

The Paleo Solution

Episode 29

Andy Deas: Robb Wolf, Andy Deas, back with episode 29, Paleolithic Solution. How are you today?

Robb Wolf: Better than ever.

Andy Deas: Why is that, Robb? Why are you better than ever today?

Robb Wolf: I have no real quantifiable reason but I just -- I'm feeling like it. Feeling better than ever.

Andy Deas: Could it be that you're taking a vacation pretty soon?

Robb Wolf: It might have something to do with the fact that we're going to hang out in Belize for 10 days, yeah.

Andy Deas: To be clear, when he says "we," it's not me. Robb and Nicki. I'm not involved. I wish I was involved in Belize, but unfortunately...

Robb Wolf: You get the November invite.

Andy Deas: Well, Robb, you know, today I'm actually drinking Grande Americano. I haven't had any caffeine in about 40 days. So I'm kind of spun up and it's very hot in Chico and I'm sweating like a banshee. So we'll see how this goes.

Robb Wolf: You huffy. Stepped up to the caffeine so...

Andy Deas: Well, it's kind of a test what I was telling earlier. It doesn't taste -- the Americano does not taste near as good as I imagined it was going to after 40 days. I thought I was on a desert island. This is going to be like my first taste of civilization and no. It just kind of tastes like coffee right now.

Robb Wolf: Huh. I guess coffee only works that way every single morning for me so...

Andy Deas: Yeah. Maybe I need to ramp up my addiction again. It will taste better.

Robb Wolf: Yeah, yeah. It might have something to do there.

Andy Deas: All right. Well, we'll get cracking on the questions. We have a number of actually pretty long questions today. So what we're going to try to do is I'm going to cherry pick some of the background on those then ask the questions but encourage the listeners that are interested to go to the show notes and read some of the background. Some of it is pretty interesting and will help with some context, but some of them are a little long to actually read on the air.

Robb Wolf: Done. Sounds good. Perfect.

Andy Deas: Perfect. So we got the first question from Sundog, long time listener, first time caller. Basically goes on to say that her and her partner's health plummeted after some prolonged solvent exposure about nine years ago. Their health steadily declined for the first several years, in the last three we seem to have leveled off in about 25% functional capacity, pretty housebound, bedridden about 8 to 10 of their waking hours. They switched to a Paleo lifestyle three months ago and have seen some small improvement. They're in their early 30s and have been diagnosed with chronic fatigue syndrome, multiple chemical sensitivity, and fibromyalgia. "Allergies are crazy bad due to most chemicals which have left us homeless in a tent for the last eight years."

So Sundog has a few questions about leaky gut, supplement inactive ingredients, and the NOW Super Enzymes. So question 1: She has no doubt that "our gut is leaking as a sieve and we have been taking aloe, slippery elm, and marshmallow for six months to try and aid this. We use lots of organic coconut oil with our cooking and about a month ago started taking copious amounts of fish oil. Two weeks ago we removed all eggs and nuts and have been dairy free since going Paleo. We haven't been able to afford grass-fed meat yet, but do buy hormone and antibiotic free. Any ideas on how long a bad leaky gut problem can take to heal or experience greatly reduced inflammation? Anything else you know of we could try to help speed this up?"

Robb Wolf: People talk about glutamine supplementation. The Eades talked about glutamine supplementation with the whole leaky gut autoimmune response. The only thing about that is a lot of the glutamine actually is a derivative of gluten and so it -- I'm a little bit nervous about recommending that. Some probiotics is good which I think they're already rolling with that. This just takes some time, takes weeks, months to really start having things turn around. And part of this is you just start feeling better and then you need to up your activity but not in a way that completely crushes you, and so just kind of getting the whole system rolling again.

Interestingly, I was rereading Berardi's Get Shredded Diet and he was talking about the tendency for people when they start eating better particularly when they start losing body fat to actually kind of outcast some kind of gnarly chemicals out of their fat mass. And that totally makes sense and it can be part of why people sometimes don't feel super good initially with changing their food around. These folks too maybe at some point will want to look into some sort of like a heavy metal toxicity or something like that. When the gut just won't heal over time, that's a really common thing to have a lead or a mercury kind of toxicity issue and either the hair analysis seems to be one of the best ways to get that squared away.

Andy Deas: Hmm. All right. Good. Question 2, they have been taking Source Natural's Pancreatin 8x enzymes for six months, "and I recently picked up a bottle of the NOW Super Enzymes to give them a whirl as they have the HCl the other ones lack. At 2 caps per meal I had a bit of a bad aftertaste which I suspect was the HCl as it reminded me much of smells from chem lab years ago, but no heat. Tried 3 caps for two meals but though there was no heat, it produced a surprising amount of burping, a general sour feeling in my stomach and later my gut, and even more of a bad aftertaste. Any thoughts? Too little, too much?"

Robb Wolf: I've seen people, myself included, start at as high as 6 capsules with this and then titrate down to one, but it took me upwards to 6 capsules to get that kind of heat sensation. I would just fill it out slowly and maybe work your way up to maybe 4 or 5 per meal and see where you're working with that. And maybe take the capsules mid-meal also so that it's not just floating on the top of the food mass. Maybe get 1/3 or 1/2 of the way through the meal. Take the capsules. Don't take them with a ton of water. A lot of people shoot a bunch of liquids down with their food. They're not really chewing their food well.

But part of the idea that we're trying to accomplish here is increasing the stomach acid concentration which may not directly break down the food as the first stage of digestion, but it is setting up, signaling downstream with the pancreas and with the gallbladder. And so I think it's a good idea to limit the amount of fluids you're taking during a meal. But I would throw the caps down midstream.

Andy Deas: Doesn't Poliquin recommend splitting your dosage like if you have four, you take two before the meal and then two mid-meal? Am I making that up?

Robb Wolf: I think he just recommends taking a mid-meal kind of the same deal.

