommend that somebody do, you know, the American Dietetic Association recommended 60% carbohydrate diet. It is absolutely ridiculous. It should be malpractice kind of gig.

And maybe someday it will be. And maybe someday it will do some sort of a retroactive class action sued against all the dieticians, all the professors of nutrition who recommended a high carb diet for

metabolically deranged individuals because you can sit down in similar the like kind of a court of law kind of gig, build a case why this is absolutely ridiculous.

So, I can't answer the why's to this other than people are bias from this information, they're not well educated, I'm not picking on their docs who are listening but I've taught chemistry at both undergraduate level and the graduate level, have taught it to medical students. And doctors try to forget their biochemistry as quick as they possibly can.

And I was talking along about this and he absolutely hasn't my back on this topic. So, not picking on you guys but there's just kind of a reality that folks get in, they need to start practicing medicine, they're not necessarily biochemists that's cool. But if you really want to get in and understand this stuff, you start looking at the mechanistic underpinnings.

And for fixing metabolic derangement, a low carb diet, particularly kind of Paleo oriented while we're dealing with vitamin D levels, where getting adequate levels of omega 3's, minimizing omega 6's, making sure that we sleep, we do something crazy call exercise. All these stuff ends of normalizing this overall picture of diseases going on in a kind of a holistic manner that's consistent with this evolutionary biology approach.

And Atkins had made way more right than wrong into the day and so it's kind of a long and short of it. It makes you sound like a **[00:10:40]** **[Inaudible]** saying it but, you know...

Greg Everett:

The first thing that came to mind when I read this question is, if she was on Atkins for 15 years, how did she know that she developed type 2 diabetes. I mean, did she one day just fall off the wagon and go eat a case of Twinkies, and then going to a coma, and then do a glucose disposal test? Like I don't understand how this even came about, honestly.

Robb Wolf:

It, you know, you'll see some doctors, I think some of the vegetarian docs, I think it's been John McDougall, maybe Dean Ornish. They will claim that doing Atkins, because you're consuming a, theoretically, a large amount of saturated fat or if you do, dude just consume a lot of saturated fat.

They say that the saturated fat is the cause of the insulin dysregulation, which is absolutely ridiculous. But, you know, this is something that we've talked about, just me individually and then when **[00:11:34]** **[Inaudible]** came on the show, just talking about the fact that you transiently, your insulin sensitivity may look relatively poor on a low carb

diet because your body is actually burning fat as a primary fuel source. So then if we challenged you with an oral glucose tolerance test, you don't have great response to that.

But it doesn't matter because you're not eating a lot of carbs at that point. If you want to start transitioning towards eating more carbs, then we start in a low level and we titrate up and then you're body becomes more insulin sensitive specific to using carbohydrate as a primary fuel source which may or may not be appropriate than based on whether or not you're activity level's high or you know, just kind of whatever like being in that kind lowest carb like 50 to a hundred grams a day of carbs.

I think that that's money that's great from an anti-aging perspective, make all the carbohydrates nonstarchy nutrient tents vegetable matter and you're great on that. So there is this perception, and a lot of doctors' heads, particularly coming out of the kind of a vegetarian crowd, this saturated fat will induce insulin resistance. And there's a little bit of mechanism that supports this through really being fast in those with the information or not giving a full accounting of the information at all.

Greg Everett: Shocking.

Robb Wolf: Yes.

Greg Everett: Alright. Tell everyone to go on Atkins, should be fun.

Robb Wolf: Yes, go back on Atkins, yes.

Greg Everett: Because obviously if she genuinely did it for 15 years, it must have been working all right.

Robb Wolf: Seems to me.

Greg Everett: Alright.

Robb Wolf: Yes.

Greg Everett: Moving on to mitochondrial disease. So, Steven says "Robb, love the show. Try to get some questions answered before but no luck. I guessed they were touched on too many times they're not just interesting enough so I thought I would ask something else." Good strategy. "My colleague's wife has mitochondrial disease which affects everyday movement.

On top of that, it affects what she eats and high fat meat is almost impossible to digest. Is there any study, research, or data that shows positive effects of the Paleo diet on mitochondrial disease? And via the site blog comments, looks like we narrowed it down to cytochrome C oxidase deficiency or complex for variation of mitochondrial disease.

Robb Wolf:

Yes. This is just something to throw out there up front to folks. If you are going to ask a question, try to give as much information as you can because I had to kind of **[00:13:59] [Inaudible]** knee a little bit about figuring out about what specific mitochondrial metabolic disease this was because there's a bunch of them. And some of them actually have some autoimmune underpinning tone.

So what I was fishing around for was trying to find out if this was one of the branch of autoimmune diseases that affect mitochondrial energy production and if that was the case then we've got a pretty good case for suggesting that, you know, the Paleo type diet would be beneficial here. Unfortunately, what he relayed with the variety it's just genetic hard wire metabolic problem with the very end of the electron transport chain, basically the power production.

