

The Paleo Solution

Episode 14

- Andy Deas: Robb Wolf, Andy Deas. How are you today?
- Robb Wolf: Dude, just loving almost eight weeks straight of no sun in Chico.
- Andy Deas: Yeah. Episode 14 and I really feel like for at least seven of these, it's been raining.
- Robb Wolf: Yup, yup. I'm like super close to doing a Kurt Cobain here so we may not get an Episode 15. Fortunately, everybody is like, "Thank God." We crested over seven, possibly eight listeners, and then it was done. It finished on a high point so --
- Andy Deas: Robb, I met quite a few people at your first nutrition seminar that listened to the podcast so I'm confident that we're in double digits, maybe not that far in double digits but we're over to 10.
- Robb Wolf: We might be as high as 11. That's true. And all of those people who attended the cert, all 95 of them, I paid them to be there so --
- Andy Deas: Oh, Robb, you know, I got a chuckle from my mom today when she was like, "Oh, people paid to see Robb talk?" Obviously, she doesn't know you. I'm like, "Sure. People came from Ireland." She's like, "Ireland! What?"
- Robb Wolf: No one is more shocked than I am, I promise you. No. I'm hugely grateful. It was a ton of fun. Really, really good crew. I think probably about 50 or 60 of the folks that had been up there are neighbors up at CrossFit ready the day before and did a Kelly Starrett gig and just have a blast of that 'cause Kelly is a genius at all things, and then rolled down to Chico and summed with us on Sunday. So that was a good time.
- Andy Deas: Robb, they were all there for you. Don't sell yourself short. You're an incredible slouch.
- Robb Wolf: Thank you. That is straight Chevy Chase there I think so --
- Andy Deas: It is just because they wrote an article this week about how they were trying to resurrect the Fletch Franchise and everyone is scared to take it on.

Robb Wolf: Mm-hmm, mm-hmm. That's good stuff right out of the gate so --

Andy Deas: Well, anything you want to say about, you know. This is Episode 14 but it's the one after your seminar so I feel like is there anything else you want to say about the first official Paleolithic Solution seminar on the spot.

Robb Wolf: No, man. Upwards of 50% of the material was new. We covered cortisol pretty in depth. Really when I've talked endocrinology before, I'll mention cortisol kind of peripherally, but this time we had a whole section dedicated to it, and I think it just flushes a bunch of problems. And it's interesting, like the more and more I play with this stuff, there is just huge synergy between insulin regulation and dysregulation, cortisol problems, and that can range from like sleep disturbances to food intolerances to work-related problems. I mean it's really insane how heavy that whole cortisol stress axis is.

And then, of course, the whole leaky gut autoimmune response. Like I had a guy in the audience that was pretty familiar with the fact that like NSAIDs and some other anti-inflammatory over-the-counter products actually worsen gut permeability, which we're actually going to talk about leaky gut here in just a little bit. But that was a new chunk for me, but I felt like the material was pretty solid. I already have some ideas for how to tweak it and hopefully improve it a little bit.

The feedback was solid. The most consistent feedback I've had is that people want a two-day gig which I just can't imagine doing back to back two days. I've done that before but maybe doing that on a consistent basis I think would be rough. We're definitely working on an advanced topic piece, hoping that Mat Lalonde gets in and is working on some stuff for Loren Cordain and he would be hitting more the like M.D., Ph.D., nurse practitioner deal; and then I would just be pedaling my pseudo science to the peasantry as it were.

So it was fun and definitely a good feedback from folks, but generally, the thought seem to be that folks got something out of it and it was worth polishing a chair in Chico with their fanny for eight hours. So good times.

Andy Deas: And another positive note, Robb. People think you're funny with your seven listeners so I feel like you're funnier maybe than Nicki thinks you are.

Robb Wolf: My wife finds nothing I do funny, which is ironic that marry those people but it's also probably pretty good so --

Andy Deas: I couldn't resist. I'm sorry.

Robb Wolf: Yup.

Andy Deas: A lot of caffeine today, my friend.

Robb Wolf: Lots of caffeine.

Andy Deas: So cool. Well, congrats, man. I think it was a great weekend. We had sun shining so those folks that don't frequent Chico probably think the weather is nice this time of year, but as I'm learning it's not.

Robb Wolf: It's not.

Andy Deas: But we'll deal with that.

Robb Wolf: Yeah, yeah. **[0:04:48] [Audio glitch]** you're getting definitely the short end of the stick, but we'll do the best we can.

Andy Deas: That's right. That's all we can do. All right, great. Well, the first question today we got actually from multiple sources, and this is another reminder about the Intro to Paleo episode that we need to record, Robb. But I got to -- I just got to keep reminding you until we do it.

Robb Wolf: You've organized all this stuff, man. You pull the trigger on that, although I guess I need to put together the curriculum for it. So okay.

Andy Deas: Well, I can take a stab, man. We'll resolve it after the call.

Robb Wolf: Okay. Okay.

Andy Deas: So anyway, multiple folks have sent in inquiries basically along the lines of "What is leaky gut? How would I know? Basically, what are the symptoms if I suffer from gut irritation?" So I'm going to throw that out at you and see what comes back.

Robb Wolf: Well, leaky gut is -- let's think of, just for a second, the intestines, you know, just the whole elementary concept from mouth to that. Generally, we have the sense that we chew up food and it goes down the pie hole and then it hits our stomach and we kind of have a sense of that whole scenario. And then after that, things thankfully go **[0:05:57] [Audio glitch]**

because don't want to think about it too much after that. But all this food, bacteria, viruses, all this stuff gets all broken down and homogenized and we should theoretically absorb this stuff at the intestinal lining and mucosal lining, the villi and the microvilli at the lower structures. I think the small intestines fully absorb nutrients.

And I go over this stuff pretty thoroughly in the seminars that I've done before when I was doing for CrossFit and now that I'm doing my own gig because the fundamental breakdown in the digestive processes appears to be at the center of the etiology of all autoimmune diseases and we characterize it as leaky gut in the autoimmune response.

But this whole leaky gut process, think about the intestinal contents are pretty nasty on their best of days, and we want to keep that stuff typically well isolated from the rest of us. And part of that process if you imagine like if you were to interlace your hands and just really push your fingers safely, you could seal everything, say like you could hold water in your hands, but then it would not be very hard pulling the hands apart a little bit, get something through the gaps and fissures in your hand. It would be very easy for water, sand or something to work its way through the gaps.

And this is very, very similar to the way our cells go together. They're actually wired to go with this thing called gap functions and there's kind of a cement, kind of tissue cement that glues all that stuff together. And grains, legumes, elements of dairy, some other things like nightshades, tomatoes, potatoes, eggplants, some other things like alcohol and kind of NSAIDs, things being non-steroidal anti-inflammatories like Tylenol, ibuprofen, naproxen type stuff, those things can all weaken junctions in which the cell linings meet together; and when those are junctions are weakened, then it's possible for intact food particles, bacteria, viruses, all that sort of stuff to make its way into the system, and this is a potential route for the development of autoimmunity.