Andy Deas: Okay. All right. And 3, "Lastly, our doctor has us on many, many supplements to help with the lack of nutrients our body had been absorbing from our very poor diet. I'm a bit concerned the added 'inert' ingredients in the capsules might be tossing a wrench in us trying to remedy the leaky gut. Are there some non-obvious things I should watch out for on the ingredient list?"

Robb Wolf: Whenever you have a situation with modified food starch, there's a potential unless the brand like NOW Foods is actually pretty good in this where they will say like free of corn, soy, wheat, all that sort of stuff. So if they do end up using some sort of modified food starch, it will say specifically what the form is from whereas other companies may simply say modified food starch then they make no label claims about whether or not it's wheat, soy, corn free. And so you really have no idea what the source is coming from.

Outside of the modified food starch there's cellulose -- nothing really pops up prominently. It's a little bit concerning that their doc is hammering them with a whole lot of supplements in this case. I just tend to be really conservative on all this stuff. I think the food, the good sleep, all that is kind of the cornerstone. Digestive support is good. I'm not a huge fan of the mega dose vitamin scene. I just don't see it do folks a whole lot of good, but it certainly makes a ton of money for the people selling this stuff. So it makes me a little nervous.

Andy Deas: Yeah.

Robb Wolf: Yeah.

Andy Deas: And so now he goes on to say, "Thank you very much for all the time and effort both you and Andy put into these podcasts. I have learned an incredible amount of information and feel very strongly that you have already helped my partner and I make healing progress we might otherwise have been much slower to achieve." So there's your hug for the day, Robb.

Robb Wolf: Whoo-hoo!

Andy Deas: I know you need it today. You haven't even worked out yet.

Robb Wolf: Well, I have the gato. If everything else fails, I have the gato so... No, it's cool and hopefully Sundog will keep us apprised of what's going on there. That would be good to hear some further positive movement.

Andy Deas: Definitely. Definitely. All right. Good. Next, we got a question Gil. He says, "Hey, Robb. I love the podcast and website. It has converted me to a completely new way of eating." I'll skip around a little bit. A pretty long question. He is 6'4", 236 lbs, "and one of those steering wheel fat measurement things says I'm at 18% body fat." I'm not sure that we're going to... Robb, we're not going to judge how valid that is, but anyway...

Robb Wolf: Plus or minus 30%.

Andy Deas: Okay. Let's see. "Switched to completely Paleo eating with the only exception being that sometimes my budget can only afford meat from WinCo. I get London broil whenever I can. Sometimes they don't have anything and I have to get fatter cuts of meat. I eat a 19 block zone diet with 5 blocks carbs and replace the rest with fat."

Let's see. "I am training four times a week now. I CrossFit. I play soccer. I'm looking to join an MMA studio. I love MMA and would love to get back into training for it. I have been on a schedule before where I would train Monday through Saturday and was never burnt out for six months. As such, I would love to do a high amount of work, but if I need to resist and stay at four times a week to lean out that's fine. I eat fat and protein for recovery meals. I have a fairly regular schedule and sleep 8 to 10 hours a night. I store fat around the navel, which makes me think I might have elevated cortisol levels."

So he goes on to say the question, "Even though I have gone completely Paleo before for longer than a month, my weight and leanness stayed almost exactly the same. All the factors were the same. I don't seem to have leaned out at all, and the only sign of anything is that I didn't feel like crap all the time after eating. I dialed everything I could think of. Why didn't I lean out? And why am I not leaning out now? How long is this supposed to take? Am I doing enough work or too little? Is it possible that I'm not eating enough? Thanks, Gil."

Robb Wolf: Let's see here. So he was 235-240, 19 blocks. He doesn't mention what his fat multiplier is though. So that's tough to figure out where he's at in that whole scene. If he's only doing 19 blocks of protein and then 5 blocks of carbs total, then he is really calorie deficient. But I don't know. It's hard to make heads or tails out of where he's coming into this because he doesn't mention the total fat block breakdown. Occasionally, someone

like this though or maybe he's free eating fat, I would still probably lean towards the side that he just needs to do at this point maybe a little bit more calorie restriction.

Stick with really not adding much fat to his protein carb meals so he might cook with some fat, say, cook with a little olive oil, but he's not really going to add a significant amount of extra fat. Just that little nudge of calorie restriction, he's got a really good tight control on the insulin element of this I'm assuming because it sounds like a pretty solid Paleo kind of gig. I'm not sure about fish oil. Certainly, you could throw up some fish oil in there, magnesium, vitamin D, covering all the real basic supplemental elements, and then perhaps a little bit of calorie restriction.

Just cut and back on the amount of fat that he's been generally adding to meals should kick him over. If you get this thing into a sleep stream, the weight loss should be really quick and pretty damn easy. And if not, then -- if we've taken care of the total kind of glycemic load sort of thing which he definitely has and he's generally feeling better which sounds like he's attesting to that, then if we're wanting to lean out more, then I would just say we need to cut the total food intake a little bit.

Andy Deas:

Also, what are your thoughts on training volume? So right now he's working back up to the training about four times a week, CrossFit, plays soccer, wants to join MMA, went through some periods where he trained six days a week, weightlifting and kickboxing, and never burn out for six months. I guess at this point for me I'm probably -- I guess because I'm getting old although I'm actually 32 years old, but relatively speaking and I feel like I tend to favor on the more conservative side of actually heavy exercise and then just trying to stay active the other days. And I feel like for some folks they get better fat loss results that way.

Robb Wolf:

Yeah, yeah, I would agree. And I -- this is where like if you track down a Poliquin BioSig person where they could do a pretty good analysis and see if he has legitimate cortisol issues, if he has either genetic really bad predisposition for insulin resistance, and then we would have to get into some sort of an insulin sensitizing protocol with alpha lipoic acid real heavy duty, maybe some fenugreek or something like that. But this is where -- when the law of GM kind of happen, it's tough to know what to do without some deeper information on this.

