

# Paleo Solution - 169

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Robb: Hey folks, Robb Wolf here, episode 169 of the PaleoSolution podcast. Greg, what's going on man?

Greg: Just trying to figure out this microphone again.

Robb: Nice. Greg and I often times spend many minutes spending our even differently than what we do during the podcast actually trying to get our gear which is actually kind of top end gear but it still doesn't really interface with garage band we would like or anything like that but was me.

Greg: Yeah, we'll figure it out. True, get them socially.

Robb: Anything new? Anything exciting?

Greg: Just put out the trailer to American Weightlifting which is a documentary I've been working out for over two years now.

Robb: Nice.

Greg: And so finally I'm kind of circling around towards completion. And so I put that little teaser yesterday and people seem excited about it. I'm excited it and now it's just a matter of getting it wrapped the way I want it to be done.

Robb: Cool, cool. I dig it. I dig it.

Greg: Yeah.

Robb: Nothing new here other than the sun is out. I actually got outside and got a tan yesterday and shockingly I feel more motivated today. You know, I keep threatening gets bad that I'm going to do a tan in Goose maybe three times a week like five-minute wax and the next time the weather goes bad I'm going to do it. It's not as bad as what it was in Chico because we do get more sun here and it doesn't suck in quite the same way it does in Chico. I mean literally one day of sunlight, and I'm motivated and I've got some good ideas and all the rest of that.

So I do better with the sun. I need to convince Nicki that definitely we need to move equatorially more quickly than what the current timeline is.

Greg: Here we go.

Robb: Yeah.

Greg: I'm all for it. I would totally put a tanning bed in the gym here if we had room for it.

Robb: It seems like a slam dunk. So that actually is another idea. I guess if I'm burning through enough, a tanning bed, punch cards then I could maybe justify throwing that downstairs, yeah.

Greg: Maybe I can just replace the overhead lights in my office with some UV bulbs.

Robb: There you go. There you go.

Greg: And to sunburn the top of my head.

Robb: Perfect.

Greg: All right.

Robb: Sweet.

Greg: Sponsors.

Robb: Yeah, show sponsors, the performance menu, go to [performancemenu.com](http://performancemenu.com), the journal of nutrition and athletic excellence when you download the performance menu, you get some shnazzy freebies, great, what those are.

Greg: Oh, you get a package of 12 back issues.

Robb: Nice, nice, and not just any old back issues. Like, these are some of the juicy mega good back issues, right?

Greg: They are all juicy and mega good.

Robb: OK, OK. There we go. OK, I was trying to dress it up. Who else do we have? We have Evolve Foods, go to [evolvefoods.com](http://evolvefoods.com). We still don't have

our affiliate thing figured out. So I don't know how to give you a discount beyond the basic goodness that Evolve Foods provides you, but, you know, like gluten free, grass-fed, jerky, if you need a good quality weight protein, Welbourn tracked down a great grass-fed weight protein, gosh we've got all kinds...I mean it's more snacky food type stuff but people are always complaining that they don't have stuff to take with them on the road or to have in pan so Evolve Foods is great for that.

FrontdeskHQ.com. Front Desk is your mobile solution for running service base businesses. They're catering everything from cross gyms to hair salons. We've even got a auto repair shop using Front Desk at this point. So regardless of your service base business, if you deal with customers, collect money, need to run payroll, Front Desk HQ is your gig. And oh, somebody was really mad on Twitter at me for saying gig.

It's like I love Robb Wolf but if he keeps saying gig, I'm going to have to listen to a different podcast and I'm just like ...

Greg: See you later.

Robb: That's nice. Anybody else? Did I forget anybody?

Greg: I don't think so.

Robb: I think that's it. Yeah. Oh, but just to dangle something out there, we have had a continuing negotiations with a alcohol sponsor. So we'll see if we can get that going. Like I said, if we get the alcohol sponsor, then my next goal is to get the BunnyRanch as a sponsor. And I don't how you legitimately get a cocaine sponsor. But it will be booze and hookers instead of cocaine and hookers. So that ...

Greg: Close enough for a the purpose.

Robb: That's pretty close. Yeah, yeah.

Greg: Okay, well, let's ...

Robb: We should do it.

Greg: We have some grouped up questions here and I ...

**[0:05:03]**

Robb: Squatty doing his usual outstanding work putting the questions together.

Greg: Yes. Okay, gluten is the poison in the dose. Martin says, "Greg, this is a long one. And I really enjoyed your enthusiasm and candidness with Eva." "Rob," -- you get the long part. "I understand you are gluten sensitive. You consider yourself full-blown celiac. Someone told me the last time you had a wheat exposure, they just filled the restroom with concrete.

Robb: That is true.

I know that when I indulge in "sandwich" god forbid and perhaps a "cookie" -- I don't know why these are in quotation marks -- because my office catered, I immediately regret the nasal congestion within an hour."

"But a light beer or two doesn't have that effect on me. And it takes putting away some serious pizza to rekindle my relationship with the Squatty trademark." I assume he's referring to the Squatty Potty.

Robb: Potty, yes.

Greg: "You've mentioned that it only takes one gluten exposure to take the inflammation and immune response to defcon one for weeks. So in my two years Paleo, more of a strong framework for choosing food than religious perfection, I really don't know if I've gone 30 days without an exposure. Do I have life changing results nonetheless? So I'd like to hear more about your experience with gluten and your clients' experiences, how much folks can benefit from strictly avoiding gluten versus a Sisson-esque 80-20 rule."

