

The Paleo Solution

Episode 15

- Andy Deas: Robb Wolf, Andy Deas. What's up, dude?
- Robb Wolf: Dude, vasectomy reversal two days ago so I'm gorked on meds and I have an icepack on my crotch.
- Andy Deas: Wow! You really had to bring that up, didn't you? I thought we were going to be able skew right past that.
- Robb Wolf: Nope, nope. The TMI is kind of my trademark so --
- Andy Deas: Yeah, Robb Wolf is always Robb Wolf for better or worse.
- Robb Wolf: Unless the drugs have really set in, in which case I am Roberto Lobo! So --
- Andy Deas: So Episode 15, you know, and Robb, I was thinking today, I feel really vindicated on this Prayer of the Rollerboys thing, because I feel like half of the people that responded on the blog were familiar with what I was talking about so I'm not the only moron that spent their youth watching bad movies.
- Robb Wolf: Hey, man, there are a ton of people who piss their lives away on the internet so you've found good company I guess. I don't know.
- Andy Deas: Well, and I was reminded of it this morning because we are working on the goals, board of the gym for six month goals, and there's some good ribbing between people about whether or not their goals are realistic and stuff, and somehow it was going to giving me grief about my goals, and I'm like, "Dude, this is my vision quest." And all these girls look at me with this blank stare but you see, all of these men that are between like 26 and 40 and they get this little smile on their face, you know, they're like, "Oh, yeah, I remember that movie." I'm like, "Ahh."
- Robb Wolf: If you can't tie it into a movie reference, then it really has no basis in reality so --
- Andy Deas: That's unfortunate. I think I might **[0:01:28] [Inaudible]** someday.
- Robb Wolf: Yeah, yeah. You just need to spend some time with Greg Everett to really have that kind of life.

Andy Deas: Ooh, all right. That would be good. I think I need to -- he might make it worse or he might be too far over the edge and I'll need to step back and look at it in alternate terms.

Robb Wolf: Yeah, he can pull anything from news radio, Family Guy, and literally any movie he has ever seen. He only needs like one pass through it and he pretty much like full memory retrieval. He and Kelly Starrett are the closest like photographic memory folks that I've ever met.

Andy Deas: Nice!

Robb Wolf: Yeah, yeah.

Andy Deas: So, you know, before we get started, anything else? Anyone who's trying to kill you this week? You survived surgery which I guess is positive.

Robb Wolf: Survived surgery. Just spent about two hours on the phone with Professor Cordain and talking about a kind of advanced topics Paleolithic nutrition seminar that we're going to wheel out, hopefully get some like Mat Lalonde action on that, but not too many details yet other than this is going to be a fully accredited gig, potential for some university credits on it and some stuff like that.

So it's going to be fully legit and several stratifications to it. So like you could roll into this thing with no basic science background and get some goods, which would be real similar to what I'm doing with the Paleolithic Solution seminar and then you can chase that all the way up to like an M.D., Ph.D. type level. So it's going to cover everything from the very, very fundamentals of Paleolithic nutrition all the way up to like protocols for getting people off of statins, off of blood thinners, and using non-conventional means, but basically Paleolithic nutrition.

Andy Deas: Nice!

Robb Wolf: Yeah. So that's very, very exciting.

Andy Deas: I also wanted to thank the reader for sharing the video of Laura DeMarco deadlifting 370 pounds.

Robb Wolf: Yes, made me feel like a complete putts.

Andy Deas: Not only that, but I was talking to someone. I said, you know, my favorite part of that video is when she picked it up and there was just like sheer

joy on her face, like she was like so in the moment and I was like, “Wow, dude. That is awesome.”

Robb Wolf: Yeah, Laura is awesome. She is a very, very cool chick, awesome athlete, super cool person.

Andy Deas: Hah! And not a vegan anymore.

Robb Wolf: And not a vegan anymore. Yeah.

Andy Deas: All right. So enough goofing off. To the questions.

Robb Wolf: Yes.

Andy Deas: Okay, question one from Raquel. She says, “Robb, I’m frustrated. I live in Ithaca, New York, which is home to Cornell and a man named T. Colin Campbell, one of the lead researchers of the famous ‘China Study.’” She admits that she “hasn’t read the book but read enough books through my studies as a nutrition educator and had enough discussions with my own nutritionist about protein versus carbs.

So at this party...” It’s never good when you’re talking about this at a party. “So at this party were two of T. Colin Campbell’s minions, talking about how we should only eat only 6 to 10%protein, 10 to 15% fat, and the rest in carbs because people who ate the most animal-based foods got the most chronic disease. People who ate the most plant-based foods were the healthiest and tended to avoid chronic disease.

One study they cited was where Campbell fed rats different amounts of casein, soy and wheat protein. Apparently, the rats who ate the casein were the sickest. Could you talk about some of the main proteins, their sources, and what biochemical importance or not they have in the human body? I know rats are quite the scavengers, but don’t think their bodies were meant to digest cheese and milk all day long. Neither are ours. So it seems to me that the study is flawed from the beginning.”

Robb Wolf: Oh, yeah. You could maybe say that. You know one thing here for maybe intellectual balance, you know, like she admits that she hasn’t read the book. You should read the book. Like the China Study is a well-written book. Campbell, the dude is older than Moses, like he is almost 80 years old and has been researching his whole life, and like I have a lot of respect for the dude. He is a professor at Cornell University. He’s got a distinguished research background and all that stuff.

I think he is like 90% wrong; but that stuff aside, like I think there's a lot of respect that needs to be given to the dude for what he's accomplished and whatnot. And if you're really going to get in and critically assess something, say like the China Study, you should read the whole damn book just to be able to say, "Okay, yeah, I read the whole thing."

So then we can shift forward to, you know, we, being like the Performance Menu, when I was more heavily involved with that, we would receive this question and I would receive this question almost daily, "What about the China Study? I just read this book the China Study. My next-door neighbor told me about the China Study." So in an effort to kind of put this whole thing to rest, I asked Professor Cordain to do a review of the China Study and he had an even better idea. There had been a point where -- I forgot what it is. It's the thing that goes on in Colorado. BoulderFest, is that right?

Andy Deas: Oh, no. I think we talked about this last time.

Robb Wolf: Yeah, yeah.

Andy Deas: Where the Berardi people are always at. Yeah.

Robb Wolf: Yeah, yeah. So there was some sort of a wingding where these folks were supposed to get together and there was supposed to be some funding for Cordain and Campbell to debate the role of protein in degenerative diseases, and so that's what Cordain suggested. And yeah, we did talk about this one before. So again, I'm medicated right now so forgive me for that.

But basically, like this is the whole protein debate where Cordain just takes point by point and dismantles Campbell, I mean just absolutely takes him apart on every point about like is protein damaging or deleterious to the kidneys? No. Does it cause bone demineralization? No. Does it increase your likelihood of cancer? No. And he just goes through and cites all the studies. Campbell did a completely sloppy job on this. He basically approached it as a payday instead of an opportunity to really argue his point; and so, on the epidemiological studies and whatnot, like Cordain really took Campbell to task.

This final piece here that was mentioned about the rats being fed casein, soy, and wheat protein, when in any organism's life does it eat casein, does it eat dairy throughout its whole lifecycle? Never. And this is one of these fundamental tenets of the Paleo diet. Now, we do have points in which we would say, "Okay, some like Paleo plus dairy would be

beneficial, like a CrossFit Football kind of scenario. You want to get someone big and strong. Dairy is a very potent growth promoter." So we understand all that stuff.

But then, that said, the fact that dairy is a really potent growth promoter, if that is the primary protein source that you're getting, then there's going to be problem associated with that, primarily uncontrolled cellular growth a.k.a. cancer. And so this is not surprising in the least that you would see this with a -- 100% of the protein source for an organism being dairy, seeing increased rates of degenerative disease in cancer, you wouldn't expect anything else.

