

The Paleo Solution

Episode 16

- Andy Deas: Robb Wolf. Andy Deas. What's up brother?
- Robb Wolf: Dude, folks need to know that Andy had a near death experience yesterday at the hands of Kelly Starrett.
- Andy Deas: I think actually it was two days ago.
- Robb Wolf: Oh, okay.
- Andy Deas: About two days ago unfortunately and I'm still wrecked. But you know Robb -- you know I drive down across San Francisco, get a little PT worked on, on my hip, low back but only in Kelly Starrett's world do I show up an hour early just to hang out and he's like "Okay, max deadlifts with bands. Let's see what you got." And I'm like "Well, I'm here to work on my hip." And he was like, "Oh yeah were going to work on your hip. Let's see how - let's do it." So you know, then I proceeded to deadlifts heavy and then I have to do some squat finishers, and then he's like "Okay, I see what I needed to see. Let's work on your hip." And I'm like -- meanwhile I'm already crushed prior to him, you know tearing hip capsules apart.
- Robb Wolf: It sounds like a party. And you drove like seven hours round trip to do it so... That sounds awesome.
- Andy Deas: But I did get to have him to stand on me for about a half hour. Stand on my IT bands, which was one of the more pleasurable moments of my adult life so you know -- I feel like as long as I've affected some change, it was totally worth it.
- Robb Wolf: Yeah, if you haven't had Kelly work on you, it's definitely an exercising torture that you need to try. I was actively trying to both poop and pee my pants to get him to stop reefing on my hips, because he had me faced down doing some sort of a pure formis mobilization, with basically the full amount of his weight on my person and I really was trying to like, foul myself just so he would leave me alone and I couldn't do it. I was in so much pain. I couldn't like disengage my bladder so...
- Andy Deas: Yeah.
- Robb Wolf: Yeah, it's great stuff.

Andy Deas: And the cherry was he called me that night and he said, "I just want to be honest with you, is that you have the worst hips I've ever worked on. So just so we're clear, and I've never inflicted that much damage on one person." He's like "So, I don't believe in Ibuprofen, but I would encourage you to use it heavily this evening, because I'm not sure how much inflammation you're going to have in your system when you wake up tomorrow."

Robb Wolf: And oh by the way did you sign a waiver before you left?

Andy Deas: "And final note Andy, please squat heavy tomorrow, we need to use that new range," I'm like --

Robb Wolf: Yeah.

Andy Deas: -- "Amen."

Robb Wolf: Keep the range.

Andy Deas: That's right so with more range goes more responsibility. But yeah that sort of -- you know that's my week Robb, I'm wrecked. But I don't get any cool drugs or anything far unlike you.

Robb Wolf: Yeah, well you know surgery is one step up brother so...

Andy Deas: Fair. That's entirely fair. Anything else going on you need to share with the listeners today?

Robb Wolf: Making some good headway on the book. Writing the lifestyle kind of Cortisol chapter right now and just the end is in sight so just chugging along.

Andy Deas: I also noticed there was a rumor on the blog comment that we actually might be getting a DVD copy of RAD.

Robb Wolf: Yeah, apparently Nick is shipping us a copy of RAD so -- Oh, yeah. We'll do a prisoner change. I'll take a copy of RAD and ship him some t-shirts.

Andy Deas: Nice.

Robb Wolf: Some of them now contraband, some of them are still legit, so yeah.

Andy Deas: But always fun to wear.

Robb Wolf: Always fun to wear, yeah.

Andy Deas: All right.

Robb Wolf: Conversation piece in each t-shirt for sure.

Andy Deas: That's why maybe you can wipe out any cross fed NorCal stuff like Dallas did on his shirts.

Robb Wolf: I'll leave that up to Nick to do.

Andy Deas: Protect the brand name brother.

Robb Wolf: That's right.

Andy Deas: All right well, episode 16. We got a group of questions and -- you know I think there's some good ones I here. I'm excited to see you spin around in a circle on a couple of these so...

Robb Wolf: I think -- I get a sense of when you're in a feisty mood by the type of questions you get so...

Andy Deas: You could tell where my day is going already. You're like --

Robb Wolf: Yeah, totally.

Andy Deas: -- "it's three o'clock. Andy's wrecked. He's feisty..." It's going to be a good day.

Robb Wolf: It's going to be a good day, yeah.

Andy Deas: All right, cool. Well, the first question is from Pat. "Robb, can you comment on biosignature? How is that different than metabolic typing from a pseudoscience point of view? It has been awhile since you attended the BioSig seminar, how has it impacted your clinical practice? Thanks."

Robb Wolf: From a "pseudoscience point of view," I guess from that standpoint is that the biosignature actually works and the metabolic type being, to the best of my ability to try to apply any type of consistency to it, it really doesn't. And therefore, it's obviously pseudoscience similar to the Paleo concept versus the Zone concept, putting Paleo obviously -- squarely in the

pseudoscience camp because it actually works well and has some universal transfer.