Another way that this can happen is a viral or a similar infection in the gut which actually causes some damage to the gut lining like the gut lining starts shedding very, very quickly and there's lots of fluid released, and typically there's diarrhea associated with it, and so this is kind of a food poisoning or some sort of they call these things enteropathies when the gut lining gets irritated.

But this is the etiology of leaky gut and it can manifest in a ton of different ways. Like the question is how would you know that you have it or that you suffer from it? And you can have some overt symptoms like

people will have irritable bowel syndrome or they can rotate between points of constipation or diarrhea. They can have gas and bloating. They can have a ton of different stuff.

There's a bunch of neurological symptoms, you know. People get foggy-headed. Some kind of autism type things are very much associated with leaky gut. But the thing is that for a lot of people, they've possibly been like this their whole life and so they never really had a sense of what normal or a healed gut feels like. And so this is why I'm kind of a whacko on this count of recommending people get in and fully eliminate grains, legumes, dairy, possibly even some of these other problematic items like nightshades. The more that we learn about NSAIDs really, the nastier that stuff turns out to be.

And it's interesting, anybody suffering from arthritis, what's one of the main things that they're shooting down the pie hole but ibuprofen? And if the underlying cause of the arthritis is already leaky gut, then it's just kind of a horrible downward spiral.

So, you know, how do you know you suffer from gut irritation? Well, pull out all the gut-irritating foods, see if you look, feel, and perform better, and then put them back in and see how you do with them there.

Andy Deas:

So since you used the term nightshades, I don't think we've defined it, so why don't you go ahead and define that as well? Because I think that's going to be -- that's sort of the next question. Well, you talked about nightshades. Okay, I haven't heard that term. What is that?

Robb Wolf:

Tomatoes, potatoes, eggplants, it's stuff that we would otherwise kind of throw into a fairly good category nutrition-wise and whatnot, but these things are all New World plants, and what we find is that there are some folks that are particularly sensitive to tomatoes, potatoes, eggplants, all of these items. Apparently, tomatoes, I think the constituent is tomatine. The stuff in potatoes is kind of a saponin type product. But all of these things apparently have some gut-irritating potential.

I personally feel like I'm kind of like the canary in the coalmine and I've never really noticed that much problem from like tomatoes, hot food other than just hot food giving you like hot food response. I eat it at 6 p.m. and by 3 a.m. I'm getting the feeling even if it was just hot curry or hot Thai food or something like that. But on a broader scale, I don't notice the same types of problems that I get with like some sort of a potent dose.

So I've historically been a little bit not as aggressive in going after that stuff. Personally, and this is some of the stuff we've been talking about like nuts and seeds when we're talking kind of Paleo nutrition and all that, people are just getting blown out of the water, and so it's kind of introducing the things in the order that's most important I feel and also most beneficial with like the removal of nuts and seeds, potentially looking at nightshades just kind of being something down the road.

And there are many people that that would be a concern for someone who have some serious systemic inflammation like joint achiness, some sort of a borderline autoimmune deal going on or maybe a diagnosed autoimmune deal. I would definitely look at nightshades being a problem in that whole scene.

Andy Deas: Yeah. All right, good. Paleo 101, Robb, it's got to be done.

Robb Wolf: We got to do it and it needs to be pretty thorough. That may actually be like a two-part gig because it's going to be fairly, fairly lengthy; but yeah.

Andy Deas: All right, good. Next we got a question from Carlos. Carlos says, "Any suggestions on what girls can eat prior to and during their menstrual cycle that can curb their cravings for sweets? According to them, they're able to maintain their diet really well any other time but the sweet cravings intensify during or before their menstrual. Any Paleo sweets that you can recommend or any other recommendations?"

Robb Wolf: 85% dark chocolate seems to be a real good fix. I think to some degree, people get a lot of satisfaction out of that and I think in a good/better/worst kind of scenario, I think dark chocolate is pretty damn good all things considered obviously. If you eat a pound of it in a shot, it may not be all that great, but I think people get a lot of satisfaction out of it.

You get some very good quality chocolate. You get some antioxidants out of it. You get some theophylline and theobromine that releases dopamine in the brain and makes you feel all in love and all that stuff. I think that's a pretty good option versus trying to like spackle together like some blackberries with honey or something just doesn't -- if that's more your gig, I guess go for it but I just wouldn't be afraid of doing two packages of dark chocolate a couple of days a week during your menstrual cycle if that's really what you've got going on.

Some people, however, will not come back from that and they're just going to end up spinning out and having problems; and the thing that I

address with that is the Kelly Starrett best self-defense, you know, best self-defense, don't be there. So it's keep your house pristine. If you know the female is starting to get some cravings related to that stuff, go out at Trader Joe's or a good supermarket, get some quality chocolate, dark chocolate being preferable. The higher the cacao content the better, and just go to town on that.

Andy Deas: And, you know, I got an email a couple of weeks ago from my friend Gabe from high school that actually listens to this and he said they had experimented with his wife with some of the homemade coconut milk ice creams during her menstrual cycle and even played with adding a little bit of flavored whey protein. I've always experimented with like whatever. Blend up strawberries with the coconut milk and freeze it that way. But they seemed to have reasonable good success with it.

Robb Wolf: That sounds pretty good to me too. I would just not plan a meal or two here and there or even three or four of them; and of course, if no otherwise pretty valued-in nutritional experience, I just wouldn't slow that stuff all that much.

Andy Deas: Sure, unless you're like me and you just never come back.

Robb Wolf: Exactly, exactly. Or like my wife who bought -- Trader Joe's had these dark chocolate lovers chocolate bars. It's that stuff that Lou was eating, like Lou Mars throughout most of his event, and they're really, really, really good. It's one of the only dark chocolate bars that I found do not -- like usually, I can kind of take or leave the stuff. This stuff is good enough that I'm like I wouldn't mind having a bar of that around.

So get two or three bars of it and then like -- Nicki is like the mouse, you know. I hear this scurrying downstairs and then "Crack, crack, crack; nibble, nibble, nibble." And then a day later everything is gone. I'm like, "Dude, I've been eating just a bite of that stuff." So yeah, people have been absolutely spinning out on that stuff if it's right underfoot.

Andy Deas: Yeah, I did steal one of those from the Lou Mars event and it was phenomenal and I ate it all in one sitting.

Robb Wolf: Shocker! Yeah.

Andy Deas: Well, I'm not going to be buying those again.

Robb Wolf: The funny thing though is like one of those bars, like they end up having two bars per package, but one whole bar lands up having like 12 or 13

grams of sugar in it, and so it's a lot of chocolate because the cacao content is so high. It just by necessity drives the sugar content down. So that's one of those things where if you really do choose some good quality chocolate you end up getting a lot less sugar and you really, really enjoy it. It's pretty damn yummy.