"And I know folks abuse the 20 part of that. And hippie excuse number one, grass-fed bison versus bagel is not where I'm at. One last thing, unless I'm imagining that the Now Foods gluten digest really seems to reduce distress after really hitting the proverbial hookers and cocaine, what aspect is that, something that really helping and what damage is still going on behind the scenes. Thanks."

Robb: Gosh. So what are the questions here? What are my experiences with gluten? So thinking back a kid, very early on, we discovered that I was allergic to oatmeal like a legitimate allergy, like scratchy throat, hives, all that stuff. And it only took us about two years to figure it out even though I was having oatmeal for breakfast everyday. So that was kind of interesting.

But I remember eating French bread and toast and cookies and all that stuff and I don't remember anything like the GI problems then that I have now. Like I always though was a little on the doughy side like it was kind of a little bit of the skinny fat kind of gig. Oh gosh, there gig again. Damn it. Damn me and my over usage of the same terminology.

I think I had this kind of long-running downward spiral. So in college, I was super stressed out like getting five hours of sleep at night, four hours of sleep at night, president of the chemistry club, vice-president of the pre-med club.

Greg: Nerd.

Robb: Nerd. But that's where all the hot chicks were at least within my genre. And I was teaching a chemistry lab class, carrying like 21 units of chemistry, physics and calculus. And I decided to go vegetarian at this time.

Greg: Good god.

Robb: And I really, yeah good god, and I think all of the stress, the lack of sleep like the whole convergence of bad things looking back now started damaging my digestion. And I remember looking back like there were a couple of years where nothing that I ate was particularly well-digested.

But I wasn't getting the like systemic problems that I have like when I eat gluten now. I moved to Seattle and that really is where the wheels completely fell off the wagon. And when you think about the vitamin D levels and the sun exposure like I was just talking about the sun came out yesterday and so I was out in the sun and got some sun, actually get a little bit of color.

So I was just looking back, everything I did was 100 percent wrong. By that point, I definitely had some sort of ulcerative colitis. Like I was going to a variety of doctors and like my gut lining was super irritated and it was right around this time that I went to Mexico and I was doing some swimming in the Yucatan Peninsula. And everybody was out in the Ocean Park. And then I noticed that there was nobody over in this like Estuary Park. And so I was like, well shoot, I'll go over there and there were cool fish on both sides and I managed to catch diarrhea in this whole thing.

And I think what happened, I went from salt water into the fresh water. The fresh water almost undoubtedly had diarrhea in it and I caught that

and I was already in a pretty bad state, but I ended up getting down to like 135, 140 pounds. Horrible GI problems. But I think the big precipitator with this was this exposure to Giardia, a gut parasite and interestingly in my many tabs which I have about 30 of them my computer right now, I have a PubMed Giardia and gluten intolerance tab open and I've been doing some research on that I've got the idea for an article.

**[0:10:12]**

So I think that that's where the stuff started for me. My mom definitely has celiac. I think that I've always been a little bit on the sensitive side but the ulcerative colitis plus the Giardia exposure, that's what really took me down at the knees. And now, if I'm well-rested, if I'm getting some sun, all that sort of stuff, if I get the gluten exposure it's kind of a low level gig like I'll have some gut problems but I don't have like some of the neurological effects.

If I'm super tired like when I was doing my book tour and it was like serial gluten exposures and bad sleep, loads of stress like every exposure would just crush me. So I think depending on how kind of robust the individual is and what their vitamin D status is and all that stuff then their exposure could be much worse for an individual.

Client experience, like the approach that I've had like Mark Sisson tends to recommend an 80-20 approach in the beginning. If you don't get the results you want then I recommend you tighten things up. I tend to recommend that you tighten things from the beginning, go 30, 60 days, see how you look and perform, check by all markers and all that stuff and then come back around and then reexpose.

Basically what I'm recommending is more along the lines of a legit elimination diet so that we can fair it out what the potential problems are and I think it's kind of six one way, half a dozen the other like you could go either way. Both ways are going to be successful if you just care about getting some results and being healthier and if you notice that you used to have some GI problems or some other kind of a systemic inflammatory problems, the null foods gluten digest, I assume that that stuff has like the prolyl endopeptidases which is the type of enzyme that you need to really break up the gluten, gliadin proteins.

And if you chop that stuff up, if it gets broken down into smaller protein fragments then it really should not elicit the kind of autoimmune GI type response that we typically see. So I don't think that products like that, depending on your severity of reactivity, I don't think that typically you

can use those and then eat a pizza and be okay. But I do think you can use those like if you're eating out and you get a small cross contamination kind of gig the I think that that stuff can really help.

So, did I get all of the stuff on that?

Greg: I think so.

Robb: So what is it doing, it's breaking? What is the supplement doing is breaking down the proteins. Is there any damage still going on behind the scenes. I don't think so with you can break that gluten protein down even just a few cleaves here and there. It's probably not going to bind to the CXCR3 receptor in the gut and that's the thing that precipitates the whole release of zonulin and initiates the inflammatory response with celiac.

There are some other proteins that are not specifically gluten that fall in the -- so gluten typically is associated with especially it was celiac and then there are other proteins that are associated with gluten intolerance which is more of an innate immune response versus adaptive immune response. I'm not sure how it would work with that but it's something certainly to play with.

Greg: I guess the one more part of this to address would be he's talking about this whole 80/20 thing and I think I guess it's not in here directly but I know this comes up quite a bit. And it's always the question of, well I guess it's in the title, is the poison the dose? So if someone is totally gluten free. Let's say 90 percent of the time.

I guess that sounds weird. Ninety percent of the time, they're 100 percent gluten-free.

Robb: Right.