You know the metabolic typing is really interesting, but it just has never borne any fruit for me at all and it seems to involve a ton of diagnostic measures followed up by a ton of supplements. And then we will get to the supplements with regards to the BioSig, because there is some supplementation side to that, but I just don't find the metabolic typing doing all that much for me and it's still -- it's like a universal baseline it ends up recommending various types of like grains, legumes, dairy to everybody, which I think is just frankly kind of retarded.

And especially in light of the fact that when we pull those things out of the diet for people, that they end up just kind of universally getting better -- you know the will feel and perform better that whole thing. So the metabolic typing I've just never -- again, never seen much traction with it, have seen some folks like the Id's and some other people play with that. They've played with the blood type diet in their clinical practice and it was just like, "Dude you know we would get more mileage out of astrology than this stuff!" And it was kind of what they came down to so, that's kind of where that stuff lies out now.

The biosignature, even though some prominent coaches have been highly critical of Charles Poliquin for the biosignature stuff, lest do they know that this thing has actually -- the way that this whole thing came together was that, there were some observations, a long time ago, that body fat distributions can be somewhat correlative with some things like insulin resistance or insulin sensitivity, you know that impending metabolic derangement usually could be associated with storing fat above the waistline, you know versus like -- what we would call an apple type fat distribution versus a pear type fat distribution which is storing more of the fat below the waistline and what not.

And then I'm not -- I forget exactly how Charles started investigating this stuff, but they started looking at the body, the thicknesses -- skin fold thicknesses, body fat thicknesses in various sites around the body, and then started looking at the endocrine profiles of these people. Did they have high testosterone levels or low testosterone levels? Did they have, you know high insulin levels or low insulin levels, high estrogen, low estrogen, et cetera, et cetera. And they started doing these correlative studies, and he has done quite a bit of work with some universities. I think some in Sweden, some in Shawano. I forget exactly what it is, but there have been several thousand people that have been looked at with this information and its correlation.

It's -- you know what do the body fat measures, correlate to -- and as people should keep in mind correlation is not causation, but the biosignature, when you are adept at taking a good body fat measurement, via the biosignature protocol, and then you stick those body fat measurements into the software that Charles has developed and has continued to basically increase the population of people that the correlations have been inputted in there. He's even getting some distinctions with regards to geographical location and ethnicity and some stuff like that, and he had seen a few variability's within some different ethnic groups and geographic groups and what not.

But basically this thing has grown and developed and the Biosignature, when somebody learns how to do it well, can give you some pretty interesting insights into what the hormonal profile of an individual is. Like when I went to it, Scott Hagnas and I went -- and interesting story, this was actually where Andy and I -- well, we had met before at a really early CrossFit serve, but Andy found out that Scott and I were going to be in Scottsdale area for like a week doing the Charles Poliquin Biosignature gig and Andy shot me an e-mail and said "Hey dude, you can -- you and Scott are welcome to stay with me and my wife for the duration that you were there." And Rachel was horrified at that prospect but everything ended up I guess working out okay.

You guys have moved to Chico and she doesn't -- he does too badly for that, so that's all good, but kind of interesting tie around to that. But you know the Biosignature course ended up involving a ton of information regarding basic endocrinology, nutrition, Paleo diet, like there's really a ton of information in there, but then a bunch of hands-on work trying to get that manual dexterity to be able to do consistent replicatable body fat test, because the touch is very, very -- just labor intensive. You have to put a lot of time in developing that hand-eye coordination and get the right feel for people, different people have very, very different types of skin, and different types of fat and some of that is kind of indicative of what they have going on also.

When I was going through that whole thing, it was that -- I wouldn't say the tail end, but maybe three quarters through, my efforts on the masking front, and I was fat. I was pretty darn chunky, definitely fatter than I had been in a long, long time and when Charles would do my -- I volunteered a bunch 'cause I really wanted to find out what was going on with me and I had the metabolic profile of somebody who was like, you know twelve pack a day Twinkies sort of deal, like I was going after the

metabolic or -- what's the molecularly baked goods like you know or something like that.

I was kind of a mess and Charles' recommendation or his analysis was that I had sky high Cortisol levels, and really, really shitty insulin sensitivity, on the normal but probably low side of testosterone and his recommendation was low-carb diet, no stress and get leaned out and get my metabolic functioning kind of scored away which -- instead of Charles good advice, I took his -- no. So like I came out with this kind of dual, what they would call protocol or issue of both Cortisol issues and insulin issues. And as we've learn more and more and more of these two things go hand and glove, and sometimes it's hard to figure out which one is causing what. But given the fact that even those he's doing a masking-ish deal and I was eating a lot of food, it was generally pretty low carb.

I was doing a lot of diary but probably my biggest issue was the Cortisol thing but I definitely had some insulin resistance. So Charles has various protocols that grows out of the -- you know your biosignature. For me it related to management of Cortisol, and management of insulin, and both of these things involved consistent feeding schedule, low carb and some phos total for the Cortisol management issue. Tweaking of my training so that I was causing less stress, like I was going to the ATM and actually making deposits and -- you know to myself instead of always taking away which the metabolic conditioning was doing at that time.