Andy Deas:

Sure. All right. Second question from Carlos: "Can Paleo eating affect your menstrual cycle in such a way that your menstrual can be late or stop all together? I asked all the obvious questions such as 'Are you pregnant? Have you had any issues in the past? Are there any health issues?' and the answer was no. Everything was fine until she started eating Paleo. She is in her 4th week of Paleo eating. Any ideas on why this might be happening?"

Robb Wolf:

Usually, we see some return to normal on the whole Paleo gig, like when folks start more protein and more fat, we actually tend to see them able to run both lower in calories and lower body fat percentage but still showing a normal menstrual cycle. I'm not really too sure why that would be. She might need some more fish oil. She might need a little more iodine. I mean I'm not sure. It's a little bit counter to what I would normally see in that whole scenario.

But that said, and this is just going to be kind of a whacky controversial thing to throw out there, but women really aren't designed to have 6,000 menstrual cycles in their lifetime, like I definitely kind of subscribe to that. And like if you look at some of the evolutionary biology stuff, you check out like "Lights Out: Sleep, Sugar, and Survival" and then the follow-up book, "Sex, Lies, and Menopause," you get a pretty good picture that females, normally they would have become -- they would start their menstrual cycle somewhere between the age of like 12 and 15 or something like that, and then you could probably expect that normally they would have gotten pregnant within a year or two after that.

And then the thing is that when we have a normally fed human being, a female gets pregnant so you've got nine months, to make round numbers let's just say a year of pregnancy, and then you've got about three years of breastfeeding under normal circumstances. So you've got between a three and four year normal birth spacing for most women.

Now, the reason why women, why breastfeeding now does not protect women from getting pregnant is because their body fat level is higher, their estrogen content is higher, and the estrogenic effect of insulin makes it such that women are hyperfertile particularly in their younger years. And so this is why normally a female would not be able to get

pregnant again until the child is weaned and is three, four years old and off running around on their own, because it just wouldn't work in anything but at an agrarian society sort of thing. So when you start looking at all that stuff, then women normally would have had 100 or so menstrual cycles throughout their lifetimes instead of like 400, 500, 600 like what they can have now.

And so there are some -- people get real freaked out about like the female triad and all that sort of stuff, and you see this in distance athletes and they have bone demineralization problems and all that. That's not what I'm talking about, but I'm just kind of throwing it out there for folks to consider. Like it's maybe not the worst thing in the world that the female not have normal menstrual cycles occasionally, particularly in an athletic kind of state.

And I know I'm going to get burned and my head stuck on a pike for even suggesting that. I get that there's the whole female triad deal and there's a bunch of like seriously fudged-up food practices, anorexia, bulimia, all that stuff that leads into some of this other stuff that's not what I'm talking about. But I just got to throw it out there that sometimes like a normal state is okay, you know, that that is an okay thing to happen.

Andy Deas: I'm not going to touch that one, Robb.

Robb Wolf: And that's why the podcast died at Episode 14 because Robb and Andy were both killed.

Andy Deas: You're on your own on that one. But those are excellent book recommendations. I'm on board.

Robb Wolf: Yeah, I would encourage folks to give that stuff a read. But then again, back to Carlos's question, I don't really know why she is responding that way. It might not be that big of a deal or it may be something really atypical; and I'm sorry that that's such a nebulous statement, but we have 10 women in our gym right now who are pregnant so like the whole Paleo working out thing seems to be very, very good for fertility.

Andy Deas: Yeah. I think the only thing I would add that I've seen like once or twice is a couple of folks that got super underfed eating Paleo 'cause they weren't hungry and that seemed to have some impact on their menstrual cycles.

Robb Wolf: Hmm, that could be. Totally! Yeah, yeah.

Andy Deas: Food for thought. You didn't provide a final answer, Robb. I'm really upset right now.

Robb Wolf: It's a cliffhanger. We'll leave it for Episode 15. If we haven't been killed by a group of really angry kind of feminist chicks then we'll come back in and we'll show our backups.

Andy Deas: Fair enough, fair enough. All right, next we got a question from --

Robb Wolf: Andy just wants to move out now.

Andy Deas: The train is off the tracks right now.

Robb Wolf: Yup.

Andy Deas: Next we have a question from Derek who actually holds the record for the most questions in queue at one time right now.

Robb Wolf: Yeah, it's like 600 questions currently.

Andy Deas: Maybe not 600 but it's close.

Robb Wolf: Yup.

Andy Deas: 594. So first part of Derek's question, this question. "Dr. Richard Johnson says fructose, not starch, makes people obese. Thoughts?"

Robb Wolf: That's a nice hand grenade to throw in. I mean I think there's a lot of truce to that. Currently on the blog, there has been some commentary about like there's the dude that had the no BS, the no bullshit site, and he was taking Gary Taubes to task and all that stuff and we kind of shot some holes in that. And then, you know, the issue about like the Kitavans pops up and it's like, "Well, they eat a 60% carb diet; don't seem to suffer any deleterious effects from that." But until they started introducing grains, and then when they introduced grains, they're eating the same amounts of carbs but it's a different type of carb and then we start seeing some insulin resistance in these people.

And then it's theorized that there are some sort of like lectin, leptin issues in which the lectins from the grains, legumes, dairy, whatever it is they're getting end up causing some sort of a leaky gut autoimmune response that ends up bugging leptin signaling, and leptin being the primary hormone kind of neurotransmitter deal. It's produced in the fat base but it's produced elsewhere in the body too that tells us whether or

not we're hungry. And it appears that if we lose our leptin signaling, we don't know that we are overfed, but yet, we still want to eat more. And so those are all kind of interrelated things, and then at the top of that deal is kind of fructose.

Now, fructose, if you really get into it and look at it, fructose is a ketone sugar. Glucose is what's called an aldehyde sugar. Saying that, people are now going to be like, "Oh, I can eat fructose and be in ketosis." And I shouldn't have even said it. I should have this through more but I already said it.

The point of the matter is that fructose metabolizes in the liver very, very differently than starch, than glucose polymers, starches made up of glucose beads essentially strung. And glucose-containing items tend to fill the glycogen in the muscles, whereas fructose-containing items tend to fill the glycogen in the liver. Also, fructose tends to cause some other not nice liver transformations very, very similar to consuming alcohol.

And if you look at our ancestral diet, we probably -- about the only time of the year that we would normally get a good dose of fructose would be late summer or early fall when there's actually more fruit around, and it's really interesting because that fructose causes almost immediate pronounced insulin resistance, which when the insulin levels start going up then sex hormone binding protein goes down, our androgens go up, our fertility goes up, and our fat base all go up; and it's the perfect time for making babies. And then you go into a winter that is largely more ketogenic and lower in calories and lower in fructose.