Greg: Are they still going to benefit from that relative to just eating whatever they and then again, relative to being 100 percent gluten free, 100 percent of the time. Like is it still better to have less gluten, less frequently or you still just kind of screwing yourself over if you're got any at all. I think decreasing the exposure is definitely for -- some people they notice that they actually get a little more vigorous of a GI response when they do have gluten and part of that is the gut liking has actually sealed and so what happening with a gluten exposure for reactive people is that obviously not everybody is reactive it's just a surprising amount of people are reactive.

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And so this why a lot of the skeptic community, they get all up and arms about this stuff. But my only story with all this is that I think more problems than we've ever thought might be traced back to gluten and gluten like proteins and that doing some sort of an elimination diet will allow us to figure that stuff out in pretty quick order.

And that's the whole crazy controversial used car assessment pitch that I have on this thing. It's like there may be some really big problems. We might figure them out by doing an elimination diet. And if it's not a concern for you then go for it, do whatever you want. But it's interesting for me. I was not gluten sensitive in the way that I am in my youth but I am now.

There's good data to indicate that people can become gluten sensitive as they age. More people tend to become gluten sensitive as they age. There may be some breakdown in the immune response, maybe chemo distress, who knows what. But in general minimizing that exposure is going to definitely in my opinion be better than not unless you're just one of this people who states pain and then you can eat anything and it just really doesn't matter.

And there are those folks, it's interesting and some of the special operations community that I've worked with like these people are obviously really good at handling a variety of stress and like they just adapt to it more effectively. Some of those people, though, they'll get a super stressful event or I've worked with some guys who ended up getting some sort of gut bug in like Afghanistan or something and after that exposure then they are gluten sensitive.

And so it's just as, you know, stuff can change. Chris Kresser talks about this, depending on where you are in your life cycle, you may be more or less carb sensitive depending on what you're training with, maybe more or less carb sensitive. And even within myself, I notice that I am more gluten sensitive, I have more negative consequences of an inadvertent exposure if I'm tired, run down, probably lower vitamin D levels and all that stuff versus if I'm feeling good, feeling pretty strong, not over trained, not stressed out. If I get an exposure then it just doesn't seem to affect me nearly the way it does if I'm tired and beat up.

Greg: All right, fair enough.

Robb: So there's just lots of moving parts with it.



Greg: Yes. Well, I guess the other part of this too is that even for those people who seem to be -- have no response to gluten or no negative reaction overtly, I guess you kind of don't know what's happening in the background unless you're regularly tracking biomarkers. And I suppose it's one of those things that if you really believe that is going to be problematic in terms of health, you probably are going to believe that it may do something long term and not necessarily show up with overt symptomology.

So it's kind of a bit of a roulette, Russian roulette sort of situation if you want to go 20 years and then hope you don't end up with Alzheimer's or something then.

Robb: Yeah, because there are examples in literature of people who have celiac, like they have the enteropathy where the villi of the intestines are clearly damaged. And they clearly have a permeable gut associated with this but they don't experience any GI distress at all. Like I'm almost lucky in a way in that I get a pretty early GI response or some people that have gut damage feel no difference in their digestion but they have neurological issues. They have the beginnings of things that look a lot like lupus or rheumatoid arthritis with regards to the development of antibodies against different tissues in the body.

So there are people that are asymptomatic from the GI side but do have other serious health concerns. And it ranges from like schizophrenia. There are all kinds of neurological related stuff. So that's another thing is you can't just rely on decommissioning a bathroom from gluten exposure to know that you might have a problem.

Greg: Excellent. Okay, one more gluten question. Gluten and athletic performance. Dan says, "Hey guys, I would love to hear your opinion and/or personal experience with gluten and how it affects athletic/sporting performances with regards to things like muscle wasted, et cetera and other reasons to avoid it to maximize training and game day performance. Cheers."

Robb: So I guess the simple thing on this is whenever we have elevated inflammation in the body, that means that some complement of our immune system, some complement of our ability to adapt to stress is going to be impaired and so that's going to decrease your ability to train at a relatively higher intensity and recover.

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And so there's loads of pieces to this. If you have elevated inflammatory side of kinds, that will impact the brain and it will change dopamine, serotonin levels, it's going to change things related to how the HPTA axis works, it's going to change the way that cortisol is released typically up regulating cortisol. You're going to have problems with thyroid. So there's a lot of different pieces to this. And so by hook or by crook, to whatever degree we can figure out ways of minimizing systemic inflammation or abnormal amounts of systemic inflammation and we will typically see better performance for folks.

And so if somebody is in an inflamed state, they will not have as good a performance as they could any given session and they will not recover from that well over the long haul. And the two of these things are kind of two sides of the same coin. If you're training very hard then we start affecting neurological elements of recovery. We affect hormone element of recovery. We affect the endocrine elements of recovery. Some of the innate immune response like secretory IGA which is critical in maintaining gut lining.

So it all goes together. If you damage the gut lining with food then we are impacting our ability to recover from stress and training from like a southbound direction. If you're exposed to too much stress or improper periodization then we're damaging -- that will feed downward and affect secretory IGA in the gut which will then open you to more systemic inflammatory things even if you're eating gluten-free, we're going to have like a small intestinal overgrowth, potential the leaking of lipopolysaccharide into the system.

And those things lead to systemic inflammatory issues. And so it becomes a little bit chicken and egg or a little bit of a -- it sounds like a Zen cone of like the tree falling in the forest of whatever you know. It doesn't really matter whether it's a southbound assault or a northbound assault, the effect being the same.