It's like if you were trying to dam a river to generate energy which is kind of maybe a little bit of an analogy to think about the mitochondria burning nutrients to generate ATP to be used in energy production. This last step in this particular mitochondrial disease if this gal has, the energy just kind of dissipated like the electrons just kind of spill out into the mitochondrial matrix and they don't really get used effectively. And you can't use fat really effectively as a fuel source.

What I recommended was that, you know, in general, Paleo diet can be healthy just from the gut elements and all that sort of stuff. But you're probably going to have to steer this thing in more of a high carb kind of approach, you know, more yams and sweet potatoes, all that sort of jive. There might be and I did a little research on this, it looked like medium chain triglycerides, like what we would see out of coconut products, might metabolize a little bit better in this condition.

So instead of doing the longer chain fats, linoleic acid like you would get out of meat, olive oil that sort of stuff. Pretty much just sticking with coconut products, you're going to have a, probably, lean protein sources like chicken breast or **[00:16:03] [Inaudible]**, you know, leaner cuts of beef and then fairly large amounts of carbohydrates for the main fuel source, and then supplementing with some medium chain triglycerides. So, that would be some stuff that you could try.

The literature that I read seem to indicate that folks get a little bit of benefit with this condition, with the introduction of MCTs for their primary fat source. So it's just something to be tinkered with. And this is this thing again where like in general, if you can eat in such a way that you are healthier, then you should do better. But this is definitely a tough disease.

I mean it's getting right down at the molecular level of how we generate energy and there's just fundamentally some broken elements to the protein complexes that are involved in that. And there are not a lot of ways around that. So gene therapy, at some point, might fix that but that's a tough one. It's definitely a tough one.

Greg Everett: Moving on to a possibly happier topic, depending on who you are.

Robb Wolf: Depending on how much you like stoners.

Greg Everett: I just have to say, this is one that I tried to ignore but I don't know what is going on, all of a sudden we just got like a dozen questions about weed. And so, apparently, it's some kind of popular topic. And I guess we should address it. And then...

Robb Wolf: Marijuana, popular.

Greg Everett: Yes, been shocking enough.

Robb Wolf: Yes.

Greg Everett: So, I guess that we got a number different questions. So, here's just to really quick and the only reason I included the first one is because it made me laugh. And that is, what are effects of smoking or ingesting marijuana? Please and thank you. I am a snowflake. So that one is just worth including for the sake of its semi haiku format and incredible artistry.

Robb Wolf: And it's also really reminiscing of all the videos of a guy that's like "I've been smoking the weed everyday for 30 years and as the same as the first day I did". You know what I'm saying. Ok.

Greg Everett: Yes. But because you don't remember the first day you did.

Robb Wolf: You just when you get old imagining things so...

Greg Everett:

So, the second question which is a little more extensive, "just have a quick question about THC. Are there significant negative long term effects of smoking? I used a vaporizer so I know I eliminate the negative effects of tar. From doing a basic Google search, I see a wide variety of opinions." Oh, the internet. "Although there seems to be some credible evidence that marijuana has negative effects on memory and brain function.

I am mostly Paleo, just haven't eliminated the dairy yet. Still trying to get 70's buff". He's got the 70's theme going on, that's for sure. "As far as other goals, I would like to live to be a hundred and twenty. Smiley face. How would the years of a vaporizer over the years affect this goal? Should I quit? I am secretly hoping you will tell me that as long as I'm using a vaporizer, I will be fine.

It's not a secret if you say it out loud. I hope you to get to this question. Thank you for everything you do. You have changed / saved my life." Oh, just jump right in there Robb please before I say something I regret.

Robb Wolf:

You know, I think there was another one we may have trended out of this but it was a -- oh no, it's in here also, it's just talking about stress reliefs, so we had another question on here. So, a lot of people will smoke pot for stress relief.

The interesting thing with this, and this is just really looking at the straight up pharmacology, the effects on anti anxiety elements of THC are very potent in the early stages of use. And then the interesting thing is that you start getting kind of a paradoxical effect in which THC use creates, worst stress and anxiety down the road.

This is in general. This is kind of broad brush strokes kind of things. Different people have different neurochemistry, obviously, some people can use white drugs, they use cocaine, there are, you know, recreational users and they don't necessarily become an addict unless they really ramped up their usage.

Other people use it once because the way that they are wired up neurochemically, they are addicted straight out of gate. Marijuana, typically, isn't like that. But there are some people who are wired up such that it just, man, it just seems to fix whatever it's that's ailing them. There was a kid, when I was doing my physical chemistry class which was one of the toughest classes I've ever had.

It's basically quantum mechanics, thermodynamics and everything applied to chemistry. It's just a ball buster of a class. And there was this kid in there who was doing a double -- actually, I think like a triple major of chemistry, physics, and molecular biology. And obviously there's more of them out there but the dude was carrying like 25 units of chemistry, physics, calculus, and so biology classes, and crushing these classes.

