

Paleo Solution Episode 124

- Robb Wolf: Hey, folks. Robb Wolf and Greg Everett, we're in the house. It's episode 124 of the Paleo Solution podcast. What's going on man?
- Greg Everett: Well, you know. I'm a little thrown off since we're recording this on a Monday instead of a Friday, but otherwise everything is going great.
- Robb Wolf: Sweet. Yeah, PaleoFX kind of threw off the usual recording scheme for us, but we're going to rally. We're going to get this baby out.
- Greg Everett: Yeah.
- Robb Wolf: Anything new? Anything exciting?
- Greg Everett: Well, yeah. I'll have a new product out by the time this thing comes out most likely. A little e-book selection of articles whatnot and what have you that I've done over the last seven years or so. I guess that should be coming out today, which mean when you're listening to this it was yesterday. So check that out.
- Robb Wolf: So we have some sort of space time congruence going on there. So Greg, I've got to ask. I'm not familiar with your work. What's your area of expertise?
- Greg Everett: The internet.
- Robb Wolf: Greg and I were having some offline banter before we started. So what else is new? So PaleoFX was a ton of fun. Lots of people there, really well organized. University of Texas, it was at the Stark Center where they have this huge physical culture museum, which was super cool. I think it was largely donated by Joe and Betty Weider. They had all kinds of cool stuff in there. I met a ton of folks. Pretty cool gig other than like I got three hours of sleep both nights that I was there and that was a pretty good kick to the jimmy.
- Greg Everett: So I take it Charles Whitman was not in attendance.
- Robb Wolf: Who's Charles Whitman?
- Greg Everett: He's the sniper guy.

Robb Wolf: Sorry, dude. I have no idea what you're talking about.

Greg Everett: University of Texas up in the bell tower.

Robb Wolf: Oh, the bell tower. Okay, sorry, sorry. He was not paleo.

Greg Everett: No, he was not there.

Robb Wolf: Sorry man. I don't know him by name. I just know the dude in the bell tower.

Greg Everett: That's Quasimodo, I think if you put it that way. All right, well, now that we are done talking about shootings and paleo and what not, let's talk about balls.

Robb Wolf: Big ass balls, okay.

Greg Everett: Serena says, "Hey there, in an attempt to get my sleep in check I'm quitting my night job and taking a desk day job. Is there any benefit to sitting on one of those big exercise balls? Thanks."

Robb Wolf: Short answer I guess would be yes. I try to break while I'm sitting. I have a pretty nice desk chair that I got from Dania. It's like a Scandinavian designs place. So it's kind of cool. Orthopedic stuff and that thing will allow me to sit kind of Indian style cross-legged pretty comfortably. I'll set my timer and I'll sit for 45 minutes like that. When the timer goes off, I'll jump up to quick little bit of mobility work and stretching. Then I'll regular, timer goes off, and then I'll jump on the exercise ball. I just rotate through with that. I definitely seem to feel better as far as just my hips and all the orthopedic stuff.

So I think switching it up however I can is good. I don't know that the exercise balls are the cure for all cancer or whatever, but I think they're legit. Just trying to mix it up will definitely help how you're feeling in the lower extremities and your neck and all that stuff.

Greg Everett: So, we have a client who used to be an editor at Penthouse. Apparently, in her office, there were a handful of people who all sat on those big blue Swiss balls. So that group of editors was just called "the blue balls." Just kind of funny if they're working for Penthouse. Beyond that, I have no advice other than what Robb said. At least, it will be something different. I honestly I think that if you are only doing that, you're probably going to run into problems too because you will find a way to adapt and get lazy

and hunch over. I think mixing it up is probably a better idea. Sit on the edge of your chair instead of sitting back like I do and slouching.

All right, Paleo versus Rippetoe and his gallon of whole milk. This reminds of me of the t-shirt you guys had made with the piece of toast fighting the cup of coffee.

Robb Wolf: Oh, yeah.

Greg Everette: Tim says, "Hey guys, I went to a Starting Strength Seminar in Redmond, Washington recently. I was told by Mark Rippetoe and some other coaches that I need to put on 40 lbs." Never heard that before. "I am six foot four and weigh 220 right now. I really don't want to weigh 260. Of course the advice of Rippetoe is to drink a gallon of whole milk every day. I mentioned that I eat paleo and he said something about biochemistry BS.