And this is where when we're really concerned about optimizing performance. We need to be at least a little bit thoughtful about the training, the periodization grabbing something like Joel Jamieson's heart rate variability tracking stuff so that you can see where you are on the recovery curve with that. And then also just being mindful about the quality of food that we're putting in our body.

Team Garman, the cycling team, they've gone gluten-free and they claim some performance boost and stuff like that. And this is another piece of this. So these same folks on Team Garmin, maybe if they're not training

at a very, very high level, maybe they would be in that camp where gluten isn't necessarily that much of a stressor.

But then when they're trying to eat the last little percentage of performance of their bodies and are riding the edge of over training and their secretory IGA is probably being impacted then things that normally wouldn't be a problem might be a problem. So again, it's a -- I wish that there were just a one size fits all answer to this. But it really starts depending a lot on what the situation is.

But we definitely have some mechanism, some proposed mechanisms and also some anecdotal kind of observations that direct us to saying, okay for a number of people eating gluten-free is probably a better option. Even in the body building scene, for years like ages, body builders have noticed that when they're in their pre-contest phase, if they cut out wheat-containing items and stick more with like white rice, they tend to retain less fluid under the skin which is to me an indicator of inflammation.

And so I think there again, we have just some anecdotal stuff that kind of directs us towards an observation that some of these gluten or gluten-like proteins are probably problematic for a lot of people.

Greg: Probably problematic in a various variety of ...

Robb: In a various variety of ways, yes.

Greg: Okay, all right. Gluten stuff out of the way. What's next?

Robb: I think we have another gluten one later. Squatchy....

Greg: Fudge

Robb: ..he lulls us into a sense of complacency and then he leaps on us with more bread.

Greg: Here we go.

Robb: Yeah.

Greg: Okay, cycling and climbing. Ed says, "Robb and Greg, hope you guys are doing well. The weather here in NYC is a bit cold and dreary. So while hunkering down indoors this time of year, I thought I might run this one by you."

"I'm an avid listener to the podcast and I'm finally caught up having listened to every single podcast. I don't know how you guys do it. Oh, interesting fact to him. I went to high school and graduated with Joe Ken. I actually get some points for that from Greg at the very least."

Robb: Indeed.

Greg: Points awarded. "I've been Paleo for the past 11 months. I cheat once in a while. When I say cheat, I mean like once a week with a hot choco, it's got a bit of sugar but that's it for real. So don't go bashing me about what you think what once in a while means."

**[0:25:04]**

"I've read Cordain's books, Friel's books, Taube's as well, and Robb's of course. I geek out on all the nutrition biochem stuff. I find it really fascinating. I'm 46 years old and an active cyclist a couple of times during the week and then a long weekend ride. Don't roll your eyes please. Yes, I find these rides enjoyable."

"I usually set a goal each to run ..."

Robb: People must think we're just such dicks.

Greg: I know. It's pretty bad when they feel that defensive about their chosen sport.

Robb: You know it's funny like it's kind of happening on both sides like I get more and more and defensive and the listeners gets more defensive. Funny.

Greg: "I usually set a goal each year to ride a classic road race and base my training around that one event. As an example, this past year I did a Paris-Roubaix called the Hell of the North. You know, that's -- it's that 135-mile-ride in France over the old school cobble stones." That sounds delightful. Absolutely brutal....

Robb: It's amazing on your junk man.

Greg: ...Right. "Proud to say I finished it. The prior year, I did a stage of the Tour de France. I think you get where I'm coming from on this. One big ride each year, lots of prep and then take it pretty easy after the A-list event. In addition to this, I'm an avid climber. Well, I was until the first kid came in to this world 14 months ago. I wouldn't trade off the world

but now my climbing is mostly indoors and mostly boulderings since it's hard to find steady climbing partners to rope up with.

All my old partners have mostly settled down or in the same boat as me dealing with new family stuff. So right to my question, directly I've never incorporated weight training as part of my quest to get stronger. I've always been of the mind that if you want to get better and stronger at cycling spend more time building power while on the saddle."

"I do use a power meter to measure my output much better than measuring input through a heart rate monitoring. Same with climbing, if I want to get stronger, I've always believed that you have to get on the wall. Do you agree with this philosophy? Are there exercises that you would recommend to assist in increasing my power output keeping in mind I'm not a sprinter but rather want increased power over the course of endurance type events, two to four hours."

"Same with climbing, are there strength-based activities I should be doing that you feel can increase my strength as a climber other than spending more time on the wall? Most of the kickass climbers I know aren't big muscle-wise but are really lean and strong pound per pound. So in answering the ultimate question of what I'm trying to achieve is really simple. I would love to be able to paddle hard, climb hard and look insane naked."

It's actually not that hard to look insane when you're naked. You make a few funny faces and you pretty much got it. It's more about the location you are when you're naked that determines how insane or sane you look. "Please tell me I can achieve all three and still have a life."

"I think Robb, you mentioned on a prior podcast when answering whether Mark Sisson's program was a good program, you depends on what you want to do and indicated that if you wanted to get strong as a rock climber as an example, Mark's program would not be the right program."

"I'm a patient man and will dial in any program regardless of its time commitment to make this happen. If any of your recommendations incorporate weight training, squats, presses, lifts, et cetera, can you suggest a good coach in New York City? There are so few talented coaches around, I don't want to develop bad habits. I know everyone says it. But I hope you don't get tired of the pat on the back. You guys have changed lives including mine."

"And through that I can't tell you how many times I've pay forward that message. Keep up the great work."

Robb: Cool. Thanks, Ed. That's super cool. So definitely , the rock climbing. You can make a easy argument that doing some weighted chins, handstand, working up to doing like handstand pushups on the ring, doing some basic ring work, that seems like a no brainer for me for improving rock climbing, doing some specific like developing a one arm or like two-finger, one-finger, one-arm chins and stuff like that, all of that seems really straightforward.