And then this also shines a really clear light on how completely clueless the vegetarians are on all this stuff because they lump casein in with the meat and chicken and fish and all the rest of that stuff. Cordain had a paper; and Andy, if you remind me, I will forward it to you; where they did a pretty good study putting young boys on either a meat-based diet sans dairy or a mixed diet but heavily, heavily focused on dairy; and the boys that were heavily focused on dairy, all of them developed what was it, essentially like a type 2 diabetes style metabolic derangement where we saw none of this metabolic impairment with just a meat-only diet. And so there's some very compelling stuff that kind of explains all of this.

Andy Deas: Duly noted.

Robb Wolf: Yeah. So we can definitely add that to a revisiting of the protein debate.

Andy Deas: I'm just laughing at the question of -- so at this party.

Robb Wolf: So there he was at this party T. Colin Campbell's minions came out of nowhere. They were all skinny, pale, not very happy.

Andy Deas: If anyone has learned not to talk about these things at parties, Robb, it's you and I.

Robb Wolf: Mm-hmm. Yeah, when people ask me what I do now I tell them I'm a mechanic, so yeah.

Andy Deas: More tequila please.

Robb Wolf: Yeah, yeah.

Andy Deas: All right, moving on, we got a question from Paul. A pretty long background. We're going to skip most of it other than to say he is pretty sure he is your only fan from Moose Jaw, Canada.

Robb Wolf: Could be, could be, could be; although, you know, that is the area this dude Preston who I met when I was at a CrossFit Calgary Level I CrossFit Cert when I was on the Cert Team, this dude Preston was 100-meter sprinter, like national caliber 100-meter sprinter. I think I mentioned this guy in a previous podcast too, but he --you know, like you always go through Fran on your indoc deal.

And so I told him, I'm like, "Dude, I just want you to go slow. Just take your time. Don't push at all." And so like the 95-pound thruster just looked like he had a twig in his hands. The guy could do legitimate like one-arm non-kipped pull-ups, so like a deadhang one-arm pull-ups. So he basically did, you know, the 21-15-9 real easy on the thruster, barely any type of kip on the pull-up, and he turned a 3-15, a 3-35, something like that as first effort ever. And then we went back into the lecture portion and we all sat down, and I asked who got the fastest time and it was the student Preston who had smoked everybody in there. This was by the way his CrossFit workout. He had never done anything like this before.

And then I asked Preston, "What's your back squat?" And he was like, "Um, I put four of the big plates on." And we're like, "Okay." And then he was like, "I do that for sets of ten." And we're, "Ahh." So the dude is doing 405-pound back squats for sets of five, sets of ten, and didn't even really know what the weight was. He just like added weight. And he is probably like 5'8", buck 85, buck 95, and just built like a brick shithouse. But it's that thing again, you know. That strength base is obviously really, really valuable. But sorry, that was my digression on the Saskatchewan deal.

Andy Deas: I was going to say that clearly highlights the fact that strength is not important.

Robb Wolf: No, no, no. Strength has no bearing in overall metabolic output at all. Oh, you know what, just to keep digressing even a little bit more, Pierre Auge of formerly -- I can't even remember what his gym is now, but he has a dude who was a nationally ranked powerlifter who is 180 pounds and he did a workout that was a CrossFit total that was 1008 pounds. So it was like a back squat, a press, and a deadlift that total 1008 pounds. He did 10 rounds of that in 4 minutes and some change.

Andy Deas: Yeah. I'll post the link. I saw that on OPT's site. It really ticked me off for two reasons. One, those weights are so light in his hands; and two, you see all the form flaws and it doesn't impact him at all because he is so freaking strong.

Robb Wolf: Well, honestly, I didn't see much. I thought his form wasn't bad. I thought it was pretty solid.

Andy Deas: Not bad but considering, let me just say if I ever completed that workout, I would need perfect form on every one of those lifts to survive.

Robb Wolf: Well, I would have needed a forklift so that's the whole other thing. But yeah, that's another one where it's like, you know, Filthy 50 and stuff like that is legit, it's hard, it's mentally challenging, but there's other workouts where like do you even have the buy-in? Like can you even get it done? It's like Ido Portal's -- one of his favorite workouts is a 120 standing back flips for time. It's like okay, cool, you've got big lungs. Do you have a skill set? Do you have all those other stuff? But anyway, that's a whole other digression so --

Andy Deas: Can you even get a seat at the table? No.

Robb Wolf: No.

Andy Deas: Anyway, off the rails.

Robb Wolf: Okay, talking about this dude from Moose Jaw. Sorry, sorry.

Andy Deas: Our second fan in Moose Jaw. So basically, background, this dude loves caffeine. That's just the bottom line. And I love caffeine and Robb loves caffeine so we're going to talk about his questions.

"Question 1: What are your thoughts on caffeine on a Paleo diet? I would love to hear your thoughts on how it affects metabolism, performance, weight loss, sleep, etc. Based on my goals, which basically leaning out, get better, etc. all the goals that we all have, is it enough of a factor that I should consider breaking up with Starbucks altogether? Please say no. Please say no..."

Robb Wolf: So, you know, it's this thing again where I think that there's a therapeutic dose unfortunately. I think that therapeutic dose is lower than what most of us end up tackling. It's probably more along the line of like a couple of shots of espresso, maybe about 4 of them a day instead of like 8 or 12 or 16 like I usually end up subjecting myself to.

When I did the update for the Paleolithic Solution Seminar, I included in that a full or a fuller accounting of cortisol. I've never really covered cortisol as a standalone topic. We would touch it peripherally in previous talks. Now it's a full-on topic.

And it's just so damn important that cortisol, the stress, stress management, it's so important but it's also so incredibly subjective. Like what is your individual wiring? Are you wound real tight? Are you real mellow? Do you have like a real mellow work environment? Do you just -- are you the type of person that just loves life and like wherever you walk, like daisies pop up after your feet if you trod on there, or you're just like mean and scowling like my wife and everything pisses you off? And so it's so subjective. It's really hard to give a yes or no answer to this which is what folks are looking for, but I think that there's genuinely a therapeutic dose.

He is living very far north which I think you're really looking at some of this like light deprivation stuff. I've really been dealing with some seasonal affective disorder type stuff because we've had a super rainy winter thus far in Northern California, like far, far worse than what we've had in like 10 years; and it's really kicked my ass and the desire for more coffee has been really potent. But then in talking to James Fitzgerald, it's really, really important to tackle seasonal affective stuff from a perspective of cortisol management because you start getting some cortisol dysregulation going on, and so it's an important thing to keep an eye on.

So do you need to break up with Starbucks? Probably not, but you need to keep the therapeutic dose in mind for sure.

Andy Deas: Yeah. Actually, I used to work with a guy that to moderate his caffeine intake he would go to Starbucks because he could set an upper limit easier in how much he would spend a day. With his home espresso machine, he was up like 16, 20 shots a day and it would just spin him out.

Robb Wolf: Yeah. I mean we do that all the time where we have this really good Cuban style espresso, café la java, and then we have a 10-shot espresso maker, and so it's literally like four minutes away from me having like a cup of espresso, which espresso is a little lighter in caffeine theoretically than say like drip coffee is, but when you're taking it by the tankard, then you can still do some pretty good damage with that.

Andy Deas: It's the only way to go, Robb.

Robb Wolf: Sure-iously.

Andy Deas: All right, second question. "What are your thoughts on green tea? I've read several websites that tout it as a miracle drink that, amongst other things, boosts your metabolism and helps you lose weight. What does green tea contain that is so beneficial? Or is this not true?"

Robb Wolf: Oh, God, I forgot the pronunciation on this stuff, epigallocatechin gallates stuff, like there are some other -- when you start off with tea, basically it's what they would consider white tea, and then it gets steamed which prevents any of the enzymatic conversion of constituents in the tea that would then turn it into like the orange pekoe or the -- what's the final tea -- basically what we would call black tea like the Lipton tea or like the Earl Grey tea. I'm totally blanking on what that is. But that's all an oxidation process.

