

Paleo Solution 148

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Robb Wolf: Hey folks, Robb Wolf here. Greg Everett in the house. This is episode 148 of the Paleo Solution podcast. Dude, what's going on?

Greg Everett: Not much how you doing?

Robb Wolf: Pretty good. Getting a little better sleep. I actually weaned myself into decaf coffee and I'm actually -

Greg Everett: What?

Robb Wolf: I'm actually feeling pretty good with that. I feel like the adrenals are down to the size of bowling ball now. I'm sure I'll suffer some sort of recidivist back slide at some point but for right now I'm marching along doing that.

Greg Everett: So what was the motivation for torturing your self with decaf coffee?

Robb Wolf: Feeling like I was gonna die and most of it probably being related to adrenal dysfunction yeah.

Greg Everett: That's it? Well I suppose that's a reasonable.

Robb Wolf: I did an ASI test and I came back barely alive. So I figured I should probably tweak things a little bit.

Greg Everett: Fair enough.

Robb Wolf: So what's new on -

Greg Everett: I'm sipping on a cup of coffee as we speak.

Robb Wolf: I figured as much.

Greg Everett: I feel like my adrenals are bigger than yours to begin with so I can take more.

Robb Wolf: Well you're youthful too. You've got youth as an advantage. I have no youth. I'm just old.

Greg Everett: I've got a few years on you.

Robb Wolf: So you guys had a meet?

Greg Everett: We did. We had a little weight lifting meet here last weekend which was fun. Everyone did very well. We qualified the four people that we needed to qualify so we'll have a good time at American Open here in Palm Springs coming up in December.

Robb Wolf: Palm Springs. Cool.

Greg Everett: Seriously it's in Palm Springs now. It's normally in Alabama or Ohio or some place that you really don't want to go in December.

Robb Wolf: Or ever really.

Greg Everett: Well there's that too.

Robb Wolf: So anything else new, exciting projects, wingdings?

Greg Everett: Man. No. I just have nothing to talk about. I feel like I'm just threading water at this point trying to keep up with the day to day instead of doing interesting fun, exciting things.

Robb Wolf: Yeah those days are behind us.

Greg Everett: Pretty much. I got two books out. It's time to rest to rest on my laurels.

Robb Wolf: Exactly and those laurels had better be big.

Greg Everett: Well, I'm eatin for em

Robb Wolf: Sweet. Nothing new here. I started working on the second book a little bit, just chipping away at it. That's about it.

Greg Everett: And so which book is this?

Robb Wolf: This is the City Zero book. So the kind of food politics, the risk assessment thing in Reno and all that. Nikki actually gave me an idea for an angle that I could approach this thing that would not

necessitate me blowing my brains out so that seems like a win. I went for it.

Greg Everett: Wow. She is helpful and so what's going on with Skilled Athlete.

Robb Wolf: Skilled Athlete is cranking along. They're actually getting ready to do a big unveil here in a couple of weeks and we might get Nikki on the show for that. It's skilledathlete.com. It's a gym management platform. We've been working with mybodyonline but it's gonna be skilltracking - all kinds of stuff like if you go to skilledathlete.com you can download an iPad or an iPhone appraisers.

We and not doing Android at this point because there's 8 zillion more people on Mac platforms than there are on the Android platform. So for now that's just not gonna happen. Go check it out. You can use it for I think a month for free or something like that. There's really cool data tracking, checking clients in, all kinds of jiggy stuff.

So definitely give it a looksy.

Greg Everett: Exciting stuff in the mixture.

Robb Wolf: Indeed.

Greg Everett: Well should we get to the heart of things?

Robb Wolf: Yeah. Let's do it. Squatchy picked out 9 big questions for us so we'll see how long we can flail around here.

Greg Everett: There are a couple of these that it could definitely go a few different ways. So we'll see what kind of collective mood we'll be in momentarily.

Robb Wolf: I've already pictured my head exploding all over the place so Greg may have to finish the podcast alone.

Greg Everett: Mine too.

Diet confusion. Justin says hey Robb and Greg. First off, I want to thank you for the plethora of knowledge that you drop on us every week. I only recently discovered the Paleo Solution podcast, but have quickly gone through the last 50 episodes.

Suffice to say, you have blown my mind with all of the information you provide. And you're blowing my friends' minds, who all now listen too. There hasn't been this much blowing since [insert inappropriate joke here]. Totally appropriate considering the conversation we just had prior to pressing record.

Robb Wolf: So true. We should just record all of that material as B tracks and charge \$1 to get into the archives and people would go wild man.

Greg Everett: I need to lighten up before.

[Cross-talk]

Anyway, my question has to do with Diet Confusion, as I call it for lack of a better term – a la muscle confusion, I'm wondering if the body adapts to one way of eating, and needs a change from time to time.

[0:05:45]

The muscle confusion term makes every time because it goes around in this gym quite a bit.

Case in point: I tend to get on food kicks where I get into 2-3 Paleo ingredients and have them all the time. Right now, I really enjoy tuna and pistachios. Don't ask me how that came to be and tend to include them with most of my meals. My previous hankering was for peanut butter and bananas, which lasted through most of the summer. Don't worry, I have a variety of veggies and low glycemic carbohydrates. I'm not just living off of fish and nuts.

With most of my kicks I initially find great results as I switch up my diet. My energy shoots up both in and out of the gym, and I achieve nice strength gains while dropping half a percent or so of body fat.

After several weeks of a new diet, however, these gains really plateau. I hit a wall where I my energy drops, and my body fat ticks up. What gives here? Could it be that the body adapts to a new diet much like it would a new workout routine? Or is this the most ridiculous concept since The ThighMaster? Even if I don't make the podcast, I'd love to hear your thoughts on varying one's diet every so often.

Keep up the awesome work!

Robert thoughts?