And instead of doing all that stuff, I just tried hammering the Cortisol management protocol, and the insulin management protocol with a bunch of more food, and a bunch more diary and it just didn't work, and that was part of the -- when I did a review of the whole thing, I did that for about two and half or three months. I started doing some biosignature on our clients and I liked it. But like when Edo and even James Fitzgerald suggested that I go do the biosignature, they said it's not really going to change about 90% of what you're doing. You know it's still going to boil down to like a low-carb gluten free kind of Paleo diet for most people and then appropriately tailoring lifestyle and post-workout nutrition to fit the various needs and all that sort of stuff.

And so there was kind of that element of it, and then there was also the element that for me, I really tackled it in a way that was contrary to the advice that I was given, hoping that I could just kind of supersede my own genetics and my kind of own metabolic situation and still get big and burly and it didn't work. But I also did not follow the advice of the practitioner whom I had paid to tell me what to do, and so you know it's -- my original analysis of the whole thing, I really need to have a caveat and go back and

either do an update or something and just kind of add in there that I really wasn't following the protocol the way that I had been told to do.

And over time I've seen this stuff become more and more beneficial from kind of a diagnostic standpoint to reaffirm what people have going on, frequently looking at them, like nine tenths of people that you deal with, they're going to have insulin and Cortisol issues. Some females are going to end with some high estrogen type things and there's some estrogen management protocols that you can do. But that's really kind of like 80% of the stuff that you're going to see, and the management isn't that far afield from what we normally recommend each day, but it's really good validating information for people.

I tend to minimize that type of stuff. I tend to minimize like body fat tracking in general. I had historically minimized things like before and after photos, and all of that has been to my detriment and to our clients detriment, like each layer of tracking that we have introduced, our clients have done better and people are happier, they liked that, that quantification, even if we're charging them for it and so that's just been a slow learning process for me and would say probably a pretty significant mistake that I've made as a coach not emphasizing more of that quantification early on to help give people anchors and standards to see - - "yeah, not only do I look, feel and perform better" but we're seeing some positive vectors on photographs, on body fat measurements and on this overall biosignature kind of thing so...

At that time, if you sniff around my former employer's commentary on Charles Poliquin though you'll notice that Poliquin is a reviled figure, so I definitely did not have, let's say administrative support in my attendance at that seminar. It was actually a pretty controversial topic and so I think part of my desire to kind of get that information was to try to make good with that scene so again, to my discredit and in some ways, but that's more of the full story on it. But Scott Hagnas has been going great guns with the biosignature. He's -- after he does the putting it all together seminar, there at catalyst athletics, he's heading down and doing I think a Poliquin level one, level two training seminar also, so he's really getting in deep with that stuff and it's really helped him. It really helped his clients a lot.

Andy Deas: First of all Robb, I want to comment that that was an incredibly long answer, so well done. We're already at 17 minutes.

Robb Wolf: Ease Louise, wow!

Andy Deas: But I think it was good. I'm glad you touched on some of the -- you know, I think for some folks the BioSig is kind of a new topic depending on what side of the fence you sit on, and I'm still waiting for the Robb Wolf update. I was interested if you were going to touch on the famous Charles Poliquin post, so I will put a little note: "Waiting for Robb Wolf."

Robb Wolf: Yeah, I should do an update on that and kind of give the full back story with where I was at you know on a variety of levels and kind of some funny stories behind it. And also what I've seen now, you know more than a year down the road with Scotty continuing to use it, we use it at NorCal in a limited fashion. I'm just not home all the much and I'm kind of the only person that's savvy with it right now.

We're hoping to have Scotty come up and get some of the trainers more adept at just the body fat measures so we can at least do that chunk and take that measure for our clients and then we can do the analysis later. But yeah there's some important stuff and so like, you know if people want to follow this up, they could obviously go and do the biosignature directly which I highly, highly recommend. James Fitzgerald has his take on this stuff also, which he has woven into his OPT training seminars and you get some exposure to that in addition to his take on the nutrition and the overall program and all that. Those are two you know areas of personal development that I just couldn't recommend enough.

Tackling either or both of those would be just absolutely amazing, both on just like an informational level but these are both people that have run very, very successful gyms and have trained thousands of people. It's just -- both James and Charles have some thousands and thousands of hours of experience, that if you really want to take yourself seriously as a coach, you can really bypass a lot of mistakes by going and kind of sitting at the feet of these people and learning some stuff. So, I know I learned a ton every time I hang out with either one of those people so...

Andy Deas: Sure. All right, good answer.

Robb Wolf: Cool. Andy's like, "Okay dude move on, move on."

Andy Deas: Your poor wife is probably home listening to you today so...

Robb Wolf: She never -- Dude, she never listens to me so... She's like, "You have a podcast really? Oh yeah, you have like 6 listeners!"

Andy Deas: It's like the Charlie Brown voice. So she's like, "I can't -- you know what? I don't even hear what he's saying any more."

