

## Paleo Solution – Episode 128

[00:00:00]

Robb Wolf: Hey, folks. Robb Wolf here, Greg Everett. This is episode 128 and what are we calling this one? The cock, balls and boobs episode?

Greg Everett: That's definitely some kind of odd theme to it. I'm not sure what to call it.

Robb Wolf: Squatchy told me that he had a little bit of a theme going on and yes there definitely is. We'll see how folks like it.

Greg Everett: Yes. He said it was a testosterone theme but it kind of seems a little different than that.

Robb Wolf: Yes. We'll call it the fetish issue.

Greg Everett: Yes.

Robb Wolf: Anything new, exciting you need to tell folks about?

Greg Everett: Not quite yet. I do have something that I'm super excited about but I'm not going to tell anybody quite yet until it's ready to go.

Robb Wolf: You tease. You minx.

Greg Everett: I know, right? It's we'll have a new product out here pretty soon.

Robb Wolf: Sweet, cool.

Greg Everett: It's going to be I think it will be quite popular.

Robb Wolf: Cool, right on.

Greg Everett: I hope.

Robb Wolf: Right on

Greg Everett: It's for the people.

Robb Wolf: Do it for the little people, man. This thing we'll go up the day after I do a post on the risk assessment program in Reno.

Greg Everett: Cool.

Robb Wolf: We were on the radio, local Reno radio but pretty interesting stuff. So if folks missed that blog post back up 1 day, check out the post that I'm going to have up on that. It's pretty darn interesting.

The risk assessment program, just a pilot study ran for 2 and ½ years and I believe the numbers on that were basically they did an intervention on the police and fire departments, people who were at-risk for type 2 diabetes or metabolic arrangement, insulin resistance were put on a low carb Paleo diet kind of gig given metformin or statins selectively as needed and tracked over time.

And it's estimated that the pilot study alone saved the city of Reno \$25 million.

Greg Everett: Nice.

Robb Wolf: And it cost I believe around \$68,000. I'll all have the numbers legit in the blog post but the savings, the return on investment with this program was a 6000:1 return on investment.

Greg Everett: That's pretty good.

Robb Wolf: It ain't bad. Yes, I mean we're in gambling capital, you'd pretty hard pressed to get that type of numbers.

So it's pretty interesting. It's pretty exciting and now like I think I've mentioned a couple of times, we have the whole city of Reno, fire police, one of the chiefs is doing a presentation back in D.C. here at the end of April basically presenting this risk assessment program to I think about a hundred and ten different municipalities basically to the police chiefs of these reasonably large cities.

And just kind of getting the information out about what we're up to. So it's pretty exciting. It's pretty cool.

Greg Everett: That is pretty awesome.

Robb Wolf: Yes.

Greg Everett: Robb Wolf, out there saving the world again. You just can't sit still.

Robb Wolf: Well, you know. What's a girl to do?

Greg Everett: Yes, alright. Well, shall we get into the fetish eye.

Robb Wolf: Yes, this may be the jumping the shark episode we'll see.

Greg Everett: I think there's already been like 12 or 13 of these and we still haven't landed on the other side of the shark yet.

Robb Wolf: Maybe that's why this thing is still going.

Greg Everett: Yes.

Robb Wolf: Okay, let's do it.

Greg Everett: Right. So this one is called total testosterone 172 in a 20 year old. That's pretty low. Although it doesn't specify male or female so maybe it's really high.

Robb Wolf: Yes although you just got an ass chewing along that line.

Greg Everett: Yes, I did. Maybe we'll address that in a minute here although I did respond to that comment which I rarely do.

Robb Wolf: Right.

Greg Everett: That one got on of my skin a little bit. Alright, Craig says, Hi Robb. I love reading your stuff. Your information has helped me improve many things in my life. I have a question. I know you get a lot of them but I understand you have an interest in testosterone lately so I thought I would share.

Robb Wolf: It's called getting old.

Greg Everett: Seriously, I don't want to be a wiener anymore. As in the subject, I am 20 years old, 5'9, 160 lbs. and train using CrossFit, football and eat Paleo. I started feeling symptoms of testosterone. I think he means a low testosterone.

Robb Wolf: Yes.

Greg Everett: And after reading the article on your site called "It's in the Blood", I decided to get my levels checked. It turned out my total

testosterone is complete crap but my free testosterone is 32 and my sex hormone binding globulin is 30.8 within normal range.

I believe my lower testosterone is due to a long term calorie restricted diet paired with intermittent fasting and over training. Before getting the blood work done, I've upped my calories to about to 3,000 a day and continue training with CrossFit football exactly.

I think that means he was doing the exact program?

**[00:05:14]**

Robb Wolf: I'm guessing so.

Greg Everett: I have felt much better but I'm basically wondering since I dug myself into this hole, could I possibly dig myself out by eating at maintenance and resting properly. I would really appreciate your advice. I trust your opinion above many. Cheers.

Robb Wolf: First, what's his name? Craig? So Craig, this is done with love but if you were in the room with me I'd have to choke you out because even back – I think I wrote this stuff up in 2005 when I first talked about the intermittent fasting stuff which was get your performance good, get your sleep good, eat out of maintenance level, look, feel, perform as solid.

And then this was one of the rare times that I actually see an argument for weighing and measuring your food, get at that level that all the cylinders are firing, everything's cool and then figure out exactly how much food that is and then if you want to drop in the intermittent fasting, then give it a shot but make damn sure that you are eating adequate levels of food and this was back in 2005.

But you know even then, understanding the difference between a you stress, a good stress versus an additional chronic stress is critical and I don't know how many times I've talked about this and it's just one of those things where it's almost getting horrifying to mention any information to anybody because I just – folks go full ridiculousness on the implementation.

I wish I could use a different word besides ridiculous that starts with an R.

Greg Everett: I think I know what you mean.