Robb Wolf: Well first back the fuck down on TheThighMaster man. That is a piece of American in that way. Archeologist in 10,000 years are gonna think that was like our religious worship tool during the decline of Western civilization calm down Justin.

One thing this eating process that you're doing is quite wacky. I just have to say it's pretty wacky but props to you for keeping some metrics and tracking some stuff and everything. I honestly don't feel like I have a scientifically credible response to this other than -

Greg Everett: Just go with your heart Robb.

Robb Wolf: Use your words Robb.

As I shuffled through all of this nutrition stuff and training stuff and everything it definitely seems like the body is a dynamic adaptive system. It does well with change and this is where we see periodized strength training where we see cyclic low carb diets, even cyclic caloric content diets.

So you look into the body building scene and maybe they don't really mess with the macros too much but you will have significantly over fed days, under fed days. People seem to find benefit from weight cutting, fat cutting protocols or they're calorie restricted and stuff like that.

Then they report some benefit. So I can definitely see eating tuna, pistachios and air would run you lean or run you dry at some point. Even when we look at the Inuit diet and stuff like that which I think would be hard to imagine a more narrow frequency band of eating. It's like walrus, seal, fish, blubber and maybe a little bit of caribou or something.

It's a pretty narrow frequency band but even within that you've got the different organ meats. You've got some sea vegetables. It sounds like the Inuit possibly have greater variety than you do. It's just intriguing and so -

Greg Everett: And it sounds like just more delicious choices in general. I don't know how I feel about tuna and pistachios.

Robb Wolf: I would definitely go for seal blubber over tuna on any type of a consistent basis for sure. Yeah it makes sense that your body would plateau out on this stuff just because you're probably also eating consistent macros. It's probably very pedantic like the same deal all the time.

I think the body does get used to that even in the big time body builder and power lifting circles people are savvy to the idea that if you want to get big and muscular and even if you are juiced to the gills on anabolics your body benefits from a day or two of low protein intake because as you consume lots and lots of protein that protein just starts acting more and more as a fuel substrate instead of it being a building block.

[0:10:18]

One of the ways that you could press that reset button is cycling macro nutrients, having very low carb or protein days and this all plugs in with macro nutrient cycling and stuff like that and it really seems to work. It seems to have some good benefit for people.

So it make sense that this could be problematic for you. I would definitely try to throw a little more variety in the mix there. Have some cashews occasionally. So kick your heels up and go wild.

Greg Everett: Sumo dead lift high pull and application. Stephanie says Hi! I don't have any formal weight training experience, just anecdotal, my own trial and error and reading articles and books on various styles of weightlifting, etc.

Robb Wolf: That makes Stephanie probably level 5 coach in some circles.

Greg Everett: She's got the keys to the space ship.

Robb Wolf: Totally.

Greg Everett: Or if you're riding with Robb, the Toaster.

Robb Wolf: Indeed.

Greg Everett: I am writing to you Robb Wolf and Greg Everett to help me out on something I am trying to understand. The Sumo Deadlift High pull is being taught at the gym I go to. It is being taught as a quick movement, powerful like an Olympic lift. I find this confusing because, the high pull portion seems to cause so much stress on shoulder, wrist and elbow flexion (thinking impingement of shoulder) I cannot think of any reason I would want to perform that movement dynamically.

Is there any reason for performing a Sumo deadlift high pull quickly? Granted I have used high pulls with wide to narrow grip training as a competitive body builder and also used sumo deadlift but not together and dynamically. Thank you for your time and hopefully another tool I can put into my workout box.

Well.

Robb Wolf: Fudge. This is the beginning of the unstitching for us.

Greg Everett: I can give you a fairly measured response just cuz I don't have the energy to get angry about it.

Robb Wolf: It's cause your adrenals are beat up dude. If you repump your adrenals you can get angry again.

Greg Everett: Ah to be young. I agree with you that I really don't see a point of a sumo deadlift high pull. I never really understood it from day one of my crossfit indoctrination. I think it was more of a novelty thing more than anything and unfortunately based on its history it's kind of become this core exercise in the crossfit world which to me is -

Robb Wolf: Appalling.

Greg Everett: Absolutely nonsensical. I don't really share your concern necessarily about the safety issues because of it being dynamic. As a matter of fact I would say it's less problematic in this case than it would be doing a slow upper body only narrow grip high pull simply because you are really just following through on the momentum on the bar that you've generated from your legs rather than actually lifting the bar very much with your arms.

If you're going to do them I would do them somewhat dynamically but I also wouldn't do a lot of closed grip high pulls.

We do snatch grip high pulls and things like that which I really haven't seen any shoulder problems from unless you have someone with an existing problem, or who has horrible flexibility ,in which case obviously you need to go about all things you do a little bit differently.

But those are always done dynamically with the bar being accelerated first with the legs and hips and then the arms are more of a follow through. So long story short I just wouldn't do sumo deadlifts and honestly if the people running your gym genuinely believe that a sumo deadlift high pull is any way related to the Olympic lifts or is somehow going to help you teach the Olympic lifts I would not have a lot of confidence in their abilities as coaches.

Robb any further thoughts?

Robb Wolf: A few. One thing and I really like the point that you made. The dynamic flavor of this is actually gonna be less potentially traumatic as far as an impingement injury on the shoulder. I don't think the little book exists anymore. There used to be this cool little maybe 80 page, 90 page book called the 7 Minute Rotator Cuff Solution.

Greg Everett: Yes I remember that. I have it as a PDF somewhere.

Robb Wolf: Yeah. It's an outstanding book.

Greg Everett: It's still out there.

Robb Wolf: It's still floating around. So when this thing popped up on the scene. It had to be late 80s, early 90s I would say that this -

Greg Everett: I remember it from like the mid 90s.

Robb Wolf: So it's been around and so the high pull was a movement that was very common in body building. It develops traps, rear delt - it's a great muscular development tool for thick, beefy shoulders and all that. The problem though is that it puts that internal rotation of the humerus you have this tendency to really impinge the super spinatus tendon as it goes through the acromium.

