

Paleo Solution - 188

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Robb Wolf: Howdy folks, what's going on? Robb Wolf here. Greg Everett's in the house. It's episode 188 of Paleo Solution podcast. Greg, we already went over this before we recorded, but what's new? What's exciting?

Greg Everett: Oh man, let's see what is new and exciting? Performance Menu is on issue 101, which is ridiculous. You can still go get issue 100 for free. Go check out those articles see if you like it. If you like, it subscribe. If you don't like it ,subscribe. Let's see what else here.

Robb Wolf: If you don't like someone, subscribe for them and give it as a gift.

Greg Everett: Yeah. I don't really care if you like it or not. Just subscribe and then we can be friends.

Robb Wolf: Perfect. Perfect.

Greg Everett: Let's see here what else. We have --

Robb Wolf: Remind folks about that's somewhat a lead in for our show sponsors. Remind people of the pricing and the various plan options on the Performance Menu.

Greg Everett: Guys standard subscription, which is still only \$30 a year and that's for 12 monthly issues and actually --

Robb Wolf: We're just giving it away, man.

Greg Everett: Yeah. You pretty much end up getting 13 issues for that price. You get like a bonus issue the way the thing works out with the year timing. So that's pretty amazing. And then premium subscription, which is what you really want is 100 bucks a year and you still are getting each issue as it comes out but you also have access to all of our back issues, which if you have been listening is now 101 issues. It's 550 articles or something crazy like that. Let's see. You get also get a 15% discount code for the Catalyst Athletic Store. So anytime you want to buy something from us, books, DVDs, shirts, that sort of thing, you go in and type in your little code that you got when you subscribe as a premium subscriber and you get 15% off of it. I mean I don't know --

Robb Wolf: Sweet.

Greg Everett: --what more you could possibly want in life.

Robb Wolf: And just to remind people like that, that includes that \$100 one and getting all the back issues that includes all of my old articles covering intermittent fasting, which I'll just come out and say it, I'll be a little bit of a prick today. I scooped to everybody on that, goddamn it so.

Greg Everett: Yeah and your triple point theory of health, fitness, and longevity that's in there.

Robb Wolf: Yeah. You're going to see some expansion on that from Greg and I in the not too distant future. So I'll just throw that out there. That thing is going to be dramatically expanded upon --

Greg Everett: And here is other cool thing you need to know about Performance Menus is the new PerformanceMenu.com is incredible. It's an amazing site. It's the first site that I've actually brought in someone else to help me build because there were a few things that were a little beyond my ability of being self-taught in hacking my way through this stuff. So it's pretty awesome. So for example you could go on over to PerformanceMenu.com and select Robb Wolf for author and view every single article that he's ever written for the Performance Menu right there conveniently.

Robb Wolf: Nice.

Greg Everett: So all kinds of fun stuff like that you can do. We have made that possible for you because we love you guys.

Robb Wolf: Cool. Cool.

Greg Everett: If you subscribe.

Robb Wolf: I like it.

Greg Everett: If you don't subscribe, we don't love you very much at all.

Robb Wolf: I like it. Yeah, we don't know you, you're dead to us if you don't subscribe so yeah.

Greg Everett: Not even dead to us, you were never even born.

Robb Wolf: There you go.

Greg Everett: How about that?

Robb Wolf: Just complete Nihilism. Nonexistence I like it. I like it.

Greg Everett: So who else?

Robb Wolf: Who else do we have?

Greg Everett: Front Desk.

Robb Wolf: FrontDeskHQ.com.

Greg Everett: I want to put a plug for Front Desk real quick.

Robb Wolf: Okay.

Greg Everett: Because we just converted over to Front Desk let's see two weeks ago or so and we love it. Everybody loves it. We're so happy that we did it.

Robb Wolf: So what do you feel like is good about it?

Greg Everett: Everything you need to – oh, here's the thing. Basically, we did no training on it with our employees. We kind of just got it ready to go and said hey we're switching over to Front Desk today. The amazing thing about that is that with a couple really minor exceptions or questions we had to answer, they were able to just figure out how to do everything on their own, which is --

Robb Wolf: Cool.

Greg Everett: --in complete contradiction to the system we replaced which you have to go to four-year university, do graduate work and then do some continuing education units just to figure out how to log in. So it's pretty awesome. It's very intuitive, it's very user friendly. It's awesome. We love it.

Robb Wolf: Cool. You know, I'll just throw out there just for a little bit a background on the Front Desk HQ like the folks that Nicki is working on with that. If you go to Front Desk HQ, click on the our team and check out the bios, the people working on this thing are former Expedia founder, Travelocity founders. It's a pretty deep bench of talent working on this thing. Then

what Nicki has been doing is really helping to streamline the user interface so that you don't just have programmers that are generating something that maybe pretty cool from like a database kind of standpoint but is really not very functional when you're trying to run your service based business. So it's kind of cool.

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You know, Nicki again she is so under-spoken in this stuff, I have to kind of pump her up sometimes because she is the one that created all the systems at NorCal. She created the On Ramp. She's helped thousands of gyms run much more effectively and so you know she's been working on the interface side with the programmers basically trying to make this thing as simple as it could be. It's kind of the difference between actually using like Apple products and I know there's going to be some Apple haters out there, that's fine, whatever, but the shit is easy to use fundamentally. You know, you pick it up. It's pretty intuitive. You can jump in and use it and so that's been the goal with the whole Front Desk HQ thing is just that they make this stuff simple, intuitive.

It's not going to be the solution for every single business under the sun but what we're finding is that if you have a service based business even with a fair number of employees like 30, 40 employees, it works very, very well for dealing with all the front end, all the backend stuff and all that. So definitely check it out. The real good about getting you hooked up on a trial account so you can sniff around, see how it works and very, very excited about that whole thing.

Then we have Well Food Company, WellFoodCo.com. We have some really nifty things coming out with Well Foods but again like if you want to move Jack Street and hang out with John Wellborn, we've got a grass-fed whey protein. We have gluten-free, grass-fed beef jerky.

Greg Everett:

Which is delicious.

Robb Wolf:

And a variety of other little snacks and it's quite yummy. I believe Amy didn't order on that and then appears to have eaten all of it rather quickly, I heard so that's cool. Can help you move up the weight class. And then finally the Bunny Ranch, BunnyRanch.com Dennis Hof's amazing contribution to humanity in blowing off some steam whether you're in the privacy of your own home or actually driving out to Carson City to blow that steam off. However, that plays out, that's what those folks do. So it's porn, it's hookers. If you check out the website, just keep that in mind. There you go. So those are our sponsors. Thank you to all of them. I'm still shocked that anybody sponsors anything on the podcast so thanks.

Greg Everett: I'm shocked that anyone listens.