And interestingly, each one of those steps creates and destroys things that are of remarkable benefit. I don't know how it didn't hit my radar, but black tea actually has some very potent anti-cortisol effects. Like a cup of black tea reduces acute cortisol response, so like from exercise or other types of stress; and green tea doesn't do that, orange pekoe doesn't do that, coffee doesn't do that, but then there are some things in green tea that black tea does not do. So I think green tea has some really cool stuff.

Interestingly, some of the other constituents in green tea which are stimulants like this epigallocatechin gallates, I'm mispronouncing that but that's approximately what it is, these things are also stimulating; but for me, they have kind of a neurological stimulation that really kind of blows me out, like it's overstimulating. It's like one cup of green tea is like doing a whole bunch of espresso for me.

So for some people, green tea is less stimulating. For me it's more stimulating and I can't really tolerate it. Whereas black tea I seem to tolerate just fine. So it's again kind of a subjective deal and there's all kinds of different beneficial constituents and all that stuff.

Probably a good argument to rotate through on these things. Do some green tea one day. Do some black tea another day. Rotate through on some coffee. Have a little espresso on the background all the time 'cause obviously that's the best stuff on earth.

Andy Deas: Yeah. And I think is the one too where you can mess with. I like to -- I have a coffee brewer that we used to brew tea and I will mix and match based on what's going on. So I might have a green tea in there, some chamomile, some black tea, just do new flavors every time. It's like a surprise every time, Robb.

Robb Wolf: Yeah. And Mat Lalonde makes a really good point of diversifying your toxin load and you could view that from the type of teas that you're drinking, the type of vegetables that you're eating or whatever, like we have several detoxification pathways in the liver; and our whole body has various kind of detox pathways, but the bulk of the process happens in the liver.

And if you could think about this being kind of a -- one of those things that they're almost kind of like gambling-related where you throw like the tennis ball up and then it bounces down and it can go through different slots, and then if it drops in the right slot then you win a price, and our metabolic pathways are a little bit like that where different things will cascade through these different pathways. And if you hammer one metabolic pathway with a ton of stuff, say like cruciferous vegetables, and then the cruciferous vegetables have some good things like di-indole methane which we talked about a podcast or two, previously as an anti-estrogen thing, that's good; but then the cruciferous vegetables also have some thyroid antagonistic compounds so that can be bad, and so that's where you want some diversity and some balance and all this stuff. And so it's another good argument for breaking this stuff up a little bit.

I'm completely random. Andy is like, "Maybe we should cut this podcast off."

Andy Deas: No, it's good. I get to see someone creating a spreadsheet to randomize their food intake.

Robb Wolf: Oh, my God. Paleolithic Solution Podcast, making people neurotic one episode at a time.

Andy Deas: But point well taken, Robb.

Robb Wolf: Cool!

Andy Deas: That's how we should work -- attack our training.

Robb Wolf: Yeah, yeah, you know, that punctuated -- what is it -- the punctuated equilibrium not -- that's not the term but it is essentially that. You're diversifying everything, your training, the food intake. I think the one consistency that you really want to try to have is your sleep and low stress, like however you can control that.

Andy Deas: Yes. All right, last question. Even though it appears he knows the answer to this, he wants your take on it. So "I've been reading enough and listening to your podcasts enough to know the answer to my next question but I'll ask it anyway, just in case you have a different spin when it comes to tea and coffee. What are your thoughts on sweeteners? That is, what would be preferable -- sugar, artificial sweetener, or honey?"

Robb Wolf: I would go with the whole whipping cream first, like I would just sidestep all that stuff entirely, go with like a whole organic whipping cream with a little bit of cinnamon which actually tastes pretty darn sweet and that would work with coffee or tea or whatever you're drinking.

And then from there, like if you really want to have some sort of a sweetener, I would really go with like a honey or like just standard brown sugar or something over artificial sweeteners. If you're generally pretty clean, like you're really not going to desire all that much of that stuff, and usually with phasing it out or going with some of these other alternatives like the whole whipping cream with a little bit of cinnamon, you really end up not desiring all that much sweet.

Andy Deas: This reminds me of that point in your Paleolithic Solution talk where you're talking about adding a little whole whipping cream to coffee. You're like, "Just add a tablespoon or two," and I just always think, "Who in their right mind only adds a tablespoon of that?"

Robb Wolf: Usually it's about a 50-50 mix but we'll just overlook that for right now.

Andy Deas: Yeah. It's worth the shot.

Robb Wolf: It's worth the shot. Yeah, yeah.

Andy Deas: Yeah. And then if you're not meeting your goals, for some reason not leaning out as much as you can, you can try it for a little bit without and see how you roll.

Robb Wolf: Yeah. And usually, one of the scary things about adding the whole whipping cream is that caffeine is actually a little more fat soluble than it is water soluble, and so that lyophilized, basically the homogenized fat,

they do some funky stuff. They put some temperature pressure on normal cream to make the fat droplets smaller so that they will actually dissolve in water, kind of get emulsified in water.

But that makes a really nice carrier for pulling the caffeine out of the aqueous portion of the coffee and it gets extracted into the lipid portion of the cream; and then that lipid actually, when it gets absorbed into the system, it goes from the intestines into the hepatic portal vein like via the lymph and it drops straight off at the liver. And so it gets dropped off into the body very, very quickly and very potently so that's actually another way that you can get yourself in over your head with regards to the caffeine. Like adding that whole whipping cream kind of increases the caffeine dose you get. You extract more of it.

Andy Deas: Yeah. I noticed for myself like every time I go to a seminar or one of yours and we don't use whole whipping cream at home and I will spend a few hours drinking that with coffee, and I noticed a significant increase in how that caffeine affects me.

Robb Wolf: Oh, yeah, yeah.

Andy Deas: I'm flying around the room.

Robb Wolf: Yeah. It's kind of like when you go out and start drinking NorCal margaritas on an empty stomach and then you get four or five of them in and then you're like, "Oh, I definitely will not be driving home tonight, and I may be changing the texture of the cab backseat as I drive home." So yeah, it's funny, the stuff that you mix in there. Some of the carbonated beverage with booze enhances the absorption and then the really stout fat source in the coffee or tea enhances the absorption too.

Andy Deas: Mm-hmm, all good stuff.

Robb Wolf: Truly.

Andy Deas: All right. Moving on, question from -- how do you think I should say that?

Robb Wolf: Clea? Clay? Clay?

Andy Deas: Clay?

Robb Wolf: Yeah, C-L-E-A.

Andy Deas: All right. That was my best guess. “Hey Robb, thank you for being such a font of information. I’m wondering what you recommend eating when following the Catalyst Athletics WOD. In the Performance Menu, Greg Everett prescribes one gram of protein per pound of bodyweight for weightlifters. Do you think this goes for the CA WOD too? Or a gram per pound of lean weight? Less?” So let’s just start there.

Robb Wolf: I think this stuff does boil down ultimately to how good your digestion is. Like in talking to James Fitzgerald, people who are very, very solid in their digestion, good hydrochloric acid production and all that, they may be able to get by with a little bit less protein, but I find most people tend to do better on about that gram of protein per pound of bodyweight, not even a lean bodyweight but the pound of bodyweight for a variety of reasons. And then even then, I’d like to see for most people some digestive support to help them process that protein even better.

Andy Deas: Mm-hmm. “Background: A little Max Effort Black Box, Wendler’s 5-3-1, switching to the Catalyst WOD. Eating Paleo for more than a year, super strict since I went to your nutrition seminar in Jacksonville this spring; 100% strict on grains, legumes, and sugar; 95% strict on dairy. In Zone measurements, I’m eating roughly 14 to 16 blocks of protein, 4 to 8 blocks of carbs, and a huge amount of fat. I weigh 140 pounds. 14 to 16 hour IF fasts 2 to 3 days a week. 6 grams of Omega 3 a day.”

