The Paleo Solution Episode 32

Andy Deas: Robb Wolf, Andy Deas back with Episode 32, Paleolithic Solution, and I'm

still growing a beard. What's going on with you, Robb?

Robb Wolf: You know, I'm having a little bowl of 100% dark chocolate nibs mixed

with some coconut flakes and it's pretty damn good.

Andy Deas: Where did you get these dark chocolate nibs from, Robb?

Robb Wolf: Actually just the supermarket, Ghirardelli brand. Like it's definitely I've

had better 100% dark chocolate nibs, like Mat Lalonde has this Pralus stuff that is insanely good even when it's the 100% cacao, but this is not

bad.

Andy Deas: All right. I may have to keep my eyes out for that.

Robb Wolf: Yeah.

Andy Deas: Well, we got a boatload of questions, Robb. We're going to try to find our

way through it for another week. Are you ready?

Robb Wolf: Long ways to go in a short time to get there.

Andy Deas: First question from Jeff: "Robb, I think in every episode you have

mentioned how important sleep is, especially when leaning out is concerned. I have two small children including an infant which makes consistent and high quality sleep next to impossible. I'm 30 years old and about 185. I am not necessarily trying to get 'Brad Pitt Fight Club ripped.'" Who isn't trying to get Brad Pitt Fight Club? Do you want to get Jim Wendler big or Brad Pitt Fight Club ripped? There's only two choices,

Robb, but anyway.

"But like everyone else I would like to lose that last 10 pounds. I am pretty strict with Paleo and my only dairy is from Kefir. I do Krav Maga once a week, CrossFit and sprints one to two times a week and mainly do

bodyweight exercises a la Convict Conditioning and Naked Warrior. Overall my training is pretty low volume, well below failure, but at a higher frequency. My gains as far as working out are going fine, but I

want to make sure that what I am doing now won't lead to burnout in the

future. In my 20s I ran high volume programs with crappy diets and made gains for months before burning out and crashing.

What type of changes should I make to my diet or training to compensate for the lack of sleep? I typically get around 7 to 8 hours of scheduled sleep, but I am woken up at random times, sometimes every two hours and for different durations."

And he goes on to say, "It would make sense for me to go ketogenic and add frequent IF days as well making sure that I haven't eaten for a while before bed so insulin won't interfere with whatever meager natural GH I am getting." I'm assuming that's a question as well.

Robb Wolf:

Yeah. You know, there's not a fix for the sleep loss like you can make sure that your other stuff is not aggravating the problem. So being kind of quasi-ketogenic might be okay; but then at the same time, depending on training intensity and all that, if you end up having enough insulin resistance, glucose needs to fuel either your brain or your musculature or whatever and you're deficient in that dietarily, then your body is going to release cortisol and you're going to convert it out of protein. So it's going to get the carbohydrate that it wants by hook or by crook.

I think being in that quasi-ketogenic state can be good, I think intermittent fasting can be good, but they can also be the straw that breaks the camel's back in some ways too. And so like a quasi-ketogenic state where you're basically trying to eat as much vegetable matter as you can, so you're getting 50, 80 grams of carbs a day, something like that. Like I think by most people's standards, it would be low carb. But then, you know, Dr. Feinman and some of these other people are getting in and really putting some tight parameters on what's considered a low carbohydrate diet, and I think at some point, low carbohydrate will mean ketogenic and so there's going to be some different distinctions within that.

But basically, kind of control that stuff. I think keeping an eye on the bedtime feeding is smart, but the intermittent fasting thrown in with the sleep deprivation does not seem like a good idea to me. It is too much. Like if you're just really busy and you just can't eat in a given day, cool! But I wouldn't really structure it in. Like the intermittent fasting is for folks that all the rest of their life parameters are pretty good. So I would not -- I would be really reticent to recommend intermittent fasting in addition to that.

Good fish oil, alpha-lipoic acid, like alpha-lipoic acid plus acetyl-L-carnitine in the a.m. can be really good for helping to reset insulin sensitivity, but that's about the goods then you're just going to have to wait till they're a little bit older and not waking you up all the time, hopefully.

Andy Deas:

Yeah. And this is probably one case where for me, if this was client, even though his training volume is pretty low, just keeping an eye on that. And then if you have days where -- or weeks where sleep is less, maybe you even lessen your intensity a little further, keep movement in there, but maybe don't push the needle as far.

Robb Wolf:

Totally. You know, that's where you do some strength work, you maybe drag a sled, push a prowler like 70% effort, but it's just insult to injury. Like if you come in sleep deprived consistently and then you're trying to light it up with metabolic work, it's just going to destroy you in a really short order.