Robb Wolf: I am still kind of shocked that anybody listens but we're grateful that you do. We try to make this thing fun and Squatchy, he always does a fantastic job but I think he switched things up on this podcast. We've got a little bit of a different flavor to things, which is nice even for Greg and I think because sometimes it gets a little repetitious. So it's nice to mix things up so.

Greg Everett: Yeah, indeed. Okay. Well let's get right off starting about beer, everyone's favorite.

Robb Wolf: Cool, beer.

Greg Everett: Let's see here. Anna says,
"Howdy you guys kick ass I'll leave it at that." No, Anna please continue.

Robb Wolf: Yeah, yeah.

Greg Everett: "My question is about Omission Beer. I know gluten-free beer is not the ideal beverage as far as low carb and grain free goes, but once in a while, a girl just needs a cold one after a big mountain bike ride. Nor Cal Margs don't always cut it. I've generally stuck to beers brewed with rice or sorghum but Omission Beer is the first gluten-free beer I've ever had that actually tastes like a real beer. Their IPA is the hoppy, bitter, liquid gold that I've been missing for the past 11 years of life without gluten. And the reason it's so damn good is because they brew it with barley and then somehow magically remove the gluten. Pretty sure they do it by filtering the brew through a unicorn horn.

Question: If there's no gluten left in the beer, do you see any reason drinking an Omission gluten-free beer brewed with barley would be any worse than drinking a gluten-free beer brewed with rice/sorghum (in spite of the fact that it's delicious which makes me want another)?

Bonus question: Aside from the carbs in gluten-free beer, are there any additional reasons to avoid it (i.e., lectins, nasties, etc.)?

Thanks a heap for taking the time to answer this as I'm sure you understand the extreme urgency and importance of this potentially life altering subject. Cheers!

Robb Wolf: Oh dude, when we're talking about beer, I completely understand the life and death nature of this topic so I'm right there with you. You know, so we just tracked down another beer, it's like Daura from Australia. The brand name I think is Australia, Daura is the specific brand. It's from Spain. It's a gluten-free beer. It was super tasty. I haven't tried this Omission Beer.

What the deal is for a lot of these beers, you can either have a beer that as it is brewed it's legitimately gluten-free, you know, like with the sorghum, rice combo. I've got to admit, you know, like some of the things like Red Bridge like they're not bad but they're not spectacular.

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Greg Everett: The trick is that you have to drink those first before you have any real beer. Like if you drink --

Robb Wolf: Yeah, exactly.

Greg Everett: --Red Bridge right after you have an Anchor Steam, it's going to taste like shit. You got to have a strategy about it.

Robb Wolf: Yeah. Yeah. So maybe a shot of tequila first to disappoint your taste buds and then just go in. But, you know, you've got the legitimately brewed gluten-free then you've got the other side of this thing where barley does contain gluten but then sometimes based on the processing method then you use some endo-peptidases to remove some of the gluten. Basically if you have a product that has I think fewer than like six parts per million or somewhere around there, a low concentration of gluten then the gluten-free authorities will say it's gluten free. Even though technically we're getting I guess into like homeopathic dilution type scenarios here where the gluten content is really, really, really low and the theory is that the content is so low that it's going to be insignificant as far as a health problem.

So I think with all of those sorts of things, you just have to get in and check it out. I'm a little bit nervous enough that even if it's claimed to be a gluten-free beer like this one, I would probably take a sip of it and kind of see how I do. But man, I react so negatively from gluten that I'm really nervous even if the thing claims to be gluten free like this. So I would just have to say you'd have to give that a shot.

I will say this that I do notice that whether it's a legit gluten-free beer or say like the St. Peter's, which those folks sponsored the Paleo Solution book release way back in the day. They're from the UK really actually a

very good gluten-free beer as well. They come in these green almost opaque bottles that look like absinthe or something so they're kind of kickass for that as well.

But I just don't feel as good relative to like drinking a Nor Cal Margarita. I don't know if that's lectins, I don't know if that's the carb content. I really doubt if it's the carb content. Like if I just have some clear booze and some lime juice and all that, I can have quite a few of those and the next day I feel a little bit rough but it's not that bad. If I had some beer, even gluten-free beer, I don't feel as well. So I think that that's all stuff to just kind of kick around and kind of use strategically.

We need to get Coach Rut on here and he needs to share his Kansas City margarita recipe, which was something approximating like about a half a beer, a little bit of lemonade, and then some tequila and some lime juice and those things were delicious. Yeah, it sounds wacky but it was really, really good. So we need to get Rut on here for a variety of reasons but one of them his cost of admission is going to be sharing the Kansas City margarita with folks, which includes a little bit of beer and lemonade and some lime juice and tequila of course.

But I guess those are my thoughts on all that is just you know, it still seems like people just don't feel quite as well doing gluten-free beers if they do clear booze but again like a really well made beer is amazing. Like there's not a lot of stuff that I miss in the whole, you know, not being able to eat gluten. Every once in a while I'm kind of like damn a piece of French bread with some butter and some garlic on it would taste pretty good but that's kind of a rare deal. Usually I'm driving by some sort of like VFW Hall and they're having like a spaghetti feed or something and I just smell that stuff. I'm like hmm, that smells kind of good.

Then a good beer, you know, definitely that's something that I kind of miss like before the gluten reactivity got really, really bad, I used to love beer and like the darker, thicker, gnarlier it was, the better. So like if you could stick a spoon in it and it stood up, I was happy so.

Greg Everett: Yes.

Robb Wolf: Hopefully that helps. I don't know that really answered any questions on that other than I think the self-experimentation is what you've got to do with that and then the whole risk-reward deal so.

Greg Everett: Indeed. All right. Let's see here. Mind-altering Paleo Options. Patrick says,

“Rob and Greg,

I figure the title is right up you’re alley with all the talk of blow and hookers that goes on.

I really enjoy my after-work drink but sadly it usually turns into the plural of drink anytime I imbibe. I don’t plan on quitting alcohol altogether because then nobody would hang out with me.” What are you in a frat?

Robb Wolf: That’s why I drink.

Greg Everett: “I would however like to find a good relaxing alternative to replace my after work drink. I thought of pipe smoking but that doesn’t seem like a habit to pick up when you’re cultivating health.” Yeah but it does seem pretty awesome. “Any recommendations on Paleo friendly options that don’t have negative effects from regular use. Herbal intoxicants, magic brews, or is the NorCal Margarita my only option? Thank you for all you do and keeping it light.”

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Robb Wolf: Man.

Greg Everett: I love the smell of pipe smoke.

Robb Wolf: Do you really?

Greg Everett: Yes. Someone around here was smoking a pipe the other day and I don’t know what it is but I like it a lot. It’s different than actually smoke --

Robb Wolf: Hmm, hmm

Greg Everett: --a little bit but.

Robb Wolf: Yeah.

Greg Everett: I always have some crazy tobacco for that stuff.