Robb Wolf: Yes but we always get our testicles kicked in for that even though we're trying to use it as exactly manner as we can but you know folks, here's the deal. If you are training at any type of intensity level you cannot calorie restrict for extended periods of time.

If you calorie restrict and intermittent fast, this is just a recipe for disaster. Think of Auschwitz. Think of concentration camp like high work output, big stress, inadequate nutrition. Now, can you do this stuff for punctuated periods to maybe get a little bit leaner?

Yes, but if you do that, you need to really keep an eye on your training volume and intensity and you probably need to ratchet that back because your focusing on like an aesthetic school relative to a performance school and if you're trying to do all of these all at once, all out of Cross Fit Inc., do everything, every day, all the time, you're going to shit the bed in an epic fashion.

We had email exchange with some folks, I'll actually ask them if I can get their full statement on this but there's an epidemic of low testosterone levels going on with guys that are basically over training, under eating, trying to be too lean well also trying to be a very high work output.

There's a reality that there are some people, say like a Rich Froning that could be at wickedly high work output and are also like 0.2 percent body fat and that's just the way to do it. He's wired up. He's top of the food chain athlete for what's going on in that scene and that works for him. For a lot of other people, you're not going to be able to run really lean and also have super high work output.

I know for myself, if I were just lifting weights and doing gymnastics, I could be leaner than what I'm at right now but I'm doing Jujitsu 3-4 days a week and if I try to ratchet my body down to a lower body fat level than where I'm at right now which isn't all that high which is probably around like 10 but my performance suffers immediately.

So you guys need to be really crystal clear about what it is you are trying to do and doing CrossFit football in a calorie restricted

intermittent fasting protocol is ridiculous. Don't do it. If you want to tinker with this stuff maybe one day a week do a little intermittent fasting maybe.

That's it but you need to make sure that your calorie intake is adequate and you need to be clear about do you want to look like Brad Pitt out of fight club? Cool. Then start smoking, drinking a lot of coffee and lifting weights and don't stress your body much beyond that but if you want really good performance then we need to tinker things differently.

**[00:10:00]**

Robb Wolf: Obviously there is a huge problem for a 20 year old male. The testosterone levels instead of 172 should be more like 1172 and to answer the question on here can you dig your self out of this hole. Yes but don't do this in the future.

You are a skinny as a old former bad ass trying to maintain whatever bad assitude they can. Don't run this stuff too tight. Enjoy your youth and have a lot of performance and build that base of building some muscle mass and performance and technicality and run with that for all you can.

Greg Everett: Yeah the figuring out your goals thing here is key here. CrossFit, football, what's their tag line forging powerful athletes. It's not forging skinny athletes. You need to eat. That stuff is meant to get you bigger and stronger and faster not super lean. So here's what you want to do.

[Cross-talk]

Robb Wolf: And it works when people follow the protocol and Welbourne has been very clear about how to feed and water your self for the best effects of that and the type of physique that comes out of that is a thick, muscled, reasonably lean like you don't look like a tub of lard.

You're not a fashion model either. You look like somebody that you wouldn't want to tangle with in a fight. That seems fine by me. This thing circles back around. I get Twitter questions all the time from folks like -

Greg Everett: Don't you love those?

Robb Wolf: They're good. The 140 character thing is hilarious.

Greg Everett: Oh my god.

Robb Wolf: Somebody asked me the other day are Mark Sisson's work outs good and I said yeah. And then the guy said well are they good or great and I'm like it totally depends on what you want to do.

Like if you want to become an elite level rock climber then they're probably not that great if you just generally want to be lean, strong and jacked then they're phenomenal. You'd lift some heavy weights a couple times a week, do some sprinting and then you're generally active.

I think it's spot on but when you are asking training questions, nutrition questions it is so goal dependent. I think I've used that analogy of the monkey with a tan in a jar. People won't let go of one thing to get other stuff or they're just not clear on what is the one thing that you want to do.

Do you want your ass to fit in to your old skinny jeans? Okay then focus on that and that's gonna dictate on how you eat and how you sleep and the things that you do to manifest that goal.

Greg Everett: And also please please please stop asking questions like that Twitter. You can't answer them. You guys are asking questions that require pretty involved answers you've got 140 characters and I refuse to write as people write on Twitter and even if you do you still can't answer it. So maybe find a more appropriate venue for asking those questions.

Robb Wolf: Frequently the question can be answered simply by asking your self what is your primary goal and that will largely drive the boat for you.

Greg Everett: Let's move on to essentially -

[Cross-talk]

Robb Wolf: More testicles.

Greg Everett: But I like this guy's subject line which is testicular fortitude. Bryan says hi Greg and Robb. My question is about a vasectomy and

testosterone loss. Some background: I've eaten Paleo since Cordain and Friel put out their book.

Before Paleo my wife and I tried to get pregnant for 3 years with no dice. After going Paleo my wife gets pregnant every time I look at her with wearing a hazmat suit. We both just turned 40 and welcomed number 3 just a couple of weeks ago.

I compete as a masters only lifter and I'm worried that going under the knife will reduce my T levels. For the record I've never been in the CrossFit camp and my training load is pretty dialed in for a guy that has 3 kids, works full time and coaches 3 varsity sports.

To the question I know that Paleo man would have never had his balls clipped but I digress. What are your thoughts on getting fixed and testosterone levels? Thank you for your time. From the guy who has no interest in March madness.

Robb Wolf:

Nice. This was kind of a rude awakening eye opener for me. There is some indication in the literature that vasectomies do reduce testosterone production and part of this is a feedback loop of just seminal fluid and the fluid that sperm is actually produced in.

If it's not released then it gets reabsorbed by the body and there's a feedback loop I believe going back into the hypothalamus that will down regulate production.

**[0:15:00]**

Robb Wolf:

I am not 100% sure on this but there are some indications in the literature that you can get some down regulation on this whole thing. How severe it is, to what degree I don't know, like there's just not a lot on the literature but there does seem to be some indication with that.