[0:15:27]

The dude did a nice little analysis on this impingement potential and really admonished people for the love of good don't do the high pull and so for a long time the high pull have disappeared out of use. This guy's education efforts were effective and even in the body building scene you just didn't see high pulls all that much. You started seeing more shrugs or clean pulls and consequently saw rotator cuff issues drop off.

Historically that's an interesting piece just in the high pull in general. And then in the beginnings of crossfit the founders of the movement were not actually that sophisticated on the Olympic lifts. As my friends from the South would say shut the front door.

So this movement was theoretically a bridge between the slow lifts, the dead lift and the quick lifts say a power clean or a power snatch and I think the theory was intriguing but then the application of the type of movement patterns that you generate are horrible.

The tendency for early arm bands, the tendency for high hip recruitment and stuff like that and it's one of these illustrations of where the type of training that you do just goes so horribly wrong compared to the way that you would do something in real life. When we were getting Glen ready for some of his fights like a fight gone bad type of workout for a diagnostic tool.

But I'm looking at the amount of mileage that we're putting on his shoulders from grappling and from boxing and everything and I just look at how little I like the sumo dead lift high pull and I was like okay what's actually gonna be helpful for this guy and that would be the hang power clean and really grip intensive, loaded to maybe 95 lbs so you get some quick turn over.

You're still moving the weight rapidly and all that sort of stuff and this was just really really effective and what I found in the course of Glen using a hang power clean at high repetition in a conditioning modality and again this was mainly as a diagnostic tool but obviously you get some conditioning benefit even from the diagnostic workout.

But when I saw Glen doing this movement he had a tendency to - you go from that hip back chest upright position and the hang power clean violent upward hip extension, get a gentle brush, re bending of the knees to catch the clean and then instead of

having him stand up tall to finish the movement his natural athletic instinct was to catch it in a slight knee bend, use a little bit of a shoulder bump to bump it off of his shoulders, reset the hips and then catch it on the way down which is actually incredibly athletic and if you see people training folks for athletic endeavors and using doubles and triples and the hang power clean or something like that to teach repetitious hip extension this is the natural movement that actually emulate sports and people who are naturally athletic.

I'm thinking about John Fergoso and some other people that we've had in the gym. You take somebody who's at a top of the food chain athlete or a wrestler, a volleyball player whatever and you just show them the rudiments of a hang power clean and they will inevitably do it the same way instead of coming tall just so we have this arbitrary finish point.

Greg Everett:

No rep.

Robb Wolf:

And so this is another interesting piece to this. I was listening to Jim Laird podcast. He was interviewing Kiefer and they were talking about food but it was interesting. Kiefer ended talking about cone drills and stuff like that and this notion that people usually use cone drills to try to improve what we would call agility but in fact all its doing is it's in training a particular motor pattern that really isn't specific to being agile on the athletic field.

You're getting good at dance moves basically and that's it and this is another one of these pieces where a lot of the programming that goes into crossfit-esque - I love crossfit. A lot of our client obviously does a foundational piece of how we do a lot of our clientele type stuff.

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But the sumo dead lift high pull we removed and we use other movements in place of that. The way that we do our box jumps now for the bulk of our clients once they get reasonably athletic I'm less concerned about a full hip open than I am dynamically doing box jumps in a legit way which we tend not to do super high volume on that stuff.

It's more like 5s and then another movement. Instead of doing 50s and stuff like that. There's bigger picture stuff here even

beyond just the large loads long distances quickly and being able to measure where you started and where you finished and all that stuff. I guess that's all nice for competitive crossfit type stuff but then there's this world of actually making people more athletic and ingraining good movement that's going to be beneficial for your life.

The type of movement that you ingrain on a sumo dead lift high pull - I just can't think of any benefit for it out in the real world. The things that you get from a power clean, a power snatch, clean pull, snatch pulls as far as developmental tools just infinitely superior and then if you want to drop in and do something for a crossfit burner say like you want to compete or something like that if you have aptitude with the basic Olympic lifts doing a sumo dead lift high pull is not gonna be a big deal.

You have all the motor patterns that you need. You look at it and then it's like okay. This is obviously how I do this shit. So yeah. That probably went way further than what -

Greg Everett: Are you sure that's decaf that you're drinking?

Robb Wolf: See these are my adrenal functioning. I can actually beg for a change

Greg Everett: That's weird.

Robb Wolf: I'm sure that was way than what Stephanie was looking for but this is some stuff for coaches to think about. It's why are you using a movement and not just fucking polishing the knob of the people who are telling you these things are good or bad. Even for me - assume I'm wrong but at least get in and think about it and tinker with stuff and see how this stuff plays out, see how people are doing things in other arenas and why they're successful and why do people coach the Olympic lifts in the way that they do, why do they coach the progressions that they do.

You do occasionally see a thruster as part of Olympic weight lifting training really rarely and it's typically performed from the back but you never see a sumo dead lift type pull. It doesn't exist in the lexicon of Olympic weight lifting.

So that was my head explosion.

Greg Everett: I don't have the energy to let my head explode either. Peter says I no bad grammar make Greg mad, so I try to be OK.

The article Greg wrote on feet forward vs feet pointed out during the squat was very interesting. While watching the olympics I've noticed that the athletes performing the clean and jerk point their feet forward during the first pull which he considers a deadlift, and feet out during the front squat; though I've also noticed most of their knees go valgus because they're lifting too much weight?

Could you expand on what you said about the knee rotating, and stretching non-stretchable soft tissue? On the topic of Kelly Starrett, he recently posted a video talking about reducing inflammation with icing to be not such a good idea. Did you watch this and what is your take on it?

Also what's up with Robb's eyebrows? In most interview videos I've watched he has this ability to always talk with one eyebrow raised. Thought I'd just mention it so he would get super conscious of it now. Good job in spearing that beast in Icaveman by the way.