Robb Wolf: Man, I don’t know with this. I mean there’s like Kava. I actually got when I lived in Seattle and I worked for Whole Foods, we went to the herb farm wingding like Herbal Ed the dude that kind of runs herb farm puts on and they had some really good Vanuatu Kava and we were doing Kavakazis and I legitimately got bombed off that stuff. Like had to be carried out to the car kind of gig. Apparently the queen mother went to the Vanuatu

Islands and also similarly got absolutely hammered on Kava. There's just not a lot out there.

I mean and anytime you've got something that actually works, the silly old government goes and makes it illegal and so it's kind of a tough deal. You know, I feel like we're turning into this is possibly more appropriate for the Joe Rogan podcast than this one but I don't know. You know, there's not a lot of options out there that (1) either work or (2) are legal and don't carry some sort of gnarly down side to it.

Thinking, thinking, thinking. Yeah, there's just not a lot of options out there. You could buy a bunch of poppy seed muffins and eat like 50 of those and both have the carb explosion and the tiny little bit of opiate effect that you get or you could just start drinking cough syrup or something like that and really get drunk on that way until you destroy your liver so. I don't know. There's not a lot of options out there.

Greg Everett: Yeah. You're just going to have to start making -- I mean people like you for who you are.

Robb Wolf: Yeah.

Greg Everett: You could always just pretend to --

Robb Wolf: Or fake a back, yes fake a back injury and move to California and get like a medical marijuana script and do that. I don't know.

Greg Everett: There you go.

Robb Wolf: I don't know.

Greg Everett: Okay. Lipolysis for muscle hypertrophy? Thomas says,

"I was wondering this morning if lipolysis is ever used for muscle hypertrophy?

As I understand (in the context of food), to build muscle we need to consume more energy than we expend. But would/could the body utilize body fat for this purpose, or do you know if it simply down regulates muscle growth if energy is kept at maintenance levels despite available body-fat? Many thanks."

Robb Wolf: So, you know, shockingly we've talked about this concept previously on the podcast. I think the only thing we haven't talked about is the

integration of quantum mechanics and cosmology, which nobody really talks about that quite yet because we haven't figured it out. But that aside, you know, this thing is always a story about who we're talking about. You know, Lyle McDonald actually talks about the body recomposition story like can you take somebody who's overweight and put muscle mass on them? Sure depending on where they are in the whole muscle mass accretion kind of story.

Every once in a while, you get some sort of kind of a sensationalistic story where somebody is like I worked out two hours a month and I gained muscle mass. It's like great you were a skinny fucker to start off with so any amount of resistance training I would expect would give you some benefit. Similarly even if we had an individual that was let's say in a hypocaloric state but they carried some body fat but had generally never done any type of resistance training, if we started some resistance training and a hypocaloric environment, but some adequate protein, we would certainly see some lean body mass improvements. We see this anecdotally. There are some reasonably good studies showing this stuff but can you take like Lee Haney or someone like John Wellborn that already carries a bunch of muscle and starve them down and add a bunch of muscle mass to them? No, probably not even with like 5 grams of testosterone a day. You know, what I mean?

There is some point where the feedback mechanisms just start inhibiting what the heck is going on and so I would say that this would be possible clearly it's possible. We have literature that indicates this is possible but it's in untrained individuals and it's a very, very short run. Then from there if we're going to continue gaining muscle mass, then we need to do some sort of like a zigzag diet where we titrate calories up and keep increasing volume and intensity of our training. And, you know, have days where we dial the calories down so that we don't get the body, the set point where it just expects tons of calories and it starts becoming super inefficient with the calories and we need to kind of zigzag these things back and forth and do it all within a good hormonal environment that's amenable to muscle mass gain. You hope that your genetics are good for those types of things and etc., etc., etc.

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So yeah, the stuff is totally doable, totally possible but this is the novice effect at best and then once we get beyond that, that story is not going to work.

Greg Everett:

To be novice again.

Robb Wolf: All you need to do is just start blogging and writing books and then you don't really work out anymore and then you're a lifelong novice after that.

Greg Everett: That is remarkably accurate actually. We talked about that a little bit before the podcast.

Robb Wolf: Yup, yup.

Greg Everett: It's really sad. It's a sad state of affairs here at Catalyst Athletics, Robb.

Robb Wolf: You just need to be less ambitious and just spend all of your time in the gym. 90% of your time in the gym and 10% hanging out with Vinnie from Planet Muscle, you're good to go.

Greg Everett: Say any less ambition on my end and I wouldn't have a gym to train in. So I don't know if that's a good plan.

Robb Wolf: Survival, come on man.

Greg Everett: Okay. Let's talk about facts post workout. Erik says,

"Hey Rob, loved listening to you on Joe Rogan's Podcast, so I decided to give your podcasts a shot. So far I love them and my clients thank you. I'm a personal trainer and am curious about the consumption of healthy fats post workout after crossfit and after a 5 by 5 workout (bench, rows, squats, deadlifts) Thanks for everything you guys do.

PS: You and Greg need to get back with Joe Rogan. I was never on Joe Rogan but I did --

Robb Wolf: I talked about you a lot.

Greg Everett: I did listen.

Robb Wolf: You were like you were there in spirit so.

Greg Everett: I was here at my own desk drinking 16 ounces of vodka.

Robb Wolf: You know, now that Parsley is out of the military, we can mention. Like before Joe got the whole thing going, you know, he's like so do you guys want to smoke out and Parsley's like I'm in the military, I can't be hotboxed and so like there was this whole kind of I wouldn't say awkward but kind of a funny backstory with that whole thing where we had to like

hide Parsley so that he didn't exit the military in a very inauspicious manner. So that was kind of funny.

But I personally so would you do... The question is a little skinny. So like are we talking about are you only eating fat post workout and would I only eat fat--

Greg Everett: I'm kind of assuming he's meaning including fats in a post-workout meal.

Robb Wolf: Well I don't know that it would be a big deal.

Greg Everett: My guess is that he's concerned. I mean the typical post workout meal is carbs and protein right and so the idea is --

Robb Wolf: Right, right.

Greg Everett: -- a super quick absorbing thing to kind of get in that window of noninsulin mediated glucose transport blah, blah, blah. So adding fats is going to slow that down and maybe you don't get to that benefit so that I'm assuming that's what he's asking. I could be wrong.

Robb Wolf: You know, there had been some -- god I forget the website. It was actually a good review on this stuff and it was talking about does additional insulin spiking post workout improve recovery and the short answer was no. You know, we've got maybe two acute elements of recovery, let's just say from like crossfit type training or heavy weightlifting type training with a lot of muscle damage and some glycogen depletion. We need to start reversing the catabolic cascade, get some glycogen repletion, start blunting cortisol and try to start shifting things more towards an anabolic state.