And this guy had the most extensive hydrochronic set up that I've ever seen in my life. It was a shocking. And this guy, I don't think he went long, I mean he set up his class schedules and he lived about 4 minutes off the campus, make a walk home and just get ripped and then come back and study and teach undergrad classes and stuff like that. And they tried quitting a couple of times, and it was horrible for him. Like he was just non-functional.

So it's a highly subjective as to whether or not it's going to be good or bad for you with regards to your functioning. I think people can kind of figure that stuff out with a little bit of tinkering. As to the health effects, smoking is generally not that good for you. Just as a baseline, like you're combusting a hydrocarbon, you have this polycyclic aromatic hydrocarbons which intercollate your DNA, they basically kind of slice your DNA up into pieces that happens primarily in the lungs but, you know, it introduces a reactive oxygen species all throughout the body.

Greg Everett: What about the vaporizer?

Robb Wolf: Well, the vaporizer is better in that regard but it's not perfect.

Greg Everett: We just use to call those bong. These kids are getting crazy now.

Robb Wolf: You know, the vaporizer -- I don't have deep knowledge in this because I recreationally played with a little bit of this stuff in high school and really didn't like it. Like if you were to put my feet to the fire, I would say I'm probably much more of a upper sort of kid which is probably why I had such a horrible addiction to coffee and power lifting and Guns and Roses songs.

So, I mean that's, you know, kind of more the way that I leaned but the vaporizer, you create this, basically, inner air environment and non-gaseous, non reactive environment than you heat the marijuana or whatever. It selectively kind of releases -- aerosolizes the THC which kind of decreases the amount of gunk that you're going to get.

And so it's good in that regard but you're still suffering some degree of long damage from that but that said, living in a busy metropolitan area, you get a bunch of long gunk from exhaust pipes and all that stuff. When Nikki and I were in Florence, Italy, every night when I would blow my nose and, you know, it was like just horrible.

It was like I was walking down country road or something but it was just kind of from the pollution and people smoking around me, and cars zipping by and, you know, every 5, 6 hours, I would kind of cough up a long way sure of some sort from the air pollution.

So at the end of the day, I guess, you know, this is the stuff where it's kind of like, you know, if you're ok with the potential legal consequences of this stuff which everybody has to kind of figure out where they with that because we have this Asinine Policy instead of taxing this stuff and they're tackling it from a libertarian standpoint.

We just have drug dealers make all the money off of it which I think is brilliant. But our puritanical drug laws ensure that we have drug cartels and all the rest of that stuff. And that we...

Greg Everett: Good word Nixon. You got them

Robb Wolf: Totally. And we ensure that we don't make any money of this stuff so that's kind of my libertarian, you know, free love, free drug, high horse thing which can set me on fire for I guess if they want to. But that stuff aside, I think that there are downsides to it but you just kind of look at quality of life.

If you feel like this is -- leaves you to neatly providing to some sort of quality of life for you, some people have kind of a spiritual commuting with this stuff, then, you know, maybe it's a benefit to you. I mean having a drink a day seems to have some benefit for most people. Having 2 starts negating the benefits.

Having 3 or more then you start, definitely, having a negative outcome to that. But some people just really, really enjoy that and, you know, they couldn't imagine not having their cocktail in the evening, or their 3 cocktails in the evening, and they are happy with it and they're cool with the health consequences and that's fine.

So, there are some negatives, I think, too. And the vaporizer probably minimizes it. All you stoners just try to, you know, not be so stoned.

Greg Everett: Fantastic advice. Alright. I don't think this next guy's getting stoned. Well, he shouldn't getting in the way with his profession. Liam says, "Hi Robb, first of all, can I say I'm fairly new to your podcast but have been spending 6 hours a day listening to episodes. I'm a truck driver and have been loving your acquisition of knowledge and all around comic banter." Cool.

Robb Wolf: That's what we're shooting for kind of the interpret.

Greg Everett: Question. "I'm a former up and coming elite level shot putter who has leaned down to around a 195 pounds from 275 at my lightest. Currently going the whole triathlons / running fad and actually enjoying it." I'm sorry to hear that Liam.

"I'm trying with the idea of making a comeback to the shot putting and would like to know your thoughts / advice on how I would go about bulking and regaining some of the lost muscle mass whilst utilizing Paleo." You know what Liam, I just want to give you a little bit of applause for using the word "whilst". This guy's definitely from a some kind of British Colony because...

[Cross-Talk]

Greg Everett: And that's just fantastic. This is practically Shakespeare. "I've heard you speak about the direction of goals, bulking versus leaning. And I'm well aware that the bulking maximize gains, there will be a degree of fat gain with this.

I'm hoping Paleo will help me maximize these gains, whilst minimizing fat gain as compared to the old carbs, carbs, and more carbs bulking. Any thoughts / tips?

Robb Wolf: Yes. She did great. You will probably have some good commentary on this. I mean 1, you got to get your training docks in a row, you know, lifting heavy weights kind of progressive overload kind of shtick, no aerobics, I mean it is just the signalling that you set up related to an aerobic training session is so horribly counterproductive for muscle gain.