He is thinking that the CA conditioning workouts are short enough to get by on few carbs. “Right now, I kind of crash after longer conditioning workouts unless I eat more carbs, but day to day, the less carbs I eat, the more it feels like I must be smoking crack. Your glycogen replacement article in the Performance Menu Issue 27 suggests that I could eat pretty much all of my carbs for the day after the workout. How important do you think post-workout nutrition is for the CA WOD?”

Robb Wolf: Man, again, this is just real subjective. You have to play with this stuff. I forgot what the blog post was but somebody had posted on there. Oh, I think it was the guy that is the Navy Seal and he ended up going like a Zone and then Paleo-Zone and then half-carb Zone. And each one of those steps the guy saw a significant uptick in his performance, and I made the comment that more or less like this is the end-all-be-all kind of Holy Grail sort of thing.

And Russ Greene kind of took me to task on that. He was saying, “Well, you know, there are people that respond much better with higher carb intake and all that.” And I was like, “Oh, yeah! Totally!” Like there’s some selection bias going on with my site because obviously, I kind of function

better on that. Mat Lalonde functions better on that. You Andy functions better on that. Like this is just kind of the signal that we're sending out to the universe here, and so people pick up on that signal, they give it a shot, and then the people who respond well to it usually end up, they're the people who tend to respond. So the people who respond better to a little higher carb intake I think are probably not as vocal on this thing, but there's no doubt that there's a huge spectrum in this and you just have to play with it.

I think that that is a nice point to play with, you know, and especially because he is weighing and measuring his food. So it's like okay, we have some really tight parameters on your data, why don't you try sticking the lion share of your carbohydrate in post workout and see how you look, feel, and perform? And then you could start playing with like reducing the carb intake, increasing the carb intake; like if you're being that detail oriented about it, it's a really nice thing to play with.

Andy Deas: Yes, and it would drive you crazy. Okay, next, moving on. "What do you think is a good protein level and macronutrient balance for the CA WOD? Intermittent fasting good or bad? Anything else I should consider changing?"

Robb Wolf: I think definitely that gram of protein per pound of bodyweight. The overall macronutrient again is going to be really predicated on how you run. Some people tend to run a little bit better on a little bit higher carbs, but I just see it seems like about 70% of folks seem to run better on a little bit fewer carbs, you know, fewer being probably 50 to 100 grams a day max and just getting the bulk of those carbs from green leafy vegetable type things. It seems like so many people seem to run better on that. Then total caloric intake is just going to be kind of predicated on are you just trying to maintain current levels and kind of optimize say like strength to bodyweight ratio or are you trying to get bigger? And that's going to dictate your overall caloric intake.

Intermittent fasting again may be beneficial, maybe not. Talking to Martin Berkhan, the Leangains guy, super sharp dude, he seems to get some really good results out of the intermittent fasting with the folks that he works with, whereas I have had much more mixed returns, but he is working with much more kind of strength than bodybuilder type folks. But the CrossFitters that he is working with, he is also prescribing their training, and interestingly, they're doing a ton less real ball-busting metabolic conditioning and they're doing a bunch more strength work, a little bit more low level like strongman, like flip a tire, swing some sledgehammer type stuff. And so they're doing some intermediate level

GPP type stuff that's not white buffalo in the sky, puke on your shoes type things.

So I think when you couple some intermittent fasting with some smarter programming that's not just predicated on metabolic conditioning, you maybe have a good situation there so it might be something worth revisiting. I had kind of -- I wouldn't say getting up on intermittent fasting, but I had seen such mixed results with it, but I was reticent to really drive it much further.

Andy Deas: Yup. All right, good, and then the "One more extremely important question. Is scotch gluten-free or not? Mixed info online. Big implications for life."

Robb Wolf: I think it's probably gluten-free, given the fact that it's been distilled. It's not born gluten-free but I think it finishes gluten-free. But you could always go with tequila.

Andy Deas: Or vodka.

Robb Wolf: Or vodka, yeah.

Andy Deas: I just want to say that my favorite part of all these questions is it always comes down to caffeine and alcohol. People will change everything else but they're really worried about, "Can I have my two cups of coffee? Am I going to lose all my benefits if I have some scotch?"

Robb Wolf: Well, you need your uppers so that you can actually get work done, and then you need your beer goggles so that you can get laid at some point. So I think that's where the whole thing plays out so --

Andy Deas: Get laid at some point. Ugh! What a good day! Robb Wolf is always Robb Wolf, whether I'm liking it or not.

Robb Wolf: Andy's wife is like, "You know, you guys are idiots!"

Andy Deas: Yeah, but I don't need you to fertilize that one.

Robb Wolf: To fertilize the field there, yeah.

Andy Deas: That's a part for the course.

Robb Wolf: Yes, yes. And then he finally says, "Sorry for all the recent drama. Thank you for the service to the CrossFit community. Right on with the right on." I like that.

Robb Wolf: Thanks to him.

Andy Deas: I'm going to use that today in a sentence.

So next we have a question from Nicholas. "I attended your cert at BTB CrossFit Atlanta. Paleo for 25 days and I'm confused with regards to fruit. Essentially, I do not know how much to consume or which types are best. While I've been eating lots of meats and vegetables, I've stayed away from fruit for the most part because I'm scared of the sugar intake pre-WOD. I know there is something wrong with this and you've encouraged tweaking of carbs in terms of felt lethargy and such.

The problem is I don't feel lethargic. I feel highly energized and ready to rock and roll on WODs. That doesn't mean I'm not consuming the right amount though, because just like you said in regards to eliminating gluten, you may not feel like shit, but how do you know what you're supposed to feel like if you've never been without it. I need some way of knowing how much fruit I need. I'm 25, 147, 5'9" and lean. If you've answered in the past, I'm sorry." Blah, blah, blah. "I had the Kurt Cobain tattoo if you remember." Do you remember?

Robb Wolf: Oh, yeah. I totally do. I totally do. Yeah, really good dude.

Andy Deas: Where is the Kurt Cobain tattoo? I want to start with the porn stuff.

Robb Wolf: I believe it was like torso.

Andy Deas: All right.

Robb Wolf: Like yeah, either torso or arm. I forgot. I do remember the tattoo though.

Andy Deas: See Robb, this is all part of this.

Robb Wolf: Oh, and the reason why that came up is because I did a workout at that seminar and it was a playlist that was all Nirvana, and he came up and he was like, "Dude. I'm sorry. I just got to show you this." So yeah. So what's the question? What does it boil down to here? Like how much fruit?

Andy Deas: How much fruit? And especially, he stayed away from fruit for the most part because he is scared of sugar intake pre-WOD basically because of

lethargy and stuff. And the feeling is he doesn't feel lethargic; he feels great.

Robb Wolf:

Again, you know, this is so -- man, I really -- I need to sit down and see if I can create more of like a logic tree on this stuff. It's like if you're this, then do this. If you're this, then do this. But there are just so many variables to all this stuff.

Post-WOD nutrition kind of, you know, we've covered this just ad nauseam I feel like, but it really breaks down to do you want to lean out? Yes or no? If you don't want to lean out, then do you feel are you trying to gain muscular bodyweight? Yes or no? And if you're not, then it's kind of like are you carb-tolerant or not carb-tolerant? Yes or no? And so that's kind of a flow that you can do with all that sort of stuff. And that's pretty solid, like there's some really solid argument for post-WOD nutrition, for recovery and whatnot, but it will be somewhat predicated on what your current status is with regard to leanness, what your goals are, all that sort of jive.

And then the pre-WOD nutrition is really, really subjective, and again, it's based off of what are your goals and where are you at? You know, he is saying that he is lean, I'm not sure what the goal is though, and that's really a lot of what drives the boat here. If it's just generally like rocking the CrossFit WODs and whatnot, then I would just get in an experiment with that carb intake.