God there's been research on this side of things for a long time, which is just the anabolic signaling from just taking branched-chain amino acids is enough to blunt cortisol to start reversing catabolism and start getting you going in a good direction. That would be more from just like a purely weightlifting, weight training kind of standpoint. From a crossfit standpoint, there's just so much work being done that I think you have to put a huge premium on glycogen repletion. Like glycogen repletion right fucking now. Like no joke, no farting around, no playing around and again we're assuming the person who sleeps well has good insulin signaling, doesn't need the lean out etc., etc., etc.

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So you know it again is adding healthy fats like would throwing some fish oil post-workout be a terrible thing. I don't think it's a terrible thing.

There are studies that seem to indicate that too much anti-inflammatory signaling and that circa workout period may actually blunt some of the hormetic stress and the adaptive response to the workout. So maybe we don't want to do the fish oil right at that point because of those reasons. You know, people ask me wacky things like I want to throw an avocado in my whey protein shake and I'm like okay it's going to look like Incredible Hulk sputum or something so go for it. That's fantastic.

Like I think a lot of the whole like quick gastric emptying, insulin signaling stuff unless I get you're kind of giving this thing a shot like the carb backloading like what Kieffer talks about which is a really interesting concept. Which is basically trying to get quick releasing carbs so that you've shuttled them into the muscles and then we're able to get blood glucose back down to normal and start burning fat again and stuff like that. But then there's back and forth on that as to whether or not if that really is all that big of a deal relative to just the total calorie balance but then will have the caveat with that calorie balance overlaid within the context of what your hormonal state. So are you insulin sensitive, does your thyroid work well, is your cortisol signaling okay, etc. etc., etc.

So people just love to get all spun out about is it just calories, is it just hormones. Clearly, they interplay on each other and both are important factors. I don't know I feel like I'm just kind of waffling here but I don't see an argument to just 100% omit post workout fats but I don't see a huge argument with the need to fat load per se either. So I guess I would steer more towards the kind of classic body builder type gig of moderate protein, higher carbs, the carbs predicated on the volume and intensity of the workout. Greg, any other thoughts on that?

Greg Everett: Yeah. I would tend to lean more towards that. I guess the bottom line is I don't see there being a need for fat post workout. So I don't see a need to worry about it what effect it's going to have if you don't need to put it in there. Like you can eat that stuff the whole rest of the day. There's just one time where you don't really need to it so why eat it then.

Robb Wolf: Right. You know, like I'm a big fan of cyclical carb just because it's easy to do. I feel like it's pretty easy to maintain good body composition on it. But you know, I always had a hope that there was going to be some sort of magic performance boost based off of higher fat diet and maybe not as much from power athletes, although I would make the argument that maybe it's a little easier to maintain better body composition with those folks. But there's back and forth on that stuff too both in the research and anecdotal stuff. I think it ends up being reasonably individual.

Gosh, you know, they've tried fat loading. Like Anthony Colpo actually had a really good article talking about this stuff and I literally needed to, you know, I think like six lines of cocaine and three pots of coffee would have made the thing slightly easier to get through. It was just huge. Like it was just a massive data dump and he just made a really interesting point, which was that people have tried and tried and tried to do things like fat loading to improve specifically endurance performance. We just don't see it happen. I wish, wish, wish that there was something more magical there but we don't see it.

One of the interesting kind of maybe backstories with that when people are talking about maybe ketogenic type athletes or more fat adapted athletes the argument is that well you know, we only store a couple of hours of glycogen if you're well trained, but we store 16 marathons' worth of body fat even for somebody who's like 5% body fat. So I think that that then leads into an argument and I had certainly made this argument that that makes an argument for consuming more fat and trying to be more fat fueled and everything.

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But from an athletic performance standpoint, we just really haven't seen that play out spectacularly well and I think part of that is just the fact that we do carry that body fat. Like subcutaneous body fat, intramuscular, triglycerides that are stored and accessible for energy. The big story within all that and I ended up –you know, Mark Dwight is very, very knowledgeable on this stuff is you just need to train based on the needs of your activity, which sounds borderline ridiculous to say it should be so obvious. But you know there's no real shortcuts with this stuff.

So if you have a very, very long event, a lot of what you are training is not even fuel substrates in the muscles. It's actually the brain. It's the central governor in the brain that needs to be coaxed and cajoled and kind of convinced that it's okay to run, bike, swim for an iron man triathlon or for like a hundred mile foot race or something like that. The way that you do that is lots and lots and lots of volume ultimately and that's the way that people are successful with this stuff.

It's not to say that intervals aren't helpful. It's not to say that some brief microcycle of a circuit training is going to be unbeneficial or won't help maintain a base level of activity while you're doing some off season stuff. But at the end of the day, the specificity of training really starts winning out and I think that that's where time and again we see people tend to eat a little higher carb, moderate, you know, protein will kind of vary, fat level will vary and that's where people will find their sweet spot with their performance.

But we're just not seeing massive benefit from like a very kind of fat loaded athlete and this is one of the problems that I had with the zone diet particularly within the crossfit context because as prescribed, it's about a 60% fat diet out of –you know, maybe even a little bit more. I kind of forget. I wrote an article I think it was 42 ways to skin the zone, which it's still hilarious. I think when that article first came up, somebody jumped on there in the comments and they're like there in fact not 42 ways described here and the whole thing was actually a joke. It's the whole Douglas Adams's Hitchhiker's Guide to the Galaxy and like the answer to the existence of life or the answer to the universe is for 42 but then what's the question. So that's what that whole thing was and it just reminds you of persnickety fuckers that like to comment on the internet.

But anyway all that stuff aside, what I found with the crossfit scene is that we have a very glycogen demanding sport and trying to dial people in on a 60% fat diet just really wasn't working all that well. So we had to start dialing the fat down and the carbs up and try to work within the inflammatory responses of all that sort of stuff. So I know I completely have gone far afield on this, but it's finally I'm done, I'm done. Greg, anything else?

Greg Everett: No. I think you covered it.

Robb Wolf: Okay.

Greg Everett: I think we're good.

Robb Wolf: Okay, I got us covered on that one. Okay cool.

Greg Everett: Okay. Let's see. Playing catch up. Rob says:

"Hey guys,

I want to start off by saying thank you guys for all the work you do. You really change lives; you've saved my parents from a lot of needless suffering and I couldn't thank you enough.

So my question starts about 3 years ago, when I first started working out. I was 21 at the time and doing some routines I found on the internet. After six months, I noticed my chest really wasn't seeing much progress relative to everything else. I had really only done football beforehand and maybe did a whole whopping 100 pushups before I started working out.

So I thought it's just undeveloped and things will just get better if I tough it out.