Robb Wolf: I've trained my eyebrows. I can raise them independently Spock style. Thank you for noticing.

Greg Everett: It just gives you a whole other range of possible expressions.

Robb Wolf: Yes and when I start making one raised back and forth while Zoey is looking at me it puts her into a catatonic state immediately so it's pretty cool.

Greg Everett: Use it while you can and by the way this email was subject lined Greg Everett versus Kelly Starrett. So let me first of all say that I'm really not interested in being on one side of a versus. So really I'm not trying to make enemies or beat anybody out there and for some reason that article about the knees thing turned into a Greg Everett versus Kelly Starrett when it really was just me responding to people asking me what I thought about what Kelly was saying and that's what I thought. So simple as that. It's nothing personal.

Regarding the Olympics I don't know if I would agree with your observation that most of their knees go valgus. I'd say that yeah quite a few of them do but yes. It's the Olympics. These guys are

lifting some of the heaviest weights you'll ever see lifted in the history of the world that's not gonna look perfect in most cases.

A lot of times part of the reason is that when you are trying to snatch or clean extreme heavy weights especially nearing your own max effort you're gonna end up naturally throwing your feet out wider than you normally would and when your feet are too wide the knees are going to go valgus when you stand up.

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There's really no way around it. It's not an indication of poor training or poor muscular recruitment or anything like that. It's just a simple structural thing. I don't know if I would really worry too much about that.

As far as what I said about the knee rotating I think about the joint. It's a hinged joint. It's not meant to rotate. If you take anything mechanical out there and you make it do things it wasn't designed to do it's going to break it. You can demonstrate that made any children's toy because they're fucking break all the time and you have to keep replacing them.

So yeah there's a little bit of play in the knee. It is not an absolute locked in, perfectly rigid hinged joint but you don't really want to push the limits of that unnecessarily and so what I'm saying is that that joint like all joints is surrounded by non elastic connective tissue to maintain the integrity of that joint.

And if you continually put that joint into positions where that non-elastic connective tissue is being forced to stretch eventually it's going to be looser than it's supposed to be. Ligaments don't just naturally shrink back to what they're supposed to be if you've stretched them somehow. There's some kind of surgery where they basically it's like taking a hair dryer to shrink wrap but I've heard that as the results of that are really unreliable and generally not good so you definitely don't want to test that out.

As far as the ice and inflammation thing - I did not watch that video. I kind of kept a little bit of an eye on what was going on but not really and first of all this is not my area of expertise. I'm not a physical therapist. I'm not a medical practitioner of any kind so take everything I say with a large grain of salt but I would agree that there are definitely a lot of cases where ice is overused or

used inappropriately. I agree that the NSAIDs and all that kind of stuff generally should not be used especially for pain management.

Honestly with the pain management stuff if you're just saying hey I'm sore. I'm gonna take some ibuprofen and you probably just need to rub some chalk in it and walk it off. If you're talking about an athlete who is a competitive athlete at a high level who has to train like you just don't have the option of hey. I'm gonna take 3 weeks off because my knee is kind of sore I think your choices are going to be a little bit different than say relative to your average crossfitter who's like hey I'm feeling kind of beat up.

So in the first case the competitive athlete there may be times when you're gonna use ibuprofen or you're going to use ice in order to allow yourself to get through a particularly bad period of training and you're not doing it to say like hey this is the best thing's that's going to heal this thing up.

You're doing to say hey this is kind of a stop gap treatment to get me through this to a point where I can address this thing more appropriately for the long-term.

That being said my general take on ice and this is based on my own experience and also just talking with a few practitioners that I trust who I know work with athletes and all of them are familiar with weightlifting in particular and that is that generally ice is going to be more appropriate for muscular injuries not for avascular tissues like your tendons and ligaments and that generally you probably be don't want to be doing it too long.

So the 20 minutes of icing is probably a bit too much. Maybe we're talking more like the 5 to 10 minutes sort of thing and then also contrast is generally gonna be a better approach for pretty much anything and then the compression I think typically is a good idea also and then appropriate movements.

So all those things - there a number of those things that I definitely agree with Kelly on but what I don't agree with is saying we can't ice. Ice is bad. It's not ice is bad or good. It's just that there are times when ice is inappropriate and there are times when ice is appropriate and you have to kind of know those things and be smart about what you're doing.

[0:30:05]

Robb Wolf: I like it. I'll just throw in a couple of thoughts here.

I remember Kelly did a piece where he was talking about the toes forward doing hints towards production and we had a podcast where I ran through my thoughts on that like for general athletic development for an individual that's got the range of movement in the ankle, the knee, the hips back is all tied together.

The toes forward squat for general athletic development I think is great. Like Rafael Rue is and lots of other coaches at his level who actually worked with a huge number of professional athletes this is what they do something shocking which is they use quarter squats for most of their athletes.

Greg Everett: I'm just gonna say all the professional coaches that I have ever talked to about this a lot of them do squat toes forward but not one of them ever squats below parallel so it's a completely different ball game.

Robb Wolf: Which in the large loads long distances quickly kind of scene people would fucking loose their mind because again they're trying to take one thing and apply it to all situations. It's not that these people who are dealing with million dollar athletes are stupid.

In fact every once in a while other people besides Greg Glassman got shit right in exercise science

Greg Everett: Get the shit out of town.

Robb Wolf: And so within that context it's like okay so a toes forward squat we're gonna go a quarter depth, we're gonna do these fairly high frequency because we're trying to emulate the patterns that we see in that violent hip extension. We're working on hip torsion and stuff like that.

We're gonna get more full joint range of movement activities from unilateral work - lunges, box step ups an stuff like that. This is standard run of the mill stuff.