I think you can find a zillion different rock climbing related websites. Who's the guy, John Gill, a rock climbing memoir?

Greg: I'm not familiar with that one.

Robb: Do you remember that website? If folks go Google John Gill, rock Climbing Memoir, he was really early in the developing of bouldering in the United States. He was a gymnast originally and he was a novice.

[Cross-talk]

And just to mix our metaphors or inputs. And he was a huge advocate of that stuff and getting really strong and having front levers and basic ring skills and all that jive. So the jive is no, I'm still using that. No, it was gig, not jive. So I'll go for jive now. Yeah, we'll get all jivey. So I would check him out. I know there are a lot of rock climbing resources on the net. I think we have some questions later that talks about Jim Jones. They talk about some of that stuff.

For cyclists, it seems like a once a week, you know, one week you work up to a heavy squat, maybe triple or something. The next week, you work up to a heavy dead lift, again maybe double.

**[0:30:02]**

Maybe you find 80-85 percent of a one rep max and do some cluster training where you get warmed up and you do a rep, wait 30 seconds, do a rep, wait 30 seconds. Get like 15 singles with that, so it's a little bit strength endurance oriented. I think there's a pretty good argument that some basic strength work will help with overall power production. But then again, it would be interesting to look at like a Lance Armstrong type of training protocol and do they do any type of additional strength work? I honestly don't know.

The endurance that I've worked with and I'm not an endurance coach, I don't do a lot of it, but the folks that I've seen, if we just get them doing a basic dead lift, some core works, some postural works and stuff like that, some mobility work, they definitely performed better. They take time off their specific runs or cycling or swimming. They definitely seem a little more injury proofed. But it does not require a ton of work. And as I say all that stuff, then I think about a YouTube video from Marcelo Garcia where he's talking about strength and conditioning in Brazilian Jujitsu and he doesn't do any additional strength and conditioning.

He just rolls and the dude is arguably, possibly the best grappler on the planet right now at least within the Brazilian Jujitsu genre. What's interesting to me is if we get into things like freestyle wrestling, Greco wrestling and all that, peripheral strength work is a huge part of that whole seen whereas in Brazilian Jujitsu, I'm still seeing people who are very, very successful with virtually no additional strength work.

And if I don't know if that's because PJJ, it's just not that explosive. So you're not required or it's that much more multifaceted. And so that kind of one gear linear type of strength work that would benefit like an American style football player or a shot-putter just doesn't apply to that. Like it's kind of a mystery to me honestly.

And then you have folks like Joel Friel who are using small amounts of strength and conditioning work with their fighters and getting really remarkable results. So honestly I thought I had some really solid feelings on this and I believe I've gotten a little more confused I guess because I find examples of people who seem to do great with no additional strength and conditioning work.

I see examples of folks who do great with it. So I think that if you get in and do something then like always having some sort of performance metrics so if you do a program then we should I think reasonably be able to say okay, do we seek some improvements in the bouldering on the saddle like actually getting some better wattage and if we don't then you make the argument don't do that stuff or if you like doing it then you can keep it in. But it's not as clear a story for me as it used to.

I would have always been at the opinion like anybody would benefit from even some very basic strength work like a squat, a weighted dip, a weighted chin, some sort of core trunk work. But I'm kind of circling back around or maybe even here there may be people because they're so non-attribute driven, they're so technique driven in the sport that they're

doing, maybe they don't need to do a bunch of extra strength work or really any extra strength work.

Greg:

Yeah, see I still feel like that generally speaking, anybody is going to benefit from basic strength work to some degree, but how much they benefit directly in their sport is going to depend largely on what sport that this and who they are and what tools they already come to the table with.

There's always going to be anomalies in every single sport. Marcelo Garcia, I would be willing to bet is one of those anomalies. Like he is not a normal human being, right, that guy is just a stud from outer space and those guys are going to exist who seem to break all the rules and are still better than everybody else.

But the trick is that normal people, it's a huge mistake to try to mimic or emulate the training programs of those guys. There's nothing you can't use parts of it and pieces of that philosophy but you have to make sure that the training that you apply to yourself is appropriate for yourself, not for Marcelo Garcia or whoever else.

Specifically with rock climbing, I completely agree, there's plenty of stuff you can do in the gym that will undoubtedly assist your climbing. Probably the biggest reason, though, is that like you said you don't get to climb very often anymore.

**[0:35:01]**

So I would think of the gym or whatever stuff you're doing at home as basically a way to get more frequent exposure to training in the absence of more frequent climbing. So stuff like chins, weighted chins, finger chins, get assistant board or a campus board so you can play around with that stuff at home when you can't actually make it to the gym.

So there's plenty of things you can do there that will help. And yes, you're right, the goal is not to get big. You don't want to put on muscle, the more weight you got to move around and that's obviously counterproductive for rock climbing.

So in my limited rock climbing experience and just common sense, climbing is all about that strength, endurance, the flexibility, active flexibility I should say, I mean you've got to be able to actively move your body through those four ranges of motions, not just be able to get there passively. Those are really, really different things being able to actually lift a heel up into a high hold and all that kind of stuff.



Those are all traits that you can train off the rock. And if you're climbing four hours a day, five days a week then you may not need that stuff. You can go out there and hang on a boulder and do a couple of extra chins at the end of the day if you feel like. Or you're getting so much training or so much climbing that you don't need additional training. But if you're only getting in to an indoor gym once a week, twice a week, then you probably want to supplement that with some additional training.