Andy Deas:

Yup. All right, Robb. Next question may be the question of the week even though it's the second question.

Robb Wolf: So neat!

Andy Deas: Nothing wrong with that. "Hey Robb."

Robb Wolf: Nope.

Andy Deas: What's that?

Robb Wolf: I said nope, this is guaranteed to be good.

Andy Deas: Question from Kevin: "Hey Robb, adore the website and podcasts. Please

keep up the awesome work.

As a law enforcement officer what would you recommend as the best way to train? Competing and looks do not concern me at all. My only goal is knowing that one day, my partners or a civilian's life may directly reflect my fitness level. I love the whole idea behind the CrossFit ready state of fitness. I've read some stuff recently about the main site not being enough to get good results. Also heard the overtraining and periodization terms kicked around.

Are the SealFit WODs too much for a regular routine? Would you recommend cycling between a SealFit WOD and a WOD like the CrossFit

Football? Something like every other day switch between the two, or three of one, rest then three of the other? How would you train an LEO that walked into your gym and just wants to be in the ready state sweet spot? Thanks a million. Kevin."

Robb Wolf:

It's a really good question. I ended up throwing this one on to Welbourn because John has had some pretty good feedback from folks who have played around both with like kind of standard CrossFit .com programming and then CrossFit Football and some of the SealFit type stuff. And the CrossFit Football type programming, the feedback he's been getting from folks wholly unsolicited has been really, really favorable. And when you look at the demands of arrest and control of pumping a lot of gear, house clearing and stuff like that, it's really not 400-meter runs with 50 air squats and 35 back extensions and stuff like that. It's much more a 20-yard shuttle, breach a door, grab somebody, tackle them.

Certainly, there's metabolic elements and both routes are legit for getting there. And I think no matter what you do, like if you pick up some heavyweight, like fundamental stuff I would see is get reasonably strong. Double bodyweight back squat, double bodyweight and some change, deadlift, 1.2 to 1.5 bench bodyweight press, 75% of your bodyweight in a pull-up, 50% to 75% of your bodyweight in a pull-up, you know, have some aptitude with rope climbs, have some basic gymnastics, work mobility work like develop some short time indexed metabolic conditioning, occasionally push it out a little bit longer into the 20-minute realm, I think that's pretty darn good to go. I think for off-the-shelf programming, CrossFit Football, Max Effort Black Box, that stuff is phenomenal. And if because of PT standards you need to run some long efforts or do more push-ups or sit-ups or whatever, just throw that stuff in supplementally.

Just a couple of days ago we had a guy who used essentially CrossFit Football type programming and then one long run a week and he used that as the backbone of doing a 50K trail run and did it just fine. So I always kind of lean towards that strength and power bias. And then also part of this stuff, hopefully as an LEO, you're doing something like spear or the Straight Blast Gym, arrest and control combatives, like some sort of a legit solid combatives program for the hand-to-hand element. Hopefully you're getting out and shooting consistently. There's all those other intangibles that are really, really important for that job in addition to just the base level fitness.

And you know, if you do this other type of training where you're not completely knackered, then you have the time and the energy to do

some hand-to-hand combatives, to go do some additional shooting and firearms work and all that sort of jive.

Andy Deas:

Yeah. And I feel like for me with the LEO folks, I think one of the big things to think about is really recovery and fatigue level, and so I think it's hard to say like how many days a week you could train. I think it depends on your schedule and then how predictable it is. I think there are certain folks that have a much more or less predictable schedule, so I feel like by default you end up with some lower intensity or some more dedicated strength work that's not going to totally crush them 'cause I think depending on -- I hate the quote but whatever. Fatigue makes cowards of us all or whatever.

Robb Wolf:

Right.

Andy Deas:

So you really have to be able to really manage that when you think about how much you're going to overreach, how are you going to periodize that stuff just because it's so important then to be relatively rested when you go into work.

Robb Wolf:

Totally! And then the one other piece with that is I would actually really recommend against a buffet approach to your training. If you want to do SealFit, do SealFit. If you want to do CrossFit Football, do CrossFit Football. But I would pick one and run with it and carry some quantifiers on that program for a good chunk of time, like at least four months. And then if you want to change gears, like change gears in a way that you're assessing what your weaknesses are, what your perceived weaknesses are, and then make a decision that's rational. Give the 5-3-1 manual a read.

If for no other reason, then Wendler is really good about holding people accountable on progression, on working out with a purpose and stuff like that. Like it's very powerfully written and very motivating.