A really common practice with like the targeted or cyclic ketogenic diets where people are very, very low carb most of the time, but then right before a workout, they would eat an orange, they'd eat an apple, they'd have some grapes or something like that, those things are kind of a nice mix because they are some glucose and a little bit of fructose. Fructose will refill the liver glycogen a little bit, not too much because we're only having like one piece of fruit. It does technically kick you out of ketosis, but if you're doing that right before a workout, what it's going to do is allow you to train at a much higher intensity level, and that intensity level is the absolute measure of intensity, whether we're talking about strength training a la percent of your one rep max or intensity from the perspective of broad times, modal domains, and we're getting our CrossFit WOD on.

Both of those intensities really kind of boil down to similar entities, and if you have low blood sugar levels at those points, you're probably not going to optimize that work output, but it's very, very subjective. You need to figure out where you're at with that and then tinker with it. But I

see absolutely no problem throwing down like an orange, some grapes, blueberries, whatever right before a WOD and see how you do with that and see if you perform better on it. I mean it's one of those things that's definitely a fair game to experiment with and see how you do.

Andy Deas: This just goes to show just how lazy I am 'cause I'm like if you feel great, let's just roll with it for now. We'll try to fix it later.

Robb Wolf: Yeah! And to some degree, that's definitely true too. It's that thing of if it's not broken, don't fix it. You know, Mat Lalonde, I really like looking at his example. He has kind of shifted from standard CrossFit WODs. He was doing the OPT WOD for a while and now he is doing CrossFit Football. He is totally killing stuff. He rolls into it with essentially like -- he is doing like a two-meal-a-day thing. He benched 5x2 at 285 or 295 the other day and like destroyed the CrossFit Football WOD, and he had not eaten anything in like six hours and he is killing that stuff.

Now, it begs the question, would he do even better having been fed? I don't know. But what he is doing is working great and he is just experimenting with it and running with it and he is making progress. Like each time he comes back to the gym, he is setting PRs and he is feeling good and he is still working great in the lab and it's very, very simple. I mean think about how simplified a two-meal-a-day plan is with regards to your life. And the dude's a buck 80, has over 1000 pound CrossFit total, great, great numbers on the WODs and, you know, simple, simple life.

So it's something to be said for figuring out the Art De Vany approach like the Russian approach like minimum investment, maximum return versus the Bulgarian deal which is like, you know, how can I make my life as neurotic as possible such that I have not a moment of peace where I'm not thinking about my food or training?

Andy Deas: Seriously.

Robb Wolf: Yeah.

Andy Deas: Your De Vany comment reminds me, did you see the recent news piece they did on De Vany?

Robb Wolf: Yeah, yeah. That was cool. That was pretty cool. We should throw that one out too.

Andy Deas: Yeah, I'll throw the link up, although I'm always shocked that like I think somehow the media always portrays him as a lunatic, and I'm like the man in his 70s. Look at him, like you know.

Robb Wolf: Yeah. I loved the nutrition professor that they interviewed and he was like, "Well, it's compelling." That dude is in his mid-50s and he looks like absolute crap. And then De Vany is more than 20 years older than he is, and granted it's a sample size of one, but it's like, dude, give me a break here. Yeah, it's De Vany and Wonder Woman are kicking ass or they're looking good.

Andy Deas: I love the fact that they're pulling their Range Rovers in the driveway.

Robb Wolf: Yeah, totally. How much do their neighbors hate them? I just love that too. I want to buy De Vany a Prowler and mail it to him just so he can seriously piss off his neighbors.

Andy Deas: Push it up and down his space.

Robb Wolf: Exactly, yeah, and we won't give him the Teflon bottom too, like it's going to be all up and down the street.

Andy Deas: Ha, Robb Wolf causing problems.

Robb Wolf: Mm-hmm.

Andy Deas: Cool. Good question. I like the Kurt Cobain tattoo. That's nice.

Robb Wolf: Yeah, yup.

Andy Deas: This also reminds me of why we don't prescreen the questions, Robb. This is much more real, you know.

Robb Wolf: And it allows you to show what a complete idiot I am.

Andy Deas: Well, you know, I had this discussion with Kelly Starrett that all these things should be -- there's a little bit of performance art to all this, Robb. We're trying to move the mike one step further away from where you want it so that this is real.

Robb Wolf: I'll keep that in mind. Good. Good.

Andy Deas: God help us all.

Robb Wolf: Yeah, God help us all.

Andy Deas: All right. Now we got a question from Kevin. “Recently a discussion about Paleo came up on our local climbing site and the detractors argument was that why aren’t elite athletes doing Paleo? Could you name some elite athletes doing Paleo? Mark Twight is the only one I know of.”

Robb Wolf: Shoot! I thought that we had this one before. Maybe I just saw this one pop up. Joe Friel Training Bible, LLC sort of gig, like The Triathlete’s Training Bible, The Runner’s Training Bible. The guy has coached a lot of people to Olympic caliber triathlon. His whole gig is the Paleo diet. We’ve got Glen Cordoza who is a world champion MMA fighter. There are a lot of people out there.

Maybe what we need to do is do a little bit of a name dropping roundup and we could consolidate as many people as we can think of in this list. If you really look at like the nutrition of most high-caliber Olympic weightlifters, strongman competitors, they look a lot more Paleo than not. And it starts getting a little bit murky because it’s kind of like, “Okay, they’re doing some protein powder. This guy is doing some milk or some dairy or some yogurt or something.” So it gets a little bit murky like what exactly is Paleo and what isn’t, but there are a lot of people more this way than not. We could try to do some sort of a roundup on that and do some name dropping on it.

Andy Deas: Well, and I think there is some consistency with some folks with recommendations, like, you know, Paul Chek, you know, he may not use the word Paleo but that’s a Paleo diet, you know, Poliquin. But some of these, I always come back to like does this really matter? And so I always struggle with like in the CrossFit world, like everyone is looking at the CrossFit finalists and what they’re doing and then how that training program applies to the average individual, and I’m always like I don’t think it applies at all.

Robb Wolf: Right.

Andy Deas: And as you and I well know, in some cases, some of the most elite athletes that we have ever worked with or known or we’re friends with probably did everything that you shouldn’t do.

Robb Wolf: And were elite anyway, yeah.

Andy Deas: In spite of it. And then so I always go back to “Okay, what are we doing that applies to the broadest spectrum of the population?” And I feel like

what we've seen is that the Paleo diet works amazingly well, simple, great results, moves everything in the direction we want; and I don't spend a lot of time thinking about how does what Brett Favre eats impact my local accountant that I train or something.

Robb Wolf:

Right, right. And this makes me think, when I was talking to Professor Cordain a couple of hours ago, his book came out in I think in 2002, 2001, 2002. It sold pretty well. He had some pretty good media exposure and then it kind of slid into the somewhat normal obscurity of most nutrition and diet books.

And then an interesting thing has happened. Over the course of a 5-year period, his book has been selling better and better and better, and granted like I'm not a huge fan of everything in his book, like we've got some of the issues with like only two eggs a week or six eggs a week or whatever. There are some minor things there but there's a really, really compelling point which is this. None of these Barry Sears books, none of the Zone books, none of the Atkins books, not even, as much as I love the Protein Power Lifepan book, none of these other books have seen resurgence in their sales.

The Paleo Diet and The Paleo Diet for Athletes are now in the Amazon Top 200 and the sales are climbing; and there's a really compelling question for that. Why? And the answer for that is, you know, and Cordain threw this out there, he shot this to me in an email and I included this email in the Paleo Brands seminar in the presentation that I did for the Paleo Brands seminar, which is basically in complex human systems, the stuff that works gets picked up and understood and get disseminated, and the stuff that doesn't work doesn't get spread around. And so there's a lot of elements of CrossFit for example that work very, very well. Intensity, group camaraderie and all the rest of that stuff works really, really well, and so this is a lot of the reason for the dissemination of that technology.