I can maybe argue for a little bit of a curtailed schedule. But it doesn't -- the way he's describing it, it's not leaping out of me saying that it's too much. But it certainly could be. It certainly could be cortisol induced from overtraining, but it's not feeling like it. Just the way -- and I'm purely

going by the way he's writing it. I really don't know he could be killing himself and I'm wrong so...

Andy Deas: Well, Robb, says to me I CrossFit and play soccer, when people say they CrossFit, that generally means like they beat the piss out of themselves.

Robb Wolf: It's totally true. It's totally true.

Andy Deas: But I could be totally misreading the situation. It's entirely possible.

Robb Wolf: Yeah. I'm just -- I'm hoping that he is fairly new to the whole process and he hasn't dug too deep of a hole yet so yeah.

Andy Deas: All right. Good. Good question. Oh, next, we got a question from Ryan. Near and dear in my heart, I like this question. So "Hey, Robb and Andy. Thanks for another excellent show with some great questions and answers. Very informative and entertaining as always. I have a question regarding adrenal fatigue. I've just read Adrenal Fatigue: 21st Century Stress Syndrome by James Wilson, and in it he recommends increased sodium intake for sufferers of adrenal fatigue. This seems to be an across the board recommendation for Adrenal Fatigue/Chronic Fatigue Syndrome. With a Paleo Diet being particularly low in sodium, would you support this recommendation?"

Robb Wolf: It seems like a pretty solid recommendation and then again I forget who did the blog post on this if it was feed the animal -- who the heck was it that made the recommendation for increased iodine intake?

Andy Deas: I think that was Heart Scan Blog with...

Robb Wolf: Heart Scan Blog, okay.

Andy Deas: Dr. William Davis. For sure I remember him doing a post on iodine.

Robb Wolf: Okay. And so the combo there usually if people are going to start supplementing with sodium like in this case are recommending some sort of Himalayan pink sea salt that llamas feed out with bladder infections and stuff. I always make fun of that -- that stuff that people pay like \$80 a pound for sea salt. But I'm just a jerk that way. But it definitely seems to make sense. There's an element of the sodium retention. It's interesting though.

When I think this starts becoming more of a problem is less when folks are just simply elevated cortisol, but I think it's when they start actually

sliding down the slope of legitimate adrenal fatigue/adrenal burnout where they've shifted, say, like they went from kind of a base level where things are normal than a tired and wired where it's hard falling asleep. And then a reversed cortisol axis where they're flat in the morning and then more awake at night and that's just about the point where things are getting ready to fall apart.

And I think that's where some additional sodium intake could be good, but then also putting in some thyroid support because when adrenals get that kind of messed up when the cortisol is up that often, the likelihood for kind of a hyperthyroid condition starts getting more problematic. And I think doing some general thyroid support like some tyrosine and/or some -- like that's old standard. 150 micrograms per day of iodine seems to be a pretty good support in that regard.

Andy Deas: Yup. All right. "Another question which I may regret asking is regarding meal frequency for adrenal fatigue recovery. It also seems to be an across the board recommendation for adrenal fatigue to eat at regular intervals in order to limit cortisol release. This is obviously at odds with your general recommendations but could it have merit in this instance?"

Robb Wolf: I'm not sure which recommendations these are. Regular interval is breakfast, lunch, dinner, and your breakfast, lunch, dinner could be on a little bit of a compressed feeding window a la intermittent fasting. I think that so long as you're not training fasted and really pushing that such that you're like hungry, if you feel like you have some adrenal fatigue, then maybe like breakfast, lunch, dinner, and a snack somewhere in there is probably good and maybe eating -- you don't want to eat too close to bedtime because then you're going to have some problems with sleep and some growth hormone release. And then if you're kind of -- if you think you're problematic in this regard, eat when you get up. Keep it simple.

So again, these recommendations for potentially intermittent fasting or compressed feeding window and all that sort of stuff, always with the caveat that we're generally healthy, that we generally have like a Paleo zone diet kind of wired up pretty good, and then we can throw in some of these tweaks and fills.

Andy Deas: "I know you've received a number of questions regarding adrenal fatigue so I'm hoping it will feature on a podcast soon. I would love to hear your thoughts on diet, exercise, supplementation for this condition particularly on your own experiences and that of your trainer at NorCal. I have read your blog post on the topic and am keen to hear more about a recovery

protocol. It's obviously individual but how much exercise is okay? Is it mainly glycolytic work we need to eliminate or cut way back on? Thanks again for all that you do."

Robb Wolf:

That's a biggie. The fundamental thing, probably the biggest deal is sleep more than anything else. Getting enough sleep, making sure that what you're doing allows for quality sleep. And then from there like good food, basic Paleo shtick, making sure that you're not consuming foods that are irritating the gut lining. OPT I think is Nutrition 201 DVD talks a lot about food allergies, and the fact that any type of food intolerance is going to cause a cortisol release because it registers as a stress. So you get all that stuff dealt with.

And then this question about how much exercise is okay? That is just a largely nebulous topic, but I think definitely that whole no glycolytic work is a pretty good recommendation. And then the thing that we've seen with Sarah, when she got back into the gym, she was out of the gym basically for a month. And as she started getting back into the gym doing a little bit of work, her default was -- I think one day she was working rack jerks and she was doing like sets of five on the rack jerks which this is one of my just serious grinds with the way that people generally are programming kind of CrossFit-esque type stuff. Fivers -- sets of five are borderline strength work.

In my mind it's almost more strength endurance work. If you have a no vest lifter then it's kind of one thing. If you have somebody who is a more advanced athlete, then one Z's, two Z's, three Z's, that's pretty much more strength work. And like all the Wendler stuff is a whole other topic that -- let's just kind of ignore that for right now because it's actually a contradiction to what I'm saying. So we'll just focus on this piece for right now. But when people were trying to put themselves back together from the sober training scene, lift the weight once, twice, maybe three times, set it down, go take a stroll, and that's about it. A little bit of sled work, walking, that's about it. It needs to be non-fatiguing.