Robb Wolf: Totally, and that's on the best of days so...

Andy Deas: All right cool. Next a question from Ian, he says "Hey Robb, I've been having to do PT every morning for the fire academy 5 days a week for about an hour and a half. Lots of slow jogging (yuck), pushups, pull-ups, band work, sit-ups, et cetera, all for higher reps, 25 to 100. I've been doing 2 strength workouts on my own at night usually doing one or two lifts each session. Eating Paleo with one cheat meal per week and getting 8 to 8 ½ hours sleep per night."

"My questions are (1) should I drop the metcons after my strength sessions as they are short, like 10 to 12 minutes, and (2) in your opinion is this a case where I should maybe play with some sweet potatoes/yams post-workout even if the goal is to lean out a bit? I've just been hitting about 15 grams BCAA and 10 grams glutamine and 5 grams creatine post-workout but I feel like I'm depleting my glycogen stores pretty good with the high rep work."

Robb Wolf: I guess the only thing that's kind of missing here is more specifics on what Ian actually wants to accomplish. I'm assuming that he's just kind of wanting to maintain consistency at the PT for the fire academy. I'm just not super sure what --

Andy Deas: Well, so if --- well, I guess let's kind of look at it in a different way. So he has to do PT every day for the fire academy, which holy cow, that's a lot of PT I probably got. So his first question is, I think it appears he's doing some extra metcon stuff --

Robb Wolf: Right.

Andy Deas: -- after his strength circuit, or his strength workouts, that he's doing on his own at night in addition to his morning work. Do we think that he should keep that in there or remove it?

Robb Wolf: But really depending on his goals, like if he's just, you know wanting to get by at the PT element of the fire academy and wants to say get bigger or get stronger then I think he could ditch those, and then also like -- it's just a little bit, telling that folks are like 10-12 minute metcons are short, which they're on the shorter end, but you know you can certainly time in the exact to half that level and still get a nice little dose out of it too.

So there's couple of -- it really depends on what Ian's goals are here, you know if he wants to get bigger or wants to get stronger, I would probably

curtail that, that extra metcon either altogether or I would make it shorter duration to accentuate the growth. Here again, like everybody's want -- on the lean out a bit kind of gig, it really depends, like some people lean out fine on a code call in which they stick the bulk of their carbs post-workout and they're otherwise doing a good amount of training, and some people don't. Like it really -- again, it kind of depends on what type of goals are there and how he responds to carbs, like how carb tolerant he is.

I like the branched-chained amino acids, the glutamine is legit, creatine's all legit, but it just kind of depends a little bit on what Ian wants to pull out of this stuff.

Andy Deas: I'm just shocked at 8 hours of PT but --

Robb Wolf: Definitely a lot of time to burn there. But you know it's definitely a physical job so...

Andy Deas: For sure.

Robb Wolf: I guess it's good to lay that baseline, but you could get a lot done in an hour and a half today, that's for sure.

Andy Deas: Seriously. All right cool. Well, if we -- Ian if you want to shoot a follow up about specific goals, maybe we can loop back around and --

Robb Wolf: Yeah. And I think Ian, you know when you ask questions but always if you can lay in a little bit more specifics to what the end goal might be, it just makes it a lot easier to narrow down, like the -- just looking at this from the big picture we could see a potential performance orientation in which case I would say, potentially the post-workout carbs are a great idea.

We can have a leaning potential as the main focus, you know kind of an aesthetics focus in which case we're just going to have to look at how much carbs Ian is doing and then kind of titrate from there and it'll range anywhere from quite a bit and maybe focusing on post-workout to almost none and not really having them in the mix-it-all, depending on what is metabolic -- you know kind of handling of insulin is and then if he wants to get big, then I would drop the metcons and you know bigger stronger, I would shorten the metcons even more potentially and possibly drop them altogether.

Andy Deas: Yup. All right, good. Next question from Cheryl, she says "You've touched on the effects of Paleo on Insulin-dependent diabetics. How about a few

minutes for non-insulin dependent diabetics? I'm curious as to how the insulin response will show up in this population with a strict Paleo, modified Paleo, meaning strategic inclusion of legumes and dairy, especially since many have excess insulin that just isn't doing its job. Thanks."

And then she also says, "Enjoyed listening to you and Andy. Maybe one day you'll move your 'cast to Blog Talk Radio and maybe take live questions?" My lord Robb! I fear a Robb Wolf on a live podcast.

Robb Wolf: It couldn't -- I don't know. How much worst could it get?

Andy Deas: That might be true.

Robb Wolf: Although I'd be game for that. That might be fun. I don't know for many folks, you know the deal with that and I guess you could always have some questions in queue 'cause we had like crickets chirping in the background, but we gave that a shot. So Stephan Lindbergh -- if you Google, you just punch into Google "Katavan study" then you'll get Lindbergh's site and he did two studies -- two really interesting studies.