Weighing and measuring your food doesn't work as a baseline as an intervention. As much as people have tried to sell that, it's bullshit and it doesn't work, and that's why this resurgence in the Paleo stuff and even after the CrossFit Level I trainer wingding, apparently they have back pedaled and now they're saying, "Well, CrossFit has always been Paleo, and meats and vegetables, nuts and seeds, some fruit, a little starch, no sugar." And God love them because you can always sing a full song for so long before you start looking like an idiot. So they finally had to come around and own what's actually working.

And so when people focus so much on the elite, on these outliers, it just doesn't tell us much of anything; but when you look at what works in the broadest circumstances, then we see this kind of more or less Paleo approach: meat and vegetables, nuts and seeds, some fruit, a little starch, no sugar. You pull gluten out of the roundup, you minimize dairy in the people who are particularly sensitive to it, increase protein intake, make sure the good fats are dealt with, and we end up dealing with like everything under the sun. And so people have better performance, they have better recovery, they have lower inflammation levels, and then there are just some people who can do anything they damn well please and they're still going to have remarkable performance.

Andy Deas: Amen. I'm going to train just like Dave Tate. I'm sure I'll get the same results.

Robb Wolf: Yes.

Andy Deas: All right, moving on, question from Matt. "Where do coffee with unsweetened coconut milk and the occasional wine fall into the Paleo equation?" See, everyone is talking about alcohol today. "If this was already answered please accept my apologies for repeating. Thanks. Love the site and the podcasts."

Robb Wolf: Yeah, I think we hammered this one pretty well, the therapeutic dose on coffee, wine. I kind of prefer the red wines over the white ones just because of the sugar content. Obviously, there are a ton of people who own gyms and are trainers and coaches and everything, and so this practical aspect of like the social element of drinking is really, really important.

In our practice, we have had a number of clients that their business, particularly realtors, a significant amount of their business involves like socializing and shaking hands and kissing babies and being out and about with people. And when we have really curtailed their drinking, they're like, "Dude, I'm not making any money, I'm not a fun person to be around," and all this stuff. And so you have to find some sort of a buy-in for people with regards to the alcohol intake that works for their social level, for what type of stuff they have going on with their work and their downtime.

I think generally like the red wine deal is a pretty good option. Definitely the NorCal margaritas are a good option. And by the same recommendation again, drink early, hit it on an empty stomach, finish off with protein and fat, and that way you tend to disrupt your growth

hormone release as little as possible and you still have some fun, get your head changed and all the rest of that stuff.

Andy Deas: Get your head changed is a Robb Wolf-ism.

Robb Wolf: I think somebody else coined it before me but I've made good use of it.

Andy Deas: Good. Good question.

Robb Wolf: Yeah.

Andy Deas: No more alcohol questions.

Robb Wolf: Until next week.

Andy Deas: Well, you're okay with alcohol in reasonable responsible doses.

Robb Wolf: Yeah, yeah.

Andy Deas: Okay. All right, moving on, question from Ben. His question is sort of funny only because it highlights how long the question cue is.

Robb Wolf: Right.

Andy Deas: Because he said, "Hope you had a relaxing Christmas, Hanukkah, or Kwanzaa. Whatever it was, hope it was nice."

Robb Wolf: We're working those ways as quickly as we can through them, obviously not very quickly though.

Andy Deas: Well, clearly it keeps growing which I think is a positive sign.

Robb Wolf: Yeah.

Andy Deas: So Ben says he is digging the podcasts and he has a question "I don't remember hearing about yet." He believes "in food quality with Paleo foods, but I don't quite understand how to teach my parents about it.

Here is my problem: My dad will go to the gym in the morning to work out and then he'll come home and eat a banana and an apple and tell me he's eating Paleo. I tell him that I think he is making a wise choice using fruit as his carbs source rather than oatmeal but I'm not crazy about the idea of him eating 40+ grams of carbs, no protein, and no fat. I understand that it's not Paleo, but wouldn't it be better for my Dad to eat

cottage cheese or Greek yogurt? I know that cottage cheese and Greek yogurt are not Paleo, but the macronutrient ratio is higher in fat, protein, and lower in carbs and fructose.

One of my friends says that if he ever became a nutritionist he would tell a client to choose a piece of whole bread over a banana. Not quite sure about that one, but it does bring the whole macronutrient concept into focus.”

Robb Wolf:

Egads! This is actually kind of an interesting question. You know, maybe one thing is that when you work say like as a trainer or a coach and it's real similar to kind of a medical profession thing, like the recommendation is to not work with your family, like the likelihood of you being successful with your family, of having any type of like entangling issues is really, really high, but obviously, nobody is going to listen to that good advice and so we're going to do whatever we're going to do.

And so in that case, actually maybe showing him some of the Art De Vany stuff that De Vany does his workouts and then wraps up with some protein primarily, you know, he fasts a little bit and then does some protein for like the growth hormone response and some of the stress adaptation genes that are flipped on post workout that help deal with repleting glycogen stores and there are some cool elements to that. The Mat Lalonde post on low-carb CrossFitting I think is a good place to look for some of that and then obviously any of Art De Vany's stuff.

And then from there, if Pops is not going to do that, and we've got a question of like a banana and an apple versus Greek yogurt, I would actually lean to the banana and the apple just because of the other kind of inflammatory issues associated with the dairy, kind of prostatitis type issues. Like again, people forget that it's not just protein, carbs, and fat. It's also the other growth-promoting elements of dairy and you just don't need that stuff, given somebody who's probably in their like 60s or 70s, something like that.

And then the thing about like the piece of bread versus the banana, like Christ! Gluten, vitamins, minerals, acid-base balance, like there is no basis whatsoever for recommending a piece of whole wheat bread over a banana. Like I'm not particularly a fan of a banana, but nutrition-wisely -- and also, let's take this a step further. Let's remove what little nutritive value that is in whole wheat bread is because it's enriched like they add nutrients to it because it's so carbohydrate dense that when you process carbohydrates in the liver, it requires B vitamins and there's such little

nutrient density in grains, even whole grains, that you end up behind the curve on the B vitamins and this is where you end up with like pellagra and some of the other B vitamin deficiency diseases from eating a whole lot of grains if they're not fortified.

So this person who says if they ever become a nutritionist he would tell the client to choose a piece of whole wheat bread over a banana, it's like gee, whiz. It just makes me want to cry so --

Andy Deas: Yeah. And I think your answer is interesting because I think to you and I, we would always choose the stricter Paleo food no matter really what the macronutrient ratios were.

Robb Wolf: Right, right.

Andy Deas: Over the non-Paleo food even though it may appear that the macronutrient ratios are a little better.

Robb Wolf: Yeah, yeah, yeah, yeah. Mat Lalonde and I were talking a little bit yesterday just about some of the Kitavan stuff and lectins and gut irritation and the likelihood that various grains cause leptin resistance and there insulin resistance and whatnot. And he points out that most of the Asian cultures, like they eat like polished white rice which has removed almost all of the phytates and anti-nutrients out of the rice interestingly, and it's actually only in the States that you really see people going after the brown rice and whatnot.

And so even in those circumstances they, on some sort of an instinctual level, have been removing, granted there are some B vitamins in that brown rice and the rice bran and all that sort of stuff. But if you're eating a little bit of vegetables, a little bit of meat, you end up offsetting that pretty quickly. So it's just kind of an interesting gig while you're minimizing the amount of gut irritants and the anti-nutrients by going with more of like polished white rice. It's kind of a funny deal.

Andy Deas: Yes. I'm just laughing, Robb, because someone just posted a comment on your blog offering to get us a DVD copy of Rad.

Robb Wolf: I saw that. I saw that.

Andy Deas: It's like we've created a whole side conversation about movies. I'm sorry, Robb. I'm sorry for ruining your blog.

Robb Wolf: We could do a movie night at NorCal too and have Rad and a few other goodies so --

Andy Deas: And people would hate us forever.

Robb Wolf: Yeah, yeah.

Andy Deas: All right. Next we got a question from Bill. He hears conflicting accounts on how protein is utilized, and his quandary is this. Ah, Barry Sears. "On the one hand I hear Sears and others say my body can't absorb more than 40 to 50 grams of protein in a single meal, and thus support the approach of getting my 200 grams of protein a day spread through 4 to 5 meals. On the other hand, I often read about people doing a 5-hour feeding window, and getting great results.