And it was really hard for Sarah in the beginning to kind of wrap her mind around how little work she could do without it digging her back into a hole again, and I know that's been true for myself. And what I've found that I can do is, as I've kind of built volume and intensity over time, stuff that looks more like a CrossFit football workout where I would do a 50-meter sprint, some deadlifts, maybe some kettlebell swings on my Wendler lower body day, the deadlift day, and walk back out. And I might do 10 minutes of that, I might do 20 minutes of that, but the basic

premise though was that my heart rate would go up then it would come back down. And I wasn't pushing a red line the whole time.

And if during that workout, say, like I had in my mind that I was going to do 15 minutes of this workout, if I got to minute 8 or minute 11 and I started just really feeling like somebody pulled the plug out of a bathtub and I'm swirling down, I didn't just feel my energy reserves dwindling down, then I was done and I didn't push through. And to the degree that I have been able to do that, I've managed to really build a pretty good base of both strength and some capacity.

I'm not going to make any type of regional qualifiers or anything like that, but jiu-jitsu is going good, kickboxing is going good, body comp is good, getting close to 2 1/2 x body weight back squat, and at almost 40 years old I feel pretty good with that. But what I really had to do and it took me a long time to figure this out, I'd really operate within my means. I really needed a plan. I listened to my every three weeks taking unload week. And lo and behold I started making some progress again.

Andy Deas: Progress is silly, Robb.

Robb Wolf: You should just beat the piss out of yourself and just spin out like what I've done for the last seven years so yeah.

Andy Deas: Let me clear that works for you so...

Robb Wolf: Yeah, it was great. It was great.

Andy Deas: That was a good question.

Robb Wolf: Really good question. Yeah, a lot going on behind the scenes with that.

Andy Deas: Next, we got a question from Tony, "Robb, while listening to episode 22 and the discussion regarding Pavlovian insulin response to pictures of food, it made me wonder re: intermittent fasting. First, I have my diet in check and I have performance based priorities. I have been playing with IF and found it to be more like torture than beneficial. I am a grazer for food so fasting was painful but I digress. If we can see food and cause a possible insulin response, wouldn't fasting cause an even greater insulin response thereby blunting the positive effects? Someone like myself who is a natural grazer, would they be even more affected?

I guess this is kind of like your reference to a big meal versus a little meal and insulin response. I know my tinkering with this caused me to

fantasize about food more often during fasting periods with the occasional mid morning drool episode. Thanks, Tony."

Robb Wolf:

Oh, man! Tony would probably be a lot of fun to go out drinking with. It's an interesting question. If nothing else, if the intermittent fasting -- the thing that I've always had, the IF kind of dangling out there. Initially, there was a stop that maybe this is a way to find this really beautiful middle ground between anabolism and catabolism, basically between growth and repair. And when we're in a fasted state, we click on some of these cellular repair mechanisms that pull out broken fragments of cells that helps repair DNA. There's all kinds of really good stuff that goes on with it, but we also tend to get suppressed, testosterone release in this scenario with men, reduced estrogen level with women, generally kind of suppressed anabolic type stuff.

And so the thought was feed yourself adequately but maybe the intermittent fasting would be some sort of an intermediate point with this, and maybe we could get some improved performance because of improved neuroendocrine response to exercise and maybe, just maybe some health and longevity benefits. And it still is kind of up in the air as to whether or not any of that is factual, but there's no doubt that if we are doing this in a way that increases cortisol that basically increases our stress response in life, it's not doing us any benefits.

And so I think for Tony -- again, I think this could be a very subjective kind of scenario. Tony appears to be kind of wired up as a grazer although I will say that I've noticed my body will more adapt to what I'm putting to it than anything else. If I'm used to eating six meals a day, my body wants six meals a day. If I'm used to eating three meals a day, my body will tend to do more three meals a day. I hate -- oh, I won't say I hate cooking, but inconvenience of cooking and eating just annoys the piss out of me sometimes. It feels like I just get going on my book, I just get going on writing some blog posts, and then I need to eat again.

And so I really prefer the two, maybe three meals a day. Make them big. I don't have to deal with a bunch of cleanup and I'm done. For Tony, if he likes eating consistently throughout the day, knock yourself out. Go for it. And at the end of the day again, it's kind of like if you've tinkered with the intermittent fasting and it didn't do any benefit for you then by all means ditch it. It's just one of many ways of skinning the cat to try to get your goals. And if he's kind of performance-oriented and it's not helping his performance, then by all means ditch it.

Andy Deas:

And it's clearly not magic.

Robb Wolf: It's not magic. And even -- I would say like Martin Berkham -- Beckham -- the Leangains guy who we love but I never pronounce his name right I know. He is one of the -- he's played with this stuff a ton, but he's kind of one of the first people to admit it may work for some people, it may not work for other people. It's just a way for doing things. It's a way of doing business, but it's not the way to do business. And I think that that's just, you know. Again, I wish it was a one size fits all. I wish 40-30-30 just worked magic on everybody, but there's just way more exceptions and there are rules other than -- for me the food quality thing is kind of the king piece of all that.

Andy Deas: Yup. Good. Our next question, from Alex, "Hey, Robb. Great news on the book, can't wait to buy several copies. I just finished reading some Michael Pollan (Omnivore's Dilemma and In Defense of Food)," great books by the way, "and was thinking about his assertions about the state of Nutrition Science i.e. studies are based on reporting by subjects that is mostly lies or fabrications, and that our understanding of most Nutrition Science is based on nutritionism and the reductionist study of one or a few nutrients or lifestyle factors at a time and not a more holistic interpretation of these problems. As a nutrition science researcher, what do you think about the state of this young science and the validity of research methods commonly applied in the field?"

Robb Wolf: Oh, man.

Andy Deas: Yes, sir.