But you know all that stuff considered I think that's probably a much less neurally and potential problematic intervention versus the wife doing tubal ligation or something like that.

Greg Everett:

And the reduction in testosterone you get from a vasectomy is probably less when compared to the reduction you'll get from the stress of having more than three kids.

Robb Wolf: yes, having a fourth baby that's a really good point. Yes, there is some indication that there might be some reduction. To what magnitude is not real clear and then like Greg pointed out the stress of being octo dad is greater than what you will get out of that whole scene. Penis topic number three for the day.

Greg Everett: Not only a weird topic but a long question. All right here we go, I have read all the subjects on these ones cause they're -

Robb Wolf: They're pretty good.

Greg Everett" Integral to the theme here. This one is dehydration and a limp tool, or happy and frisky once again. Carl says, Hi Robb and Greg here's my deal I've been eating clean or pretty clean Paleo for about 1 and a half years. Occasionally we whoop it up with some dark chocolate, wine, Norcal margaritas but we really never touched any processed food with wheat in it.

I'm assuming he meant food. So here's my story that I want to share with others and see if my experiment of n=1 sounds legit and maybe help someone else. I'm a very healthy active 48 year old male married to a super hot 50 year old female.

We've both been physically active all of our lives. We both do a max effort black box plus CrossFit conditioning type of gig with me throwing in a bit of gymnastics as we are rock climbers and mountain bikers.

About a year ago, I started seeing a strong decrease in my sex drive, totally scary. It progressed to the point of our bedroom adventures becomes disappointing and embarrassing due to an occasionally "limp" tool. I have never experienced this in my life. Are we on Dr. Drew right now?

Robb Wolf: Seriously, what is it Dan Savage?

Greg Everett: I'm not familiar with that one. I'll admit the 20 year old obsession with sex is long gone yet I really enjoy sex and have enjoyed a very happy sexual relationship with my wife. It totally suck see things going rapidly down hill.

I'm worried and frightened, tried to eat cleaner and exercise smarter with no improvement in libido. My strengthening and conditioning was great. I sleep okay and my nutrition excellent. I

was starting to seriously worried that my testosterone level is taking a dive for the worst as a function of age.

Then last month I started pounding down on a minimum of a half ounce of water per pound of body weight, as recommended by Brian Mackenzie. I always drink what I thought was a reasonable amount of water and had no idea I wasn't getting enough. Yet, within a week of increase water consumption, I was happy, frisky and enjoying bedroom adventures again.

Robb Wolf: I just got to say I love the word frisky. It is such an underutilized term.

Greg Everett: My confidence and pleasure is back and my spouse is happy again. So, am I an outlier or have you heard of this before? As insulin levels normalized through a Paleo diet do we store less water thus need to increase water consumption. I've never heard dehydration causing impotence yet one easy, cheap and effective solution for me.

Robb Wolf: No pun intended here, that was a mouthful, so don't sting. I threw in to Google dehydration impotence and there is a bunch of stuff on the internet. It is mainly forums but you know people asking that question. This is the first time I've ever heard of this.

This was never on my radar. It kinda make sense and the fact that we don't have any lab values here then it's just guessing. It's really hard to hang out hat on much of it even if we have had total and free testosterone levels, maybe an ASI test, adrenal stress index telling us what the cortisol levels are throughout the day.

Then we might be able to get a mechanism here but otherwise it really is like super anecdotal, n=1. Who knows? The only thing that I can think of like there was one question in here. Do we tend to retain less water as insulin levels normalize.

Yeah that's definitely a feature. Normally that's beneficial. People see their blood pressure drop when insulin goes down. We reduce aldosterone, and aldosterone causes us to retain sodium. If we retain sodium we retain water that's a whole funny back story that i'm so glad is archived forever on the internet.

**[0:20:00]**

Robb Wolf: If you ever bumped into me yeah ask me about aldosterone and the great last minute, the great stories.

So on this other side if you have dehydration effect that can be a stress and with that stress maybe we have elevated cortisol. If we have elevated cortisol maybe we have a pregnenolone steal and maybe that's the cause of the whole thing.

But I'm totally fishing for a mechanism here like without any blood work and anything to kind of hang our hat on it's completely a guess but it kind of makes sense. At the end of the day the bone is that the flag can rise to full mast now and everything.

Greg Everett: Maybe he's just really turned on by water.

Robb Wolf: That could be.

Greg Everett: Water fetish?

Robb Wolf: There were not details pertaining to that. I don't know and thank you for not including details pertaining to that. That's good.

Greg Everett: Yes.

Robb Wolf: Greg any other thoughts?

Greg Everett: I have absolutely nothing to contribute on that one.

Robb Wolf: Okay cool.

Greg Everett: Oh boy.

Robb Wolf: There is stuff on the internet. People asking similar questions like commenting similarly, all completely anecdotal, forums, Yahoo questions type stuff. That's the best that I've got on that side and then the only mechanism I can think of is maybe elevated cortisol, maybe something to do with dopamine signaling if there's a stressor something like that. I don't know.

Greg Everett: Okay.

Robb Wolf: Now we shift from penis and balls to boobs, something for the ladies.

Greg Everett: Danny says hey Robb and Greg. I love the podcast and I'm working my way through all of them on my way to work instead of listening to ESPN radio. I guess that means you guys are fairly entertaining or probably would have driven off the road by now at 5 in the morning on my way to work on a mixture of exhaustion and boredom.

Robb Wolf: That's a lot of pressure.

Greg Everett: Thanks for keeping me awake. Yeah seriously. I'm sure my wife and son appreciate it.

Speaking of my wife and son I have a question relating to both of them. My son is now three months old and growing like a real bad ass. My wife has been blessed with a huge milk which I think is awesome because her boobs are huge. My son loves it because he can eat all day long.

I swear I'm just reading this as it's written. I feel like a goof ball but that's what it says. Even with our three month old son strong appetite we have managed to stock pile a freezer full of breast milk.