He studied the Katavan in detail over the last like 20 or 30 years. He's an MD, did PhD in Sweden. He did a Paleo diet that was analyzed in swine -- in pigs which interestingly, I was actually one of the review editors for that, at the Journal of Nutrition and Metabolism, and then that one showed a very favorable blood glucose response with pigs and then they put it into humans and they compared a Paleo diet, grain free, dairy free, legume free Paleo diet in type 2 diabetics, and they had a grain, legume, low fat dairy, Mediterranean diet in type 2 diabetics and these two groups were compared side by side.

I think it was an 8-week protocol, 6-week -- I forget what it was but at the end of the 8-week protocol -- whatever the timeline was on the protocol, I forget the duration, the Paleo diet folks -- now these were adlib item, these folks were allowed to eat to satiety. It was not particularly low carb. These people ate yams, sweet potatoes, fruits, vegetables, lean meats, nuts and seeds, blah, blah, blah all that stuff, but it was Paleo oriented. But that group, the Paleo group was no longer technically type 2 diabetic. They had normal fasting blood glucose levels. They had normal insulin response to glucose.

Interestingly they only had a little bit of a change in their waist circumference, which I don't know if a longer period of time, we would see improvements in that measure, but we definitely appeared on a

metabolic level to see improved insulin sensitivity and not so in the -- you know in the highly vaunted Mediterranean diet group. So this is where I would ask Cheryl exactly what strategic conclusion of legumes and dairy would you use other than to fuck people up at this point. Because it's very clear that the lectin issue in these foods is probably one of the main causative factors in the whole leptin dysregulation that leads into insulin dysregulation. Like there is no strategic use here other than make people insulin resistant, is kind of one thing. And then the other part to that is that -- well, I don't know if I want to launch into that.

Andy, do you have any thoughts on that chunk? I'll try to not get too verbose on this thing right now. What are your thoughts on that?

Andy Deas: No, I thought it was good. That's a part of the reason I put this one in here, is I wanted to hear your thoughts on this strategic inclusion of legumes. And legumes -- we've talked about the dairy thing. I think we'd beat it to death but you know?

Robb Wolf: And let's not try not to be a jerk about this thing but, it's very -- this is a really well done study in a very, very compelling study and that we have this just highly vaunted like Mediterranean diet. It's whole grains. It's legumes. It's low glycemic load, blah, blah, blah. But we have Neolithic foods and these people at the end of this run, are as insulin resistant as when they were in the beginning, and then the people who removed the Neolithic food, did not even have the benefit -- like I would argue that they would have had even better success, had they done a low-carb Paleo at this point 'cause not only are they metabolically deranged from some sort of quasi auto immune issue that's being caused by the lectins in grains, legumes, dairy.

But they -- you know just the quickest way to reset that insulin sensitivity is just to drop basal insulin levels overall and that you know part of the best way to do that is reducing carbohydrate level and then maybe not eating 6 times a day, you know breakfast, lunch, dinner, a little bit of a compressed feeding window, and you know a little bit of interment and fasting is probably the fastest way to reset insulin levels in that case. And you know like -- I hope we keep reminding people, type 2 diabetes, everything related to that, it is an environmental disease.

It is a disease of your environment. You are exposing yourself to elevating carbohydrate intake in general, but we've also kind of discovering because the pesky Katavans and all that that there's also a sub-category to this that you know it really is the type of carbohydrate that we're dealing with. Now, there's caveats to that because there's obviously

situations in which people want to lean out more and want better metabolic control, and they need to really be careful with even the amount of fruit like yams and sweet potatoes that they take in.

But I wonder sometimes too if that problem like, “Would I be more insulin sensitive if I did absolutely no travelling and I was never exposed to gluten?” Like is part of my insulin resistance, my inability to handle carbohydrates better, is that do impart to the fact that like every single time I travel, I get some sort of a gluten dose? Or like when I eat out I get some sort of a gluten dose frequently and because I am more sensitive to all that stuff, is that causing some leptin resistance that’s then making me insulin resistant? If I lived on a desert island with literally all only like taro root, coconut dish to eat could I eat a ton of carbohydrate? Like you know upwards of 60% of carbs like the Katavans who -- and be lean and muscular and healthy? I don’t know. I’ll give that a shot!

Andy Deas: What if you had some wild boar in there?

Robb Wolf: I’ll throw some wild boar in there, yeah.

Andy Deas: All right, good question.

Robb Wolf: Yup, totally. A really good question and apologies if I get overly feisty about that. But it’s just really important that folks keep that stuff in mind.

Andy Deas: Next we got a question from Sot. “Hi, I am in Australia. Wanted to thank Robb for all the info he passes out. It’s awesome and helped me out a lot with my health and fitness. Question on Green Drinks. I use Core Greens from Synergy, am I wasting my time and money adding it to water? Core drinks has no algae in it ingredients are clean from what I can tell.”