He actually made me finish his double bacon meatloaf and mash potatoes when we were eating dinner Saturday night." What I want to know is why he didn't he finish his own double bacon meatloaf and mash potatoes?

Robb Wolf: Seriously.

Greg Everett: "How many people can say that they finished Mark Rippetoe's dinner?" Oh man, there are so many things I want to say about that. "He said I would lift better the next day. I do want to get stronger, hence the reason I forked out the dough to attend this seminar, but I do not want to chug a gallon of whole milk a day. Do you think someone can see the same strength gains eating paleo as someone who consumes the gallon of milk a day? Are there certain foods that I should be concentrating on consuming to help with strength gains and recovery? Anything I should eat pre and post workout to maximize my training?

On a side note, the owner of the facility we were at, mentioned he stayed with you in a hotel room once and he woke up at 0300 to find you eating a can of sardines while doing a handstand. What is up with that? Thanks for your input. Tim"

This one is a don't ask don't tell deal on the handstand and the sardines. So it's a myth.

Robb Wolf: Looking at this thing, there's some juicy material here. I've got to ask first of what are your goals? What are you trying to do? Six four, 220. If you're

reasonably lean, you probably could carry a good amount of muscle. You could probably get really strong. Definitely just adding body weight is a really quick easy way to get stronger, but absolute strength goes up, relative strength goes down, body weight stuff gets more difficult. What are you trying to do? Do you want to look like a fire plug or do you want to look like kind of a lean, strong jacked athlete? You know what I mean.

It really depends on how you want to stir the boat. It's just kind of funny this whole idea that like paleo provides inadequate calories. We've done this stuff with the thousand calorie curry and the thousand-calorie omelette and stuff like that. It's really easy to get four to 6,000 calories a day eating just basic paleo gig. It's been kind of nice kind of vindicating.

We've always had Welbourn floating around out there. The dude runs anywhere from 300 to 330 pounds depending on if he's doing triples versus singles and depending on whether or not he had a large bowel movement that day. He finds that if he eats paleo, he doesn't have gut inflammation. He absorbs nutrients better and he puts on muscle easy. I would argue that Welbourn is kind of genetically talented in that area.

Greg Everett:

He's a bit of an outlier.

Robb Wolf:

He's a pretty good outlier there, but we've had some other nice vindicative stuff on this. Like Frank Mir went paleo and was already a big strong dude, but got leaner, got bigger, got stronger. He's running in that 265 to 290 kind of range. Mark Bell who's world-renowned in the power lifting scene has been twitting and blogging like crazy on paleo. It's the same deal where these guys who are pushing the outer boundaries of strength and muscularity. He found that he has less inflammation, he recovers faster, and he's stronger.

Welbourn ended up doing some stuff with him. Welbourn's done some stuff with some other top of the food chain power lifters, these guys who were winning world championships in this stuff. They're like, "Dude, I recover faster. I'm bigger. I'm stronger." I think some of the use some dairy, but it's not necessarily like the gallon of milk a day kind of gig. They might throw down whey protein. So it's more like Mark Sison Primal kind of gig where you eat generally paleo. Eat big and then throw down some whey protein in the post-workout window.

So I think this is all easily done. I think that we've got some people at the top end of the food chain who are actually winning world championships with this stuff. They're all finding that eating closer to paleo and then being kind of smart about what grey area foods they throw in that

they're really benefiting from. These are people that are tinkering with a lot of stuff ranging from what type of supportive gear they're wearing for their bench shirt and all kinds of stuff in their training program.

So I suspect that this isn't like an aberrant finding. These dudes are competing at the outer edge of human performance and they're finding some good benefit from this. That's just kind of one chunk.

Then this other side, like the gallon of milk a day is definitely a potent growth promoter. It's 3,000 calories of food that protein carbs fat good ratio, all that sort of jive, but the growth promoting properties of dairy are very non-specific. They just make you big everywhere including your belly.

Greg Everett: That will give you a nice fat face.

Robb Wolf: Yeah, you get a lot of systemic inflammation, you get that abdominal adiposity. You get a big fat visceral adiposity deposition which that's the worst place in the world to carry body fat. It's the stuff that has the highest concentration of aromatase so it converts testosterone into estrogen. It increases your likelihood of breast, colon, and prostate cancer.

Greg Everett: Yeah, and if you have ever got the chance to work on cadavers, tell me that's not gnarly when you get one those chubby ones.