When I look in the freezer and see the breast milk -

Robb Wolf: Acres of breast milk.

Greg Everett: I think that if my son can double his size in six weeks maybe I can use the stuff to get bigger also.

Robb Wolf: The DEA is gonna knock. They're gonna find this guy and abscond all of that breast milk.

Greg Everett: Seriously. I recently had a friend who's a pro downhill mountain biker tell me about how he cut 5 seconds off his track time at the Sea Otter Competition last year - I used to go to that one - by supplementing with his wife's breast milk.

He said he would drink 4 to 5 ounces per day and felt like a new man. I guess what I'm getting at is are there any performance enhancement aspects to breast milk and if so is it safe or would you recommend making a nice little post work out breast milk supplement?

Robb Wolf: If everybody hates this episode it's all on Squatchy. It's his fault. I've been seeing him in his braces but if you hate this one then take it out on Chris. It's not our fault damn it. He's the one that picked all these.

I just think it's hilarious that this downhill mountain bike course which largely is gravity fed and you've got a 5 second change in his results and it's all due to breast milk.

Greg Everett: It's the only logical explanation.

Robb Wolf: And I want to get into the whole thing if you weigh more than gravity pulls harder on you but we should have a poll to see how many people buy that, see what type of science literacy we have on the podcast. I think we would end up hopefully being happy by the results but we might end up being crushed.

Greg Everett: I just have to say I'm not gonna name names but I had an entire conversation last night over dinner that made me really sad for the future of our country. It was me continuing to explain that Africa is not a country and that the United States of America is a country but America encompasses Canada, Mexico, US, all the South American countries and just getting blank stares in return.

Robb Wolf: Yeah. That's a complex one.

Greg Everett: So what is Italy? Is it a country? Yes. Oh okay so it's a country in Europe? Yes.

**[0:20:00]**

Robb Wolf: This reminds me of Dan Silver. It's like hair and bangs.

Greg Everett: With bangs.

Robb Wolf: With bangs.

[Cross-talk]

Greg Everett: Gravity totally makes bigger things go faster. Everybody knows that.

Robb Wolf: I think you could argue that there's probably a health benefit for consuming a little breast milk particularly really early when the colostrum is going because you get so many immunologically active proteins out of the colostrum.

I got to say that when the wolf cub arrives I'm probably gonna do a couple of breast milk lattes my self when and where I can make that happen. I don't know that this is gonna being on 200 mg a week of Nandrolone or something like that.

I think that there's probably a performance bump to this and I think it would largely be related to protein and immunological fractions that are going to improve gut integrity particularly if you didn't receive breast feeding your self as a kid or maybe an adequate breast feeding or if you have some sort of gnarly gut microbe like - oh god I'm blanking on it - the thing that looks like the Skype logo.

I'm totally blanking on the thing.

Greg Everett: Looks like the Skype logo?

Robb Wolf: Yeah it's got like two little eyes and then kind of batman shaped kind of gig.

Greg Everett: What? I don't have any idea what you're talking about.

Robb Wolf: You get it from water and creeks and stuff like that. Oh anyway different gut pathogens that damages the intestinal lining. That can be a big problem and I think that you might be getting a little bit of a reset action on that.

Greg Everett: I know what you're talking about now. Now I can't think of what it's called.

Robb Wolf: Yeah. I'm just completely blanking on the thing. You would do metronidazole to treat it. It sporelates.

Greg Everett: Oh my god. That's bothering me now.

Robb Wolf: And I keep wanting to say candida and it's not candida.

Greg Everett: Definitely not candida. Okay. Well I'm sure we'll think of it after the next two questions.

Robb Wolf: We're gonna bleed from the ears until we get that one figured out.

Greg Everett: All right. Let's see here. This one's about loss of appetite. Ross says Ross says dear Robb – that's actually really funny timing loss of appetite after those first four questions.

Robb Wolf: I'm sure that we'll get a lot of that going on.

Greg Everett: Dear Robb, my question is pretty straightforward. However, I know within the world of human physiology the answer is never so simple. I bought your book about 6 months back, been off and on Paleo since then and up until... Oh my god this is why they invented punctuation guys.

I bought your book about 6 months back, been off and on Paleo since then up until about 3 months ago when my wife was diagnosed with celiac and Crohn's disease. She is also not lactose intolerant but does have issues like most with the D protein calcium type A1. She decided to try some goat's milk which doesn't have type A1 and pretty much downed the rest carton with no problem whatsoever.

He kind of likes the word of "the".

Robb Wolf: Giardia.

Greg Everett: Giardia. That's what I was thinking about.

Robb Wolf: Sorry.

Greg Everett: Oh man. Okay. He said my question is for me actually a strict Paleo diet to... Wait a second, he had this whole intro about his wife and the question is for him.

Robb Wolf: **[Laughter]**

Greg Everett: With that being said, my question is for me actually. I adopted a strict Paleo diet to match my wife so she wouldn't go it alone as well as reduce any pressure she would face with any 'shit food' in the house. Okay now I get it.

My conundrum is now for some reason I have little if any appetite and have to force myself to eat about 90 percent of the time. Obviously, this question may or may not make it to the podcast but of course I'm so curious as to why I am just not wanting to eat.

Robb Wolf: I can't figure out why it made to the podcast. It didn't deal with cock, balls or boobs. What's the relevance here?

Greg Everett: We're not done. It might have some of that stuff in here later. I'm 30 years old, 6'2", 204 lbs., 15 percent body fat, sleeping an average of 7 to 9 hours per night, activity level is active, 3 kids got to keep up with them, heavy lifting two times per week with another one or two days of 15-20 minutes of extra activity via rowing, jump rope et cetera. Otherwise, I'm reading, listening to podcasts mostly yours and sleeping if I get the chance with the kids."

What do you mean mostly ours? Why is it not exclusively ours? Oh, FYI as far as food goes when I'm hungry I can usually eat about 400-500 calories LOL calories worth of food before my body says please no more and I'm forced to push the plate away, but then I am not hungry for the next 9 to 10 hours. You can see my problem?