Robb Wolf: You know I’m okay with most green drinks. You can make sure that they don’t have like -- I go back and forth on like the wheat and barley grass, like I don’t -- those things typically don’t have any type of gluten in them, but depending on when that stuff was extracted and the germination cycle, the can so -- and even Poliquin, if you have some sort of -- if you’re on a Cortisol protocol, he will have you take a green drink that is 100% grain free. And he tends to recommend grain free green drinks for like the kind of alcoholizing element and so -- he’s pretty good at recommending a none kind of sprouty grain legume sort of gig for his green drinks.

So if you can find something that looks like that, I would generally try to take it with a little bit of food. I think your absorption on like an empty stomach is probably going to be low because a bunch of that stuff -- all

the carotenoids, the Astaxanthin and Zeaxanthin, keratins and all that, they really absorb better with some fat, so I think shooting it down with a meal would probably be better than not, but that would be my only caveat to that, and then obviously assuming that this thing is in a sugary kind of concoction.

Andy Deas: Yeah, the ingredients look good and -- I don't know. I mean I've played with the green drinks off and on. Greens Plus et cetera, all up already and I never notice a difference with it, but you know that's just my --

Robb Wolf: Yeah, I think it's one of those kind of you know subtle. If they do you any good at all it's probably subtle, but it ain't some freeze dried powdered veggies. It's probably not the worst thing in the world. When I start seeing people juicing like 15 pounds of broccoli and a bunch of apples and everything then we've kind of got some problems. But again, it's because of the carbohydrate load. You know most of these powdered green drinks are really almost kind of -- not a one to one. But they're kind of a one to one with regards to amount of carbohydrate they contain typically so...

Andy Deas: All right, good. Next question from Eli, "Robb, appreciate all the time you take with the podcasts. They are really top notch and I am learning a lot from them. My question is actually two fold. First my wife just had a baby 6 months ago." Congratulations. "She's trying to shed some of the baby weight and I was thinking that a Paleo approach might help. She has a fairly active lifestyle but is not much for doing structured regimented workouts. I was not sure if you have ever worked with post baby moms but I was looking for your input. She's still nursing and I am sure she would be concerned with the diet hurting her milk production." So let's just start there.

Robb Wolf: Actually, we had Chrissy who -- one of our terminers, my wife's sister, she just had a -- she has a 17-month-old. She put in a little note here. Chrissy's feedback -- "Just in case if you wanted my opinion if she eats enough food, milk production should be fine as far as baby goes, our pediatrician told us." Oh well, and I guess that's part of -- you know leads into the part two -- we've worked with tons and tons and tons of women who became moms and then you know hatched the kids -- become pregnant and became moms. The moms do great on Paleo. The kids do great on Paleo. The digestion with the kids is phenomenal. They do great, they're way happier.

I mean, it's just a really good scene and it's just a simple thing to play with and experiment, like give it a shot yourselves and kind of see how all the

stuff goes, so you should have no problem with milk production, any of that stuff on a Paleo shtick.

Andy Deas: Want to play on, my favorite part of the question is that “She wants to shed some of the baby weight, and I was thinking that a Paleo approach might help.” Paleo approach helps everything Robb. What podcast do you think this is? No, I’m just kidding.

Robb Wolf: It helps everything except the rice and corn growers apparently, so yeah.

Andy Deas: For sure on that one. All right, “The second part of the question has to do with our daughter. She is starting to eat some baby food and I was wondering what advice you could give a parent who wants to start his daughter off right when it comes to developing good food habits early. I think it would be easier to steer her in the right direction from the start then to try to break bad habits later. I see people whose kids are already addicted to fast food garbage and sweets, and I definitely do not want to start that trend. However, I know that a baby is limited in what food they are actually allowed to consume at these early stages of life. Thanks in advance for any advice that you might have.”

Robb Wolf: And there again, like Chrissie’s feedback on that, her pediatrician recommended, just basically introducing foods when the kids start looking interested. Like they’ll start looking around at the foods you’re eating and look a little -- you know, they’re kind of reaching for it and stuff like that, and you puree the food, you start with like yellow fruits and vegetables, sweet potatoes, apples, et cetera -- meat, chicken. You puree it, get it into a paste, dab it into their mouths. If they like it -- they will like certain things, and not like other things. The stuff that they don’t like, you can try it again in like a month or two, because their taste buds do change and things that they didn’t like previously they may like in the future.

And they -- again, like they just do really, really well. Kayden and like there’s ton of the kids in the gym now, they never really had the cereals and they don’t have any of the colic or the digestive issues that the other kids tend to have. And I don’t know why the kid issue becomes such an incendiary like a hot button you know topic. But all I’m recommending is that you give it a shot. You know it’s a -- and again it kind of boils down to like, if you just ran a thousand calories of fruits, vegetables, and lean meats through a nutrition analyzer, and looked at how much vitamins, minerals and antioxidants there were versus grains, legumes and dairy, the grains, legumes and dairy don’t even meet the RDA.

They don't even meet like the bare minimum. Whereas like the fruits vegetables, lean meat, seafood et cetera, that ends up like looking like a nutritional supplement. So is it better or worse to feed your child more or less nutritionally dense foods? And then when you start looking at it from that standpoint, the whole question starts becoming a little bit silly, other than the fact that these are, are staple foods and what our government tells us to eat and all that sort of stuff. So, I mean it is a little bit different in that regard.