Andy Deas:

Yup. All right, good. Great question.

Robb Wolf:

Yeah.

Andy Deas:

Next we got a question from Summer. "Hi, Robb and Andy! First of all, I'm your biggest fan in Canada. What you are doing is genius and I look forward to any and all new blog posts/podcasts. Bring your PSS to Toronto." We're going to skip the next part.

"Here is my question. I have not had a menstrual cycle in 6 to 7 months. This is really abnormal for me as I used to get it too frequently, usually getting breakage while being on the pill, and never missed a month before. My doctor ran some blood work and everything came back normal, thyroid, prolactin, etc., except my LH hormone. My other pituitary hormone FSH was normal. I'm wondering if there is any way my low LH could be tied to diet. I found one study suggesting low leptin can also reduce LH. Are there any nutritional mechanics that you know of, i.e. low carb, caloric restriction, etc. that could influence low LH levels?

Here is some more background on me: female, 31, 5'4", 130 and in the best shape I've ever been in my life. I am fit, but not overly lean. I've been training with CrossFit for three years and have been eating Paleo for almost two. Prior to this I was a low-fat, treadmill girl. The only things that have changed in the past year are that I'm doing a lot more strength work at the gym (OPT style training) and I started taking fish oil and vitamin D back in November before this happened.

Other than that, my diet has not changed. My stress and sleep are also the same. I'm going to see a gynecologist and an endocrinologist in a month to discuss, but would love to get your perspective as to whether nutrition could influence the low level of LH. Any help you could provide will be greatly appreciated.

Keep up the amazing work. Already preordered the book so I can't wait for that to come out."

Robb Wolf:

Sweet! Huge question. We'll try to keep this one a little bit on the short side. The leptin and insulin definitely have influences on luteinizing hormone. Luteinizing hormone is the hormone that's released out of the pituitary gland that stimulates -- luteinizing hormone in men will stimulate testosterone production. In females it's estrogen production. There's also some downstream influences on follicle-stimulating hormone. Definitely, some areas in which leptin can be influenced is just generally carbohydrate load, stress, cortisol. So if cortisol is high then we can have some leptin impairment, and then the leptin impairment can feed in to all this stuff.

The one thing that I'm wondering about is since we've been seeing a few people -- I don't know if I'd called them paradoxical responders, but some people who have problems with fish oil causing acne, I wonder if there's not something going on here with an Omega-3/Omega-6 imbalance that could be feeding into all these. So this could be something where putting in just a small, like a small amount as you can of GLA or DGLA, like

primrose or borage oil, could be pretty helpful. Like until we get a full profile of what the luteinizing hormone, follicle-stimulating hormone, like there's more information that I would need to be able to dig around in the endocrinology a little bit more.

But since she is asking is there anything you can do nutritionally that might modify this, the fact that she started adding in fish oil and vitamin D and then she experienced this problem; now this is completely stabbing in the dark, I don't know this to be the fact; but it could be a situation in which she's got a little bit too much Omega-3 that could be interrupting some of the prostaglandin production and some of the downstream production of some hormones related to Omega-3/Omega-6 status. So that would be one thought is to actually maybe decrease Omega-3 consumption, add some of the activated Omega-6 SNC if that changes anything. But that's really firing pretty blind. There's not really that much information on here that I would need to go much deeper than that.

Andy Deas:

Yup. All right, good. Next we got a question from Warren. "I will try to keep this short. I've been loosely following a Paleo-esque diet for some time and decided to make my switch to full Paleo. I only had to eliminate a bit of dairy from my diet (my beloved cottage cheese) and a few remaining grain products.

Since going full Paleo I've been expanding my diet to include more fruits and vegetables. I've had no problem sticking to 100% Paleo; however, one of my weaknesses has been fruits, both fresh and dried. I haven't been eating a large amount of them; however, I am eating a lot more fruit than my pre-Paleo days' mindset is comfortable with. I was a low carb weigh and measure before, and this unweighed, eat to satiety is difficult to adjust to. I am comfortable with my body fat, single percentage, so I'm not too worried about leaning out any further.

What I haven't been able to understand is why dried fruits are so bad on Paleo. If you are looking at organic dried fruit, with no additives or preservatives, is it not essentially the same as eating the equivalent amount of fruit, just without the extra water removed through the dehydration process? Can you please explain this to me so I can understand the logic behind this 'dried fruit is bad' and the 'dried fruit equals candy' analogy? The fructose isn't magically transformed into sucrose during the dehydration process, so what gives?"