**[00:30:00]**

Actually wait you can see my problem? My meals are typically 60% fat, 30% protein and 10% carb, veggies. Oh man. I'm struggling with this one Robb.

Robb Wolf: I'm struggling with it I'm not even reading it out loud.

Greg Everett: I only been consuming starchy carbs like sweet potatoes and maybe a cup of rice as my after work out meal so usually on work out days my meal would look like this 20% fat, 40% protein, 40% carbs. As far as fruit goes I actually don't eat much of it and if I do it's included in my post work out meal.

Robb Wolf: There is virtually no punctuation in this thing.

Greg Everett: There's none.

Robb Wolf: It is hilarious.

Greg Everett: There's been two periods this whole thing. Hope this helps little as I've been trying to lean out but with the higher levels of cortisol from not eating much and working out it's been a very slow ride. Thanks for your response in advance and will be listening and hoping for any feedback if possible. Sincerely Ross.

Ross I'm sorry to beat up on you man but Jesus that was tough. I really don't mean it personally.

Robb Wolf: I would tease Ross more but I'm afraid it might be raw sentiment and he would come and beat me up so that's the only one that's staying from more shenanigans here.

That was a really long question and I really think if you look at the macro breakdown you're eating a perfect macro nutrient breakdown to not be hungry. Lots of fat, lots of protein, very little carbs and the carbs coming mainly from veggies. It looks like that maybe shifts in higher activity days but I would recommend cutting down the fat a bunch.

I would start having some starchy tuber type stuff in the AM with your protein and I think you'll get more of an appetite with that and you'll probably end up eating more calories overall. That was one of the problems when Greg and I wrote the masking guy way back in the day.

We kept trying to figure out some way of keeping insulin levels low by moderate protein, real high fat and obviously low carbohydrate and then when you eat that way you literally want one meal and you don't want to eat the rest of the day and so this is the back and forth that you have on this trying to maintain insulin sensitivity while also getting in enough calories to actually grow and all that sort of jibe.

So I think pretty simpler just eating a really good macro nutrient breakdown to not be hungry at all and so you've got -

Greg Everett: I would recommend supplementing with breast milk.

Robb Wolf: Yeah. Absolutely. And maybe try a vasectomy for a little bit of a challenge, just to make things a little challenging. Yeah. I would cut your fat, up your carb, have more carbs early in the day. I

think that'll probably drive your appetite a little bit more and you should be good to go.

Worst case scenario you might need some digestive support like some mal foods super enzymes or something like that to kind of kick the driver over and we've talked about that a bunch. Start with one capsule per meal and work your way up. I've talked about it in the past. Look it up. Mal food super enzymes to adjust the appetite level.

Greg Everett: Look it up.

Robb Wolf: Look it up.

Greg Everett: Oh boy. Well continuing on the same theme this one is called eating bones. Chris says hi Robb and Greg. I made a stew this week from a left over chicken carcass and goat bones and some bone in crass cut grass fed beef shanks and some veggies of course. I left it to stew on low heat for three days having a bone out again.

But today as I was eating some of the stew I noticed some of the meat seemed kind of chalky in texture and then I realized it wasn't meat I was eating. I knew there were some bones in my bowl so I took one of the chicken bones and bit right through it. It didn't taste bad and I continued to look for bones to it.

Then I thought. Is this safe? Will this kill me? But I have a suspicion that I've stumbled on to something that could be super nutritious and could is way for people on a budget like me to make use of refuse that would just be thrown out.

I'm thinking you guys understand what that's supposed to mean. I haven't tried eating any of the larger beef and goat bones though. I would love to hear your thoughts on the matter. Thanks for all you do. I love the show.

I've bee eating Paleo-ish for a couple of months now. I'm planning to go all in for 30 days as of April 1<sup>st</sup>. I know that's April Fool's Day. Don't jinx it.

Robb Wolf: So we have another question coming up next talking about bone broth and so I guess I'll kind of weave these two together a little

bit. I guess I don't really talk about this per se. I haven't seriously beat this drum but I've always -

like if I cook a chicken I cook the carcass down and make bone broth and I tend to gnaw the articular portions off of chicken bones and beef bones and whatever and if the bone is kind of soft I end up kind of chewing it up and eating it and I've just always done that and I kind of assumed everybody did that but I guess they don't.

**[00:35:08]**

It has been somewhat humorous to me and maybe I'm being a dick here like here again there's been lots and lots of things that I assume people know how to do like the food matrix kind of deal.

Greg Everett: Don't make assumptions like that.

Robb Wolf: Exactly. I've failed people because I make assumptions in these regards and so I've been I guess a little hoity toity and then I just assume that if somebody cooks a chicken they make soup out of it or stuff like that. You eat the articular portions and that is just absolutely false apparently and so I shouldn't be so snooty about the whole thing.

I think this is a great thing to do. You get lots of nutrition. You get the micro crystalline hydroxy appetite bone matrix and that's just the bee's knees for your own bone and getting some dietary calcium and all that sort of stuff. The old journal of the American Nutraceutical Society, the paper that Loren Cordain did, a Paleo diet built on modern foods. I forget the exact term.

But in that analysis it looked like the program was a little bit skinny on calcium but there was absolutely no consumption of cartilage or bone or anything like that even from fish bones and sardine kind of gig. So I think that's one of the places that historically people probably got a significant amount of calcium that was super semilable and just along for the ride.

So seems smart to me. I would go for it. I would not eat a bone that was sharp enough to perforate your esophagus or something like that.

Greg Everett: That's good advice.

Robb Wolf: It's kind of funny. You need these esculatory deals like the legal thing. It's almost like I have to take the warning about putting a plastic bag over your face and just apply that to everything. It's like let's figure out the most idiotic thing you could do under any circumstance and then we need to figure out some sort of a caveat for that.