It's hard to really adequately describe it. And the body always defaults preferentially to endurance adaptations. Yes, they really really fight to get strength, speed and power adaptations to body is way more concerned about us proving out and running out of gas than it is about us being really big, really strong, really powerful.

So, you need to get your docks in a row with that regard first and then you start eating, you know, the gram, maybe 2 grams of protein per pound to body weight, post work out carbs, endure more carbs as for your tolerance, good amounts of fat.

I think initially like that, you know, with good solid 4 meals a day than of got a thousand to 1500 calories in most of the meals as a good spot to start and just keep an eye on your muscle gain versus fat gain. Unless the fat gain is really out of control.

Like if it's beyond what you are really comfortable with then you kind of dial things down. I think tackling this in about 3 to 4 month blocks also like kind of having a goal, a weight goal that you're going to achieve within a 3 month time and try to reach that new plateau, and kind of stabilize dial the food down just a little bit, kind of stabilize the body weight at that new heavier weight and then do another run up.

Since you've been at this weight before, it's not going to be that hard for you to get back to it but, you know, just being smart with it and giving yourself some time to get back up there.

Greg Everett:

Yes, absolutely. The training is going to be huge. If you're running, and swimming, and biking like crazy person, you're not going to suddenly, you know, put 80 pounds back on. It's just not going to work. It's like one of my favorite things, we get these like high school football players and stuff, you know, "I need to gain weight" and gain weight and finally all of a sudden they put on 20 pounds and you asked them what happened, say "well, basketball season ended"

So, yes, I get that squared away and then like Robb said, you know, keep that same solid Paleo foundation. And then add, you know, relatively Paleo-friendly carbs as tolerated, as needed. And, you know, we talked about this, I think in the last episode, I mean with 2 episodes ago about just stair stepping that weight gain up.

You know, and trying to, as Robb said, get to a certain weight, hang out there for a week or 2 at least and then kind of bump it up again. And that should make the whole process a bit more successful.

Robb Wolf:

It's kind of interesting like I've had success in the past doing pretty high protein, pretty high fat, really low carb kind of approach. And then something just seemed to change in me. I mean that approach didn't really seem to work so well anymore and I've recently, probably the last 3

months, had been much more like aggressive, post-work out carbs, doing actually mainly yam and sweet potatoes.

I'm working on some blog posts on some Asian varieties of sweet potatoes that are so insanely good. They're like eating cake. It is insane. Like part of me just likes to train now because I can eat more of that stuff. It's like so good.

But what I've been doing is actually cutting back my fat were used to, say like go to have like a can or half a can of coconut milk with meals and all those stuff. I'm really not adding a ton of extra fat with things. I eat a lot of protein with whey and had a really good, we bought like a 300 pounds of grass fed ground beef and not just thing kind of going wild without a little – I'm sick of ground beef.

At this point I'm waiting for us to get some other cuts in but I've whatever fats with that and then I'm eating a good amount of like yam and or sweet potato, most of my meals, not all of them. But you know, I'm eating more earlier the day and then not as much later in the day unless I train later and stuff like that. But it's interesting, I'm running about 178 to 180, and pretty lean and strong and pretty jack for me and you're almost being 40 years old, and so it's kind of interesting.

I've also been throwing in some crout and like my digestion seems so much better. I've been making some crowded home which got some stuff I want to do more blog post on just add probiotic and making your own sour crout. And then I've also been throwing in a lot more sea vegetables. So, I've been buying sushi wraps, the sea weed sushi wraps.

And I'm just rewrapping hamburgers and you know whatever I'm eating in that stuff and getting 3 or 4 sheets of that a day. And, you know, I suspect, maybe there's been some iodine deficiency floating around out there I haven't really bothered to either get it checked or to get iodine supplement.

That's just some stuff that I've played with. So, and tinker with higher protein, higher fat, lower carbs, yes you do with that. If you don't do well with it ratchet the carbs up, hold the fat down a little bit, see how you do, definitely make sure you get enough iodine, and make sure your digestion is good, and make sure vitamin D levels are good.

I'm just kind of shocked with how my body has changed over the years because the stuff that used to work really well for me isn't working so well now. Shocking enough, things change. So...

Greg Everett: Yes, I mean personally, I absolutely cannot gain or maintain weight without a pretty high carb level. It just absolutely does not work. So I've quit trying to make it work.

Robb Wolf: And that's where like having a, you know, having some theory is great but having also several tools in your toolbox so that you can tinker with stuff. I think that low carb Paleo kind of shtick is amazing for reversing metabolic derangements on different blocks of your training period that may be of benefit but then I think it's interesting when I really first went low carb like years ago, back around 2000, 2001.

I did jujitsu, I did kickboxing, I did **[00:33:55][Inaudible]**, and I mean I was eating like spinach and color greens and that was it. Another note was protein and fat. And I could roll, I could kick box, I lifted weights, I had cardio for days and some of this is that I wish I was younger then too. I mean there's a certain element to that.