Now if you're exclusively into the sport of fitness and everything needs to be the same range of movement every single repetition

then this may not work because it's a different deal but depending no where you're going with that boat again its tools

I barely could carry Greg's gym bag with regards to Olympic lifting knowledge but if you toe your feet out you are creating a situation in which the combined center of gravity is more favorable for you and getting that weight up versus having that toes forward.

And so in that regard people are going to toe out more in Olympic lifting and Olympic lifters are known to be good general athletes when they get tested but again their deal is Olympic weightlifting so you're gonna squat in a way that is most beneficial for that and so again maybe not that much controversy. Just unfortunately not a one size fits all kind of gig.

With the inflammation deal and icing and all that - for years I remember Fred Hatfield back God again late 80s, early 90s he was quoting a bunch of Russian literature that was saying that post injury like a sprain or strain that they would subject the area to heat and actually create a huge inflammatory response, a day or two later start using contrast methods to move the fluid and inflammation out of there and they felt like that they had better recovery.

When you think about hormetic stressors and immune response and stuff like that it totally makes sense but again what Greg just alluded to if you've got a knee like the popliteal fossa is so swollen with fluid that you cannot move your knee and you have to get out and play that day because it's your job then you would better get some sort of anti-inflammatory action, some menal lymphatic drainage, probably some icing to get all that inflammation down so that you can in fact have normal knee function.

I think it's a case of we probably just went too far on one side. We just went bananas on the icing and using continually passive movement units hooked up to cryopax and stuff like that. It makes it feel good. The pain goes down and everything which obviously has some benefit but there may be some downside to that.

So we just need to be possibly a bit more sophisticated in how we roll that stuff out and then the final thought on that I guess it's

just that if you have somebody who is massively inflamed because of horrible diet, bad sleep etc. you may have to default to ice in my opinion because they're so fucked up that you don't really want things to get much worse.

[0:35:10]

And so again are we talking about a healthy insulin normal kind of population? Are we talking about hyper insulinemic quasi autoimmune individual who tripped and went down a flight of stairs and they are all fucked up. Do you treat that person the same way you do an athlete?

I don't know. That person might really benefit from some icing with their bruised knee or bruised elbow because they're inflammatory response is so over-the-top that you don't really want to get that thing to get much of a feed forward mechanism.

Greg Everett:

Yeah. The one more thing I would add to that is that I think it was Kelly who said in his original blog post about this something like do we really think that the body doesn't know how to treat these things and that seems like a cool theory but the body must know how to do this so why are we interfering.

But if you stop and think about it the answer is no. It doesn't necessarily know how to treat these things right. One because we're potentially exposing the body to think that it's not prepared for like these high end athletic endeavors are not necessarily natural or weightlifting is definitely not Paleo at least at a high competitive level but then there's plenty of examples of the body completely reacting inappropriately or to extremes.

And the perfect example is allergic reaction. You think anaphylaxis is a reasonable response. You can't just fall back on this weird idea that well the body must know exactly what is perfectly correct for every situation. Unfortunately you can't just rely on that as convenient as it would be.

Robb Wolf:

I think having some awareness about where to intervene and where to let things roll is smart but that's a great point.

Greg Everett:

Paleo and cataracts. David says I'm 74 and with moderate cataracts – surgery planned. Since I was 27 I've eaten mostly what I'd call "natural foods" – that is, lots of veggies, fruit, and

loads of whole grains but with plenty of meat – lots of southern fried chicken.

Until recently my blood pressure was 120/80 although it is sometimes higher now. I've had fairly high cholesterol for years but refused meds thinking I could deal with it via nutrition and exercise. Other than that, and the cataracts, I am, as far as I know healthy – no aches, pains or limitations.

So my question is: While I understand that if I had eaten Paleo all along I might not have developed cataracts can eating paleo now do anything to reverse the cataracts? Thanks.

Robb Wolf:

A couple of things - one thing is that 120/80 blood pressure that really makes me wonder about insulin resistance. That is way higher than what I would want to see. Diastolic blood pressure - the one on the bottom, the lower the number, anything over 70 I start getting really nervous.

I start thinking about insulin resistance which god everytime the aldosterone thing comes up it just gives me a little bit of a chuckle but anyway.

Insulin goes up, aldosterone goes up, when aldosterone goes up we retain sodium, when we retain sodium, we retain water and that makes blood pressure go up and so I would be really curious to know how you would respond to a ketogenic diet. I would be super curious to see if that brought your blood pressure down a bunch because of the diuretic effect.

So that's one potential benefit of a ketogenic diet in that scenario. Another potential benefit is that the cataracts are an accumulation of reactive oxygen species damaged and this product called lipofusion which is this incompletely metabolized fat backbone which accumulates in the eye and basically causes clouding and obscuring.

And one of the interesting features of ketosis again is that you tend to ramp up these cellular detoxification pathways and you actually can remove lipofusion from cells and people who are aging what we would typically call normal in Western terms by the time they're in their 70s or 80s like a significant amount of the cell is taken up with just lipofusion - just this fatty, waxy nastiness

that is the accumulation of incompletely metabolized lipid products.

Ketosis has the ability to remove these lipofusion products out of the cell and therefore not push out the other organelles and allow for normal cell functioning and stuff. I have never seen a study. I've never seen a specific example of somebody reporting that their cataracts ended up improving.

I've seen a ton of people myself included who had some blood sugar swing issues when I was eating higher carb and then when I started eating more ketogenic more cyclic ketogenic like some of the vision problems that I had ended up going away because I wasn't getting the blood sugar swings which can move fluids in and out of the eye in kind of a dramatic fashion and isn't very good for the eyes.

[0:40:20]

So I wouldn't be surprised if ketosis helped the cataracts. If it didn't help the cataracts it would certainly benefit both the recovery eating ketogenic but having some antioxidant rich veggies and stuff like that. Going into the surgery I think you would have better surgery outcome, better recovery and you would most likely not see the cataracts return because you're removing the main mechanism of causation - these reactive oxygen species which are mainly a spill over from a hyperinsulinemic adaptations.