Robb Wolf: Yeah. When you are trying to discern the gallbladder or something and you have to carve through eight or 12 inches of gelatinous omentum. It's super gnarly. So I don't know. Those are my thoughts on it. We're seeing people who're actually winning world championships in strength athletics. The dude that just won the Arnold Strongman event, apparently at the end of that, he was paleo, paleo, paleo. Then you've got Mark Bell, you got John Welbourn and the dudes that are training with John.

We've done some stuff with some O lifters at the Olympic Training Center and everything. I think some paleo plus dairy works phenomenally well, but just that gallon of milk and then a bunch of junk food, I think that there's way more intelligent ways that you can go about that. I'm just kind of hanging my hat on the feedback that I'm getting from people who are registering actual world championship status on stuff.

Greg Everett: Typically good people to listen to.

Robb Wolf: Probably half-decent people to look to, maybe again, statistical outliers. I mean we don't always want to hang our hat on world champions because some of these people they can do whatever they want to and they're going to win.

When folks have been eating more along this kind of gallon of milk, seafood, like eat anything under the sun and they shift to a cleaner diet and they get better results. There's no problem with the getting the caloric content and all that stuff. It's kind of compelling to me. There again, it's just get in and try it on for a while. The big picture on this thing is be clear about what you want out of your training. Whenever I hang out around Welbourn, he thinks that anybody under 300 pounds is not even worthy of citizenship basically.

Greg Everett: That's going to be a small band of people.

Robb Wolf: Yeah, seriously. So I could fight my genetics, try really, really hard to be big and I might brick 200 pounds. I'll look like a fire plug or I can kind of go with my genetics, be reasonable strong for my body weight, and be lean. Actually be in a position which my wife wants to sleep with me and I'm probably not going to die when I'm 45. So I would be just real clear about what you want to get out of this stuff and kind of stir the boat.

Greg Everett: Yeah, that's a thing I wanted to address here is that it seems very clear what you want, and that is to not weigh 260 pounds, but to get stronger. Like Robb said, you have to ask yourself what your goal is. If your goal is not gaining weight, then you need to not do this in a way that makes gaining weight a primary goal.

So to answer your question, it's entirely possible to gain significant amount of strength without putting on significant amount of body weight. People do it all the time in weight class sports such as weight lifting for example. So much of that has to do with how you structure your training. I feel like we address this like one or two podcast ago with regard to a woman who didn't want to get bulky.

If your training relatively low rep, not necessarily super low volume, but relatively low volume then you're going to be getting strength gains more as a product of neurological improvements rather than morphological. In other words, you're not going to be laying down huge amount of new muscle to get that new strength. So you definitely don't need to do a gallon milk a day. Stick with the way you want to eat, make sure it's adequate for what you want to do and appropriate. Make sure your training is tailored to what you want. I think it's really that simple.

Robb Wolf: Yeah.

Greg Everett: Just be yourself, man.

Robb Wolf: I just got to be me.

Greg Everett: All right. Bobby says, "Hey Greg and Robb, I am thirty years old and I have been training pretty consistently now for about six years, "crossfitting" for the last two and a half. I have a background in wrestling and triathlon, but now I am biasing my training toward power lifting and strong man (strange transition I know) and have recently competed in a few events with descent results. I do eat fairly strict paleo with some dairy products thrown in.

My question has to do with coaching rather than diet. I am level one crossfit certified and would like to pursue coaching. However, I am very aware that there are significant flaws in the strict crossfit methodology. I do want to coach in a crossfit box. However, I do not want to be a coach who relies solely on the main site wods and information that is drip fed down from headquarters (like so many unfortunately do).

I have heard you advise people to go to gyms where staff are actually qualified to do personal training and have an idea of what to do with people who present special challenges (fibromyalgia for instance). Here's my problem. I have had some success programming for myself with quite a lot of trial and error, but I still do not feel confident to program for others especially special populations (I'm uncomfortable with the idea of trial and error with others).

Are there good books to read, courses to take, websites/ organizations to look up? Is the NSCA a good starting place or not? What else is out there? A lot of people around me are telling me to just start using the main site wods with clients," oh my God, "and progress my knowledge from there, but I can't help but think that there must be a more scientific and tailored starting point. I guess the crux of my question is where do you learn how to effectively program for individuals without hurting them? I want to be a high quality coach within crossfit, not just another crossfit "coach". Any advice would be welcome. Thanks for all you guys do."