So like I think that there's a lot to that, like this notion that fructose is very, very strong at the heart of obesity and fat gain and whatnot. And just within our stable of athletes and like the folks that we've worked with online, folks notice that if they peel out things like just whatever fruit, apples, oranges, bananas or whatever, and they go more like yams, sweet potatoes, squash for their carbs, they tend to run leaner, they tend to be more insulin sensitive. So I think that there's a lot to that.

Andy Deas: That was two and a half minutes.

Robb Wolf: Was that too long or do you want me to go longer on that?

Andy Deas: You could draw your own conclusion from that. No, I'm just kidding.

Robb Wolf: Okay, okay.

Andy Deas: No. Good answer. Next part from Derek: "Are onion and garlic allowed on the Paleo diet?" I hate the word "allowed" by the way.

Robb Wolf: Yeah.

Andy Deas: "I have read many positive things about how they are both potent antioxidants and anti-inflammatories, but they seem a bit harsh or pungent. I want to say spicy. If peppers are questionable, perhaps these are too?"

Robb Wolf: You know, there are a lot of people that develop allergies to garlic, particularly in conjunction with wheat or dairy, and garlic can be a little bit of a GI irritant but it can also be -- it's really potentially antimicrobial. I forgot what it's the -- Allison -- gets hydroxylated or oxidized into an active form. So basically, garlic needs to be crushed for it to become active, like it needs to be exposed to some oxygen and then you get a little bit of a ripening process with the whole active constituents in it.

It's one of those things that I think it's great for some people and not so great for other people. I do really well with garlic if it's cooked well, like throwing it in soups and stews and all that. If I do too much raw garlic like kind of a **[0:27:53] [Audio glitch]** sort of gig or something, it can make me a little gassy, a little bloated. So that's just a thing with garlic, onions.

And, you know, it's interesting --

Andy Deas: Robb! Robb!

Robb Wolf: Did I drop out?

Andy Deas: You did. I don't know what happened.

Robb Wolf: Uh-oh.

Andy Deas: You were attacked. Nah, it's probably the weather.

Robb Wolf: It could be. Where did you lose me at?

Andy Deas: You started to say something interesting about garlic so just start wherever you think you want to start and we're going to edit out that minute or so.

Robb Wolf: Okay. Well, garlic, you know what, the long and short of it is that garlic generally has some really good beneficial properties to it as do onions.

Both, however, have been implicated from various folks in different situations in being problematic with some GI problems. And so I would just kind of feel them out and see how you do with them.

I noticed for myself I do fine on either of them and in large amounts so long as they're cooked. If I get too much of them raw I'd have some GI disturbance from them.

Andy Deas: Yeah, and I think this you touched on a little bit in the first question kind of about leaky gut. I think there's sort of a period of adjustment. You probably start removing certain things like wheat, dairy; and then as you get further down the road, more refinement. Think about the nuts. You can maybe play with some of these. Obviously, if you have autoimmune or something, you're going to attack this from a little bit different angle, but I think for the average person, I don't spend a lot of time worrying about onions or garlic.

Robb Wolf: No, no, definitely not.

Andy Deas: Dig in. And the last part of Derek's question which I actually wanted to touch on because I thought this is actually an important topic. He says, "You guys won't come back in 40 years and say that tomatoes are actually perfectly fine to eat, will you? I feel like this stuff happens all the time in nutrition."

Robb Wolf: Well, okay. So the one thing that I was spinning out on when, and maybe this is why the phone pooped out, is the whole like allowed thing on the Paleo diet. Like it would just horrify me if what we're doing turned into another cult, just another goose-stepping, unquestioning cult. We've got enough of that. We don't need any more of that. We need people who are thinking and using general guidelines to hopefully just live a better life. And I think that hopefully, that's the way we try to present this stuff.

There are some generalities, like one of the things that I definitely will dive in front of a bus and be like, "For the love of God, don't do it," it's like don't eat gluten in general, like I can pretty much hang my hat on that. And then from there it starts getting a little bit more not as granular or whatever. It's a little less clear what the exact buy-in is.

And so the stuff like tomatoes, I eat tomatoes all the time. I don't seem to have a problem with tomatoes. If I had an autoimmune disease or somebody else has an autoimmune disease, I'm really going to counsel them to not consume tomatoes and see if that affects them beneficially. And I've worked with enough people who have had enough problems

that they do seem to respond well to removing nightshades out of the lineup if they've got some sort of real inflammatory condition or autoimmunity in.

So I guess like the Eades, I would just want to reserve the right to modify things as I go if I understand things further, but I think that there are some generalities here that we get that are very, very consistent. One thing that is new that I'm really being forced to reevaluate is how much dietary carbohydrate is good or optimum. And if you would have asked me 10 years ago I would have been like hardly any green veggies. That's it. You don't need anything else. The other stuff won't benefit you, advanced glycation end products, sugar, sticking to your proteins, blah, blah, all that stuff.

And I still probably about 90% buy into that, but then at the same time, some of this Kitava information is compelling. I mean it's interesting. There are these well-documented situations of these folks eating largely carbohydrate diets, 60% carb diet, and doing just fine on it. And, you know, it's again not grain-based and it's with the introduction of grains that they start seeing some problems. And this looks real, real similar to the whole Okinawan situation, which is good hunk of protein, fats from marine sources and all that, and then a bunch of carbohydrate largely from like yams and sweet potatoes is what more what their ancestral diet has been. It hasn't been so much rice.

So these are some commonalities that I've maybe modified a little bit over time as like okay, maybe people do legitimately have some better operating parameters health-wise with regards to carbohydrate. I think the doc from PaNu is very much of the opinion that it's like low carb or the lower the better to some degree. And I still, in my hearts of hearts, kind of agree with that, but this Kitava stuff has made me try to rationally reevaluate what I'm looking at all this stuff, and say, "Okay, maybe there is more to it than what I've been thinking previously."

Andy Deas:

Yeah, and I think this whole if we change our mind in 40 years reminds me of the whole Mike Boyle thing, like to your point about the Eades, reserve the right to change your mind. And we don't have the final answer, I don't think on anything in any field, and if we're still doing exactly the same thing in 40 years and haven't changed our minds about anything, then Robb Wolf, you were the smartest man on the planet.

Robb Wolf:

Exactly. Well, you know, and if you look at like physics or something like that where Newton developed a bunch of calculus and a bunch of the stuff that we used in mechanics and physics, and some of that stuff was

kind of new initially. Obviously, you cook up this new way of assessing movement and rate of change and all that sort of jive.

But then pretty quickly, you kind of come to a point where you're like, "Okay, this kind of is what it is," and a couple hundred years can go by and mechanics really haven't changed all that much. And so then, it's like, "Yeah, okay. We've used this stuff, we've explored it, and this is kind of the furthest reaches of it that we're going to see."