You know, 10 years ago, that's definitely a factor. But it's interesting that mode of training and eating eventually wasn't producing the same results for me. And like Mat Alone and I talked about this -- we talked to him about this on the podcast.

A lot of people do really, really well on low carb Paleo even when they're doing kind of intense like politically demanding work like cross fit and stuff like that until it doesn't work anymore. And it can be rather shocking like the wheels just kind of fall off the wagon and then you really need to start supplementing with some carbohydrate and I'm kind of, you know, of the mind that folks needs to stay ahead of that even pre-emptively throw.

Even just like 50 grams of carbs post-workout if they're doing some glycol locally demanding stuff. Do that under harder training days even if they feel like they're one better on the low carb, high fat kind of gig which is getting kind of far afield from this original question.

But the main take on being just have a couple of ideas in your head. You know, you ride one pony for a while, see how it works kind of switch gears, see how the other one works. And then should be able to get there.

Greg Everett: And if the first one doesn't work as well, eat it.

Robb Wolf: Eat that pony, hell yes.

Greg Everett: And I guarantee you're going to get back to 275. Alright, speaking of carbs and delicious things, Dave says, "Hi Robb, just a quick question today. I love your recent takedown of Brian Dunning's Gluten is Fine podcast. I found a few of his podcast to be pretty lean on this research.

He's also done one high fructose corn syrup where, surprise surprise, he basically says "ain't so bad and are certainly no worse than other naturally occurring sugars" Everything I've read says the exact opposite. Care to comment on this? Thanks.

Robb Wolf: Well, this is straight out of like the high fructose corn syrup rehabilitation. You know, advertising can't campaigns...

Greg Everett: The team Mats are incredible.

Robb Wolf: Out there, they're amazing. I love the one where like there's 2 women talking and there's like the black woman who like woman and then, you know, and so we've got this like, you know, racially diverse thing and then the white chick is a complete moron and the black woman like fills her in on like "high fructose corn syrup, it's just as good as sugar." And then like the white chick is all like "oh, wow".

Greg Everett: Dude, it's made from corn.

Robb Wolf: It's got to be good.

Greg Everett: I just love how they go out of their way to make you feel like the biggest moron ever. Like if you have any kind of reservations, about high fructose corn syrup. Like, dude, you're just retarded. It's made of corn.

Robb Wolf: Their main takeaway is like high fructose corn syrup, it's just as good as sugar. And...

Greg Everett: Which is also awesome.

Robb Wolf: Which is hilarious and, you know, back to our rock star Brian Dunning who -- he seems to have done a good job on some things like the Bermuda Triangle and like the Loch Ness Monster like he said...

Greg Everett: I want to research on those.

Robb Wolf:

Well, you know, he does great on things that are absolutely irrefutably wrong. You know, he does a great job of that. And then it appears that when he pops his head up on topics which actually require some expertise in a subject. He just completely shits the bed. I mean it is beyond shocking.

So Brian doesn't get in and actually look at the molecular mechanisms about the fact that we have a completely separate transport molecule in our hepatocytes that preferentially pull fructose out of our blood and store in the liver.

And at the process of preferentially pulling this fructose out of the blood and storing it in our liver, actually up regulates another enzyme in our liver called fructokinase which is the phosphorylation enzyme that is involved when we pull glucose out of the blood and stick it in the liver. It's phosphorylated and then subsequently stored as muscle or liver glycogen in this case.

But the intake of fructose, turns the liver into a glucose sponge. What was a situation which the liver took a little bit of glucose out of the blood, now the liver takes a massive amount of glucose out of the blood after we've had a fructose exposure.

High fructose corn syrup fits the bill. So does sucrose. Both of them are bad. Trying to say that they're on equal footing is trying to justify, you know, well, a shot and blasted the head isn't too much worse than like a **[00:38:39][Inaudible]** surge shot to the head. It's like yes it's true but they both can fucking kill you.

And if Brian Dunning's ability to just being an idiot on this stuff is shocking, I don't usually like going after people like this but When I did my blog post in response to his thing, he came on with a bunch of Dick Swagger and everything about, you know, the whole topic. And eventually we ended up pounding him back into his corner.

And I would love for him to commentate on this high fructose corn syrup thing again. And if you noticed, something I'm not is getting in and saying "well, Brian Dunning doesn't even have a biochemistry degree or anything." I don't give a shit. It doesn't matter. I don't care what the person's background is, I want to know, can they think and can they look at the research and actually educate themselves on it.

The guy that wrote Natural Hormonal Enhancement, Rob Faigin, is a lawyer by training. But Rob really understands his biochemistry. He

clearly understands that fructose is a problem because of the preferential storage in the liver and what that can do to metabolic derangement.