And like I said, it is supplementary. It's not the foundation necessarily of that. And as far as cycling, yeah, you definitely have to ride but I'm with Robb. In my experience, I have seen cyclists definitely, unquestionably improve with some additional strength work. And it's pretty minimal. In climbing, there's a lot more variety. But cycling is such a limited kind of a monostructural activity. You're just sitting there pumping your legs over and over and over again, 99 percent of the times in this horrible posture, you have zero eccentric work.

So if you can balance that out with some training in the gym, I do believe it will improve your cycling directly, but more importantly I think it will improve just your general health and function off the bike. And if you're healthier and happier and a little bit more stout then you are going to do better on the bike. You'll be able to ride more often. You'll feel better after rides, during rides.

So I think it's hard to argue against that although Robb just kind of tried to ...

Robb:

No, I appreciate you kind of sand shoring that up because again years ago I would probably have been 100 percent -- I would have said much more similar to you. Some of those Marcelo Garcia stuff has kind of had me scratching my head but I think you pointed out the flaw in my logic there which is that you're always going to have an exception to the rule.

Welbourn is a very genetically talented dude, like he had a really impressive vertical leap in high school. He's always strength trained really hard. But he's related to me that he would show up to camp and dudes would smoke him on like the bench press max and different stuff like that. And they didn't do a thing in the off season.

Like they sat on the couch and played video games whole off season and they were still beasts. But for him, if he had done that, he would have never played in the NFL. Like he had great genetic potential but it had to be further developed by a smart strength and conditioning program

where other dudes, they were already at the top of the food chain and they were completely unmotivated to do anything else and maybe they didn't need to do anything else. I don't know. So I mean that's a good point remembering the outliers aren't necessarily where we want to draw our conclusions from necessarily.

Greg: Yes, exactly. Okay, where are we here? Go mad. Go mad no more. Steve says, "Hey guys, loving the show. Keep up the awesome work. I have a question on weight training with body weight ratio goals. I'm 6 foot 2 inches, 185 pounds, fairly lean and looking to get strong -- looking to get strong without putting on a ton of weight and rather to increase my strength to body weight ratio, not the any means necessary go mad masking type approach that is often so tempting."

"If this is my goal in the long run, would I be best served gaining weight in the short term, getting super strong and then cutting weight versus weighting out very slow incremental gains in strength while never putting on any mass at all?" Taken from the article above written about Jim Jones and Mark Twight, I have set myself some basic goals for the year."

**[0:40:01]**

"Dead lift, double body weight, front squat, one and half times body weight, overhead squat, one times body weight, bench, one times body weight, pulls ups 25 reps, kettlebell snatch 150 reps in 10 minutes with a 24 kilo kettle ball, 500-meter row in a minute or less than a minute and 30 seconds." Although he looks he has a greater than a minute and 30 seconds.

"And plan to tackle this with a three to four-day a week with a Wendler 5-3-1 approach." I have to object.

Robb: Yeah, I do too.

Greg: Well, go back to the beginning. Yes, if you don't want to gain weight then don't start by gaining weight. That doesn't make any sense at all. The less you can change your body weight, the better off you're going to be. So if you want to want to stay the weight you are then train to stay the weight you are.

So much strength gain is going to come through neurological improvement not just muscle mass probably arguably more. And so you should be able to achieve these goals without putting on much if any weight at all maybe a couple of pounds here and there but nothing significant.

But the way you're most likely going to be able to do that best is with really low rep, high intensity work and you may still have to get a, I wouldn't call that high volume because the reps are going to be so low, but many sets. So doing singles, double, maybe triples and a lot of these lifts. But doing 6 to 10 sets, 12 sets even kind of depending on what you're doing.

The pull ups is probably where you got to go a lot of volume. The kettle ball snatch is of course a lot of volume. But the 531 stuff to me is too many reps. You want to stick with something more like, what's a good example, like Power to the People.

Greg: Yeah, yeah.

Robb: That's a great really simple straightforward kind of training program. Great book by Pavel Tsatsouline. You can pick that up for pretty cheap I'm sure on Amazon. But that's more the kind of training program I would steer you towards.

I would totally agree like in a lot of Pavel stuff, it's like three to five sets of three to five reps, somewhere between 80 and 90 percent of your one rep max, frequent exposure to the movements. Part of the problem with 531 for a more beginning individual is that you're really only getting one exposure to the movement per week and that's really hard to get a forward progress on that.

I think for a more advanced athlete that could be fine. And again, you know, any type of a structured program, you're going to make some progress on it. But for you, specifically wanting to, in the Pavel works, have wiry strength kind of gig, I think that looking at the Prelepin chart and looking it like a relative percent rep max and what type of set and reps scheme you're going to do based off that. That's a great way to go but then there is some more templated stuff out there like the Power to the People.

If you did dead lift and overhead squat on one day with -- and a nice way to tackle the pull-ups because that's more of a strength endurance kind of activity the way you're doing it. One day a week could be just kind of high motor unit, heavy stuff, that one to three rep, one to five rep range. Another day could be a strength endurance.

Say like your max pull ups are 12 and then you would do anywhere from four to six pull ups in a set and you try to get as many sets as you can

throughout the day on that, grease the groove kind of technique. And the kettle bell snatch really lends itself well to that too. So you could do a day of some of the lifts, a day of the more strength endurance type stuff and just rotate back and forth on that every third or fourth day that you see that workout, cut the volume by half, keep the intensity about the same and I think you would make shockingly quick progress on that. Like, I think you could knock these goals out in a couple of months doing that.