I personally know Dallas and he's pretty beastly on the heavy weights so he must be absorbing the protein when he's doing IF, right? So, if aiming for 200 grams of protein a day, should I just cram it all in during a 5-hour window and fast the other 19 if I'm wanting to play with IF?" So let's start there.

Robb Wolf: Oh, man. So let's back up even a little bit further than this. Let's just do an accounting of some scientist and coaches and the diets they recommend and the diets they eat. Paul Chek, Poliquin, Cordain, Joe Friel, these people are all like I would call them practicing athletes. And even let's say -- let's expand that out -- Matt Thornton of Straight Blast Gym, John Frankl who is a black belt in Brazilian jujitsu under Straight Blast Gym, Ph.D. from Harvard in Korean literature. All these guys are coaches and athletes. All of them eat essentially like a Paleo diet, unweighed, unmeasured kind of Paleo diet sort of gig. That's what they advocate. That's what they eat. They walk their walk, walk their talk, however you want to look at that sort of stuff.

Then you look at Barry Sears and contemporaries of Barry Sears, and they recommend a diet that they can't even follow themselves just as a baseline. They don't train currently, which I think the not training yourself is an interesting deal.

Say like Poliquin has an interesting thing that he has -- I forgot if it's like four levels to his programming, training, but most of it is built around strength development but they also have circuit-based training that's very, very similar to CrossFit and he makes all his coaches go through that stuff because it's horrific training, very, very painful. The lactate accumulation is painful and it hurts and it makes you vomit and all the

rest of that stuff, and he makes all the coaches that go through that course go through these modules like eight weeks of it because he wants the people who are going to be prescribing workouts to have a very intimate understanding of how badly that stuff sucks.

So I think whenever you become separated from the training process, the coaching process, and the actual eating process that you were recommending, the likelihood that your feet are still based in reality is very, very unlikely, and so then we start getting these whacky claims about like you can't absorb more than like 35 or 40 grams of protein and stuff like that.

You look at like Mauro Di Pasquale, God, who else? Welbourn, all these other -- the people that I mentioned before, they are absolutely absorbing more than 40 or 50 grams of protein in a sitting and it is not causing some sort of horrific protein, you know, insulin response like when Barry Sears and the CrossFit Journal piece said that he would prefer you eat a small piece of protein with a Twinkie versus like a large steak. I mean I just can't find a more illustrative point than that as just kind of a baseline. And so that's piece number one.

Piece number two, would sticking all your calories in a 5-hour feeding window be a good way to go? It might be. There is some interesting literature floating around out there that sticking the lion share of your protein immediately post workout and like the lion share being say like if you were going to take in 200 grams of protein in a day, you might take in 150 grams post workout that there may actually be some really significant benefit to that with regards to that kind of pulsatile growth response. Not a lot of data on it, it's hard to do, but there is some compelling stuff there.

Andy Deas: So my only tidbit is yes, Dallas is a beast so he is clearly absorbing protein.

Robb Wolf: Yes, he is absolutely absorbing protein. Yeah.

Andy Deas: And for accuracy's sake, Robb, I think actually Barry Sears is talking about weighing and measuring dingdongs versus eating a plate of ribs.

Robb Wolf: Thank you for the clarification there. Okay.

Andy Deas: 'Cause that's the kind of stupid stuff that I remembered.

Robb Wolf: Okay, okay.

Andy Deas: And then the secondary question on this is he wants to know where should his workouts fit in those windows if he does play with the feeding windows? He feels strongest on heavy lifting days, "if I've eaten." So he is thinking eat, workout within 2 hours or so, then eat all the rest within another 3 hours.

Robb Wolf: That sounds smart, like you would do a small meal just to kind of prime the pump, get maybe a little bit of caffeine in, and then hit it, and then post workout is the lion share of your of calories.

Andy Deas: All right, good. And then he finally says for what it's worth, he is 5'10' and 210. He could stand to lose 20 pounds of those, but is not concerned at the moment. "Just working to get my squat over 400 and deadlift over 500." I love this guy.

Robb Wolf: Yeah, that's good stuff. That's good stuff. You could make the argument for trying to simplify this whole thing say like a three to four meals a day approach and try to get to those numbers and make it a little more conventional and streamline. But if he is making some progress on this other thing; and there again, like if it's real simple and like he feels good and he is making progress, then good to go. The one thing that again, the intermittent fasting can be a stress, so if he gets any type of like cortisol type problems or some insulin management problems, then that might be something that he would want to soften up on is the duration and the frequency of the intermittent fasting.

Andy Deas: Yeah. I mean that's a lot of food. I mean I'm with you, man. I would almost think you'd start sprinting out through the day and see how you do and then maybe drop some of that stuff in, but maybe it's easier for him. That would be hard for me to get all that food in in that short of a window and not just be a wreck.

Robb Wolf: Yeah, yeah.

Andy Deas: Also, on a totally unrelated topic, Robb, a recent blog post by Jason Ferruggia so blog number 9000 that I read. He had a pretty funny blog post that was just I thought was funny. It was basically his point that even though he's in the fitness industry, he does not care about people losing weight. And he was like, "When people find out I'm trainer, they always ask how to lose weight." He says, "I do not care. All I care about is taking someone with a 200-pound squat to a 600-pound squat. I just want to make people big. Do not ask me anything else. I'm not interested."

Robb Wolf: Dude, props to him 'cause that's find your focus and your bliss and then run with it, so yeah.

Andy Deas: Yeah. That was a great post. I love it.

Robb Wolf: That's cool.

Andy Deas: All right. Next we got a question from Unknown and I think you touched on this actually on the blog a couple of weeks ago actually now, but I think this is an interesting question to touch upon. So "I've been through a lot of stress in the past couple of years. I had issues with eczema, asthma, illness, etc. Since going Paleo all this has cleared up. I was surprised how quickly it happened. I've also had a substantial amount of hair loss.

As a female, this was truly terrifying. I have lost about 50% and I was hoping that the Paleo diet would help with that as well. Is there something additional I should be taking to help correct this? I do have some new hair growth, but it has been months to see that change. Any advice? I have been Paleo for a year."

Robb Wolf: The alopecia, the hair loss can be related kind of to -- in females, what we're talking about here, kind of an autoimmune response that we see real tight linkage with gluten and that whole transglutaminase issue, and also just stress. The cortisol can actually interrupt the growth-promoting signal at the follicle so the hairs can just fall out and cease to grow, and so you drop cortisol levels, drop stress levels, remove gluten, dairy, all that sort of stuff out of the rotation.

And interestingly, here's this thing where I just got to point it out, all those things are very, very synergistic both positively and negatively with regards to stress. If we eat a food that we have an intolerance to, that releases cortisol. It's a stressor for us. So when you remove these foods, not only are we minimizing gut irritation and direct activity that could be an autoimmune reaction at the hair follicle; we're also reducing cortisol levels. And so there's a bunch of synergy to all this stuff that really works well.

The only other thing that I would maybe throw in is like a solid multivitamin like a B vitamin multivitamin. There's definitely some cofactors in there that would be helpful, and then also like 5000 IUs of vitamin D 'cause vitamin D is really, really important in kind of skin and hair health, and it easily is something that could be deficient in this person particularly if she had some gut irritation in the past.

Andy Deas: Yup. All right. Next we got a question from Mary. She says, “Thank you for your informative podcasts. Really appreciate the hard work.” She is a 44-year-old female, 5’1”, currently 106 pounds, following low-carb diet (no legumes, raw milk based dairy only), weight trains three times a week for 30 minutes, walks four times a week for 30 minutes.