And then you also have the cell detoxification pathway removing that lipofusion which is kind of the primary problem with the cataracts. So it would be interesting if you did some tinkering. I think that you could build a good argument just on the blood pressure side to do a little bit of tinkering with the ketosis and then it should benefit the eyes too and it'd be very interesting if you did something tinkering with that stuff to see what the results are.

Greg Everett: Way cool.

Robb Wolf: Sweet.

Greg Everett: HIV and the Paleo diet. Melanie says one of my children has recently found out that she is HIV positive. We are still waiting on

the Western Blot test to make sure she did not get a false positive but I am wondering if there have been indications that going Paleo would help to prolong her time without meds.

Any information would be appreciated as I am not an advocate for Western medicine and the longer she can stay off the meds the better in my opinion.

Robb Wolf:

So I'm obviously not a doctor. Take all the stuff as informational non-prescriptive, all of those exculpatory clause type things but I like to be I guess naturalistic in the approach to medicine that I'm kind of thinking about but there is a reality that some things like vaccines and antibiotics and antiretrovirals and stuff are amazingly effective at keeping people alive.

And so if your daughter has even been suspected of being exposed to HIV and it looks like she's got at least one diagnostic test that confirmed that I cannot think of a reason why you would not be aggressively tackling the antiretrovirals and the protease inhibitors which are kind of the standard cocktails for HIV treatment.

It just seems crazy to me to not do that because they've actually seen examples where the early administration of these drugs, the HIV ends up getting cleared at some point and so this is a situation where I wouldn't go too granola on this thing. There are some really effective drugs. HIV used to it eventually progressed into AIDS and kill you and it doesn't typically do that now. So I wouldn't really mess with it.

Greg Everett:

look at Magic Johnson. That guy is bigger and more jacked than he ever was.

Robb Wolf:

I would keep that in mind and then on the other side of this thing where Paleo would be beneficial I had some studies about the main difference between being HIV-infected and having full blown AIDS where your immune system starts tanking is the disruption and gut permeability.

That seems to be the thing that goes south, allows this huge influx of bacterial endotoxins and all kinds of environmental inputs into your system and that insult combined with the general impact of the HIV virus on the T cells is what leads to the end basically.

It just looks eerily like a bunch of these gastrointestinal related issues that we see stemming from grain consumption, stress, a host of different things. So eating a Paleo diet, having good vitamin D levels, getting adequate sleep - like that all just seems important for any type of mechanistic thing that you can think about with regards to staving off that HIV status and then that to me combined with antiretroviral and protease inhibitors used stat seems like a really smart thing to do.

If the individual is male then you can also throw testosterone therapy into the mix. There was a book called Built to Survive which was actually written in the - had a really heavy following in the gay population and before the antiretrovirals were available people looked at the fact that AIDS was a wasting disease, that you ended up losing muscle mass.

So some people started experimenting with anabolic use and these people survived and they thrived and they started getting incarcerated for having scheduled drugs on their person which actually was saving their life but it's an interesting thing. That was a really really effective treatment for people before the advent of antiretrovirals and stuff like that.

[0:45:33]

Greg Everett:

This subject line is just to get someone fired up namely Robb. Also, brown-nosing, great talk at AHS12. Kate says dear Robb and Greg.

Hello! I've listened to almost every single podcast and I'm a huge fan. I want to say something sassy and clever, but right now I'm like one of those middle-schoolers over thinking the "coolest" lines in my head so I'm just going to skip it

I just saw this in the New York Times and felt a little bit of rage. However, as I am not an expert, I wanted to throw it out to you two for analysis. It is Dr. Jules Hirsh shooting down the recent JAMA study showing people on a high-fat diet burning more calories than they consumed. In the interview, he also references a similar study he did where they measured -

And then that sentence just drops off. So I don't know what they measured.

I was wondering what do you think of his analysis of the study/what do the different results of the two studies say? Additionally, could Dr. Hirsch have been right about the difficulty in measuring energy output? He seems to blame calorie differences on lost water weight, but here I'm confused. If a calorie is a calorie is a calorie, why isn't a pound a pound (a pound)?

Here is the link to the NY Times interview and here is a link to what I believe may be the study Dr. Hirsch refers to in the interview. A little background: I just saw Gary Taubes speak at AHS12 and I believe he references the same JAMA study, but obviously he had a different interpretation.

Robb Wolf:

Yeah so this Dr. Hirsch - gosh. It's painful in a way. If you stick people in metabolic ward settings where you're controlling exactly what people are eating at the end of the day the calorie deal ends up being a huge factor.

It's hard to start distinguishing differences between a high carb diet, low carb diet and stuff like that if you've given people isocaloric feeding and whatnot. We do see some definite differences between say just simply weight loss which could be water, fat or muscle versus the actual fat loss and typically on the lower carb diets we see better fat loss, more muscle retention, possibly even lean bodyweight gain.

What Dr. Hirsch dismisses in this I'm sure was accounted for in the methodology and it would be goofy if it was not. The paper that's linked is not in fact the paper that he's talking about and the one that Gary Taubes was talking about. But I remember reading that one.

So even if we - gosh there are so many layers to this thing - even if the calorie - which is funny. There was just a thing in Science I think where they were saying a calorie isn't a calorie and more people are kind of gearing up to that, understanding the different metabolic pathways and the hormonal results and all that sort of jive.

Let's say that the calorie is a calorie story is true that's only one piece of the picture. There's also the stuff that Stephan Guiana unity talks about constantly which is the palatability, the neuro

regulation of appetite and macronutrients absolutely are not equal in that regard.

So let's just say that the propeller heads are correct, the calorie is a calorie. It doesn't matter what macros you eat. It all comes down to eating less even then which I don't think that's accurate but even then let's say that that is 100% accurate. There's no metabolic advantage eating higher protein and lower carbohydrates and stuff like that we still know for a fact that hyper palatable foods cause people to overeat.