Within the context of the Paleo diet, like Cordain has these seven tenets of a Paleo diet based around macronutrient breakdown, protein, carbohydrate, and fat, and there's a spectrum on that, but it's not hugely divergent. There tends to be more consistency than not, micronutrient density, you know, the amount of vitamins, minerals, antioxidants that you get per calorie, acid-base balance, sodium-potassium balance, fiber content. I'm blanking on two other things. But anyway, there are some basic tenets with that Paleo diet that are in stark contrast to our modern diets, and I think that when you start looking at it from that perspective and you start analyzing health and wellness from that perspective, then we have some pretty consistent findings.

Similarly, like the work that Frank Booth did with his exercise in gene expression, and this kind of dovetails into some of the work that Cordain and Boyd Eaton did early, early on looking at hominid energy expenditure, we're wired up to be very, very active but a variety of activity, and this is some stuff that Andy and I talked about I think the last podcast. There's a little bit more of that long, slow distance stuff mixed in with strength work, mixed in with what we would call metabolic conditioning probably models the human environment a lot better than just like sitting on the couch and then doing Fran, and then sitting on the couch and then doing Helen. I mean it's all or nothing and there should be a lot more in between ground on that. Art De Vany has talked about that for years.

And so there are some things there where we've got some models that I think we can legitimately hang our hat on with this stuff. We understand and develop nuances to it, but there's some pretty solid stuff there that we can hang our hats on. And I still don't know where that places tomatoes.

Andy Deas: Or carbohydrates.

Robb Wolf: Or carbohydrates in general. I don't know. I mean I think there's some either if A then B or some either or type stuff, or maybe some sort of a

spectrum going on there. I'm not really too sure. Some of the Lights Out argument is that the closer to the equator you live, the better your carbohydrate tolerance typically is, and I would 100% agree with that, and that very much makes sense.

And it would be nice -- I've only seen a few people take some Chinese medicine and wed it to some of the Western stuff. Poliquin has done it a little bit. I've got 40 units of Chinese medicine diagnostics under my belt in my pseudo scientific background. And it's interesting, when you start getting into like Five Element Theory and stuff like that, like it talks a lot about your body will kind of match itself to the environment in which you live in. And so if you live in a dry arid environment, you will tend to adapt to that and certain physiological types will have problems with that. Similarly, people who live in a damp, cold environment will have problems in adaptations associated with that.

And I think for sure, when we start getting in an extended dark period, like when you live further north or further south towards the equator, basically a shortened photo period, you don't handle carbohydrate as well. There's no doubt about it. But then also, if you start going further and further a higher and higher latitude, you just have less carbohydrate available too. You get more and more kind of ketogenic in the way that you just find food stuffs around. So I think that's pretty interesting also.

Andy Deas: We don't have an answer.

Robb Wolf: We do not have answer. There's just tons more questions and stuff to tinker with.

Andy Deas: All right, Derek, we answered one question. 593 to go. I'm just kidding.

Robb Wolf: We'll get to those next podcast. We'll do the Derek's hit list podcast.

Andy Deas: Moving on.

Robb Wolf: Moving on.

Andy Deas: We got a question from Ben. He said, "Hey Robb, love the podcasts. You're the man or caveman as it were." I like that.

Robb Wolf: Oh, boy. We need a Lou Mars rum shot after that.

Andy Deas: “I vaguely remember you saying in an interview that ice baths increase insulin sensitivity. Could you elucidate how this occurs and what evidence supports it? Maybe a topic for the podcast?”

Robb Wolf: I have no idea the mechanism what this. I’ve read on it. We know that cryotherapy like icing an area will improve -- you get a vascular rebound response, one. So like when you ice an area, it will initially maintain the same color and then it will start turning red. You get a rebound hyperemia response where you get increased vascular flow to the area and that contrast can actually suppress inflammation really, really effectively on a systemic level.

I have no idea what the mechanism there reestablishes insulin sensitivity, but I know I’ve read research on it where it does -- we could try to drag -- do some Googling on that but also like a simple Google search is like cryotherapy insulin sensitivity, hydrotherapy insulin sensitivity. There’s a couple of things that you could look at and could track down some of the literature on it. But it works and it works really, really potently.

Andy Deas: That was an epic failover response but we’ll take it.

Robb Wolf: It’s the best I have, damn it!

Andy Deas: Sorry. I’m cranky today. It’s late in the day. Too much coffee.

Robb Wolf: Never too much.

Andy Deas: Yes, no, says you. Next we got a question a Jason. Jason has been experimenting with very low-carb diet and I think he is in a happy place. He may be friends with Mat Lalonde now. He’s going to be deployed for approximately 6 to 8 weeks and the food that he will be exposed to will be pure and absolute -- I’m not going to swear.

Robb Wolf: Shite.

Andy Deas: Thank you. So in an attempt to take control of it, he has converted 22 kilograms of beef roast into beef jerky -- I like this guy -- and has his coconut milk and oil at ready for the dietary nasty onslaught. So anyway, his question is “How fragile is the gluconeogenesis/keto state? What I call the ‘happy place’ just because of the incredible effects on mood and body comp. Will 1 gram of refined sugar kick me out of it? At what point does my carb intake jeopardize the state?”

I guess I'm asking, if I do end up having a meal or a week of meals which include refined carbs, how severely will I be affected? I know it takes 2 to 3 weeks to initially get into the state and things get exponentially better from there. But what happens if you've been in that state and you're exposed to refined carbs? Does it take 2 to 3 weeks to get back into it? Or is it a shorter process?"

Robb Wolf:

I mean Mat Lalonde did a blog post on this actually and one meal is not going to -- it will bounce you out of ketosis but it's not that damn hard to get back into it. And something to keep in mind too is you don't need to just eat carbs to go out of ketosis. You can eat an overly large hunk of protein and go out of ketosis 'cause the body will go into gluconeogenesis and it will kick enough carbohydrate out so that you can go out of ketosis that way.

I don't really sweat it all that much. I just kind of eat to satiety and kind of let all that stuff work itself out. Michael Eades is a big fan of what we would call hepatic gluco, you know, glycogen repletion. It's a big, long term for like letting your liver make carbohydrate out of protein sources, and it's very, very insulin regulated. It produces some glucagon and folks always forget or don't understand that glucagon actually improves insulin receptor site sensitivity so it makes insulin receptor sites work better. And so it all kind of comes out in the wash.

I wouldn't really sweat it too much. It sounds like he is doing a hell of a job prepping for it so I wouldn't worry one way or the other with that really. It sounds solid what he is doing.

Andy Deas:

Yeah. That is a lot of beef jerky.

Robb Wolf:

That's a hell of a lot of beef jerky. All I can say is if we ever do some sort of like XTERRA event, Jason is going with us and he is provisioning the whole freaking endeavor so --

Andy Deas:

And hopefully, I will not be on that trip.