Robb Wolf: Maybe linking to the NorCal Nutrition: Are We Crazy? blog post which I did quite a while back, the state of the nutritional sciences currently is abysmal. I mean it is the dark ages. I've tried to create some sort of a relationship with the folks at the California State University Chico Nutritional Sciences Program and they hate me. I mean just hate me. I offered to fund both an undergraduate and a graduate research student \$1,000 this semester, all that they needed to do was make the research oriented towards evolutionary biology or Paleolithic diet. And the department passed on setting up this research fund because they're so antagonistic towards the concept of evolutionary medicine in their program, and it's a real simple kind of scenario.

Nutrition is a subdiscipline of biology, and the guiding tenet of biology is evolution via natural selection. And I forget how to pronounce this guy -- Dobzhansky. He's a Russian researcher from the mid-1900s I believe and he had this statement which was basically "Nothing in biology makes

sense but through the view or the lens of evolution." And I know that ends up being controversial topic for some people. I don't even want to get into that whole topic. But it's like if you buy into this stuff, if you buy into evolution via natural selection, you buy into the medicine and nutritional sciences being essentially extensions or subdisciplines of biology, then you've got to embrace this to some degree and why this works for cows and horses and koala bears that the biome that they evolved in is best suited for their health but somehow that doesn't apply to humans is just madness to me. It makes no sense at all.

The vehement like anger that this raises in people particularly in the nutritional sciences departments is just amazing. And if you cruised over to a physics department and you asked those folks, if you read a little bit of the history of where physics transitioned from a Newtonian view of the universe to a quantum mechanical and statistical mechanics view of the universe, it's actually kind of interesting because the Newtonian view of physics was the dominant view of how the world worked for a couple of 100 years, 300 years, almost 400 years. And then a work that Einstein and Planck and Feynman and all these dudes started producing -- Newtonian physics wasn't working anymore.

And so the research that they were doing, the studies that they were generating, observations that they were having were no longer fitting Newtonian physics at all. It just failed. There was this point where things got small enough and things moved fast enough that Newtonian physics just simply failed. And so the whole idea of quantum mechanics interestingly emerged out of just observations of matter and energy interacting with each other, and it was the way that they interacted with each other that people retro-engineered the whole field of quantum mechanics, Crystal Field Theory, all this kind of wacky stuff. But it was purely an empirical kind of scenario where they looked at data and they said, "Well, we need to figure out some way of making sense of these data," and that's where quantum mechanics grew up out of.

In the nutritional sciences we have a little bit more of an advantage in that we have all of anthropology and nutritional anthropology where we have hundreds of years literally of data of people living among different cultures and different peoples and observing the relative health and vitality of these people. And so we actually have some interesting data points out of historical accounts about what may or may not be some healthy ways of eating. And so, yeah, there is this kind of reductionist approach to nutritional sciences, but really the failing is not just that it's nutritionism or a reductionist approach. The failing is that these folks are

not playing these data through the lens of looking at it through evolution via natural selection.

When you start doing that then stuff starts making a whole lot more sense and you can start fitting the pieces together. I used an analogy in the book, *The Paleolithic Solution*. If you imagine you had two different pieces of pottery and those pieces of pottery got dumped on the ground and broke, and let's say one of them is red and one of them is green. And let's then -- one -- they're completely different shapes but you could either see their shapes ahead of time and know what their colors are or we put some glasses on you and you don't know what the color is, say it ends up being this opaque brown color, everything looks brown, and you don't know that there's actually two different pottery pieces there that you just have a box full of pottery shards.

Which one is going to be more difficult to put back together, the one -- the scenario in which you can tell that there are different colors and that you know that you have specific goal you're trying to fit the data to, fit the pieces to or the thing where you just have a bag of studies, the pottery shards, and you have no idea how the stuff fits together? And right now the nutritional sciences are the pottery shards and people in nutritional sciences have no damn idea how to fit the pieces together at all. And part of their problem too is that there are massive amounts of money -- USDA, the whole agribusiness kind of thing underpinning this stuff.

So there's really no impetus to drive a different view because it would absolutely eviscerate the backbone of most of the giant agribusiness scene. So we have huge amount of ignorance. We have people who are not really thinking in these academic institutions, and they're largely funded by governmental agencies that are tied into some really -- when you get right down to some pretty nefarious characters, people who own significant tracks of the American economic scene, lock, stock, and barrel, it's kind of scary.

Andy Deas: Yup. That was a good one, Robb. That was quite a dissertation for a very short question.

Robb Wolf: Yeah. But I talk about that a fair amount in the book and then that blog post that I did quite a while back, *NorCal Nutrition: Are We Crazy?* I talk quite a bit about that in there as well. Just this lack of a guiding principle in the nutritional sciences and how that is kind of singularly unique in scientific fields that you don't have some sort of a binding theory from which you can assess whether or not what you're looking at makes sense.

Andy Deas: Yup. All right. Well done. Well said.

Robb Wolf: Thank you. Thank you. Good question. Thanks, Alex.

Andy Deas: Next, we got a question from LA, "Hi, Robb. Do you have any advice for hard-gainers? My husband has been trying to gain weight since high school and cannot seem to do it. We transitioned to a Paleo diet in October, with him still eating oatmeal every morning and sometimes rice or beans. He is terrified to drop them because he is so lean. He does drink 4 gallons of whole milk per week, but it hasn't seemed to make much of a difference. How lean, you ask? The man is 36 years old, 6'4, 165 lbs, and 3-5% body fat. Our calculator might be a bit off, but you can see every muscle, all his ribs and veins. I will send you a picture if you want, but he is truly one of the leanest people I have ever seen (don't call him skinny though, he gets very offended)." I understand that.

"Training: We own a small MMA gym, so he does Muay Thai, Brazilian jiu-jitsu with conditioning four times per week, approximately 75 minutes, heavy weightlifting one time per week, he can clean well over his bodyweight, light yoga one time per week on his rest day, and swimming one time per week. We also commute to the gym and work, so he bikes quite a lot. His performance is good, but he really wants to gain weight. Thank you so much for all the information you provide."