Robb Wolf:

Real simply, people just tend to -- I think they have much higher likelihood of overeating dried fruit than they do a whole real fruit, and that's really all it boils down to. Like folks will have like a bag of dried

apricots or something and they can hammer four, five, six, seven of them and get a pretty huge total carbohydrate load where you would be really hard-pressed to do it with the water still in the fruit. So I think it's just simply folks tend to overdo it. If you don't overdo it, then it's really not that big a deal.

Andy Deas:

Yeah. Yeah. All right, good. Next we got a question from Lee. "Robb, ever since discovering the podcast I have been easing my way into 100% Paleo over the last month. Already the results are amazing. I am trying to develop a plan to help my dad get on track. He is 72, 5'10", 219 at approximately 28% body fat. I have been talking to him about going Paleo and the issue is with his warafin that he takes for his A-Fib. His MD has advised him not to consume green veggies because it jacks up his pro time. If he consumes more green veggies on a regular basis, thus, regulating his vit. K intake daily, shouldn't the MD be able to moderate his warafin dosage to match the increased vitamin K?

Also, how do you feel about fish oil for someone taking warafin? Love to hear this on the podcast as I listen every week. Thanks in advance for all you do."

Robb Wolf:

Yeah. It's warfarin and it's a blood thinner.

Andy Deas:

Thank you, Robb.

Robb Wolf:

And you know, this is one of those things where -- I will dig around. I've got it in my references somewhere. There's an established protocol where you can substitute fish oil for warfarin and have kind of predicted blood thinning effects and you can use what's called a coag panel to track the progress. You would need a doctor who's aggressive who wants to do something a little bit different.

Combining all this stuff is super dodgy. Warfarin has like razor thin therapeutic versus toxic level. And really, it's not toxic. It's just that you can bleed out and die. And so it's hard to make that thing work. Warfarin works very, very well as an anticoagulant but it's, gees, it's hard to manage. It's really hard to manage.

So throwing in the other -- like just saying, "Well, couldn't he eat some vegetables and then the doctor just adjust for that kind of flippantly?" you never how much vitamin K people are extracting out of their vegetables, you know. For one batch of vegetables to the next you're going to get different ratios. So this is where the doctors and the pharmacists are really trying to make their job easier and keep the

person alive within the best of their ability, and so they're trying to limit all these really highly variable inputs like eating vegetable matter.

I think the fish oil is much safer. I think that there is arguably an established protocol for using it in place of warfarin, but the doctor, the pharmacist, like everybody would need to be on the same page with regards to that whole kind of graded withdrawal. I will do my best to track that thing down and we'll get it in the show notes, but then I mean it's a really complex situation.

But ideally, someday we're going to have, via Professor Cordain's work and hopefully the work that Mat Lalonde is doing and all that, a legitimate physician network of physicians, nurse practitioners, pharmacists that are educated in these topics and that we can go to these people when we have health concerns and we can get much safer, much more effective medical care. But right now, they do the best that they can with what they have, but there are legitimate, well-studied, well-documented alternatives out there that are safer and work more along whole foods kind of Paleo approach.

Andy Deas:

Yup. Good. Moving on, question from Nicholas. "Hey there! First off, I'm so appreciative of you guys. You are a priceless resource that I have turned many friends and patients alike on to.

My question is about cholesterol. Simply put, I understand there are many studies that dispute the link between dietary intake of cholesterol and chronic heart disease; but from what I can tell, there seems to be a valid link between high serum cholesterol and CHD. As someone who has high cholesterol, I am thrilled that I don't have to reduce my cholesterol intake, but I'm still concerned with lowering my serum numbers or at least improving my ratios, assuming there is in fact a link between my numbers and CHD. Please point me in the direction of evidence to the contrary if there is any.

I will concede that all this Paleo stuff is relatively new to me, less than two months, so perhaps I just need to give it more time; but my wife and I have really taken to this new diet, we are pretty strict with it, and we cheat very infrequently. Besides some quality resistance training three to four times a week and some really mellow met-cons two to three times a week (BOOOO! HISSSSSS!), taking fish oil and lots of veggies and fruits, is there anything else you would recommend? Should I even be concerned about my numbers or is that hogwash?

Again, thanks for all your great work. Your dialogue with Andy is both easy to listen to and a wealth of info. Keep up the good work."

Robb Wolf:

You know, the big stuff for me to really look at with all this, A1C, so how much glycated hemoglobin is happening, which gives us an indicator of dietary carbohydrate and also potentially carbohydrate being caused by stress, so like hepatic or liver-derived carbohydrate being generated out of the liver. LDL particle size, so like some large fluffy non-atherogenic LDL particles.