Robb Wolf:

Yeah, yeah. That's right. We promised never to coach another endurance event so after the Lou Mars gig.

Andy Deas:

You can consult, Robb, not coach.

Robb Wolf:

Yeah. Okay.

Andy Deas: Cool! Next we got a question from James. I guess he sent us an email last week but left a couple of things out so he is going to simplify and add at the same time. He is in a situation where he has practically no time, and really only time for breakfast and lunch. He doesn't have access to the best carbohydrate selection as he is in the Dominican Republic.

"So the question is it all right to do intermittent fasting every day, as in eating only breakfast and lunch but getting all my Zone blocks in? The other is, the one meal that I have after working out, should I not have my fat blocks there and up the carb blocks or should I just do everything even? Any ideas that you have on what I should do would be great. Thanks."

Robb Wolf: Wow! You know, it's always an eye opener for me when I travel much outside the US or Canada or something like that because when we were in Nicaragua, there just was not a lot of veggies to be had at the stores. There was some but not anything like what we're used to here and there was actually a lot more fruit and all that sort of stuff as kind of the baseline availability. You still there, Andy?

Andy Deas: Yeah, I'm with you.

Robb Wolf: Okay, okay. I had a little click. I thought maybe the phone gods had kicked us off again.

So I mean that's just kind of an interesting gig and he is coming out of the Dominican Republic with all that stuff. I think it's totally fine to put all the Zone. If he is doing a weighed measured Zone, sticking all those blocks into two meals I think is totally fine. People do that fairly frequently. They seem to do pretty well with it. I think it would be hard as hell to eat.

You know, a way to do it is just basically post workout you would have a larger protein and carb meal, and then the other meal would be just be more protein and fat, and it would probably rotate based on whether or not you're working out. So you would use like 42 Ways to Skin the Zone and figure out on your non-workout days you could delete some of the carbs or a significant amount of them, and then on workout days obviously have significantly more.

And there again, you could play with that and just see to what degree you need the carbs to be able to operate well, you know. Like Mat Lalonde and a lot of other people are showing there's a huge spectrum in which people operate well and it may just be a matter of getting in enough fat in total to keep that engine turning over.

Andy Deas: Yeah, I cannot imagine fasting each day and only eating Zone.

Robb Wolf: Yeah, yeah, seriously. That was the other thought. I'm hoping that you're at least at like 5x fat or something like that, like seriously prop up that fat. I would prop up the protein blocks too. I might even up it a good 10 to, I don't know, 25%. Maybe even if you're 16 blocks I would stick it to like 20 blocks protein or something like that just to cover your bases.

Andy Deas: Yeah, or maybe roll a few weeks and just don't weigh and measure it and keep up your fasting and see what happens. I'd be curious actually to see how much he actually ate, but I can't weigh and measure anymore either. It drives me crazy.

Robb Wolf: Pseudo science, man.

Andy Deas: It's all going to come out in the wash, Robb.

Robb Wolf: Yeah, yeah.

Andy Deas: All right, good question. Yeah, the whole veggies in some of the international locations is always interesting.

Robb Wolf: Well, and you know, why am I blanking on the PaNu doc's name? I keep forgetting it.

Andy Deas: Kurt.

Robb Wolf: Kurt. Kurt had an interesting point and it's really interesting because it dovetails in real nice with what Eades talks about and all that and they're just like vegetables. It's like, "Yeah, that's cool, but don't sweat it so much." And again, there again, you start sounding like a crazy person recommending that or even giving notion to it, but I don't think we need quite the huge variety and all that that we buy the thought, like some kale, some coloreds, beet tops, all that sort of stuff. That is pretty solid. It doesn't need to be as spectacularly broad as what we usually shoot for. And usually, the seasonal variation is pretty good to go on that when you get right down to it.

Andy Deas: Yeah, Dr. Kurt Harris, which reminds me he was on Jimmy Moore on Livin' La Vida Low Carb a few weeks ago.

Robb Wolf: Oh, right on.

Andy Deas: Yeah. I highly recommend it, folks. Check that out.

Robb Wolf: You know, if you want to, we can do just a blog, link back to that so that folks could check it out. That would cool.

Andy Deas: That would be perfect. Good reminder, Robb.

Robb Wolf: Sweet!

Andy Deas: All right, cool. Next question, "Hey Robb, a question I get from some of my clients when talking about a low-carb Paleo diet is about carb loading before an athletic event. My understanding is that the only reason to do this would be to top off muscle glycogen stores, and that doesn't take that many carbs, so basically carb loading isn't necessary or helpful. Am I correct in my thinking? In your opinion, should athletes be carb loading prior to events? Any input would be greatly appreciated!"

Robb Wolf: What type of athlete, what type of event, how were they historically trained, how long is the event? I mean you just can't give a -- this is not a one-size-fits-all kind of scenario. Different people adapt to varying degrees on higher or lower-carb intake based on their work output.

Ten years ago I felt like I actually -- and this could just literally be built within the whole context of ten years ago, but I really seem to motor along really, really well on just low carb, like tons of fat, lots of protein, no carbs at all, and I would do jujitsu, I'd do kickboxing, I just seem like I never ran out of gas. Whereas now, I think I do a lot more, but then I got to say also, I never did anything that was kind of CrossFit-esque. As hard as the jujitsu was, as hard as the kickboxing was, it was never as hard as some of the longer CrossFit style WODs which will completely knacker me. And there's an understanding also that when you completely exhaust a muscle of glycogen, it takes a lot longer to replete it to build it back up.

So there's a bunch of different variables in there and like the fundamental thing is you need to game plan all of this stuff and figure out how the folks are going to respond. So you can't just go into game day and like bust out something new, either on the side of we're going to try it low carb or we're going to carb load suddenly, like you need to practice that. You know, if the event is at 3:00, then you need to figure out what your primal fueling is and you need to practice that several times to figure out like what the gastric emptying is and all that stuff.

Paleo diet for athletes, which is oriented around endurance athletes, definitely shifts. It has some shockingly periodized blocks of training in

which you have a period of time in which you're lower carb, higher protein, higher fat, and then you get into a competitive phase in which you use significantly more carbohydrate and taking advantage of a post-workout carbohydrate windows and stuff like that, people seem to be really well on that.

Our guy Glen Cordoza, the MMA fighter, did super well on protein greens and veggies for most meals, protein and carbs in the form of sweet potatoes post workout. He would weigh in for his MMA fights the day before and then do little easy kind of workouts, like two rounds of Cindy and then eat a protein and carb meal. So technically, he was kind of carb loading too but we played with that stuff a bunch. So there's no 100% answer, it's very situation dependent, and you need to game plan it if you want to get it right.

Andy Deas: This is not helping you sell your Robb Wolf free workout shakes today.

Robb Wolf: Damn it!

Andy Deas: Foiled again.