Greg:

Yeah, probably. Okay, more milk stuff. Milk, dairy and the power athlete diet. Danny says, "Hey Robb, first of all thank you so much for all the information you have made available to the public. I received your book, the PaleoSolution for Christmas and I love it. I've been following CrossFit football for quite some time now and I've noticed that in that version of the Paleo diet, dairy is allowed. Although in the version of your book, it isn't."

I was wondering why that would be and which version do you recommend I follow? I'm no longer a football player but I love to work out some CrossFit football and love the games I'm seeing. Does drinking one to two gallons of milk hinder my progress health wise or am I okay since I'm following the CrossFit football plan?

Again, thank you for everything and I hope to hear from you soon.

**[0:45:03]**

Robb:

Yeah, I mean not to be cheeky but my book was written trying to help metabolically broken people not die. We've got autoimmune consideration and type II diabetes and stuff like that. And so again, it's a completely different population than what we're talking about with an athletic population like a power athlete kind of story.

So if you are wanting to get big and strong, then I think throwing some dairy in the mix. I've said this before, I think dairy has growth promotion beyond just the caloric content. Like just seem milk makes little mammals and the big mammals and to really effectively. But again, if we're thinking about a health and longevity standpoint, maybe not even, you know, like the -- you just want a meter of the dose on that stuff.

You know, if you start getting chubby, you're carrying around a ton of extra fat, you may get really strong but I don't know that you're going to be particularly healthy with that. Even for football player, you get some really big dudes but if you're muscled than body fat, like you still need to

change the direction and be agile and what not, if you've got a little bit of decent body composition, I think all of that is going to be better.

So just think about the dose response curve, and also, when you were thinking about this and this is kind of a symptom of the whole Paleo, low carbs schism or confusion or whatever is the vast majority of people are not athletic football training athletes. They are people who have metabolic problems and like we have huge health care problems and you know, people dying prematurely and all that.

So the main message going out there is this kind of grain, legume, dairy-free, lowish carb Paleo approach which virtual miracles in helping people the variety of metabolic and autoimmune type issues. But that isn't appropriate for hard training athletes. And it's just really important to keep that stuff in mind.

Greg: Yeah, generally my recommendation is to avoid the dairy unless you are specifically trying to gain weight because in that situation -- I mean, there's no question that dairy will help people put on weight. But like you just said, there's also definitely some tendency to turn into a bit of a chubster.

So with women especially. I think I've run into quite a few women who've been like oh yeah, I did the starting strength thing and I was trying to drink a bunch of milk, most of them not a gallon a day. But trying to drink so much of milk, saying you know, and I just got super fat. I'm like, well, yeah, it tends to happen. And I think it's more common with the women for that dairy to just chub them up.

For the some guys, they can put on a bunch of weight and still stay relatively lean but I think those are the same people who are going to stay relatively lean and put on muscle pretty easily with any approach.

Robb: Yeah, the go mad deal for me, I'm three, four years later dealing with the metabolic after effects of that. It is still hard for me to get as lean as I once did before I did that.

Greg: Yeah. But it's been used for a long time. I mean you talk to anyone who was strength training in the '60s, '70s or before that and it was just common knowledge that you just drink milk to get bigger and stronger... and took Dianabol

Robb: Yeah and if you have some Dianabol for the nutrient partitioning a whole other story.

Greg: Okay.

Robb: We have to revise everything we just said if we got some anabolics in the mix so yeah.

Greg: You got Matt Foreman wrote this blog posed on our site a few days ago about basically all these excuses and problem that weightlifters come across and his basically two options for getting through it and one was basically crawl up in a ball and cry and the second one was just suck it up and work through it. And one of the final comments was option three, steroids.

It kind of overrides just about everything else you're doing.

Robb: Oh man, those were the days. Those were the days. Yeah. Maybe confounded by fasting blood glucose levels. Christy says, I'm at a quandary. I just have to say up front, this is a great question. And I'll just cut to the chase on the answer. I have no idea. Here we go.

Greg: All right. Well, I'll just read this quickly then. "I've been Paleo for over two years. My fasting blood sugar levels have been whacky and I have tried everything I can to remedy the situation. My A1c is fine at 4.7. It could be better. It could be worse. My fasting blood glucose is consistently 105 or more up to 119 despite militant about not eating funky junk."

**[0:50:05]**

"I recently had my food allergy tested and have no sensitivities to anything except eggs. I've really been bumming on my crap fasting blood glucose after having a light snack, walking, eating before 7 and every other damn thing under the sun. So I randomly decided to a piece of pizza and see what the hell that did. Next morning, it was beauty at 85. So I tried doing some Paleo friendly starchy carbs at dinner, no good. Tried a piece of French bread, success."

"WTF is what I want to know. I completely buy to the Paleo lifestyle and don't really want to eat wheat at all but after extensive biohacking that seems to be the only thing that holds the fasting blood glucose levels down in the am, not sweet potatoes, rice, nothing helped me. I'm obviously confused to potentially deranged. Thanks for the podcast, I learned a lot from you. Please advise."

Robb: So she's taking ...

Greg: Testing her blood in the morning after chewing carbs all over the place like post walking, post everything. And it seems to be either the pizza is the only normalizer or wheat specifically is the only normalizer in the whole thing.

Well, but I wonder if she's basically -- I mean, she said okay I tried to do some Paleo friendly starchy carbs with dinner but then she does bread or pizza and it works. I'm wondering if it's just the amount. So she does such a big carb freak out at night that she just plummets by the time she wakes up rather than it being a little more steady with a smaller amount of ...

Robb: Although, she said a slice of pizza or a piece of bread.

Greg: Well ...