Brian Dunning obviously does not. And so this is the thing that I left him off with the last time I said this "if you want to commentate on stuff and be a skeptic which that whole topic kind of I find hilarious other than a Chris Kresser gives it some legitimacy with the healthy skeptic website and podcast and everything.

But most these other skeptics seem to be this weird deal of just looking around at what the consensus is with the government and with the established kind of into these and then say "well, this is what everybody in charge seems to believe, so this is what I'm going to believe."

And it's not that I just automatically assume that the people in charge are wrong. Like I'm not going to NASA and telling them "hey man, you're apps for physics are screwed up." But there are situations, like medicine, like nutritional scientists, that are not actually operating with any type of guiding framework, like an evolution be a natural selection.

There's bunch of damn problems there. So this ain't just a hilarious topic to me and the skeptic community I find just fascinating in their ability of self delusion and their willingness to commentate the material that they have know freaking clue about at all which I think I've mentioned this in previous podcast.

This is the Russian literature paradox which, you know, if we're having a discussion about 18th century Russian literature, obviously Greg would be able to commentate on it because he knows all things literature. But generally, people don't open their mouth on the topic because they don't know anything.

And that's just something I would ask these people to do. If you're really going to commentate on fructose, or gluten, or something like that, why don't you spend enough time to become a legitimate even arm chair expert on this stuff and not just completely regurgitate what you find at Wikipedia. That's just ridiculous.

Greg Everett: Yes. Yes, bitches.

Robb Wolf: You know what, I hate getting personal on that stuff, and I think he just, in some ways, whose kind of unfortunate and that he happen to be one of several people who are probably writing on this stuff at the same time, somebody shot his stuff to our blog, and so it popped out.

And he didn't really have this strength of character to be like "yes, ok I'm wrong, I don't understand this stuff at all." He tried to argue and defend his spot from which he had absolutely no basics yet and no understanding on it. And I think that's ridiculous. This lack of character lack of good sense really. So...

Greg Everett: Yes. I don't feel that bad. I mean if you're going to put that out there for the world to see, you better be ready to back it up.

Robb Wolf: Yes.

Greg Everett: And it seems like a fair enough demand.

Robb Wolf: I've been wrong on stuff before, I've thrown stuff out there and then people throw things back at me. Whether it was a research study or somebody else's -- somebody else making a good position. Chris Kresser wrote a great blog piece on A1C.

And like, I used to just recommend A1C's like crazy and then Chris wrote great piece describing the fact that when we have a low carb kind of diet scenario, Paleo low carb diet scenario, red blood cells don't age the way that normal high blood glucose level individuals' red blood cells age. I was totally wrong on that.

And I did take ownership for that because I had highly recommended this is a good blood test to hang your head on. And I was wrong. You know, but that's -- so I was wrong but all I needed to do to be right was admit my fault then move forward. And you can't know everything but I do the best I can to be as on top of this stuff as I possibly can be.

And I've enough character that when people are talking about computer programming, or tuning up a '57 Chevy or something like that, I don't comment on it because I don't know anything about it. So, I guess that's one thing that I would recommend to the skeptic folks like really do your homework before you comment on this stuff.

Greg Everett: Yes, it's usually a good idea just to stay in your lane.

Robb Wolf: Yes, really is. It really is.

Greg Everett: Alright. Well, let's move on and then you can let that huge a thing in your forehead stop for awhile.

Robb Wolf: I'm draining here right now. I put a turkey baster size needle in it to just drain that. Drain that out.

Greg Everett: Alright. So Crystal says, "Thanks for the podcast and all the great information. I just finished a 6 week Paleo challenge at my gym and I busted passed the plateau. I'd hit several time over the past few years. I lost 4 inches off my waist with seemingly no effort. And gain almost 50 pounds on my back squat." It's almost like the stuff works.

Robb Wolf: Yes.

Greg Everett: Don't go fooling yourself Crystal. "Now that I'm done bragging about my own results. I'll ask my question. My mom's having problems with dysphasia, difficulty swallowing.

Her doctor's have been able of little help. I know little about the condition but was wondering if this is one of the many things I can be helped by eliminating grains from the diet.

My mom's 60 years old and this problem has gotten worse over the past few years. She often ends up relying heavily on liquid food as anything that requires a lot of chewing is very difficult for her to get down. With a Paleo diet help with this issue? Can you recommend any research on this topic?

Robb Wolf: Yes. There's just a mountain of research in this area. We've talked about it in previous podcast. She can dig around in the archives. What I usually see happen first with folks who develop dysphasia is typically they had their gallbladder out years before.

So I would be interested to know if Crystal's mom had her gallbladder out previously. She may not have, she may -- the gallbladder pathology may not have occurred. But I would bet money that she's had her gallbladder out. And what's happening is you end up with damage to the gut lining. That damage to the gut lining disrupts the signalling of the release of cholecystokinin.

Cholecystokinin is critical in normal peristaltic movement of the smooth muscles in the esophagus in the lower gastrointestinal tract. This things seem to just work its way north. So, initially the problems are related right around like the liver and gallbladder.