Andy Deas: Yeah. And you know what on that topic I think I'm going to post a link to the famous Robb Wolf NorCal post "Are we crazy?"

Robb Wolf: Yeah, it's a goodie. That's a goodie, yeah.

Andy Deas: Yeah, that's good. I like that one. I'll include that in this 'cause I think that's a -- the whole nutrition analyzer thing I think is a good perspective. All right, good. Question from Chandler. "Hey Robb, hopefully this isn't going outside your purview." Well, I don't think that would stop Robb from answering so... "Recently you mentioned the immune response to gluten in the gut in comparison to the immune response to poison oak on the skin; moreover, that it's an immune reaction that causes the inflammation. You've also related stories of people who, after having been gluten-free for a period of time, get into intestinal trouble upon eating wheat."

"As such, I would assume that children generally go through this same "wheat induction" as they're introduced to food. Is this true, and are you aware of any information on the subject? If it's not true, how do you explain the discrepancy?"

Robb Wolf: Well, yeah. We generally say that's true and this is generally like all the gut rot kind of GI problems that we see in kids whom we start introducing cereals to them, and most people end up recognizing that like corn or rice based cereal end up being less problematic than wheat based cereal, but they still -- again, just like very simple kind of gig as compared to feeding kids, fruit, vegetables, yams, sweet potatoes, even like corn cereals ends up causing significant kind of GI problems in the kids, and it's a pretty simple thing to just tinker with them and see for yourself. So yeah, I mean there's no discrepancy there. It's a pretty consistent gig.

Andy Deas: All right. "A second unrelated question from your poison oak comparison: How do you categorize spicy foods like chili peppers? From reading the Wikipedia page on" -- capsaicin?

Robb Wolf: Capsaicin.

Andy Deas: Capsaicin?

Robb Wolf: Yeah.

Andy Deas: That's why you're the biochemist. "It appears that the chemical excites nerve cells without tissue damage (i.e., the experienced pain isn't the result of an allergic reaction). However, I'm curious to get your take on these types of foods."

Robb Wolf: Oh we should drag Garret Smith in here for --

Andy Deas: For sure.

Robb Wolf: -- his chunk on this. You know the deal -- the chili peppers, they're gut irritants. I mean they eat -- and this is actually an analogy that I used with the gluten itself but then also using actually chili peppers specifically. What happens to your nose and mouth when you eat really hot food? It starts -- you know your nose runs, your mouth -- you know saliva production increases. So it's an irritant, it registers as an irritant and then your body tries to dilute that irritant by producing a bunch of snot and mucus, and just basically trying to move it through.

And although it's not an allergic reaction, capsaicin can in sufficient amounts be a, what's called an "excitotoxin" in which it actually kills nerves ending so you can damage nerve endings to the -- you know nerves for the point of actual like cellular death from capsaicin. It's pretty hard to do, but you can do it. And it definitely is one of those vectors of GI irritation. Now, this is for me a big problem 'cause I love tomatoes, love curries, all that sort of stuff, so I still eat these foods.

I don't seem to really notice that much problem with them, some other people do. I remember Coach Bordner, before he had his knee replacement, really noticed a big difference by removing nightshades out of his diet. Different people have kind of reported various degrees of problem with the nightshades but yeah it's -- and nightshades being like tomatoes, potatoes, eggplants and then like all these chili pepper type things ranging from bell peppers to -- you know like Serrano chilies and stuff like that.

Andy Deas: Yeah, and I think if you just Google nightshades, there's a ton of interesting stuff out there.

Robb Wolf: Yeah, yeah. And you know some folks like Garret Smith, he would stick the nightshades as bad as gluten, and I don't doubt that there are probably people who have the susceptibility markers to be bad in that regard. It was interesting when we kind of discovered the Sorghum-based beer or the Redbridge -- I do fine on it and can drink a couple of those and you know it's not really any different than just generally drinking booze you know?

It usually makes my sleep a little bit less good and all that stuff but really not that big a deal, depending on how much I take in. But then Dutch Lowy, he doesn't do well with gluten, you know as a baseline but when he had tried the Redbridge, the Sorghum beer, it ruined him. Whereas like he can have kind of like a thinner beer like a Budweiser or a Corona or something, which theoretically has some gluten in it, and it bothers him less than the Sorghum-based beer does. And so that -- you know that's a thing again, all grains contain lectins, different people have different susceptibilities to different things and so you just kind of have to keep that in the back of your head, and so it wouldn't be surprising that there is probably different susceptibilities to the nightshades.

And again the people that I would recommend probably looking at this stuff are people with kind of known inflammatory problems or autoimmune problems, like you're probably going to want to aggressively remove these out of your diet and see if you feel better.

Andy Deas: Good.

Robb Wolf: Otherwise curry is just too damn good to forego it so...