After about a year, I started working out with a buddy and he noticed I'm lifting my left shoulder during any kind of press, regardless of the type of grip I'm using. He says I should try to stop that, but doing so meant dropping the weight and the hell if I'm going to take a step backwards. The idiot I was...

A few months after that, I started seeing a trainer who also said I should keep my shoulders stable and on the bench but at this point the damage has been done. I started a new program a few months later and the 1st day of the 2nd week I do chest again and say 'This strain on my should is just way too much, there's got to be something wrong'.

So I go to a physiotherapist, I explain the problem. He takes one look at me and knows immediately what the problem is. My lower traps are essentially Steve Rogers before he was Captain America. My shoulder blades stick out like crazy as a result and I'm told to hold off on any kind of chest exercise: press/fly/dip or shoulder press till I get this worked out with Physio, about 3-4 months.

I was told I can go to town on legs and back; but my chest was lagging to begin with. So how the hell am I going to get things even now? Other than the physio I'm doing, what kind of exercises/routines should I be doing and what kind should I be doing after recovery to help my chest catch up?

Side note: The fact that this went on for so long and even a trainer didn't really advise looking into it too much has made me super skeptical about health advice I receive, even if I'm paying for it. Although, I always feel I'm in good hands when listening to you guys."

[0:35:07]

All right. Well let's see if we don't fumble this one.

Robb Wolf:

Little that you know. You know, I think that this is one of those classic in what you can see in the mirror kind of stories. Like you see a lot of people with pressing issues and the pressing issues are actually a consequence of really underdeveloped pulling, underdeveloped rhomboids, all the teres minor, the lower part of the trap, everything that's involved in scapular retraction, depression, helping to offset some of the scapular rotation that occurs when we're pressing overhead. We maybe have some serratus anterior misfiring that's occurring within all that stuff, which is still more of a presser but is the balance is really the story there.

It's maybe not 100% accurate analogy but the foundation of pressing is actually all the back musculature. If the back musculature is stabilizing the shoulder then we're in a little bit happier of a position to make pressing effective and to get chest development and all that sort of stuff. So when you first started talking about this, like immediately I was like okay this kid hasn't been doing any type of horizontal rowing. He hasn't been doing anything like face pulls or the Cubans, which I think we talked about that previously. Greg, I think you did a video on that. Did you do a video on the --

Greg Everett: On Cuban press?

Robb Wolf: The Cubans, not just the Cuban press but just basically elbows high and outside scarecrow position. You have the bar basically on the sternum and then you just rotate up working those external rotators of the shoulder. Did you do that one?

Greg Everett: I don't know. I don't know.

Robb Wolf: I do was a huge fan of that and he actually thinks that you're a complete inadequate broken athlete unless you can do like 50% of body weight for like five reps and like 8-second eccentric and all that stuff, which is clearly pretty high standards but that's what he's gunning for. But people don't do nearly enough pressing.

When Wellborn was on the podcast maybe two times back if folks remember, he mentioned that he always did two to three times more total breadths, more volume in his pulling than in his pressing. . That was basically for shoulder health and shoulder stability. Everybody usually associates American football with a big bench and really powerful triceps and all that sort of stuff, which I think that that's all totally true but again it's built off of a big beefy solid healthy back and scapular retractors, external rotators of the shoulders.

So I think if you really want to get geeked about your chest development, you need to get first really fired up about your back development and always kind of emphasize that first or at least for a long time. You know, if you are orthopedically not in the groove then you're never really going to get the chest development that you want. Not that I'm like a body builder or have massive experience with that stuff but when I was power lifting the guys that I trained with were world champions and we did way more back work than pressing and I was like dude I just want like big pecs

and giant bis and tris and like yeah, that's great. and then you're going to be injured in like six months and you'll suck.

So these guys made me do things right and even to this day like I don't look particularly big from most angles except when people see my back and it's kind of interesting. Like I'm 5'9", 175 pounds-ish and I wear a large shirt. The only reason why it's large like it's a little bit snug in my arms just a bit, maybe a little snug in my shoulders but it is typically stretched to the gills going across my lats and traps and all that stuff. So even when I'm rolling doing jujitsu if I pull my gi off and people see my back, they're like holy shit. Again not that I'm like a really big dude but the bulk of my muscular development is in like spinal erectors, lats, rhomboids, traps. That isn't immediately apparent when you're just looking in the mirror all the time.

But if you want to get more chest development right now, you could probably safely orthopedically do like some dumbbell flies and stuff like that and then maybe some floor press would be safe with the winging of the scapula but you would need somebody to really watch you and coach you on that stuff. Again, you need to make sure to keep the volume very back centric so that you fix that orthopedic issue and that neuromuscular issue so that then you can circle back around and start pushing some heavy weight.

[0:40:22]

Greg Everett:

Yeah.

Robb Wolf:

Any other thoughts, feelings, suggestions?

Greg Everett:

Let's see, I have a couple of minor ones to add because I mean I obviously agree with all that because it was just fucking genius.

Robb Wolf:

Well thank you.

Greg Everett:

But yeah, I think that's something that I definitely try to focus on too is that having that balance, which is really not a balance mathematically. It's a larger volume of pulling exercises than pressing exercises. But balance as in function and health. I think that a lot of people even when they are doing say horizontal rowing type exercises or even pull-ups vertical stuff, they really don't focus on, they don't emphasize that scapular retraction and depression. I think that's missing.

So people can kind of go through the motions of doing rows but if you have someone who's kind of like upper trap dominant, that row is going

to end up looking almost like a horizontal shrug. That shoulder kind of rotates and drops down rather than the shoulder blades coming in and retracting and depressing as they should. So I would say with the rowing work that you're doing, make that a focus especially when you've been told specifically your lower traps are weak and underdeveloped.

Doing the kind of prehab, rehab sort of stuff like scap pull-ups if the serratus are definitely underdeveloped like Robb suggested they maybe the scap pushup type stuff and take your time. I mean taking three to four months to work with the physio to get balanced, to get back into a position where you can start training your chest better to get that balance is a small price to pay. I mean three to four months is really not a big deal when I think Robb kind of alluded to it if not said it directly. I don't know I kind of was spacing out.

Robb Wolf: Shocking.

Greg Everett: Is that you pause for three to four months that's a hell of a lot better than having the next three to four years being stuck in this constant cycle of trying to push the chest getting hurt, having to back off again, that's just dumb. So you got to have a little more of a long term viewpoint on this rather than saying I want giant chesticles right now. I think that was about all I had on that to add.

Robb Wolf: Yeah and I mean get jazzed about getting a big beefy well developed back. Like that looks good and it's aesthetically pleasing. You know, one of the most painful things to see are these dudes that are super internally rotated. They've maybe got kind of big chest, maybe a little bit of big anterior delt and then it literally looks like there's just a dinner plate in the back of their t-shirt. Because their arms are all pulled forward and you can see their spine poking through their t-shirt. There's no spinal erectors, there's no traps, there's no rhomboids, there's no lats or maybe there's a little bit of lats because they do some lat pull downs occasionally so there's like a little strip of like ribbon that you can kind of see from the front, which again everybody is just like fucking like anteriorly focused. I'm all about like going for an aesthetic physique, that's fine. Like doing some body building is just fine but you've got take a little bit more of a holistic picture of this stuff.