And then it seems to work its way north, such that the person has dysphasia and this difficulty swallowing. This was another one of these

papers that I shot to Cordain or I found some stuff and shot this idea to Cordain about writing a paper on dysphasia.

And at some point, hopefully I'll get on that because it's just kind of waiting to have the whole all the mechanisms tied together on this. But standard deal, grain, legume, dairy free diet is what I would jump in. And if it needs to be more soups and stews and even a blended, you know, puree type stuff initially, no problem with that.

That totally makes sense but I would be shocked if the food quality approach doesn't help things. And then, you know, getting a little bit of omega 3s in the mix, making sure the vitamin D levels are good, getting on a probiotic. I think all of that stuff would produce some really dramatic results.

Greg Everett: And so if she needs to convince her mom or doctor, and where do you suggest she go to get some research. Can she dig something up on Pub Med or?

Robb Wolf: If you just do a simple like dysphasia gluten, you will find a ton of stuff. And it's not proof, not from Mat Alone land. It's not up the crack and the standards of proof but it's very compelling. And it's good enough to make an argument that like "Ok, let's give this a shot for a month and see how you do."

And so the mechanism has not been 100% stitched together there but we have probably 75, 80% of the pieces or at least I'm aware of about 75, 80% of the pieces. There's a few black and, you know, broken fragments here and there but the path all leads in a direction. We just have a few pieces to around a 100% geared together.

Greg Everett: Or it certainly isn't going to hurt anything to try it out. So...

Robb Wolf: No. This is that same thing again, healthy eating is generally healthy, you know what I mean. All other things being equal, just generally eating better is going to have beneficial results.

Greg Everett: Yes, seems like a reasonable place to start.

Robb Wolf: Yes.

Greg Everett: Alright. Let's talk about some fish oil. Everyone loves fish oil. Eric says, "Robb, I've been using your fish oil and dosage recommendations from the fish oil calculator, and listen to doctor very serious video on omega 3

but find these doses pretty high in line with some long term studies. The short term studies show a lot of benefits, but long term use seems to point to some risks.

What do you think of some of these studies? I've been eating a couple of raw Brazil nuts along with my fish roll but tried and added some selenium to the mix. Are Chris Kresser and Chris Masterjohn off base here? And then we'll link somebody's studies here in the blog post.

Robb Wolf:

I think Kresser and Masterjohn are spot on with this stuff. You know, when I first hit all the scene, and this is again just kind of an evolution of our understanding, it was pretty obvious that there was an imbalance of omega 3 and omega 6's in our diet.

You know, from an ancestral perspective and then also we understood that omega 3 is for potentially anti inflammatory. My initial recommendation was to have high dose fish oil just in general and we wouldn't really too much about decreasing the intake of omega 6's in the diet. This was to make things easy because it's easy to eat walnuts and almonds and all that sort of stuff.

And then we wouldn't worry too much about people using mayonnaise if no mayonnaise has a lot of omega 6. But it just made life easy and it made it kind of yummy and relatively simple. But then we learned, I learned that, you know, this isn't the best way to go about this. That intake of the short chain omega 6 that linoleic acid, it's a problem.

It causes inflammation in a variety of ways. It kind of block some of the anti inflammatory properties of the longer chain EPA DHA. And fundamentally, what we were kind of coming around to also was that if people complied with the nutrition, complied with the lifestyle, they shouldn't need large doses of fish oil for a long time.

When I was talking to Loren Cordain about this, even a very heavy person who carries a lot of body fat, which from the standard American diet perspective would be very very rich in omega 6's, it only takes about 2 to 3 weeks of some pretty aggressive fish oil therapy to totally saturate their systems.

Saturate the adipose tissues, saturate the red blood cells with good amount of EPA DHA and this is taking amounts or anywhere from like 10 to 40 grams a day, depending on how heavy the person was.

So, Whole 9 has had a fish oil calculator, 6 months ago, **[00:50:20][Inaudible]** Melissa and I had an email exchange about modifying the recommendations on the calculator and they're busy folks, I'm busy. It took us until it just like a week ago to finally get the modifications up on the site.

So you go to whole 9 and you do the Robb Wolf Fish Oil Calculator. It still spits out a large dose but, you know, that large dose is for sick inflamed people for 2 to 3 weeks maximum. Then it dials to dose down the initial doses 1 gram per 10 pounds of body weight per day for like, you know, 2 weeks, 3 weeks. Then it drops it down .1 to .25 grams.

So anywhere from 10 times less to like 4 to 5 times less fish oil. So it starts off very high and then it pulls it down to, what would be reasonable levels, but again with the caveat, that you still need to get your docs in a row with omega 6 intake, you need to sleep better and all the rest of that stuff.

Like if you're still throwing a bunch of pro-inflammatory foods down the pipe hole, unfortunately the high dose fish oil is not a simple get out of jail free card. I'd hope it could be but it's not. If you're doing these other pro-inflammatory things and still taking real high dose fish oil, food of the long hole actually be a problem which is a lot of what Chris Masterjohn and Chris Kresser talked about.