Robb Wolf: Oh, man! Oh, man! Holy cats! So one thing, you transitioned to a Paleo diet but there's still oatmeal, milk, rice, beans. So one issue there is maybe he ate better. I don't know. But let's just keep all that stuff really clear. And then this guy obviously has a high metabolic rate, obviously leans toward the lean side. We won't call him skinny, of course. But if he wants to get bigger, he's going to have cut some of his volume of his training. I mean that's just all there is to it. Probably not biking to work. Probably two days of jits and Muay Thai instead of four. Probably no additional conditioning. Maybe three days a week of lifting heavy instead of one day per week. He's just going to completely need to reorient his priorities with this.

This whole anxiety of dropping -- so he's going to -- he's afraid of dropping beans and rice and oatmeal and somehow he's going to get skinnier from that. Again, we have these thousand calorie curries, thousand calorie omelets. I would almost guarantee that I can really, really quickly construct a Paleo diet that has a ton more calories than what he's eating. I'll bet you money on it in fact. And so it's -- again, obviously he's lean. Are we trying to get him leaner with the Paleo diet?

No, but he might again be healthier. He might perform better. He could still have some issues of systemic inflammation under all this stuff. Maybe not. Maybe he's just like Wolverine and he can eat pretty much whatever he wants to and just go through walls. But I just think it's really important to keep these things distinguished.

I would also really ask the question like -- have him spend two years of mass gain, like a year of a mass gain and then trying to lean back out and having a lot of metabolic derangement with it. And then finally getting back down like when I started the whole mass gain gig, I was about 163, got up to 185, pretty chubby, definitely high insulin levels, high cortisol levels. I'm down to about 175 and probably getting around like 8% body fat, getting about as lean as what I used to run before. Strength is good. Conditioning is fine for what I want to do and my life is easy.

So I would really ask him the question like, what do you want to do? And if you want to get bigger, then fine. Do what you need to do to get bigger, but understand that you're going to be giving up a lot to do it. You're not going to be as generally active. You're not going to -- I got to say like there is no day in the gym lifting weights that is anywhere remotely as fun as kickboxing, jiu-jitsu, capoeira, rock climbing. I only do my gym stuff to be able to do this other stuff better. Sunday I want to learn how to swing dance in Lindy Hop and throw my wife over my head and stuff like that. I just dig that stuff and I find it way more interesting and a lot more fun than just simply pounding food and pounding weights. Some people really dig that though.

Jim Wendler, God love the guy. He does it very, very well. But he also -- he's like, "I like to go lift and then I like to go drink whiskey and play guitar." And so I think be really clear about what you want to get out of all this stuff. It sounds like he has a really nice balanced life and he does some fun stuff. So I would just caution against -- be careful what -- if you want to really effect change, then you're going to have to completely gut the schedule and change it.

And so be clear about what you're wanting to do here because I think you have a really fun nice schedule going on and I would frankly be reticent to mess around with that. But that's just my -- if he came to me as a coach and wanted me to put 20 pounds of muscle mass on him, then he's not going to be doing jits, he's not going to be doing Muay Thai, and he's not going to be doing conditioning. He's going to lift heavy and he's going to eat until his eyes are going to pop out of his head.

Andy Deas: Robb is an anti-mass gain face, but big picture though. He could potentially add some mass. Who knows how much? 10, 15 pounds. Modifying a schedule over time then adding some of these activities back in.

Robb Wolf: Absolutely.

Andy Deas: Sure. Perhaps he cannot keep up -- it is as now, but let's be honest. I'm 6'4", 235 lbs. I feel skinny on a daily basis. If I was 165, obviously I don't know if I had 3% body fat. Maybe I would like to roll like that. That would be pretty cool.

Robb Wolf: Right.

Andy Deas: But I don't think what he's asking for is ridiculous, and I think it could be a goal to shoot for and then you realize you take somewhere -- give somewhere else. I mean obviously if you're a great hand balancer and you gain 30 pounds, you're not going to be the same quality hand balancer you were before but you may be better at some other things.

Robb Wolf: Totally. Totally. You're totally right. But when the -- and I think this is the wife here mentioning this stuff, yeah, if he's reticent to drop oatmeal and stuff like that, it just doesn't sound like he's going to be real dynamic on the change. And so is he going to be willing to drop jiu-jitsu and kickboxing for four months, five months to really get a mass gain out of this whole thing? And what I -- inevitably what I end up seeing guys like this do is they just -- they try to eat a little bit more but they don't really eat enough and they're still doing a bunch of jits and they're still riding their bike to work. "Well, I don't want to quit doing that?" And it's like, well, then just don't do it.

Andy Deas: Right.

Robb Wolf: It's like you're going to have to really -- sorry, Heather Dalton, but the dude is going to have to shit or get off the pot with this if he wants it to work. And so that's why I'm reticent in some ways to recommend it because I don't know that he really understands what it's going to take to really effect change in this way. But if he wants to, just need to understand, he's going to absolutely have to gut the program and change it and you're 100% right, he can always go back and he would probably go back. If he's 15 pounds heavier, he could probably have a different jits game, a different standup game. He would definitely have some different capacities. I just don't know if the dude is going to have the discipline to

do all that. Is he going to want to change his life that much? I don't think he will.

Andy Deas: Right. All right. Good. I like that question.

Robb Wolf: I think as a coach like having done this stuff now coming up on like 10 years, I just get -- I won't say sick of it, but people come to you with a set of desires that they think they want to do. And then it's almost a little bit of a counseling session where you need to make them aware of what they need to give up to get there because otherwise you're going to have a battle on your hands trying to get that person where they think they want to go, whereas if you educate them upfront, very emphatically "We need to do x, y, z or we will not achieve our goals," then you're both on a way better spot, and then you can maybe find a better middle ground there.