Robb: That was the one thing that I was thinking of but the fact that she said, a piece of bread, a slice of pizza and I'm taking it at face value that that's really what she's doing. I was thinking that too that maybe she's generally running too low on carb which means we're getting some stress and we're getting that hepatic glucose release due to cortisol up regulation.

If that's the case then you're like a carb back loading or eating carbs in the evening seems like it would fix it. But if that's not the case, like if it's just literally, if we're going carb for carb French bread versus sweet potato or rice and the French bread is the thing that's working, I have no idea.

Greg: Yeah, that's pretty weird. You're going to have to consult an expert on that one.

Robb: Because we don't fit in that category clearly.

Greg: Okay, boy. This one is about gelatin. Monica Marie says, "Hey Robb, I was curious if you could speak about gelatin. I've been reading about the benefit and decided to be in supplementing it because I am a picky eater and despite my husband continuing to show a large portion of animal fat onto my plate, he loves me, I stand the texture. So my solution was to supplement."

"Is there a certain amount that would be helpful to consume to make sure I'm getting the proper amount? I should note that I started this supplement after my daughter was born to help with stretch marks, loose

skin and then read about it just being kind of necessary in general. These are the two online sources I have. And there's a couple of links. Thanks for all that you do. Lots of love."

Robb:

The main deal with this is that if you would make an argument that you want a balance of the gelatin and like the glycine containing fractions in gelatin and stuff like bone broth to balance out the amino acid profile that we get out of like muscle meat because we don't eat offal, people tend not to eat much in the way of skin unless you're eating some chicken or maybe some chicharones, the fried pork skin and stuff like that.

When you think about even probably like my grandmother's generation, they just ate everything. Like they made soup out of the soup bones. This is where like some of the bone broth deals are little bit funny to me. It's soup stock. It's not Chuck Norris tears. It's fucking soup stock. I had done that. It's like you eat a chicken or you have some pork ribs leftover or whatever and they boil the stuff down and I was looking at it much more from the like the flavor enhancing standpoint just like this stuff tastes amazing even if I just cook some like greens or something.

I would put a couple of like soup stock in it and cook the greens with it and it tasted amazing. It also happens to have these nice benefits of like the collagen and glycine and all that stuff. But the thing is that the more protein you're eating from like muscle meats, the more you need from like the gelatin. It sounds like you're not eating a ton of muscle meat.

So you probably don't need a ton. So I think it'd be relatively easy to meet whatever the standards on that. But as this whole what is it, a tail to snout kind of movement, gains a little more momentum, people are eating more awful. They're doing more like boiling down bones and saving skin and stuff like and using that in some of their other cookings.

**[0:55:02]**

So I think that this is kind of changing around. I think it's a good thing to do but again in the order of operations, I see people get super freaked out by this. They're like oh my god, I've got to have bone broth and glycine rich stuff to balance this stuff out. But they're still eating a bunch of crappy food.

And this basic Paleo approach whether it's got awful in it or not, whether it has bone broth or not it's going to be incredibly healing and really, really beneficial and then as a layer of refinement, sure, throw this stuff in, use some Knox gelatin and make some of your own stuff at home.



That's great. It just makes sense. It makes economic sense, environmental sense, all that stuff to get as much mileage out of those critters that weed as we can.

I just see people make that a bigger than what it is. Yes, address it, incorporate it in your living. But you could even look at it in an argument just that it's going to enhance the flavor and the satisfaction of the food that you eat by doing this type of stuff.

Greg: Okay, world's shortest question. Nutritional yeast. Chris says, "I've seen yes and no on nutritional yeast depending on the site. What do you think?"

Robb: Oh man. Why would you want to eat this stuff? I think somebody asked me this the other day. It goes in cycles. So, yeast has some B vitamins in it. Great. You get B vitamins from greens and from meat. I like greens and meat both a lot better than nutritional yeast. It's fine I guess as far as it goes.

If you have somebody who has a yeast reactivity, if they had some sort of candida over population at one time, they could be very reactive to nutritional yeast. Other people should be fine. But, god, people make stories or like, well I put it on my popcorn and it tastes buttery. And I'm like fucking use butter man.

Greg: Seriously.

Robb: Are you kidding me? If you're going to have some popcorn, get some butter and throw on it. Like throwing nutritional yeast on it and calling it a snack just seems ridiculous. It's not like I hate the stuff but I'm just kind of if you're vegan and there's no other way that you're going to get a ton of B vitamins and stuff like that then sure knock yourself out. Use it. But I'm just pretty --yeah, I just don't know what to say.

Greg: Yeah, I'm with you. I don't really understand.

Robb: And this next question is gargantuan and I'm actually in a tight schedule and have to go to Jujitsu.

Greg: We'll skip that.

Robb: We're going to skip that one and we'll stick it in the next round because it's a monster.

Greg: Perfect. All right.

Robb: Anything else? Do we have anything else that we need to -- any other bookkeeping, administrative that we have?

Greg: I don't believe so. I think we tailed it all.

Robb: Okay. Sweet. Well Greg, put out his trailer on the weightlifting documentary that he has cooking. He has another project also cooking which someday everybody will be savvy to what that is, not just me.

Greg: Someday.

Robb: Someday. See and then we're going to have Joe Ken on the podcast here soon.

Greg: Yes.

Robb: Okay.

Greg: Perfect.

Robb: Cool.

Greg: All right, dude. Have fun at Jujitsu.

Robb: Yeah, it's always great getting smashed. So it's guaranteed good time.

Greg: Perfect.

Robb: All right, man. I'll talk to you soon.

Greg: Okay, see you. Bye.

**[0:58:42] End of Audio**