You look at some of the old like Franco Columbo back pictures and everything like that guy look like a myostatin knockout bull. You know, as impressive as his pressing was and his delts and everything, it was always his back that was like holy shit, you know. You've got the show muscles and you've got the go muscles and the go muscles are primarily in the

back. You know, hamstrings, gluts, spinal erectors, traps, those are the things that win gladiatorial battles not being able to pinch a penny between your pecs during a pose down or something. Again not to say that you shouldn't pursue that but just get jazzed, get fired up about developing that interior, the posterior chain and all the pulling musculature, all the support musculature.

Greg Everett: Yeah. The nice side benefit to all that pulling work is that you end up getting really strong hands and wrists and forearms too. I can't think of anything more manly than like big fucking meaty hands and forearms and being able to actually get lids off of jars and shit for your wife instead of being some diaper baby who's like well I can't get this lid off but I can definitely pose out my pecs for you.

[0:45:06]

Robb Wolf: [Laughs]

Greg Everett: Like as you grow up you have to become useful in life not just good looking.

Robb Wolf: Crazy talk.

Greg Everett: Yes.

Robb Wolf: Unless you're the Kardashians or something like that so.

Greg Everett: Oh my god, just don't even get me fucking started on that shit.

Robb Wolf: [Laughs] Okay.

Greg Everett: I can't take it man.

Robb Wolf: How about cheat days for getting ripped?

Gregg Everett: Okay. Sam says,

"Hey guys,

So I've been doing a lot of reading into how to make my body not only a deadly weapon in terms of athletic movements, but also a deadly weapon in terms of looking like a badass. I recently joined a CrossFit gym (sorry)" – that's not me saying sorry by the way. That's in the text. Don't get mad at me. "To enter into a community where there will be people to push me physically past what I was doing on my own. Worry not, the

programming there tends to be 40 minutes of mobility and strength with maybe ten to fifteen minutes of sweating.” Excellent.

“Anyways, I’ve previously lost a lot of weight following Tim Ferriss’s diet from 4-Hour Body and got ahold of Engineering the Alpha too. In both books, and in many protocols like the attached GQ article about Chris Evans, the diet guy recommends taking a day per week to go totally apeshit on eating junk food.

What’s your take on this? I know Mat LaLonde wasn’t huge on Tim’s protocol, but it seems like these protocols are similar, get results, and will help me become a monstrous athlete with the sort of abs ladies fight to eat sushi off of.

Cheers to you both, kind sirs.

Robb Wolf:

Nice. You know I think that these – so just a couple of questions back, I was talking about like a zigzag type of approach to diet which that terminology was actually Dr. Fred Hatfield. He was approaching that whole thing from a very empirical observational standpoint about cycling calories up and then cycling calories down and he really didn’t get into the endocrinology or anything like that but he found that it worked really well. So I think that there are great arguments for phase shift diets that either you’re just cycling calories or you could cycle calories and carbs and by implicitly –you know, if you’re cycling carbs then you’re cycling other macaroos with that.

The only problem that I see with this stuff of the go completely apeshit one day a week is that there are some people that, I don’t what to say this. So a guy getting ready for a movie for example, they typically have a well versed trainer that is getting them moving through the process. They’re getting paid very, very well to be in very good shape and if they don’t show up and shape, I think that’s kind of like making the contract null and void and maybe even the producers can sue the actor or something. So the people are highly motivated. They’re typically working out multiple hours per day doing all kinds of stuff, doing stuff on the set and everything.

Whereas when the average desk jockey schlep looks at this then they maybe lift some weights a couple of days a week and then they’re like well dude this worked for this movie star so I’m going to go do my complete hog fest once a week. But the thing is that they don’t have that much of a caloric deficit or just energy output they’re doing. So that one day of a hog fest in a hard training athlete would be potentially beneficial

because we're resetting glycogen stores. We're telling the thyroid and we're telling the hypothalamus hey everything is cool, we're not in a starvation kind of scenario. We're living in abundance. You can shed body fat. We can kick anabolic hormones high. That's not really the same picture. We're talking about somebody who is barely exercising at all.

So maybe the one cheat day is a cheat meal per week versus a cheat day based on activity level and hormonal status and all that sort of stuff. So I think that the theory is sound. You know, we have some days of lower calorie intake and then we have a day or a meal of much higher calorie intake and so we're able to kind of stair step down the body fat. Just as the body starts getting a little bit weirded out and maybe we start down regulating lectin production and start having some problems with energy, balance and maybe down regulating metabolic activity. We do a big meal or a big feeding day and that pushes things back up. That totally makes sense but again it's all the context, who are you, what are you doing, how is your sleep, what type of hormonal status are you in?

So this is where these things –you know, just having a little bit more of a caveat or I guess a caveat is fine. You know, it's like this thing is appropriate unless it's not and what I find is that very, very few people are actually training at a level where just like the complete like get yourself kicked out of a buffet line kind of gig just aren't that many people who are training at a level that warrants that. So I guess that's my only caveat with that and then also clearly like gluten exposure and all that sort of jive, which we've talked about that ad nauseam. But I just don't see people most people training hard enough to do that.

[0:50:26]

Now the fact that you're going to a crossfit gym. You know, it sounds like they're doing a really solid programming, which is fantastic, and you're probably going to –you know, you might benefit from this type of approach. But I would keep gluten free and then also just keep in mind again this thing works except for the people that it doesn't work for.

Greg Everett:

Yeah. I mean the one thing I would add not to be a total buzz kill but people get worked up about the whole junk food thing. Like, oh yeah, so I'm going to eat junk food and get super jacked. Like to me a lot of times it's just a fucking excuse to be lazy about that stuff because you can get a lot of the same effects eating food that's a hell of a lot better for you. I mean you need a big super dense, starchy, high glycemic index carb source and shit like that. Like okay just eat a giant bucket of white rice. You know, like there's a lot of options that don't involve eating home run pies and Krispy Kreme. I mean maybe that's just me being a dick about it

but not to say you can never eat that stuff and there aren't reasons to possibly do it.

But like Robb said, I know a lot of times people fool themselves about how hard and how much they're actually working but then also they fool themselves about what they need nutritionally and kind of what their reasons are for that stuff so.

Robb Wolf: Yeah.

Greg Everett: Just keep that in mind.

Robb Wolf: Yeah. I guess just to beat this dead horse. Beat it, you know, turn the dead horse into hamburgers. You know, a lot of times people don't come back from the binge.