Greg Everett: Oh boy. All right. Well let's continue with this theme and then figure out why eating bones could kill you. Murph says hi Robb and Greg. Could you talk about proleins in bone broth? In case you don't know bone broth is all the rage these days in Paleo. Everybody is doing it. Health bloggers like Chris Kresser and Paul Jaminet are big fans.

They say it promotes a healthy gut. I've even heard Robb state on the podcast before that he frequently boils down an entire chicken carcass. You just heard him say that. Over the years I've heard Robb and Mat Lalonde talk a lot about proline rich protiens from grains and dairy reeking havoc on peoples guts.

Well, It has recently come to my attention that foods like bone-broth and gelatin are also rich in the amino-acid proline. What gives? Is this bad? Are bones killing me? Why is the proline in broth different than the proline in grains? Explain.

Robb Wolf: Explain.

That's much a question as a demand. Yeah totally. Kind of a threatening demand. So it's not just a matter of what amino acids are in a protein, the really significant piece is the structure that is produced by these amino acids. So you could have a fairly high proline protein but the proline amino acids are set up such that the structure of the protein is still relatively easily digested and that it's not immunologically reactive.

The deal with glyden and different globulins is that the structure tends to avoid either acid or base hydrolysis. It is kind of bullet proofed and hardened so that it's difficult for acidic environments or base environments to change the protein confirmation, the shape of the protein to make it easier to digest.

And then proteases and peptidases have a difficult time acting on these proteins. So it's not simply what are the amino acids but

how are they strung together. What does the structure of the protein look like and then what does that mean with regards to the ability for us or other organisms to both digest it and what does it do with regards to irritating the immune system.

Some proteins are shaped in such a way and they have a post translational modification where the glucose or different polysaccharides are attached to the protein and it makes it much more immunologically reactive.

So there's a lot of different factors here besides looking at what's the amount of histidine and proline and glycine and stuff like that. So you need to think about the structure and that's really the bigger picture here and within all that context when we look at what you're getting out of bone broth and we don't really need to be concerned about the structure per se.

Reasonably there's stuff that needs to be digested is reasonably digested and yeah. Cool.

Greg Everett: That's exciting.

Robb Wolf: Terribly exciting.

Greg Everett: Let's see here. Here's a question for you Robb because it's perfect timing. I.G. says Robb and Greg, here's a question very pertinent to you, Robb, given your impending cub. What sort of training protocol are you planning on going with as a brand new father?

My daughter was born not even a month ago and between the low quantities of contiguous sleep, the non-predictable nature of my days, and my desire to be at home as much as possible given how much I'm missing while I'm at work, I haven't been able to sort through what sort of exercise protocol I should be using until my life become a bit less chaotic.

Before my daughter arrived I was on a twice weekly starting strength-esq plan: Tues 3x5 squat, bench, power clean, Thursday 3x5 squat, press, dead; adding weight in a linear fashion. This was working great and I was having a lot of fun while getting much stronger.

The trouble is that it required quite a bit of time at the gym and without adequate sleep I fear that I'll be under-recovered and prone to hurting myself or getting frustrated.

I was thinking I'd do something akin to day 1 squat, bench or press, dead or clean attempting to maintain rather than gain strength; day 2 a 5-15 minute intense CrossFit-ish workout focusing on the CrossFit football end of the CrossFit continuum in terms of movements and heaviness, days 3-7 lots of walking.

What do you guys think?

Goals not lose a bunch of the strength I just gained. Not get so out of shape that it takes forever to get back up and running. Stay mobile. Relieve some stress.

Shortened question: What is the most efficient protocol for someone to maintain strength, mobility, and GPP in that order, when I don't want to squander a second away from my daughter, and because I live with a new-born I'm getting shitty sleep?

Robb Wolf:

Gosh. I'm hoping I can still get in like two days of Brazilian jujitsu a week. I have a garage gym like 30, 45 feet away from my office so I'm hoping that I can - I've said in the past that I want to try this thing of just having like some gymnastics moves and maybe a bar loaded for power cleans and bar loaded for back squats and just do some of that throughout the day so I'm not really doing a dedicated work out but I'm just getting some exposure and I think for just strength maintenance that's a good way to go.

So like hand stand push ups, pull ups, maybe you could install a pull up bar, you can work some pistols and in that type of stuff you can just kind of work it throughout the day and even if you're cruising around with the kids you hammer head down for a couple of minutes and you do a couple sets of pull ups, a couple sets of hand stand push ups or some pseudo plunge push ups or something and you're not gonna degrade all that much.

You'll maintain a fair level strength. It's not gonna be that stressful. I would say that if you are heading into sleep deprivation I would avoid almost anything that looks like CrossFit. Any type of metabolic stressor that's in that glycolytic pathway I would personally avoid it like the plague.

If you can go for a long walk and you can put on a weight vest and get a little bit more stimulus from that I would weigh lean towards more towards that than I would any type of glycolitic meltdown kind of gig.

The protocol you listed here seems pretty legit other than I would just do strength work and then walking and if you could get a weighted vest and walk with that and the kid and that seems like a pretty good way -

Greg Everett: Just don't wear a gas mask when you're doing that.

Robb Wolf: Yeah especially with the kid. Yeah. Shocker, a dude cruising around the town with a gas mask and what looks like an explosive vest on might get taken down, shocker.

Greg Everett: There was a guy right around here who was doing that. He was running with a weight vest and a gas mask, carrying a package to deliver it to the post office and damn he got himself shot by 45 snipers. Wow you didn't see that one coming? Jesus.

Robb Wolf: Broad times, modal domains.

Greg Everett: Good god man. Have fun exercising in Guantanamo Bay.

Robb Wolf: Seriously. With NDAA you just disappear down the rabbit hole and you don't see your lawyer. It's like Robb disappeared and we haven't heard from him in 10 years and I think his review comes up in 13 years so yeah.

Greg Everett: If we're in the mood.

Robb Wolf: Yeah if we're in the mood.