Possibly the most important one out of the whole thing is C-reactive protein, which is an indicator of systemic inflammation. C-reactive protein is not in and of itself bad, but it's indicative that there are inflammatory events happening in the body which could be bad. Having a good level of HDL is good. It's cardioprotective. So those are the things that I would really look at, and then your triglycerides should be overall low.

So one, I would make sure that the test is an accurate fasted blood test. From there I would just kind of consider the LDL particle size, C-reactive protein levels, A1Cs, triglycerides. And in the book, I detailed this stuff very, very specifically in what numbers and what ratios I'd like to see. Mat Lalonde covers this stuff in his talk and I think he is doing a podcast here this weekend. So although this will be playing out after he has done that, but there may be some replay on it.

But anyway, there are some other things that you definitely want to look at besides just total cholesterol. Generally, when you bring insulin levels down, then the enzyme HMG-CoA reductase, which is kind of the main factor in cholesterol production, that gets downregulated; and interestingly, higher protein intakes, monounsaturated fat intakes, which prop up glucagon release, that actually improves or downregulates HMG-CoA reductase. So it improves cholesterol levels by essentially having more protein in the diet.

So you should see some stuff move to the right direction. I would want to see specific numbers here so that we could make some kind of pinpoint recommendations, but that's the direction I would look with all these.

Hello?

Andy Deas: Robb Wolf. Sorry, I was drinking coffee on mute.

Robb Wolf: You hussy!

Andy Deas: People make comments about heavy breathing and, you know, whatever.

So I want to make sure I'm trying to be as quite as possible and respect

the listeners and the value that you're providing.

Robb Wolf: And sneak in some coffee while working.

Andy Deas: Only on the days we record podcasts so people don't accuse me of being

asleep.

Robb Wolf: Well, I'm eating chocolate and coconut chips, so I think it's not going to

be bad.

Andy Deas: This is the afternoon snack of champions, Robb.

Robb Wolf: Yup, totally.

Andy Deas: Moving on, next we got a question from Carlos. "First off, I would like to

say you have been a big fan of the podcasts and recently saw you in

Seattle CrossFit for your seminar. Good info.

My question is in regards to fat loss. I am currently 26, 5'10", around 198, and I would say I'm fairly lean except for the pudge I have in my stomach. I have been back in forth with my diet, remaining fairly Paleo. I've done the Zone but didn't like it because my strength numbers went down too much and went to unweighed Paleo eating to satiety and using butter and cream for some fat sources. I'm currently doing gluten free and dairy free for 30 days to see where I'm at in regards to any dairy intolerance.

My question pertains to a statement you and Andy made about having people lean out before doing a strength program. As a younger man, I was obese with no muscle mass whatsoever, my greatest weight being at 230 pounds. Four years ago I started to diet and got down to 195. Since joining the army I have gotten all the way down to 175. Still, I really don't think that I had that much muscle mass, all the while still keeping a little flat tire of fat.

As I said, I'm currently 198 and my lifts are going up steadily (300 squat, 330 deadlift). People tell me it's just extra skin, as noted by the way by stomach sags when I do push-ups. I have come to the conclusion that it will probably never go away and mainly been focusing on strength these days.

So anyway, have you ever come across a client with the same problem? Is there a point where diet and exercise will not be enough? Basically, how much of an effect does leanness have on progression? My sleep hasn't been the best but I pretty much think I'm stuck at where I'm at." And then let's answer that part and then we'll get to the next question, Robb.

Robb Wolf: Cool! And there's actually like 15 questions hanging out in there.

Andy Deas: Well Robb, everything is like seven questions to you.

Robb Wolf: Oh, man.

Andy Deas: But there's only like three more. It's fine. It's fine.

Robb Wolf:

Is there a point at which diet and exercise will not be enough? Like I wonder if he is talking about with regards to like the kind of stomach sag. I've only with our gym, I can only think of one, maybe two clients that as they lost body fat they didn't kind of snap back, like they had some sort of Richard Simmons effect where they needed to go and get a -- they

would probably benefit from some sort of surgery to get their pudge roll removed just because of loose skin, but it's super, super rare, like I just

don't see it happen hardly at all.

The question about leanness and progression, it really depends on where you're at as an athlete. Like are you a beginner, intermediate, advanced? And I think also, he may be making a mistake that we generally recommended getting lean before starting a mass gain. Not necessarily a strength deal but a mass gain. And that's because when you're leaner you tend to have a little bit better nutrient partitioning. You tend to put more nutrients into the muscle instead of the fat. You have a better hormonal environment as you gain body fat. Even if it's from a non-carbohydrate source, just simple caloric excess, you will gain some body fat on that; and if that gets to a significant enough degree, then you can start getting some metabolic derangement despite not really taking in all that much carbohydrate. So, but you know, obesity or excessive fat gain really isn't all that healthy at the end of the day.