First of all, I just need to say God bless you for recognizing that starting with the crossfit.com workouts for your clients and learning from there is not the best way to go.

Robb, would you like to continue from there?

Robb Wolf:

Gosh, just a lot of stuff kind of percolates to the surface on this one when I'm thinking about all this. It's where to look. When Catalyst is offering a seminar, I would go check that out. If Ido Portal has a seminar, I would check that out. Poliquin stuff is good. I would check that out. OPT has got some good stuff. I would just look at some people who are well established in what they're doing and just kind of round out your offerings from there.

I would really recommend reading the numerous post it both my wife and I have her written on her blog nickivioletti.com, in which we actually talk about how we structure our business. How we weave in the training and the business systems to best effect so that we actually have a systematic approach to the way that we bring people through the process.

It shines a light on how we've adopted some stuff like Michael Rutherford's max effort black box and more strength oriented approach, strength and skill oriented approach to training. Bringing in Dave Warner's skills standards and kind of modifying those to create a multi-tiered program for our folks. Those are the things that I think when you start thinking through, "Okay, clients come into your gym, what's their first contact?" Phone call, e-mail, walk-in maybe now at this point like a social media contact, how do you triage those people?

At NorCal, we do a 30 minute fitness evaluation where somebody talks to them and listens to what they want and we'd check out shoulder and hips and scapular mobility and all that stuff and kind of get a sense of would they be appropriate for one on one or the on-ramp? Then we start pumping them through the program.

If you've got some sort of a system in place and some thought about progression instead of scaling, then the coaching. I wouldn't say that it becomes self-evident, but it becomes a lot more clear. I really still love the classic crossfit workout "Diane," the 21-15-9 deadlift handstand pushup. I just kind of dig it. I think it's cool workout. I think that that would be a horrible workout to introduce to somebody on their first day in the gym. They've never deadlifted before and the standard of care out of the crossfit scene is that you would just give that person a PVC. They would do 21-15-9 deadlift with a PVC and then maybe presses with the PVC, and that would be their first introduction.

Is that better than the person continuing to sit on the couch? Yes. Is that the best way that you could pump somebody through in effective strength and conditioning program? Absolutely not. If you read some books like the Talent Code, it's clear that the number of repetitions that you do in an activity and the qualitative nature of that activity that that's what lays down the myelination. That's what lays down the neural learning for people.

So if you give this air play to virtuosity, if you want virtuosity, you've got to actually train that movement as close to perfection as you can. So squatting, deadlifting, pressing, learning the basic scapular retraction elements on like body row and stuff like that, those things need to be performed in a way that they aren't poor technique. Or you practice three or four sets of good technique. Then you do something like a Diane workout where the technique goes out the window. You lay down 50 repetitions of bad technique. The higher intensity, more volume training is what's going to win in that case.

So that's where for us, our elements on ramp class people, we're not using deadlifts as a conditioning tool. We'll work deadlifts as a strength modality and then we'll do some things like bear crawls and prowler pushes and med ball slam and stuff like that. Some kind of low motor unit or simple motor recruitment movements that aren't going to bugger the things that we want people to get good at, mainly strength movements. I think those are some ways to tackle all these stuff. We've talked about it a lot in previous podcasts so I won't beat that drum too much. Think about the way that you're systematically bringing people through your system. Check out John Welbourn seminar.

At some point, we're going to have a NorCal method business seminar and a brushing of the way that we introduce movement in our program. It's going to be more focused on just business systems themselves, but part of the business system is actually being effective in the way that you coach movement. So we'll brush on that stuff a little bit. Greg, any other thoughts or people that you would recommend that they go do some training with?

Greg Everett:

No, I want to agree with you generally that a good idea is to look to the people that you respect and who seem to be doing the type of training and type of business that you would like to be doing and find ways to learn from them. Unfortunately, in this day and age, most of those kind of people put out a ton of content either online for free or through books and DVDs that you got to pay a little bit for. In the grand scheme of things are incredibly inexpensive relative to say a college education. Beyond

that, if you can bug these people -- not me, because we don't offer this -- but bug these people for internships or some kind of mentorship program because there's really in my opinion no better way to learn how to do this stuff than getting into the environment where it's actually being done. Observing, helping, speaking to the coaches, speaking to the clients, and really being present in that environment rather than trying to view it from a distance and reverse engineer the stuff. Like I said, that's not always possible or it's not always practical.