So simply telling people which is what Dr. Hirsch said in the interview continue eating the food that you're eating just eat less of it. If you're fucking eating Twinkies and Ding Dongs you can't eat less because you can't stop until you've done a car jacking or sold your body on the streets to get more money to go buy more of that food because it's so cracky and addictive and yummy.

So that part of the equation never seems to get woven together. The fact that there are legitimate metabolic differences between the type of macro nutrients that we eat and then we're not even considering the differences in the way that those food tip the gut and are then metabolized by gut bacteria and all kinds of inflammatory signaling there.

And then the other piece of this is that what type of foods are you going to be over eating on and which ones are you not going to over eat on and chicken, fish, steaks, sweet potatoes, broccoli - it's hard as hell to over eat that stuff. French bread drizzled in garlic butter is really easy to over eat. So that's another piece of this thing.

[0:50:38]

It's funny the propeller heads like this Dr. Hirsch have been telling people to just eat less for a long time and it doesn't fucking work. So these ass holes need to come up with something different. This guide it's like I want to put an electric shock collar on these people when they say this shit and then each time somebody dies from metabolic derangement it could have been prevented.

It's somewhere in the ether they just get zapped from this stuff because it's obviously not working. We keep telling people largely the same story but it's obviously not working very well.

Greg Everett:

Indeed. All right. Well speaking of getting fat. Seven month old not fat enough Tim, Kristen, and Zoey say Robb. I have been an avid listener of yours for a while now and have been eating paleo for about 2 years.

My wife, reluctant at first, started eating paleo-ish while she was pregnant and post pregnancy went full paleo and is now 100% paleo now that she sees and feels the effects! Our problem now is that our 7 month old isn't gaining enough weight to please the pediatricians.

She was exclusively breastfed for the first 6 months and now eats real solid foods - peas, carrots, sweet potatoes, chicken, pears, apples and avocado. We keep upping her solid food content but her metabolism is crazy high and she seems to burn off everything that she eats. The pediatrician now is strongly urging us to give her formula a few times a day and add some grain snacks and infant cereal.

I don't have a realistic option to go to a new doctor because I am in the military and our health care options are limited. She is hitting all of her developmental markers and everything else is great, they just want to plump her up. A friend of ours has twins that were born at the same weight as our daughter and was the same weight at 3 months.

They started them on formula and they ballooned up literally and the look swollen and frankly unhealthy. Should we be worried about the low weight if she is hitting all of her cognitive and developmental markers and is otherwise healthy?

Are there any other healthy foods we can add to give her more food that will help her grow? I know you usually deal with 24 year old dudes that want to bulk up not 7-month olds, but maybe now that you have a new addition to the wolf-pack you can understand my frustration and confusion. Thanks.

Robb Wolf:

So this whole thing is 100% an artifact of your pediatrician looking at the standards which come out of the United States instead of pulling from the World Health Organization standards which pull from the world and typically sees people who are breast-feeding for upwards of a year.

So when you look at the numbers and the recommended bodyweight projections for babies from the United States it's like an order of magnitude larger than what the WHO recommendations are. That's because fewer than 15% of people breast-feed at all in the United States.

Virtually all the babies are formula fed and the formula is very high caloric content. It's much more insulinogenic and the babies get way bigger, way faster on formula. Fuck man. Like this stuff just -

Greg Everett: Do the quick answer.

Robb Wolf: So that's the quick answer and if you want to do a little Google searching or ask the pediatrician to please look at the WHO data instead of that the United States data and then your baby's gonna be right in line with that.

Luckily our pediatrician pulls from the WHO data and he's happy as a clam with the progress that Zoey is making and Zoey is off the scale on all the developmental stuff - rolling over, eye contract, grip strength - all of that stuff she's off the Richter but then when you look at her developmental parameters she's super high on height but then she's 58th percentile on the weight.

So for the average pediatrician they would say that she's under eating but she's breast feeding all the fucking time. We were just shooting down biology, that you can't always rely on biology and stuff like that but when it comes to feeding a baby it's kind of like they are going to eat enough to be provided what they need unless the mom is having production issues or something like that.

The long and short check out the WHO recommendations that basically pulls out the formula fed babies and focuses on breast-fed babies only and then we're actually comparing apples to apples.

[0:55:00]

Greg Everett: Yeah. It should be pretty reassuring to you with the fact that all of her other markers are spot on especially the cognitive stuff so I mean it seems like I wouldn't worry a ton about it.

Robb Wolf: Sn underfed baby will not have normal cognitive development. That is the classic scenario of when you're looking at an underfed baby which interestingly you actually see a lot of these stuff in like the vegan community because even if the mother is breast-feeding the mother's breast milk is so nutrient deficient that the baby's not doing well.

And then beyond that it's is a clear indication that when the baby has a failure to thrive, there's a lack of body weight gain and there's a lack of normal psycho motor development and you're not seeing any of that so just simply look at this and be like well your babies not obese yet like all the other ones so we need to plump them up that's fucking ridiculous.

Greg Everett: Yeah. All right.

Speed up keto adaption. Ben says hey Robb how's a goin? First off, I bought your book and liked it.

Robb Wolf: Well at least one person did. That's good.

Greg Everett: Definitely the best 'paleo' book I've bought so far. People either love your book or they hate it or they think it's okay.

So yeah, I work in a warehouse and eat a super unhealthy diet to get through the day, enormous amount of carbs. Every time I try to go keto while working, I always can't get keto adapted fast enough, and my quota plummets and I get in trouble. Phinney and Volek seem to think it can't be done in less than 2 weeks, but I'm not sold on that.

Basically, so far this is what I think would yield the fastest keto adaption time. 1)After eating coco oil, go on a 48 hour fast. 2) Begin eating a healthy keto diet heavy in coconut oil. Would walking be detrimental or beneficial? I can't figure out what this study means and there's a link of course.