Sleep hasn't been the best. I mean that's one of those like gimmes. It's just money on the table. If you don't fix the sleep, then there's -- largely it's unknown what we could be working with and it's definitely a place where we could get some improvement.

Andy Deas: Free money.

Robb Wolf: Absolutely.

Andy Deas: All right, moving on. One last question or as Robb said 17th. "You said the

bulk of strength training diet should consist of about one gram of protein per pound of bodyweight, 50 to 75 grams of carbs, and the rest of calories from fat. You mentioned that if you wanted to cut fat that it would work up to about 15 cals per pound. Is this the total amount of calories for every macronutrient or just from fat?" I'm confused just

reading that question.

Robb Wolf: If you want to lean out then that's a pretty good rule of thumb to follow.

It's straight out of -- I got some of this from talking with John Welbourn, but if you dig up John Berardi's article, "Get Shredded" I think, if you go Berardi Shredded or something like that, Google it, this is straight out of his playbook. A gram of protein per pound of bodyweight, really minimal carbohydrate intake, sufficient fat calories such that you're getting overall about 15 calories per pound, and you should lean out pretty

quickly on that.

Interestingly, that's very, very similar except if -- the way that we were tweaking the Zone, taking the basic Zone recommendations, cutting the carbohydrate in half, adding three blocks of fat for every block of carbohydrate deleted, ends up looking very, very similar to this. It's

skinnier in protein, but it's damn close, really, really close.

Andy Deas: Yup. All right, good. See Robb, that wasn't so complicated.

Robb Wolf: No, no, not at all.

Andy Deas: Nah, you're fine. Next we got a question from Thomas. "Okay, I've seen quite a few questions regarding fish oil calculations and

recommendations. I read the question and listened to your response on Episode 27 about fish oil thinning out your blood. Some of my family members were worried that the amount of fish oil I was taking was too much. Let it be known they know next to nothing about CrossFit or

Paleo/Zone eating.

To get to the point, I have been told that the amount of fish oil I take, which is 36 capsules, could cause me to hemorrhage or bleed out quickly if I was to cut myself. Also that it could damage my liver and make my skin bleed. Basically, to sum it up I could bleed to death." I'm not laughing. I'm sorry.

"What are your thoughts on these accusations? Well, I slowly amped up my dosage as Andy said and have not had any problems so far. I researched this issue myself on the web and the only sources I found that could back up your recommendations were from Poliquin, Berardi and Sears. I know you sort of answered this same question in Episode 27 but to touch on this a little more would be much appreciated.

Some good hard proof I could show my family so they would stop worrying about me taking fish oil in the amount I do would be great. Since this is all quite new stuff, this sounds crazy to people who still follow old school BS recommendations from the FDA. So what would you say to somebody who told you that you were crazy and stupid for taking that amount of fish oil? By the way, I love your stuff. Keep it up."

Robb Wolf:

I actually replied to Thomas in an email and I was just like "Your family is being hysterical. They have no freaking idea what they're talking about."

Basically, what I hung all this on I looked at about how much fish oil he was taking in in a given day and then I pointed out that if you had a couple of salmon or sardine meals a day, you know, day in day out, which really isn't all that ridiculous proposition, that you take in the same amount of fish oil. And he threw that back to his family and they were adequately chagrined that they were being kind of ridiculous about the whole thing.

People just freak out about this because it's a supplement and all the rest of this stuff, but it's really not a supplement. The Omega-3's are missing out of our diet. We're supposed to have more Omega-3's than what we're getting and so we do need to supplement it. Either cough up the money and buy grass-fed meat and wild-caught fish or you buy some fish oil and try to prop it up as best as you can. And I just love that people get so spun up about this.

Like in general, I think most supplements are kind of BS. We just had some big discussion, Welbourn and Lalonde and myself, about comparing just regular cow's milk, whole milk versus like a high carb, low fat energy drink for post-workout recovery, and then they compared it to against whey protein isolate and all that sort of stuff. And not surprisingly, the whole milk worked better than all of that stuff, and this has kind of been my position for a long, long time.