Greg Everett: Yeah.

Robb Wolf: They do the binge, they never really come back and then for myself also I think the psychology, promulgating the psychology about cheat days just chaps my ass in a way because you don't cheat on food. You cheat on spouses. You know, I mean cheating is when you have rules and parameters and you make a deal and all that stuff and that's not eating. This is why I just get legitimately fucking annoyed when people are like well what about a cheat meal. It's like if you want a meal, you know, we travel a lot if we get to Hawaii, which doesn't happen a lot but when we do, there's a couple of places that do like a Kalua pork nachos.

Greg Everett: Nice.

Robb Wolf: I eat some Kalua pork nachos by god you know, and the cool thing is that they throw nachos there and they're gluten free because oftentimes fried food is gluten contaminated but there's a couple of places the stuff is gluten free. I have some Kalua pork nachos and I have some cheese on it and I get some acne from it a couple of days later but I'm like damn that was good and then I'm over it, you know. Because I don't eat for emotional reasons. I mean I like eating and we ate dinner with Nicki's dad last night and they made some chicken thighs that had been marinated for two days and like a white wine marinated with salt and garlic and all those stuff and dude they were amazing and it was just chicken thighs. Like it was nothing fancy but they were totally amazing and I was jazzed about it both because the meal was delicious and because I didn't have to cook it for one and I didn't have to clean up so that was great.

But I personally don't have emotional connections with food other than I like eating but it's not a reward. It's not something that, you know, well I worked really hard so I get this treat or whatever. I know that that's the story for a lot of people and I'm not talking down to people that are in that situation. But if you are in that situation then you probably experience the fact that eating like maintaining good body composition is hard because you have an emotional connection to the food. I'm not a therapist and I'm not a hand holder so I'm not good at navigating people through that other than just telling them to cut that shit out and don't do it.

But the cheat meal for me for a lot of people what I've seen is that it just creates all kinds of weird psychology, not particularly good behavior. There's a misrepresentation about how much you're actually working out to be able to warrant the types of food you're eating. Like Greg said, if you are kind of caloric restricted for a couple of days trying to lean out. you want to kick your heels up. Then it seems like going to sushi and bringing your gluten-free tamari sauce and eating a whole bunch of white rice and sushi or something like that or like going to Vietnamese food and having a giant eight troughs of pho or something is a way better option versus almost all the other options out there that people use so.

[0:55:11]

Greg Everett:

Yeah.

Robb Wolf:

And you'll get better results at the end of the day.

Greg Everett:

Well yeah.

Robb Wolf:

You know?

Greg Everett:

To continue on the thread of kind of the psychology of cheat meals and all that, it really sets you up to have a mindset that the way that you're eating throughout the week or the majority of the time is like some kind of torturous punishment.

Robb Wolf:

Right, right.

Greg Everett:

And then you finally get this day where you can actually enjoy yourself. You know, if that's the way you view, that's your perspective on your day to day nutrition, you're never going to be able to maintain that. You can't do it. Like you just won't. So the only way around that is to learn how to accept that way of eating as being the norm rather than being this weird thing that you have to like torture yourself with just so you can earn that

one day of donuts. You know, like any other way I think is you're just fucking yourself over.

Robb Wolf: But what do we know?

Greg Everett: Not much. We've admitted plenty of times before.

Robb Wolf: You know, and it's funny, Greg and I have talked about this stuff too. It's like clearly we're both in business to do stuff. Like we make our living from the health and fitness scene and all that. But there are some of these, god they're almost like unassailable truths that seem to work really well in selling a lot of shit and like the cheat day, the cheat meal kind of idea seems to sell a lot of stuff and it works occasionally.

But in my own clinical practice like actually getting in and coaching people day in and day out for years, I just haven't seen it work all that well. I've seen it create neurosis and problems but it's not fucking sexy. It's not cool. I can't wrap them you know, like what we're talking about is like logic and knowledgeable approach to life versus some sort of flash in the pan like hey you know, the next celebrity diet and people get all jazzed about that and they continue to fail in what they're doing and get angry and remain chubby. The shit that really works is just way less sexy and not all that pizazz containing and just kind of where it is.

Greg Everett: Yeah. I think that the moment that you plan a cheat meal, you're in trouble. If you can have the attitude where you truly believe in how you're eating and you know that it's helping you, you know it's keeping you healthy, you know it's helping your performance, your body composition all that stuff. You know it's something you can live with long term then when you come across an opportunity for example you come across the nachos in Hawaii for example, you can go ahead and kick your heels up and eat it and not go home and feel like you have to kill yourself or starve yourself for the next three days as some kind of penance for your digression or your transgression excuse me.

So I think that if you can again make that way of eating the norm, you make that the lifestyle then it's much easier psychologically to accept the occasional cheat meal if you want to call it that. Rather than planning okay every Sunday night I'm just going to pound three pizzas and a bucket of ice cream and that just turns into this really weird kind of sad sort of situation. Like Robb said, I don't know that people really recover from that entirely.

Robb Wolf: Can we just even beat this horse even more?

Greg Everett: We could but maybe--

Robb Wolf: I just --

Greg Everett: Maybe you shouldn't.

Robb Wolf: Maybe we shouldn't.

Greg Everett: No if you have more --

Robb Wolf: I just uh..

Greg Everett: -- if you have another club go for it.

Robb Wolf: I got another club. I have a fresh horse and a new club. You know, I've been thinking about this stuff like this is going to be completely far afield so probably everybody should just turn off the podcast and I'm just going to keep yapping anyway, but here goes. Nicki and I were talking about this so we'll get cable TV and we'll have it for a while and we're like this shit sucks. Like there's nothing on. All we end up doing is like buying stuff off of Amazon prime or Hulu or Netflix anyway. It's rare that we watch anything on TV. The main reason why I have cable is so that when my brother-in-law Sean comes to visit with his family, we can watch the UFC. But if I'm home alone, I don't even watch UFC myself. I'm like I don't care, I'd rather like read a book or drink a Nor Cal Margarita on my back porch and watch the sunset kind of gig.

[1:00:06]

Greg Everett: How are you supposed to keep up with the Kardashians?

Robb Wolf: Exactly. You know, and this is some of --and it's hard to put my finger on it. Maybe people do blog post it at some point but people are part of what the cheat meal is is this buildup anticipatory thing and I get it from the whole like dopamine addiction, excitement, pizzazz, flash, drama. Like it kind of fits into all of that stuff. There's this hope of somehow short cutting or hacking as we -- I took a giant piss on the whole hack concept a podcast or two back.