Robb Wolf: Yeah. Maybe people can just rent the shakes since they don't really know if they're going to need it, although the return policy would be really gross.

Andy Deas: Oh, man. All right. One size fits all, Robb. Remember that.

Robb Wolf: It does. I had a guy email me the other day and he asked if he could post one of my -- the really big post-workout nutrition blog post that I did. It was maybe a year ago or something like that, and he wanted to put it on a bodybuilding forum and I was just like, "Oh, mother of God." And I was like, "Yeah, go for it."

And I'm just waiting for the kind of onslaught to happen with that because the bulk of the people I'm working with are kind of more CrossFit oriented or at least more kind of strength and power oriented so like outright muscle mass gain. Although we talked about that stuff a lot, and all of us pine to be as muscular and strong as Mat Lalonde and John Fragoso but it still isn't like the meat and potatoes of what we do versus like in kind of a bodybuilding forum, like that is the reason for being. So I was just like, "Oh, man. I'm just waiting for where all that stuff goes." I haven't had any linkbacks yet so maybe it hasn't gone up yet.

But there is such a potent desire for making everything like a one-way like a one-size-fits-all, a one-way kind of approach to it and there's just so many variables, so much individual variation. You have to keep some good concepts in mind and then just do a ton of tinkering based on your own composition and all that. And, you know, that's where the art of this stuff comes in, like you use as much of the science as you can and that's where the art of just tinkering and seeing how it turns out is where it all kind of finishes.

Andy Deas: And tinkering is going to dovetail nicely into our next question from Tiramisu.

Robb Wolf: It's a great name too.

Andy Deas: I know. I was like, "Is that really the right name?" Well, I don't know. I don't know. "Hi, Robb. I've listened to you use the phrase 'look, feel and perform' with regard to judging the impact of diet changes. I'm struggling with how you can see a significant enough change in these characteristics unless you are making a radical change from a deficient or allergic reaction to a healthy diet. Once you've tossed out the heavy hitters, processed sugars, simple carbs, got the your macros generally worked out, and taken your basic multivitamin, fish oil, vitamin C, D, E, how do you differentiate whether a dietary change is an improvement?"

Robb Wolf: Gees!

Andy Deas: I could give you the Greg Everett answer.

Robb Wolf: What's the Greg Everett answer?

Andy Deas: I think he stole it from you but I always heard him say, "If you're living on doughnuts and orange juice, I can guarantee you significant improvement. If not, we're going to have to tinker significantly."

Robb Wolf: That is true. That is very true. You know, I mean once you're at that spot, if you've done all that stuff, then, you know, you've kind of done everything you need to do so I'm a little perplexed on this. Do you have a different take on that, Andy?

Andy Deas: Well, and I don't know exactly what we're getting at here, but some of it reminds me, you know, I've had this discussion with Scotty Hagnes on some of the advanced Poliquin protocols and things. Like some of this stuff, after you get at a certain point down the road, I mean what you're

really looking at is percentage points of improvement or fractions of percentage points.

Robb Wolf: Right.

Andy Deas: And I think for a lot of folks I'm not sure they're actually relevant depending on your situation, your background, and what you're striving for. We talked about the Lance Armstrong thing before with measuring in a wind tunnel, positioning on the pike. For him, for that, you know, fractions or percent would make a big difference. For a lot of folks, I'm not sure that it even matters in the big picture and things are going to come out in the wash.

Robb Wolf: Right. Yeah. So yeah, I guess that's a great, great way to delineate that as just like how important is all that stuff to you. And also, another thing to keep in mind, you know, I made this point both at the Black Box summit and at the Paleolithic Solution seminar deal, you know. We talked about the performance that we got out of Glen Cordoza and some people like John Fragoso, some of our better in-house males, but these guys -- like Glen has a 440-460 Fight Gone Bad, something like, 275-pound clean and jerk, 225 snatch. He is 170-175 pounds. His main deal isn't even working out. We just do that to make him a better MMA fighter and he is phenomenal with that, and he has done this unweighed, unmeasured Paleo diet.

And this question that I threw out to the Black Box Summit is Russ Berger that really took me to task, he is like, "Well, why wouldn't you weigh and measure his food? When would you weigh and measure Glen's food?" and I was like, "What would you do specifically to improve what he is doing?" Because he is making improvements every day, every time he comes in the gym, like he is either doing better with his tae boxing or he is doing better with his O-lifting, and so like what's working is working very, very well. And this is a guy who has written 13 books and is a full-time fighter and he is doing great off of the program that we're doing.

Now, could he potentially get more juice out of it? Yeah, possibly, but I'm frankly at a loss as to say, "Okay, well, he needs more protein or more carbs or more fat." I mean he seems to be doing really, really well with what he is doing and so I would be remised to tinker with any of that.

And so this is another deal where if you're still making progress off of what you're doing and if you have a smart program, you've got a little periodization in there, you've got some linear strength progression from those people. Most people are still weak enough that they need to be

focusing on strength as kind of a primary factor, your strength and technicality, I would put that caveat. And then if they have all this big stuff dialed in, they're probably going to be making some solid forward progress.

And occasionally, you'll find something like adding in like Night Calm. Some extra magnesium really, really improves sleep quality. Some people respond well to Tribulus and so they get a little boost in their testosterone production or something. But these are really, like you said, fractional improvements and it's the big macro stuff that is usually the hardest but most important stuff to get people to focus on.

Andy Deas: Yeah. And I think the only other thought I had reminded me of Dan John, philosophy of a strength coach, and I've heard him talk about this a couple of times where he has standard few workout programs that he has used over his life and his standard diet. He would always say, "You know, when I'm going to play with adding something in," he uses fish oil originally as an example. "If I do x workout that I've done a number of times and I'm doing it over a period of weeks, I generally know how I feel two weeks in, three weeks in." And his approach is "If I feel a significant difference that two weeks, that three weeks when I added something in like fish oil," he said, "I'm going to keep it in." He's like, "If I don't feel a difference, I'm going to get rid of it."

Robb Wolf: Sure.

Andy Deas: So I think that's one way to do it. I think some of the supplements you're talking about like the vitamin D thing, you know, I've talked to folks that noticed a super immediate difference with that. When I supplement with vitamin D I never have noticed a difference with it, but I'm supplementing with it based on the fact that I believe the research and the theory of how critical it is; and in that case, I'm not necessarily relying on the change in how I look, feel, and perform.

Robb Wolf: Right. Yeah, yeah, yeah. I dig it. Yeah.

Andy Deas: So my two cents, I'll sell it to you for a penny.

Robb Wolf: Perfect, bargain, bargain.

Andy Deas: All right, good. Next, a couple of questions from Daniel. "What are your thoughts on krill versus fish oil? I now take krill because it smells less, no burps, and I can take a lot less for the same impact."