It's just damn rare that I see a supplement really qualitative, you know, decisively beat out real food. Every once in a while I see something, but everybody is claiming all these miracles. Scott Connelly was sniffing

around me and Welbourn at various points trying to hawk his shakes, and these preposterous studies that are done on neophyte, untrained athletes and then trying to extrapolate a bunch of stuff about like protein accretion and everything and untrained populations then try to extrapolate that to trained populations is just ridiculous. And again and again and again, when you show real food head to head against these supplements, the supplements don't work any better.

Occasionally, it's something like some of the Vitargo products that are glycogen repleting and the high molecular weight carbohydrate molecules seem to have some kind of cool effect with glycogen repletion, but it's just really specific situations and it still kind of begs the question though like how often do you really need something like that versus like a yam or a sweet potato, you know. I mean it's just how often do you need it. And so the whole point to all that is that I think that there's a ton of BS surrounding supplements and so it's probably good to be suspicious; but every once in a while, you do actually have something legitimate and so you might think about it a little bit and put it in some proper context.

Andy Deas:

Yup. All right, good. Good question. And next we got a question from Zack. "Hey Robb, I really appreciate what you do. Please keep up all the hard work.

I am a very clean eater 99% of the time, but there are always those meals that you can't avoid -- weddings, holidays, trans-Atlantic travel where you have no choice but to eat outside our usual diet. Usually after a meal like this, I obviously feel like crap. Is there anything I can do after eating a meal like this to speed up my recovery and get back to digestive health? I know this is kind of a crazy question, but I hoped you might have an answer." So start there, Robb.

Robb Wolf:

You know, for me, like this is really a matter of choice. Like this isn't a thing of like, oh, well, if it was me, I'm at a wedding and I have nothing to eat, you either make a choice to eat the wedding cake or you don't; and for me, I don't because it's not worth how I feel. But I maybe way, way, way more sensitive to either gluten or some of the other stuff than what Zack is and so it's just not a worthwhile deal for me, and I'll be almost willing to bet that I do more travel longer distances than Zack does. Maybe not but I'd be shocked if he didn't.

And so like you've got to plan ahead a little bit. Like if I'm going to be on the plane and I know I'm going to be on the plane, then I cook up a really, really big breakfast and that may be the only thing that I eat all day. And I just don't eat while I'm cruising through the airports. I might have some

jerky. I might have a bag of coconut with me and then I don't eat until I get to the hotel and I can track something reasonable down.

And this is where some of the intermittent fasting kind of comes into play where it's like okay, I'm just going to kind of forego eating, and when I do eat, I'm going to eat really big to kind of make up for the differences. Because for me, it just doesn't make -- it doesn't pencil out. It's not a worthwhile thing. Andy and I were talking before the podcast about the "Primal Body-Primal Mind" book and Nora mentions in there that she feels that gluten exposures can increase inflammation and cause problems for people for up to six months post exposure.

And so I don't know. Like it's kind of funny, like people -- there's a variety of positions on this. Some people feel like it's a bunch of hand ringing and it's not that big a deal; but then when I see autoimmune diseases reversed and people getting pregnant who went through full fertility interventions, basically like gluten-free, dairy-free Paleo diet fixing so many different problems, it's kind of hard for me to not be a little bit militant about it. Just in that if you've got a problem and/or if you really want to optimize health and performance and all that sort of stuff, you need to actually follow it.

And you know, how you implement it, I really don't care like it's up to you. I'm just trying to provide the best information I can. I don't want to turn it into a religion, but there is some sort of understanding where if we were to change this from like dodgy food to hookers and cocaine, it's like that is going to create a problem. It's going to create a problem for my marriage. It's going to create a problem for drug enforcement agents. Like it's going to create a problem. And that's just a fact. It's an unavoidable fact.

And Zack is pointing out here that he doesn't feel good after this whole thing. So you need to make a decision then, is going with the dodgy food worthwhile to you, because there's really not some sort of like backend thing that can fix it other than not doing it again. So there is no quick, easy solution to that.

There are some enzyme products out on the market that I have not played with, have not researched, that claim to decrease the amount of gluten that makes it into the small intestine and can therefore do damage. I don't know. I don't know about that stuff but --

Andy Deas:

It reminds me of the travel thing, CrossFit Portland blog. They're always posting pictures of them traveling on planes with all the food they have packed.

Robb Wolf:

And they are a scene.

Andy Deas:

And they have also been known to travel cross-country with the grass-fed beef on dry ice. So they make sure they have enough whenever they show up where they're going. So it can be done with enough commitment is my point.

Robb Wolf:

Scotty Hagnes will travel with beef heart.