Greg Everett: Oh man.

Robb Wolf: So any other thoughts on the lifting training deal-o

**[00:44:57]**

Greg Everett: I definitely would second the motion there to just avoid CrossFit-esque/-ish or whatever you called it stuff. You're gonna be getting pretty beat up. I wouldn't worry about it especially since you list your priorities in the order of strength and mobility and then GPP.

The conditioning stuff will come back easy. Mobility is huge. It's a very easy to foam roll and stretch in the house with your kid. It's not like you have to go somewhere special for that so that's easy to do all day long everyday every time you get a chance.

With the strength stuff I think it could be as simple as having one day do a few sets of squats, the other day super set some either weighted pull ups or bent rows and some bench press or press. Do a few sets of each back to back. That alone will give you a little bit of a conditioning effect but also allow you to get that strength worked in pretty quickly.

I don't know that I would do your 2 strength days back to back and then go 5 days with no strength work and just walk. I would try to spread those out a little bit maybe and then I think I would start there and then lots of baby curls.

You can absolutely do the road house complex with a new born baby. That is a one arm curl and press for those of you who are not familiar with that term.

Robb Wolf: Great movie by the way although we don't really endorse the overhead squat while wearing moby.

Greg Everett: No. Definitely not.

Robb Wolf: Yeah but that's just me.

Greg Everett: Okay.

Robb Wolf: Okay. Let's wrap this train wreck up. You have one more?

Greg Everett: This is the easy one. Oh my god.

Robb Wolf: Dude. It's really wrong.

Greg Everett: This is like the simplest question ever but it's the longest one of the day.

Robb Wolf: Strap in folks. We're almost there. There's no good way to make a funny pun about lifting belts. This is the subject line. Matt J. says Hey Robb and Greg.

I am looking for some purchasing advice and was hoping you guy's could help me out. The background: I am a short-ish guy, 5'8 with what I'm assuming is a short-ish torso. I never measured my proportions, but I have a pretty big dead lift compared to my other lifts.

I really enjoy Olympic lifting and plan on getting back into it sometime in the future. I came into this whole thing from spending a year in a CrossFit box, so I got good exposure to everything as you can imagine.

I've been doing starting strength for the past - oh man I was just gonna make an infectious disease comment but I guess we'll leave that to the imagination now. I've been doing starting strength for the past few months to correct my pitiful lack of strength, and I've been getting to the point where I think using a belt might help me out with continuing the linear progression.

I like to keep the squats high-bar and do front squats once a week because, like I said, I would like to move more towards Olympic lifting once I ride out the LP. I suppose that's the new acronym for linear progression.

However, there is a lot of information floating around on the interwebs about what kind of belt to get and why, so I came to the ultimate source for all information in order to get the straight poop on what kind of belt I need to buy.

Robb Wolf: We're good with poop.

[Cross-talk]

Greg Everett: To start off, I know the reason for a belt is to give the abs something to push against in order to increase the intra-abdominal pressure in the thoracic cavity. Intra abdominal pressure in the thoracic cavity - interesting.

At least I think I KNOW this -

Robb Wolf: It's in the neighborhood.

Greg Everett: Please straighten me out if there's more to the story. Rippetoe says that you need a good 4 belt because the surface area for your abs to push against is the real reason to wear a belt, and the

tapered belts are designed by people who don't know how a lifting belt actually functions. He goes so far as to state that if you have a tapered belt, wear it backwards. Is this a feasible option?

If you want to look at deep shit. Yes. Then again, Olympic lifters seem to wear tapered belts. I'm assuming this is to limit the potential for the belt getting in the way of the lift and stuff.

Finally, 70 s big has a good series of posts on belts, and in one of them he says that he uses a Velcro belt for his Olympic lifting, a 4 suede belt for squatting and pressing, and a 4 leather belt for dead lifting and pulling.

My question is: Who is right and what do I do? Simple question, eh? Let me just tell you this right now everyone on the internet is wrong.

To clarify: Should I get a 4 belt to ride out my linear progression, then get a Velcro/tapered belt - which one - once I move back to more Olympic lifting? Is there a need for multiple belts or can you recommend one that I could get away with for everything.

I'm never gonna be lifting elite, just like to do it for me. And finally, being that I'm not real big, do you think a 4 is overkill? Should I look into a 3 belt, and what's the difference between the 10mm belts and the 13mm belts? Obviously stiffness, but why and which one do I need?

I love the podcast and am looking forward to your pontification on this incredibly perplexing issue. Thanks for all your help and keep up the good work. Matt J.

Wait it's not over. P.S. Tapered Valeo belts are cheap on Amazon, but tapered Cardillo belts and Inzer 4 belts seem to be a go-to on the blogs/forums. Why the price difference, and could one get away with the cheapo if they weren't worried about long term-durability which is what I'm assuming the difference is?

Robb Wolf: Holy cat.

Greg Everett: Wow. Okay. I'll just answer this in one sentence. Buy a 4" classic Valeo belt.

**[00:50:01]**

Robb Wolf: What is exactly for folks who are listening?

Greg Everett: That is the belt that I use. That's the belt my lovely wife Amy uses. That's the belt that a large number - I think it's probably the most common belt you'll see at least in the US among weight lifters. It's a 4" belt obviously.

It's not Velcro. It's the plastic cam thing so Valeo makes a 4" belt with just a Velcro enclosure like it goes through the little buckle and it comes back around. Don't like those. I don't feel like they're as secure although I never heard anybody having a problem with them but it would make me nervous.

The thing with the cam that's really nice is that you can always get it to the exact right tightness. So I've used leather belts that are even your standard belt buckle thing and there are days when your chosen hole is gonna be perfect and there are days when you just can't get the right fit.

It's they're too loose or too tight. It's gonna drive you nuts. I actually agree with Mark Rippetoe on this that you don't necessarily want a tapered belt. The reinforcement abs is very important.