I literally get e-mails a couple times a week from people looking for internships here and we just unfortunately are not set-up to do anything. I would love to be able to do it in the future because I absolutely recognize the value and then of course Robb and I both have recommended reading list on our website. So that's a good place to start in terms of actually just study materials. I really thing you need to get out and try to visit as many gyms as you can rather than staying in the gym you're in right now.

I guess maybe it's not clear here if you're currently working for a crossfit gym or you have one in mind that's going to hire you or something. Before you totally settle in, I would try to bounce around to a few places and really interact with a few people and bring back some ideas before you get started. The big thing too is that you are smart enough here to recognize that there are certain people or certain situations that you're not comfortable with as a trainer and that's good. It's a good thing that you're that conscious of your present abilities and knowledge. A lot of people are not.

So take advantage of that. Be the respectable good trainer who says, "Hey, this is outside my wheel house. I'm going to bring in someone else to give me some advice or I'm going to refer you to someone who's more appropriately suited for you." Anytime you refer someone or anytime you bring on someone to consult, to help you with a certain client or a certain issue, that's such a perfect opportunity for you to learn and to actually add that ability and that knowledge to your own.

So never refer someone away and then never have any contact with them or the person to whom you referred them. Always check back in with them. Play some kind of active role with that and there's plenty you can take away.

Robb Wolf:

Eric Cressey and Mike Boyle both have some really robust internship programs.

Greg Everett: I think Mike Robertson is on that list too. You can throw the same thing.

Robb Wolf: Cool. All right.

Greg Everett: Good question though. Let's see here. Brian says, "Robb and Greg, I'm still a relatively young for a strength coach (25), but I've been in and around the collegiate strength and conditioning as well as private training scene for 6 years. The one thing I see strength coaches agree less on than anything is the use of percentages. A strength coach that I have a lot of respect for looked at one of my programs, and asked me why I didn't include percentages. All I could think was, "percentages of what?"

Greg, I know you use percentages on your website. When I see 85% x 1 x 3, is that 85% of what my 1 rep max is when I've had ten hours of sleep, no stress, and I'm gloating over a "colleague" being rated the 96th most influential person in fitness?" Oh, God.

Robb Wolf: The back stories.

Greg Everett: Yeah, you guys are going to have to listen some podcast in the recent history to figure out that one if you don't know it. "Or do I take into account that my girlfriend just ran off with the pool boy and I got four hours of sleep last night after my new puppy filled the house with his best work? Considering that I'm not feeling my best, how would I adjust the percentage?"

Typically, I go with Eric Cressey's approach of going as heavy as I can for a given rep scheme that day, and then making sure I've done at least 90% of that load for a given number of repetitions. For example, if I was going for a heavy triple on shoulder press, my rep scheme my look like this: 3RM, 3x3>90%. So if I warmed up to a 3rm by going 135x3, 155x3, 185x3, then 200x3 for my max that day, I would still need to just get 2 more sets of 3 reps at at least 180lb.

I know there are a bunch of ways to get strong, but what are your thoughts on set percentages versus a more of a Westside "feel it out" approaches? Thanks."

Man, all right.

Robb Wolf: You want to take a stab at this first?

Greg Everett: Yeah sure. Well, first of all, I do use percentages on my website most of the time. Not always though. You can find cycles on there that don't have

any percentages at all. I do use percentages a reasonable amount of the time on the website simply because I don't know who you are. There has to be some way that I can guide you in picking weights for these workouts because you're a strange person to me. I've never seen you train. I don't get to see you train on a day to day basis.

Quite honestly, when I don't put percentages I get flooded with e-mails and private messages and all kinds of stuff like what do I do? How do I fill this weight out? So that's the main reason I use percentages.

If you have an athlete that you're very familiar with, for example one of lifters who I've been coaching for a couple of years, I see them train day and day out. I have a very good feel for what they're capable of. It's not that hard to prescribe percentages and be pretty confident that they're going to be what I'm trying to accomplish. A good example for not using percentages is brand new lifters. One, because you don't really have that history with them.

You don't really know how they're going to respond to certain things, but also because their abilities are changing so rapidly that you don't want to lock them in to any given weight. That being said, you can still prescribe percentages or prescribe weights and then be flexible with them based on how that person looks, feels whatever.

So for example, I may write a cycle that's six to 12 weeks long. I may actually prescribe percentages for that entire duration, but usually what I do is I only give my lifters one week of that program at a time. I tell them, they know that, "Here's what we're planning to do. It's not set in stone." I'm out there with them every single day watching what they're doing. Taking notes literally and figuratively in my head, and then I'm adjusting their program.