She reduced her carbs from 130 grams to 50 grams in April 2009 “and restricted my calories to 1200 daily,” egads, “and lost 5 lbs over 3 months. Although I loved the way I felt initially that seemed to have triggered a hormonal response. My periods stopped completely. I am currently on Cytomel and my blood work shows no menopause. Any suggestions/ideas on changes to my nutrition/workout routine/etc.?”

Robb Wolf: It sounds like she just needs to up her calories a little bit. Like she doesn’t mention how much protein she is getting in. I would definitely make sure that she’s getting at least a gram of protein per pound of bodyweight, and then just really start ladling on some extra fat, get some vitamin D in there, and add in some fish oil. Probably maybe about 4 or 5 grams of EPA/DHA a day would be good. It seems like she’s just hardly eating anything. She is itty-bitty. I mean 5’1”, 106, but as you age, you don’t want to lose muscle mass like for any reason so I would want to see her up her calories just a bit. And I like the fact she is strength training a week. That’s cool. That sounds good.

Andy Deas: Yeah. This is kind of like one of those things like I have a lot of clients at the gym that are like 240-pound males and I’m like, “What did you have for breakfast?” and they’re like “Two eggs and a slice of bacon.” And then I’m like, “Okay, we’re going to go over and we’re going to ask that 112-pound very lean fit female what she had for breakfast,” and they’re like, “Okay, we’ll go over.” And she’s like, “I had six eggs, five pieces of bacon and half an avocado.”

Robb Wolf: Right, right, and the guys is like, “Oh, okay. Roger that.”

Andy Deas: So yeah. I mean obviously she is a fairly small girl and that is not a lot of calories.

Robb Wolf: No, no. I don’t think enough and a classic deal like if the amenorrhea kind of thing with the lack of menstrual cycle is kicking in then try to up the calories a little bit and see if that normalizes things. And maybe direct her to last week’s episode where we talked about the whole amenorrhea thing and that may or may not even be that big of a deal, but I would like to see her doing a little more calories.

Andy Deas: Yeah. Yes, please. Okay, last question today, Robb. Oh, am I wrong? Oh, we have two more. I'm sorry.

Robb Wolf: Uh-oh, uh-oh.

Andy Deas: I threw you off right at an hour and 9 minutes.

Robb Wolf: Cool! We'll be fast.

Andy Deas: Question from Nathan: "Thank you for all the work you do educating people. I'm personally really grateful that you're out there as a resource. The owner of the box I work at was talking about fasting today as a precursor to starting Paleo. He went on to tell a couple of clients that a fast of up to a month is no big deal and that the body doesn't need food.

I know you're a proponent of intermittent fasting, and from what I can gather on your site you don't mean anything near that long. It seems like the ideal time to do short fasts is once you've got Paleo down and you're sleeping enough every night. Should we be telling people to fast for 48 hours before starting Paleo? When you say intermittent fasting, how often and how long would you say to do it?"

Robb Wolf: Wow!

Andy Deas: Lost in translation somewhere.

Robb Wolf: I am just shocked really. Recommending that people do like a month-long fast, I'd just say one thing, if you own a gym and you're recommending that, I just -- what the hell? Man, I could spend an hour on this. We're already over topic. I think that's a horrible recommendation. Unless there are some really deep qualifiers in here which I would be very, very curious to hear, I cannot see any reason for recommending that. If for no other reason, like the compliance is going to be shit on that. Nobody is going to starve themselves for days and then they're going to have horrible performance. They're going to lose muscle mass. It's kind of maddening, very, very frustrating.

There's really no reason to do for the most part any type of fasting over about 16 hours. The maximum benefit, minimum downside is at that 16-hour point so from like 12 to 16 hours there's plenty beyond that. You have to go like 48 hours or longer before you potentially start getting any other metabolic benefit. And during that period from like 16 to 48 hours, you are metabolizing the most protein that you're going to -- you're going

to lose the most protein out of your muscles that you're going to during the whole process. So I just can't see any recommendation for that.

And here again, like if people will just -- I don't know why people need to make this so extreme. If you just eat breakfast, lunch, dinner, kind of low-ish carb Paleo, a hunk of protein, some fat and some veggies, you will typically lean it like a short of you, you know, like that Charles Poliquin thing again. You need to understand that there's a difference between a mouth and a vacuum cleaner.

So like if you're eating reasonably sized portions, you're going to lose weight, you're going to change your metabolic function, you're going to improve your performance, and it's not that big a deal, it's not a horrible thing versus turning this into just kind of a circus and something that is completely unlivable. Like this is not sustainable stuff.

And then if you want to drop a little intermittent fasting, fine, but I would rather just see your food quality get dealt with like they mentioned. Get your sleep in and then if you want to play with compressing the feeding window a little bit, then fine. But yeah, this other stuff just creeps me out.

Andy Deas: The call of Robb Wolf.

Robb Wolf: Yeesh.

Andy Deas: All right, good. That was a good question. And the last one I think is actually pretty interesting. I think we touched on this a tiny bit last week actually, but I kind of like the angle of the question. So "Hey Robb, love the podcast. So much of what I hear in nutrition is supplement with magnesium and vitamin D and my question is this: How do we know if there will be long-term effects from this? For years people have been told about taking hormones and vitamin E and others, only to find out that it either doesn't work the way it was once thought, or it is potentially dangerous. Is it better to be possibly deficient in something like magnesium or vitamin D or to take a supplement that may be either a waste or potentially cause harm? I hope this makes sense"

Robb Wolf: Hmm, it's a great question, you know. Man, I'd try to make this one concise 'cause I know we're over time here. We know that there's -- part of the aging process is this free radical damage, oxidative damage to our DNA, oxidative damage to our proteins. So we understand that these things called reactive oxygen species from cellular metabolism, they are part of the aging process. So then there was this thought, "Okay, well,

we'll take big doses of antioxidants which scavenging clean up these reactive oxygen species and these should prevent the aging process and it should also prevent some elements of degenerative disease." So we started dosing animals, we started dosing people with high amounts of antioxidants, vitamin C, vitamin E, all that sort of stuff. Lo and behold, we saw actually no benefit and actually some worsening of problems.

So what we've figured out from that is that there's this whole process, hormesis or you get exposed to transitory peaks and troughs of oxidative damage, and then your body becomes immunized against that. And exercise is a primary example of this. Eating a smart kind of Paleo type diet is an example of this because we take in naturally occurring antioxidants in the amounts and ratios that we kind of coevolved with and we find a lot of benefit from this.

So there's kind of some synergy there where it's like do we need vitamins, minerals, and antioxidants? Yeah, we do better on that but we tend to do better from food type levels and food type sources than we do from supplement levels which tend to be sky high kind of off the chart levels.

So then it begs the question, what about the vitamin D and the magnesium? Vitamin D, in the past, we tended to make a ton of it for the most part; or when we ate the livers of animals, we ended up getting a ton of it. So dietarily we ended by hook or crook usually having a whole lot of that vitamin D in our system, and then also the magnesium historically we ended up getting a lot of magnesium.

It's a really good question and we have seen some examples of like supplements not really being of huge benefit, but I would -- man, I would bet the farm that magnesium supplementation and vitamin D supplementation is not going to have any type of downside. I could be wrong. It's a very astute question, but I would be shocked if there ended up being some sort of a downside with that stuff.

Andy Deas: Yeah. I could think about this question for two days and not come up with the best answer.

Robb Wolf: Yeah. It's a great question and there's a ton there, but on keeping the brevity, I think these two items in particular, fish oil, if we're keeping an eye on kind of ancestral ratios, I think we're very safe with that.

Andy Deas: Yeah. All right. Well, with that, Robb, I think that's Episode 15. I'm going to go think of some more abstract '80s movies to watch.

Robb Wolf: Sweet! I dig it.

Andy Deas: And hopefully, you'll recover fast from your little situation, and we'll talk to you next week.

Robb Wolf: Awesome!

Andy Deas: All right. Thanks, man.

Robb Wolf: Thanks, Andy.

Andy Deas: See you soon.

Robb Wolf: Bye-bye.

Andy Deas: Bye.