However you will see a lot of weight lifters especially European weight lifters wearing pretty traditional styled leather belts that are 4 inch in the back and they're tapered down a bit in the front. They do just fine. They squat and clean and jerk way more than you ever will, way more than I ever will and it doesn't bother them. So it's not like wearing that belt is just not going to work.

Robb Wolf: And I would say having done a lot of power lifting and a little Olympic lifting that the little bit of taper is good just for the floating ribs and the increased range of movement on the squat and what not.

So I remember when I competed in power lifting I had a super gnarly - I don't know if they even make them anymore. It's the Inzer leather belt where you've got a ratcheting lever action that locks this thing down.

Greg Everett: Dude. I had to help extract someone from one of those before.

Robb Wolf: So I was just getting back into doing some heavier lifting and I think that I was going for 120 on the clean and I put this belt on and it just about broke my ribs because I never - even when I'm squatting deep and kind of high bar styling stuff like that the dynamics of a clean are so incredibly different than squatting and it was almost a disaster wearing that belt.

It was too rigid. It was too thick and definitely some sort of taper in the front would have been better and actually just not quite as rigid as what it was would have been better for me. It was almost a disaster for me.

Greg Everett: So these belts are pretty inexpensive but I've had the same one for - it's going on 5 years now or so. They'll hold up just fine but I guess the other thing to consider is do you really need a belt? You don't mention here what you're lifting but it sounds like you're very much at the beginning stage.

I would really encourage you to not use a belt yet and you say well should I put a belt to continue the linear progression. It's not really a continuation of the linear progression in my opinion if you add a belt to the story because you're really changing the circumstances.

To me it's akin to saying well I'm gonna keep pushing my squat strength up or my squat numbers up by squatting shallower and shallower over the next 3 weeks. You know what I mean? Like just changing the exercise somewhat.

So consider that. It's not like you're a bad person if you use a belt but I would put it off as long as you possibly can.

Robb Wolf: I would say that when I was power lifting a belt added pretty close to 10% to my top end relatively to raw.

Greg Everett: It'll definitely give you a good boost in the squat and the clean for sure oftentimes the jerk also.

Robb Wolf: Do you want to do the flu shot one and wrap up on that?

Greg Everett: Yeah sure. Is this some kind of government conspiracy 1. I just thought Jesse Ventura. Okay. Annual Flu Shot. Rickey says Hey Greg and Robb love the podcast! You guys really save my hour commute every day and I thank you for that.

Sorry if I start to sound all Jesse Ventura conspiracy theory on you but here goes nothing. I am active duty military for the past 8 years and I have been Paleo for a year. Well of course I have become very conscious what I put in my body which brings me to this, what about what the government puts in my body?

I can't help but get a little curious when flu season comes around and they act like with out this vaccine the flu monster will destroy us all. They tell us the time, the place and then the medics stand and watch in amazement as we spray this mist into each nostril so they can check one more name off the list.

**[00:54:56]**

Just recently they have switched from the injection now to the mist up the nose. I hear the only difference is the mist is a live virus. Anyways, I figured you guys would know best. Is this safe or better yet, any long term studies showing this even works?

Or is the government trying to kill us all off so they don't have to pay health insurance benefits past the age of 60? Thank you so much for your time!

Robb Wolf: That's funny. There are some circles that are convinced that the Hep B vaccinations and all that stuff had some ticking time bomb so that when you get out of your productive work years you keel over and die.

Greg Everett: Shit. I got one of those trying to work on the gut bucket.

Robb Wolf: Me too. I love conspiracy theories but the funny thing for me is it belies a level of understanding of the world that nobody has. There's nobody in control. This whole thing is more like an avalanche that we are currently riding the top off and just aren't underneath it currently but that's a whole other thing.

Greg Everett: Uplifting comment there Robb.

Robb Wolf: Seriously. When you look at flu vaccinations the funny thing is that they are super hit and miss as to whether or not they got the right formulation. You need the right sequencing on the virus so you get the right immune response.

If you get an immune response to a viral code that doesn't represent the critter that you get exposed to then it doesn't really do you any damn good. I'm of the opinion that if we made sure that everybody had very high vitamin D levels that the main problems associated with the flu are gonna be mitigated.

The cytokine storm and the problem with really gnarly pneumonia type symptoms and secondary infection I think most of that is an outgrowth of most people having really low vitamin D levels so you get some of the Carlson liquid vitamin D at 4,000 IUs per drop. It's a tiny tiny little bottle. It'll last you 6 months and it costs about 6 bucks.

So I would get your Vitamin D levels checked, make sure that you're in that 50-60 nanogram per deciliter range at least and that's more the direction that I would go with this and do I think that the government is putting some sort of viral time bomb in us by doing this stuff.

No. I think that a lot of it is contracts and money and also just making it look like we're doing something that we are in control and doing something qualitative to change the outcome of an event. Really when you look at the statistics it doesn't really hold water.

The vaccinations don't really do all that much of anything for the vast majority of people but there's some really good data that seems indicative we made sure that everybody had good Vitamin D levels that would actually do a lot to help people.

I think there's both more and less to be concerned about with this than the standard scene.

Greg Everett:

Sweet.

Robb Wolf:

Cool. Is that it?

Greg Everett:

Oh that is it. I don't want to read any more questions with no punctuations today.

Robb Wolf:

Yeah and I think we covered the cock, balls and boobs things pretty well.

Greg Everett:

Oh god. I can't wait til the next set of questions come in.

Robb Wolf: If you hated that take it all out on Squatchy not us. We're just the messengers. Squatchy is really running this thing. So it was not us.

Greg Everett: The grammar filter is gone now that I'm not fielding questions so I guess that's my penance for being such a dick about it.

Robb Wolf: Details.

Greg Everett: I've got to stumble through this stuff. Well all right.

Robb Wolf: Cool G. We'll talk to you soon.

Greg Everett: All right man.

Robb Wolf: Thanks man. Bye.

Greg Everett: See you.

**[00:58:44] End of Audio**