Greg Everett: Yes, like I said that in the blog they'll -- we'll put some links to these studies that Eric is referring to. Alright, sorry, not the studies but these articles.

Robb Wolf: Yes, which both blog post site several studies and describing their positions on the need for probably lower amount of fish oil.

Greg Everett: Alright. Well, let's wrap it up with some big words here.

Robb Wolf: Cool.

Greg Everett: Nathan says, "Hi Robb, I recently read your book. Loved it, and so did my wife. And I have been following the Paleo lifestyle for almost a year now. But was sort of 80, 20 about it. I assume 80% compliance." Because the other way around wouldn't be very impressive.

Robb Wolf: It's kind of pissing him away. Yeah.

Greg Everett:"

I recently stepped it up to the streak 30 day challenge and I've had great results. Enough about me. My question is for a good buddy of mine who I'm trying to convince to give Paleo a shot, who has a blood disease called Antiphospholipid Antibody Syndrome.

He is 38 now and had his spleen removed in 2002 as a result of his white blood cells taking his red blood cells for foreign due to the antibody. Prior to that, a 3rd of his colon was removed due to a blood clot on the bowel. Consequently, he's on blood thinners, Coumadin which blocks vitamin K. So if he eats too many greens with vitamin K, he's more prone to clot. He also has trouble absorbing iron.

They're not sure why, so he takes a supplement. I've already told him to remove grains, legumes, etc. from his diet. But my question is, do you have any insight on what he could take first iron and vitamin K issues? My concern is if he's not going to be able to eat enough vegetables following a Paleo with eating.

Robb Wolf:

I think he's just taking some run of the mill multivitamin. So, in some ways the question done a 100% makes sense. But we'll kind of stop by it really quickly. The one thing that we have, we have an anti antibody an antiphospholipid antibody.

We have an autoimmune disease. Standard protocol on this autoimmune disease is trying to heal the gut. I mean that's just kind of across the board deal, grain, legume, dairy free kind of gig. That's kind of one baseline.

Then we also, because of this blood clot in the colon, I'm willing to bet that we probably have some sort of systemic inflammation going on in the gut which is also very, you know, supportive of this idea of **[00:54:03][Inaudible]** autoimmune response.

The malabsorption of iron part of that could be because he had part of the colon removed, although most of the absorption happens in the small intestine, so that really shouldn't be an issue. But you could have some watery absorption issues and stuff like that.

But what I'm seeing as a general kind of flow here is probably some autoimmune disease. Almost certainly some gut irritation and the, you know, everybody that we've ran across, if they are iron deficient, like iron deficiency anemia and / or if they have some sort of osteoporosis, they have some sort of gut irritation celiac, something like that going on such that they're not absorbing nutrients.

And so from there, like if you need to keep the vegetables low because of the clotting factors, that's cool. That's fine. You know, ideally, grass fed meats, wild catfish, more yams and sweet potatoes, then fruit and veggies or mainly veggies, and you just kind of modify that way so that you keep the vitamin K levels low for the clotting issues but that should address the gut irritation.

It's going to increase the amount of iron that's being introduced to the system. But the amount that's introduced to the system doesn't really matter if the gut is irritated and you can't absorb it. So that's really the most important part of all that.

Greg Everett: Alright. Well, any final thoughts you would like to throw in there?

Robb Wolf: I'm glad the sun's out.

Greg Everett: Seriously.

Robb Wolf: I'm very happy about the sun being out.

Greg Everett: It's been sunny here for 2 or 3 days and it's amazing.

Robb Wolf: Yes.

Greg Everett: I actually stayed home yesterday for the first time in like 8 years. And sat outside for a bit and actually saw the sun for one of the first times in about 8 years. And I'm pretty sure I had seasonal affective disorder.

Robb Wolf: The whole time?

Greg Everett: Yes. So, I'm much happier now.

Robb Wolf: Northern California is not Southern California.

Greg Everett: And that's a fact.

Robb Wolf: That is a fact. We get a schmootsy block of weather each year. We had almost 2 months of just like sucked in bad weather and I know people and maintain in stuff like that are all cry me a river because it was like minus 50 there and stuff like -- it's still bad enough for me. It's bad enough for me. I'm glad the sun's out now.

Greg Everett: Yes. I'll take it. Alright dude, well, I'll let you go party it up in Reno.

Robb Wolf: Sweet.

Greg Everett: You go get some food. Paleo of course.

Robb Wolf: Naturally.

Greg Everett: With a moderate dose of fish oil.

Robb Wolf: And a maximum dose of nachos at some point.

Greg Everett: Possibly some nebulized marijuana.

Robb Wolf: I'm hungry and I don't know why.

Greg Everett: Alright.

Robb Wolf: Sweet dude.

Greg Everett: All right. Talk to you next time.

Robb Wolf: Awesome G thanks.

Greg Everett: See you.