Andy Deas: Robb Wolf, scaring people out of their goals daily.

Robb Wolf: No, just awakening them to the fact that they might be doing more of what they like than what they thought so...

Andy Deas: That's true. That's true although he have known several people even clients that put on 20 pounds a mass and are very happy for it. But I agree with it.

Robb Wolf: Totally. Totally.

Andy Deas: There's a give and take on all this stuff.

Robb Wolf: Yeah.

Andy Deas: All right. Good. Next, we got a question from one of our top 3 handles, DamnDirtyApe. "Robb, just discovered your site, love the podcast, and I'm going through them all in sequence from the beginning." And God love you, DamnDirtyApe. There are some painful episodes in there. "I have been eating very Paleo now for a little over a month and love it, aside from Diet Coke, which I am really, really having difficulty cutting down due to a lifelong addiction of 3 to 5 cans per day."

Robb Wolf: Wow!

Andy Deas: I just want to laugh because every time we get one of these it's like Robb Wolf, you know, "This is the Robb Wolf influence on me. I'm eating almost Paleo." What does that even mean? In this case, it's "I eat Paleo

but I have a crap load of Diet Cokes," which is not Paleo as far as I'm aware.

Robb Wolf: It's not good from any standpoint. I mean it's like -- it's just bad no matter what so...

Andy Deas: And I'll tell you, DamnDirtyApe is someone that used to mainline Diet Coke. Get it out of your system for a while and then -- like six months and then drink one and they taste horrible, but that's my own little soapbox. We are not meant to consume that stuff. "I have been getting my wife to adopt the tenets as well, but she has two main sticking points I was hoping you could address: She has had minor IBS ever since getting E.Coli while in Mexico doing charity work in high school. On a three-week Paleo-esque diet she has generally felt good so far, but is convinced that a daily portion of Greek yogurt is good for the flora in her stomach. Plus she craves the stuff. Do you think cutting it out is critical, and is all that probiotic stuff really valid?"

Robb Wolf: The probiotics are valid. There can be a lot of different things going on with the IBS and one of the big ones is just stress. So like training stress, sleep stress. She could -- it's interesting like you can get strains of -- I'm wanting to say candida, but it's not candida. It's the other gut parasite -- giardia. That stuff can lay dormant or quasi-dormant for ages. You can have it for 20 or 30 years. So may need to do some other kind of GI cleansing protocols. Again, like this whole O&P, ova and parasite, but somebody pointed out in the comment, you need to do multiple iterations of this to make sure that you've really done a thorough accounting.

The biggest deal though is like gluten free, dairy free Paleo diet. If you're not doing that, then you still are inflicting damage on your guts. Interestingly, the diet soda stuff too, if she's doing some of that, that can also really alter your gut flora in an unfavorable way. So get that stuff dealt with. Make sure the training is smart and make sure her sleep is good. Probiotics, yes, that's good. And then leading into the second question, definitely doing some digestive support like good old NOW Foods Super Enzymes would be really helpful.

Andy Deas: Yup. "She also gets monthly nausea due to the Ortho Evra patch and wants to include some sort of mild bread or starchy stuff when the nausea and cramps happens to help settle her stomach. In your opinion, what would be the least damaging go-to food for that? white bread? sweet potatoes? white rice? saltines? (her preferred choice). Also what

would be your worst, 'last resort' foods – bran muffins? wheat/rye bread? beans?"

Robb Wolf: Once you start messing with the wheat stuff, it's all the same. I mean saltines are the same as bread, are the same as bran muffins. I mean it's all kind of the same from there. I would definitely say yam, sweet potato kind of gig, some fizzy, bubbly water like Pellegrino or like the Gerolsteiner, German mineral water, stuff like that would be good. Ginger, ginger caps are pretty helpful in that regard too. Usually, if you can peel people out of eating the gluten stuff for a while, then they notice that it's actually not much of a gut settler but actually a problem in and of itself, but you just -- again, you have to rest it out of their hands long enough to get them to improve which is upwards of a month.

Andy Deas: Yup.

Robb Wolf: Particularly when we've got some things related to some monthly cycle issues because she's not going to see that day to day. It only happens for three or four days during the cycles. So that makes it more difficult to see it frequently enough to really be -- have it drilled in. Its like, "Okay, yeah, I really do benefit from changing my food."

Andy Deas: Yup. All right. Good. DamnDirtyApe, top 3. All right, Robb --

Robb Wolf: So RatherLean and then who else do we have there? What are the other -

Andy Deas: Oh, RatherRipped, DamnDirtyApe, and there was one in the last episode. Now, it's totally escaping me.

Robb Wolf: Yeah, I'm forgetting the third one.

Andy Deas: Oh, it will come to me. I don't have enough caffeine in me. I'm 40 days behind.

Robb Wolf: Yeah, more than I do, brother, so...

Andy Deas: Oh, I'm sure you had your espresso this morning.

Robb Wolf: I only had one.

Andy Deas: Wow! This is like a -- I'm sure you'll make up for it on vacation.

Robb Wolf: Yeah, I'll crack out on vacation so...

Andy Deas: All right, Robb, last question of this episode.

Robb Wolf: Okay.

Andy Deas: All right. I'm going to let you take a crack at the name.

Robb Wolf: Nainoa? Naina? Nainoa?

Andy Deas: We'll take it --

Robb Wolf: I think he's a Pacific Islander, Hawaiian perhaps so...

Andy Deas: Yes, I would --

Robb Wolf: And he sounds big and fast so we apologize for butchering your name.

Andy Deas: Yes, exactly. "I have heard you comment a few times that you should work out according to how you are designed, that training long and hard if you're an explosive athlete can lead to excessive cortisol production. Well, I am nearly 100% fast twitch. At 300 lbs I can out sprint the average man, I can out shuttle my semipro football teams skilled players. However, when I run in excess of 70 yards, I look like your average fat guy again. I am willing (or trying to be willing) to forsake my strength and power to make sure I don't die at 58 like my dad. I dream of climbing crap, doing Ido like balancing stuff, running, swimming, and doing Parkour. Is it just not in my cards?