Andy Deas: But I think the last time I talked to Garret about it too, when he had done something like Cortisol stuff, he's kind of I think for a lot of folks was you know similar, take some of that -- and that stuff out for 30 days, add it back in and kind of see what happens.

Robb Wolf: Yeah, that elimination diet is just money. You know it's really, really solid, especially if you do a very comprehensive approach to it.

Andy Deas: Robb Wolf elimination diet, \$9.99.

Robb Wolf: I should just try selling. I really should make a PDF and just take a price tag on it and it's like "Cut out these foods. Do it for a month."

Andy Deas: Robb, I'm telling you -- what's this guy's name? Daxx? Daxx my boy, and you're up, he sells the elimination diet package. I'm telling you.

Robb Wolf: Dude, I shouldn't do it. We will have jumped the shark at that point. But I don't have heels of apples, start selling molecularly baked goods also but --

Andy Deas: Nice! I'm so happy to eat some of those.

Robb Wolf: Oh, man.

Andy Deas: All right, I think we'll do maybe one more 'cause I got to --

Robb Wolf: Okay.

Andy Deas: I got to train some folks. Question from Daniel, "Hi Robb, Daniel from Sydney Australia. A TV show called Food Investigators on SBS aired over - that airs over here did a Paleo Diet trial and had good results. However the man in the experiment lost the same amount of muscle mass as he did fat and I was hoping you may have an idea as to why this happened."

Robb Wolf: You know if you go to that website, which we actually have the website in the PDF, I was like the second person to comment on that thread, and I asked what methodology they used to check his body fat levels, and I'll just about guarantee you that they used bioelectrical impedance which is like just wickedly inaccurate. If you have someone who went in there overweight -- fluid retentive because of being overweight, you know high insulin levels, they're retaining sodium, they're retaining water, and then you have this huge diuretic effect of Paleo diet, and the person comes back in later, it's -- the bioelectric impedance stuff is just horribly inaccurate unless you were using some sort of a guide that is standardized in order to calibrate the bioelectrical impedance deal.

And even then it's only as good as how it's calibrated to the person that's standing in front of you. If they go eat a really salty meal and come back, then it dramatically changes the readings. And so those things are just horrible and the thing is, is that we never see people lose muscle mass on these stuff. I mean, even the basic Zone deal there are some pretty good clinically controlled studies in which people who were sedentary ending up gaining lean body mass, improved bone mineral density, improved muscle mass off of that and so it's -- there's some sort of texting error here, I'll guarantee you that. I'll bet money that they used like an electrical impedance gig and also guarantee that the dude did not lose muscle mass on this.

Andy Deas: If he lost muscle mass on it, we're on the wrong gig Robb.

Robb Wolf: Yeah, yeah. Yeah, that it's just the -- it's heartening to see that they did it though and then the feedback generally was pretty favorable. It is funny that the -- most of the comments are very hammering and concerned about calcium, even though that every parameter of the dude's life improved, blood lipid panels, all those stuff and all these people are just wringing their hands are about his calcium levels and "Gee whiz, what's going to happen to his bones?" And then everyone smiles as the cholesterol carb pops up here and there, so it's pretty funny, even though all those stuff improved so...

Andy Deas: Yeah, and some of the comments are just hysterical like "Everything's better." "I'm no longer lethargic." "No cravings," blah, blah, blah. "One thing I do miss is a replacement for bread. I'm not sure what I can substitute it with. I miss my bread!"

Robb Wolf: Yeah, I miss it too but I don't miss being fat and sick. So you know it just depends on what you miss more. Your ass fitting in that pair of jeans you want to fit in or not being sick or the piece of bread? We've seen people who were really, really sick. The recidivism can be high. You know our client with urticaria where she couldn't go out in the sun and then she could and then she slid back into eating the bread midweek, and couldn't go back out in the sun again, you know it's almost like the person who has like emphysema or lung cancer and they're smoking through their tracheal, you know? It can be very, very compelling and very addictive for some people.

Andy Deas: For sure. All right. Well, with that Robb, I think we're going to hold the last few for next week.

Robb Wolf: Cool, cool.

Andy Deas: And I think that's it man. Anything else?

Robb Wolf: No, no -- just working on the book. We had a couple of days of sun in Chico, so I'm feeling less -- you know the desire to co-bane myself and although we're supposed to start raining again tomorrow, but I think that'll be good actually for productivity on the book. Just knowing that the sun still exists is pretty helpful.

Andy Deas: It will not be good for my productivity Robb, after working outside across San Francisco and then yesterday squatting outside, I feel like you know I'm better designed to work out in the sun and this rain is going to do me in I think but --

Robb Wolf: Well, maybe under the eave of the awning then.

Andy Deas: Just so I feel like I'm outside but I'm not getting drenched while I squat, although that would be a good movie scene.

Robb Wolf: Yeah, yeah very rocky-esque.

Andy Deas: That's right. All right, well thank you sir, and another good episode, and we'll talk to you next week.

Robb Wolf: Cool, thanks Andy!

Andy Deas: All right, see you Robb.

Robb Wolf: Bye.