Robb Wolf: You know, the krill honestly just makes me a little nervous because that stuff is like the base of the food chain of the ocean and it just makes me a little nervous like harvesting all that stuff and eating it all. But then if we kill the ocean, then it will really solve the global overpopulation problem and all the other damage we're doing to the planet. So maybe that's all fine.

I think it's real good stuff. It's loaded with zeaxanthin, astaxanthin, cryptoxanthin, all these like funky carotenoids that do some cool stuff. So I think it's legit like it's definitely very, very good but it does make me a little nervous on that soil-linked green side of things where like we've killed the algae of the planet and we're all going to die. So I don't know but that's my only kind of big reservation about it.

Andy Deas: Yeah, and the krill thing is interesting 'cause one of the few folks whose stuff I love and respect that really like it is the Eades.

Robb Wolf: Yeah, yeah.

Andy Deas: Those other folks that I'm really into their stuff, you don't hear much about it, so I've never really been able to wrap my head around that.

Robb Wolf: Yeah. He did also, however, turn his back on his excellent exercise chapter in which he advocated lifting weights, sprinting, and jumping and throwing stuff, and then got in bed with Fred Hahn on the super slow gig, but he did make the point too that that's the only thing that he will do, and so it's better than doing nothing which I fully agree.

Andy Deas: Don't hate on the super slow or you're going to start hating on the HIT guys soon, Doug McGuff, you know. There's room for all of them, Robb.

Robb Wolf: I like Fred. Fred is a good dude. He is a good dude. He and I have had a ton of email exchanges so he is a good guy and it just kind of broke my heart a little bit when Doctors Eades turned their back on their -- I think that book is just amazing, like it is really the cat's meows for some concern. I hope mine is worth a puddle of urine compared to theirs but trying to make it solid.

Andy Deas: And you're talking about the Protein Power Lifeplan.

Robb Wolf: Protein Power Lifeplan, just outstanding book. Yeah.

Andy Deas: Epic, yes. And second question from Daniel. He says, "You often say things like 'lean out.' What do you define as 'lean'?"

Robb Wolf: I think for most people, it's usually having a little bit of abs showing, and the reality is like if you're more -- I think to some degree, the more legitimately athletic you are, that being like you have to do something against someone else or against a barbell or something and not just kind of figure-oriented stuff, then that level of leanness is not going to be as much as what we might otherwise think or what.

So like you can see people will get into the 5% body fat level where they're very, very, very lean. Usually, you start seeing that be counterproductive to overall performance, but it kind of depends a little bit too. But usually, the abs are up and in males, that will be about 10% or lower; females maybe like 12% or lower, 13%.

Andy Deas: Yeah, or for me, 5%, whatever. No comment.

Robb Wolf: Andy Deas, large and lean.

Andy Deas: And I think the lean-out thing, I mean it's relatively subjective depending on -- I think we got a couple of questions about like, "Hey, am I lean enough to start bulking?" I'm like, "Are you happy with where you are?" For some folks, I think their goal is really that six-pack or whatever, eight-pack. I think for some folks, their performance is more what they're oriented to and we can always see folks that are super, super lean off and not excel depending on what sport they're playing.

Robb Wolf: Right, right.

Andy Deas: So another spectrum. Oh, man.

Robb Wolf: Indeed.

Andy Deas: All right, question from LA, the final question, Robb. This could be the moderately almost the shortest since the first one. "Hey Robb, thanks for another fantastic podcast. Quick, off-topic question: Can you gain fat if you eat more than your bodyweight in protein? I weight 125, but when I recently put all my foods into Fitday, I saw that I'm eating between 150 and 170 grams of protein per day. I have recently gained body fat. Could this be a culprit?"

Robb Wolf: Could be. I mean certainly, if you're eating more than what you were eating previously. Protein does release some insulin. Obviously, there's a point, and this is the stuff where like I think some people like Lyle McDonald and some other people start casting stones at the whole kind

of Paleo low-carb camp where they're like it does come down to calories and all that stuff. And at some point, it's like, "Yeah, okay. It does come to calories." But then they miss a bunch of other points in which a low carbohydrate level tends to cause a lot of satiety and it tends to make it just very, very hard to even eat enough calories.

And so again, there's like this whole mix-and-match deal with that; but fundamentally, if you're gaining body fat and you're legitimately gaining body fat, then it might be the caloric content or it could be that you've been sleep-deprived or your stress level has gone up or a bunch of other stuff too. So that's maybe, it could be that; but it can be other stuff too, and we can start calorically restricting people and screw up their sleep and they'll end up less lane particularly through the midsection so --

Andy Deas:

Sure.

Robb Wolf:

Yeah. But I mean that's certainly the good spot to look but it doesn't -- it's not just dependent on like whether or not it was more grams of protein than pounds of bodyweight. It could be the overall package. Maybe you need to dial down some carbs somewhere. Maybe you need to dial down the fat so that the total caloric load is less. Maybe you'd do better on a recovery basis on higher protein. I don't know. I mean it's all over the place in that regard.

Andy Deas:

Good question, yup.

Robb Wolf:

Good question though. Yeah.

Andy Deas:

That's it, Robb. That's the end, man. Episode 14 may be the last one ever.

Robb Wolf:

People are begging like, "Please let it stop. Call the police."

Andy Deas:

So before we close though, I want to throw out there that I was having this discussion at the gym about some classic '80s movies, things like Rad.

Robb Wolf:

Oh, no.

Andy Deas:

Gleaming the Cube. And I told, Robb, Prayer of the Rollerboys was like a classic movie, and he has no idea what I'm talking about. So if anyone listening has seen this movie, please respond on the blog so I can prove to Robb I'm not the only one who saw this movie in the '80s.

Robb Wolf:

We can provide a link to the trailer too. It has some namers. It has Corey Haim at his apex, Patricia Arquette and she was very hot and delectable

as she always is. Yeah, I miss that one, like that was obviously like a bong exhale month for me or something like that because that movie never hit the grid, whereas Rad and Gleaming the Cube definitely was a fan of that. But as much as I liked in-line skating, that probably was not the bigger draw for me.

Andy Deas: You're too busy lifting weights. I'm sorry.

Robb Wolf: I was too busy lifting weights. That was around my State Powerlifting Championship point, which I did track down the video on that and I've got it transferred to AVI and to Flash and I should be posting that soon. So it's horrible. It is a train wreck.

Andy Deas: I can't wait to see it. Actually, there was a couple of your friends from high school that were threatening to post pictures of you on the internet before you started lifting weights to show me how skinny you were so I need to see some of those.

Robb Wolf: Well, I wonder if I was skinnier then than I am now. That's hard to imagine, but yeah.

Andy Deas: So with that wonderful topic, Prayer of the Rollerboys, Robb, check it out, and I'll talk to you next week.

Robb Wolf: All right, sounds good.

Andy Deas: All right, see you, man.

Robb Wolf: Bye.

Andy Deas: Bye.