I try to program in occasional 3-5k runs but they smash me and ruin the rest of my workouts. Should I worry about losing weight before I start trying to run? Should I expose my CNS more to the stress of my bouncing girth so it gets used to it? If I succeed at losing weight living Paleo, will I still not be able to train for endurance without counterproductive cortisol production? You have no idea how thankful I am for your work. I never take for granted that you are giving me access to info that will extend and better my life. Thank you."

Robb Wolf: One thing, that's very kind closer there. I definitely appreciate hearing stuff like that. I think that there's a middle ground here. I would be willing to bet particularly if -- what are we going to solidify that -- Nainoa -- we'll say Nainoa. If I'm mispronouncing the name, super, super sorry. If you have any type of like a native kind of bloodline, you are even more likely to be predisposed to heart disease, type 2 diabetes. All the refined

western foods are that much more problematic because of the lack of time of adaptation.

And so something like a Paleo diet becomes all the more important for you. But that doesn't mean that -- I don't -- we don't know -- you mentioned 300 pounds but we don't know your body fat level. So let's just say you're like 20% body fat or something like that, we could get you down to 10% body fat in like 260-270, probably really, really good blood lipids and a freight train of a monster. And I think you could do plenty of hand balancing, climbing, and stuff like that.

You start looking at things that look a lot more like CrossFit football, like Max Effort Black Box, and then start learning some real basic tumbling skills -- handstand, handstand to front roll, cartwheels, basic dynamic movements of exploding off of a pull-up bar that's low and a pull-up bar that's higher and stuff like that. You can easily integrate this stuff and definitely pulling 10%, 15% of your body weight off, 30 to 40 pounds I think would put you right in there. And you could stay plenty strong while developing a huge amount of endurance that is specific and important for what you do.

John Welbourn gets emails all the time from dudes that have been deployed to Afghanistan and Iraq and they were doing a variety of things before they ended up finding CrossFit football. And then when they start doing the CrossFit football, they find that when they're carrying a bunch of body armor and they're carrying 80 pounds of extra gear that strength endurance activity really serves them well. That CrossFit-esque football preparation serves them very, very well because they needed more strength than what the kind of standard like 400-meter run, 50 air squats, 30 pull-ups type of stuff was going to produce for them. That stuff is really good on a general conditioning level. But when strength is kind of the premium plus some strength endurance, it becomes even more important.

So I think you can find a spot where you could have a crushing level of endurance, but it fits your physiology a lot better and you would just be a monster. I'm willing to bet so...

Andy Deas:

And I feel like too for some of the stuff like -- you know, let's be honest. I will never look like I do doing balancing stuff, but starting small I still get a lot of benefit out of. I enjoy it like it helps support my other stuff, and I feel like there are a lot of big guys that go with that. And I'll never be able to do a full planche push-up and maybe not, but I feel like chasing that is definitely worth the time and pays dividends in tons of other ways that

you can't even really predict unless you spend some time messing around with it.

Robb Wolf:

Yeah, totally. And you know Welbourn again is a good example, 6'5", almost 300 pounds. He learned tumbling and rope climbing and pull-ups and all that stuff as a kid and just never quit doing it. And if you are a bigger dude and you haven't done that stuff yet, there's almost nothing that you couldn't do that would be more fun and wouldn't benefit you more than learning how to do some handstands, learning how to do a handstand to front roll kind of deal. And get in to where you could walk 100 meters on your hands. That's legit for anybody, also for big dudes. And there's a lot of benefit for the shoulder girdle stability, shoulder health, and all that sort of stuff and it's just fun.

At some point, I think that's where -- it's so interesting to me like I've been in a lot of gyms for a lot of years and people will watch you do different things and people have seen me and seen other people squat big, deadlift big, upwards of over 500 pounds close to 600 pounds at one time for me, and it was just kind of like, "Okay, that dude moved a lot of weight," but it was really no big thing. But if I jump up on a pull-up bar and I do a front lever or I'm on the rings and I do a front lever to an invert to a back lever to a skin the cat and then do a -- keep the support, people -- their jaws just drop. And the stuff the Ido does, their jaws just drop.

There's some -- I think when people see a really good dance, they see some capoeira, they kind of Fred Astaire type dance move kind of things, I don't know what it is but it spins something in our psyche that's just like that is amazing and it's something healthy. It's something very like survival prone, like if you're a guy and you know how to dance, girls just want to like hump your pants off. So it's hilarious. It is so much more compelling to have some of that balance, coordination, gymnastics, dance type skills. It's so much more valuable from like impressing people and being fun than just simply lifting a weight.

And I love lifting weights. I totally dig it, but I just can't understate the value of these really basic gymnastics drills of learning how to throw a really good jab, cross, right round kick kind of combo and pull it off on a heavy bag or on some pads and make it look good and make it solid. There's some really beautiful stuff to that and it's very fun. It's open chain. It's very dynamic. It has a huge amount of demands on your brain, on your nervous system, on your balance. And I think that's a lot of what draws people into that stuff.

Andy Deas:

Yup. All right. Great question.

Robb Wolf: Yeah, yeah. And if you -- Nainoa, if you end up doing this stuff, (1) tell us how you pronounce your name and then let us know how you do with this. We'd be really, really interested to see what you do and what type of progress you make.

Andy Deas: Yup. And Robb, that's it. Episode 29 in the books. How do you feel?

Robb Wolf: So much better. I feel like I've had coffee all day.

Andy Deas: Well, through me you have had one, Robb.

Robb Wolf: Sweet.

Andy Deas: Well, thanks for your time as always, and I'll talk to you next week.

Robb Wolf: Right on, Andy. Thanks.

Andy Deas: All right. See you, Robb.

Robb Wolf: Bye.