Andy Deas:

Exactly. All right, moving on to a more serious question. Zack's mother is currently living with multiple sclerosis. She was diagnosed almost 20 years ago and has lived relatively well with the condition, but it's looking more and more like she is going to be confined to a wheelchair by the end of the year. "I have talked to her shortly about how a Paleo diet may be beneficial to her, but the fact is I don't totally understand it myself. She is an MD herself and is very keen to avoid any 'miracle cures.' Is there any validity in what I have heard about Paleo diets helping people with MS?"

Robb Wolf:

Yeah. And I actually replied to Zack directly. I just forwarded the -- there's a four-part, six-part video series that Loren Cordain does on Paleo diet for multiple sclerosis and so I forwarded that on. And the fundamental thing is all of these autoimmune diseases seem to boil down to some sort of a gut irritation. Grains, legumes, dairy, potentially some of the nightshade type foods, tomatoes, potatoes, eggplants, hot peppers may all be problematic in these regards, and so limiting, avoiding these foods, getting adequate vitamin D, safe, reasonable sun exposure, exercise, all these things seem to be really, really good for the condition.

And you know, it's like the whole thing of miracle cure. Yeah, I get that but at the same time, like if something works, it works. So assess the science, give it a whirl, and then let us know whether or not it did anything.

Andy Deas:

Yup. And then finally Robb, I think we had some feedback from the vitamin A debate, Episode 28, from Chris. I think we were originally going to talk about it on today's episode, but I know then we discussed and you were actually working on a written response to that, right?

Robb Wolf:

Yeah, it's pretty big so we've -- there's kind of some different camps out there, Weston Price camp that is very pro say like cod liver oil and high amounts of vitamin A/vitamin D out of the cod liver oil, and then some folks more out of I would characterize the Loran Cordain camp which is formed vitamin A, like the palmitate form, not the carotenoid forms can be antagonistic or it's thought they can be antagonistic against vitamin D. And so the recommendation has been if you're supplementing fish oil to use, fish oil plus vitamin D or you know, to just kind of minimize your formed vitamin A intake.

And so there has been a fairly hot debate going back and forth on this whole topic, and I've been doing my best to research it. I've been talking to Mat Lalonde, and so I'm doing a pretty lengthy write-up on this whole thing and we'll shoot it to Mat and have him go through it and we'll post that, and hopefully get some good comments, very good discussion on that topic and then we can maybe revisit it in the podcast too. But we are working on addressing that. So it's big.

Some of the questions that folks throw out and I'm always super excited to get this stuff, but some of it, to adequately answer the question, and this is in a large part like we need to do frequently a really heavy duty educational element to get most of the listeners, most of the readers up to speed to be able to understand what the heck we're saying. Like I could reply to a number of these things and use all the scientific jargon and very quickly directly answer this stuff, but then nobody is helped with the whole thing. So I have to do a ton of background writing to be able to layer in just the basic like anatomy, physiology, biochemistry, endocrinology to be able to make sense of all this stuff so that it's not just smoky mirrors and like "Hey, just believe me because I said this sort of stuff."

But you know, to kind of cut to the chase on this, where I'm at with the whole thing is that if you follow a generally kind of Paleo recommended diet, then you should have adequate levels of vitamin A and vitamin D. If you have inadequate levels of vitamin D, I don't see any problem supplementing either D directly or using sunscreen. And so I don't see that problem being deficient specifically, but then at the same time, I do not really see the Weston Price recommendation of supplementing with preformed vitamin A and vitamin D really being all that much of a problem either other than ancestrally, there are some mechanisms that seem to indicate we have feedback inhibition of both vitamin D production and vitamin A production from the environment. So we have control mechanisms out of the environment when we're making vitamin A, vitamin D on our own versus if we're say like taking in cod liver oil or

something like that. So that's the only kind of teaser that I'll throw out there on that topic for right now.

Andy Deas: Yup. I think the point is that we got the comment and we think it's

important to discuss but important enough that we wanted to make sure that there was a written response to it for discussion purpose. So it is in

the works.

Robb Wolf: It's in the works and we're doing our best to make it as thorough and

understanding as we can do on it.

Andy Deas: Yup. And with that Robb, that ends Episode 32 with another blistering 44

minutes.

Robb Wolf: Woo-hoo!

Andy Deas: Yeah.

Robb Wolf: Dude, there are CrossFit workouts longer than this.

Andy Deas: Yes, there are. I will never do them but they're out there. So thanks for

your time, man, and I'll talk to you next week.

Robb Wolf: Right on, Andy. Thanks.

Andy Deas: All right. See you, Robb.

Robb Wolf: Bye-bye.