Thanks for any help you can provide!

Robb Wolf: I think this is actually a pretty smart way to get into ketosis rapidly and the really heavy use of coconut oil is the gonna produce ketone bodies very very quickly which is going to spare as much glucose for the brain and as much glucose for the rest of your body as you can.

The ketone bodies still take some time to really ramp up as a fuel substrate in the muscles and the muscles usually shift more into just fatty acid oxidation anyway but I think this is a pretty slick way to do this and you can do some anaerobic intervals in there like some high-intensity intervals on that first day doing either some upper body or lower body, you know like a Schwinn Airdyne mixed with a Concept-2 rower would drop glycogen stores like crazy so that would be good.

This would be a really harsh kind of introduction to all this stuff but I think it would get you kicked over about as fast as anything is going to do.

Greg Everett:

Cool. Yeah don't get fired.

Macronutrient ratios for fats.

Nikki says dear Rob and Greg. Love your show and look forward to Tuesday, listening to you all the way from London, England. It's become particularly funny recently for me to hear Rob references his family. My daughter is called "zoe" and I'm Nikki too.

Okay, I am really hoping you guys can help me - I just have to say. It always cracks me up. I don't know why with the British way of talking about how people are named something but they're called Zoe. That's like what we use to tell people what we call them behind their back. Her name is Zoe but we call her ass hole.

Okay. I'm really hoping you guys can help me out here as I've been searching for the last piece of the Paleo puzzle. I understand that PUFAs are not good, but no where can I find a recommended amount of saturated, fat, mono unsaturated fat and polyunsaturated fats one should have daily.

I've been Paleo for 5 months now and I am still confused about the macro nutrient ratios of fats. Sorry the spelling is here is just wacky. As a former researcher for the BBC, you'd think I'd be able to track down this information, but alas, I have not. Oh if it was that easy we wouldn't have this podcast.

I use FitnessPal to keep track of what I eat and use their custom settings for my carbs 10%, protein 20% and fats 70%. Last week I heard the Australian writer David Gillespe, Fear of Fat, say one

should't have more than 6g of PUFAs so I've now got that value now.

Please can you tell me how much of the other 2 fats I should aim for. I am 5'8", 133 lbs (60kg) and 11.2 % body fat. I do 3 strength sessions a week.

Cheers as the Brits say.

Robb Wolf: Indeed. They do say that.

[1:00:00]

I'm a little flummoxed again what to say here because if you are you're eating grass fed meat, seafood, fruits, veggies, roots, tubers and nuts and seeds - unless you are eating tons of say like mayonnaise or something I don't really see how you're gonna steer the vote really one way or another.

I don't know that it really matters all that much because are you going to just eat coconut to get more saturated fat? Are you going to reduce olive oil so that you don't have as much monos and if you are eating these foods then I don't really see the amount of poly unsaturated fats that you're getting to be an issue at all.

So I feel like I'm possibly failing you here but I think that this may be a level of detail orientation that really is not necessary and there's really not that much that you're going to do to alter these fatty acid ratios to any significant degree again unless you what was the first guy Joel or Justin?

Unless you're gonna eat only tuna and coconut we're not gonna change your fatty acid ratio that you're taking in all that much and if you're generally eating whole unprocessed Paleo-esque foods I think that you're kicking ass as much as you could and you don't really need -

Part of the beauty of it is that you don't need to sweat too much more than that. Maybe you think a little bit of macronutrient cycling, some cyclic low carbohydrates, sticking carbs post workout, stuff like that but that doesn't seem all that hard either.

That actually seems to make life simpler to me relative to the zone where you're trying to get every damn meal exactly the

same proportion and all that jive. Greg is this a failure answer? I just don't see how you can really dial this stuff in one way or another without really becoming wacky, becoming Justin your eating style.

Greg Everett: I would say you're definitely over thinking it Nikki. I agree. I really don't see anything good coming from getting this thing dialed into some super precise ration and even if you knew how to find it I don't think there's anyone who's going to be able to tell you exactly what the perfect ratio is anyway.

Robb Wolf: And then going back to Justin's original question like the body benefits from change and dynamism so I would maybe try to eat seasonally a little bit. I would switch stuff up.

The polyunsaturated fat deal if you are hyper insulinemic, loads of oxidative stress then the ingestion of lots of poly unsaturated fats is probably a horrible idea. If you're not metabolically broken I don't see it being a huge problem and then even the step further is that I don't know how you get a ton of polyunsaturated fat unless you're drinking flaxseed oil by the gallon or using half a gallon of mayonnaise for your meals and stuff like that.

The interesting thing even within that if you're on a ketogenic diet then it seems like you metabolize the oxidative stress from polyunsaturated fats is completely different than even when you're consuming a standard medium carbohydrate intake.

So yeah it's an interesting question but I just don't see any real way to address it without becoming neurotic about food and I don't see any way that you could address it that's really gonna turbo charge things more than just doing some simple cyclic low-carb eating, some nutrient partitioning stuff like that.

Greg Everett: I concur.

Robb Wolf: Is that everything?

Greg Everett: That's it.

Robb Wolf: Sweet.

Greg Everett: An hour and four minutes.

Robb Wolf: Dude we're like clockwork man. We'll credit it all to Squatchy for precisely picking just the right amount of freak out worthy questions versus concise answers.

Greg Everett: There you go. Quite a team we make.

Robb Wolf: Indeed.

Greg Everett: Alright well?

Robb Wolf: I guess that's it man.

Greg Everett: That is it.

Robb Wolf: Yeah I can't think of anything else. So I guess same bat time, same bat channel next week.

Greg Everett: You betcha.

Robb Wolf: All right G. Take care man. Will talk to you soon. Bye.

Greg Everett: Alright see ya.

[1:04:58] End of Audio