It's just all fucking fake. There's nothing real to it. You know, it's the same deal that drives people to purchase a car that they can't afford and they're leveraged to the gills to pay for a car so that they got some sort of like status or flash or pizzazz. This may sound totally insane but I see these things travel in unison. So the same thing that gets people fired up about

this idea that they are going to be able to cheat meal their way to a skinny sexy body is the same shit that's like hey baby, you work hard so you deserve a maxed out credit card and all the car that you can buy and six times more house than what you can afford even though it's at the top of the market and you're going to be fucked.

You know, it's like this whole thing and people open their mouths disengage their gag reflex and like take it balls up into their face and they're just like, oh god, I'm gagging. It's like yeah, you're gagging because you're gagging on a bunch of bullshit and the media cock that you decided seem like a good idea and it's not. It's just all the same shit and I guess that's why I get so spun up like it's kind of a chop wood, carry water and like you find your pizazz from something besides food and purchasing cars. Like if you work really hard and you just love cars cool, god love you that's great. But live within your means.

Like the stuff I'm talking about is this consistent behavior where people get themselves in trouble by not understanding their own physiology and our own makeup as human beings. It's like hookers and cocaine are exciting, oh wow, gee whiz and it will also potentially undermine your life if you're not smart about how you tackle shit like that.

So I see a lot of this stuff is like a bigger systemic problem where people just spend no time just alone in their own head thinking for a moment about like how am I living my life, what type of human being am I, what type of relationships do I have in my world. You know, like Crossfit HQ recently just had a picture up on one of its videos that they had. Up on the wall of shame, there was a picture of Osama Bin Laden, Saddam Hussein and me. I was just checking this thing out and I'm just like what's the internal dialogue with those people? What's going on inside the heads of those people and what's the imagery that you're trying to portray with this?

It's interesting there's so many good things to that scene and good things to society at large and media at large and all the rest of that stuff. But when start doing really pathogenic shit like that, what's the internal dialogue and what's the shortcut that people are trying to find instead of just like having some peace within their own skin between their own ears and living a good life. But I got to tell you that life isn't the flash, the excitement, the shortcuts. You know, it's work and you have to find some sort of joy in the day to day existence and work. You know, the relationships you cultivate and the people you love and the relationship that you have between your own ears so. Okay that was completely far afield but --

Greg Everett: That was the best question ever.

Robb Wolf: There you go.

Greg Everett: Yeah.

Robb Wolf: You know, our listener, we may end up wrapping up the podcast anyway because people like yeah, I'm done, those guys are completely – they didn't just jump the shark but they jumped in the tank with the shark so. There you go.

Greg Everett: All right. Well let's finish up with this quick detoxification one.

Robb Wolf: Okay. Okay.

Greg Everett: And then we give everybody a break.

Robb Wolf: Sweet.

Greg Everett: Until next week.

Robb Wolf: Yeah.

Greg Everett: Okay. Grant says,

“Straight up. I think it's bullshit.” That's a great way to start this question here. “However, I have been known to be wrong before.

No one has ever shown me anything that could be considered proof and I really don't like the ignorant hippies at the health food store and subsequently don't waste my money on such things.

But...you have shown to be rational and have some cred. So how about it?” How about it Robb, how about detoxification?

[1:05:09]

Robb Wolf: We have Grant snowed, so clearly. You know, so our body has detoxification pathways. The liver has a multitude of detox pathways, the cytochrome p450 and all these amino acid derivative detox pathways. When you learn pharmacology, one of the key features that you learn about pharmacology is which pathways these different pharmacological agents are removed out of the body. We have some capacity for removing heavy metals. Some lipid associating chemicals can

bioaccumulate in the fat in our body and this is some of the argument for going into maybe ketosis occasionally so that we kind of turn over that fat mass a little more rapidly and staline so that we bioaccumulate less of these lipid soluble toxicants.

But a lot of the things that pass for detox you know, like coffee enemas and stuff like that like they're kind of wacky. Still going back 2001 protein power life plan Mike Yates' book I think had one of the just great insights into this, which the detox pathways really benefit from eating some fruits and vegetables and fiber, from eating some protein, having the substrates that produce things like glutathione and that involved like selenium and alpha-lipoic acid. You know, generally trying to not live in a super toxic environment. You know, when you buy some new carpet, having the low volatile organic compounds type of variety and not sniffing paint thinner and stuff like that. It's probably good.

But a lot of what passes for detoxification or the person is sick because they're toxic or whatever is in my opinion pretty much bunk. You know, people end up inflamed. People end up metabolically broken and you can then end up with some impaired detox pathways in the liver and that's due in large part because the person is both inflamed and they're nutrient deficient. So we see some legitimate problems from a nutrient deficiency standpoint if you don't have adequate selenium, if you don't have adequate B vitamins, particularly methylated B vitamins if you come from that whole methyl-tetrahydrofolate reductase enzyme deficiency, which is endemic in northern Europeans. These folks don't convert folic acid into the methylated form of folate and therefore they can have some B vitamin issues and some other methylated B vitamin issues. Those are all legit concerns but that's not necessarily specific detox. It's like inflammation, gut damage, and all of that then leading into a depletion of important nutrients that are important in the detoxification pathways. That's where like a good functional medicine doc, a lot of what Chris Kresser practices. That's the way that this stuff is tackled.

There was a great paper that was looking at autism like symptoms in kids with Celiac disease. So they put the kids on a gluten-free diet, they had a little bit of improvement in the kids but it wasn't until they started supplementing them with a variety of methylated B vitamins and some other substances that these kids were deficient that they really saw significant improvements in the autism type presentation. Which we need to get Mat LaLonde back on the show at some point but he's made a really interesting point which is a lot of the problems that we see whether it's metabolic derangement or systemic inflammation, gut permeability, a lot of this stuff may have much, much more to do with

deficiencies in different trace minerals and vitamins and whatnot from poor diet that then allows other bigger problems to occur.

So I think that the way that the detox thing is typically couched by the kind of hippie crowd is inaccurate but there's truth to the basic concept. I think that the way that people tackle it though is not all that helpful.

Greg Everett:

All right.

Robb Wolf:

Man, that was a lot.

Greg Everett:

That was a lot indeed.

Robb Wolf:

It might have been the last one we'll see. [Laughs] So dude, anything that we should tell folks before we wrap up or are we good to go?

Greg Everett:

I feel pretty good.

Robb Wolf:

Okay, cool. Well I know Greg's got some projects brewing that he's going to crack open on us here in the not too distant future. We're still hammering away on the nutrition serts. The Doc Parsley I just did the talk for Especially Health in Reno and I did my evolutionary medicine talk. He did his evolutionary perspective of sleep kind of from dealing with the seals and that went really well so. We did not record that. There wasn't really the setup to be able to record that but we will get more of Doc Parsley. Yeah, that's all I got.

Greg Everett:

Cool.

Robb Wolf:

All right, man, thanks G, we'll talk to you soon.

Greg Everett:

All right. See you.

Robb Wolf:

Okay. Bye.

[1:10:43]

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