So even I only give them a week at a time, I may adjust that week five times over the course of that week. It totally depends on what's happening. There's other times when it needs no adjustment. So if you have a plan, you have to understand that it is that a plan, it is not totally rigid and inflexible. You have to be able to adjust according to how you're working because there are days when your girlfriend runs off with the pool boy and you get four hours of sleep.

In fact, if that happens, you're lucky to get four hours of sleep. That being said, you don't want to completely abandon a plan because you expect these occasional problems. Now, regarding Eric Cressey's thing, I don't know where that system originated, but the place that I first saw it is

actually Dr. Kyle Pierce and Dr. Mike Stone. Working up to whatever your rep scheme is for that day, working up to a max for that and then backing off for a certain number of sets between 85 and 90% of that.

I have used programs like that before. Sometimes they work well for certain people, sometimes it's absolutely terrible. It really depends on the person because some people can push themselves to the point of absolutely destroying themselves.

So you take one person. You say, "Okay, I want you to work up through you three rep max." They will work up to what they feel is a three rep max and they're not really pushing themselves that hard. You take someone else work up through a three rep max and they can't work for four days. So you have to take that into account too. Before I forget, going back to 85% times 1 times 3, what is that a percentage of? It's a percentage of what would be considered your current one rep max of that exercise.

So within a reasonable amount of time, a couple of months or something like that. What this really comes down to is that you cannot in my opinion say, "This is my system, this is the only way I do things. This is going to work ideally for everybody." Then just leave it at that because that's just not how it works in the real world. You have to write programs for people according to who those people are, the circumstances of their lives, what they're trying to accomplish, what role this training plays in their lives relative to career, family, whatever. Instead of saying, "Well I don't use percentages because things might happen or I do use percentages because I need to have this plan." You've got to figure out a plan for each person or set of people who have similar circumstances. What do you think about that, Robb?

Robb Wolf:

I dig it. The only thing that I would add on that kind of somewhat intuitive like Abadjev Cressey thing, like find a three rep max, back it off. Do three sets of three at 90%. In my experience, where that works is when people understand that even on that three rep "max," bar speed needs to be fast. Whether it's a bench, whether it's a back squat, a deadlift, whatever the thing is, the bar speed still needs to be fast and you need to be non-emotionally psyched for that event.

So this is not a powerlifting meet where you're head-butting the bar and getting a max. I think we're people and Greg alluded to this, is that people can beat themselves down with this other approach. If you go too hard on that, then it's too systemically demanding. That's where you have to then start peeling in and putting in a prescribed percentage I

think a little bit more often because you actually need to rein people in a little bit more. So I think that people can use a little bit more of a flexible intuitive approach like he mentioned with this Cressey kind of gig.

I think Abadjiev is one of the people that use this stuff a bunch. The critical part to that is this is a non-psyched non-emotionally wound up type of “max.” The bar speed still got to be fast. When the bar speed starts dropping and you start grinding, then it becomes much more neurologically and systemically demanding and you’ve gone too far. You’re going to dig too deep of a whole and the stimulate versus annihilate thing is kind of getting lost.

So if you’re going to play with that stuff, whether you’re doing it or whether you’re coaching people, really keep that in mind that the bar speed is really important. The bar should be moving quickly on even like these three rep max. Basically, what it’s saying is there should always be a little bit more left in the tank. Even on stuff like five by five and whatnot, if you really get in and look at how people are talking about it, you always should have a few more reps left in the tank and then you’re slowly progressing that stuff. You can’t train over east to the wall every day all the time. It’s actually very rare that you can go in and really smash yourself and not face a pretty long recovery from that exposure.

Greg Everett: Yeah, that’s something I’ve had to say repeatedly to people that I’ve prescribed programs like that is, “Your three rep max or whatever it is, there should be absolutely zero chance of a failed rep.” Because to me, that’s clear, it should be obvious, but it’s not to people. I’ll get these e-mails from people like, “Yeah, I just do my five rep max and I failed on the third rep.” That’s not even close. What are you doing? “I’m tired. I feel beat up.” Yes, because you’re doing it wrong.

So that’s really important to keep in mind. Again though, that comes down to the fact that people are going to approach that differently and some people are intuitively going to understand what Robb is saying and some will absolutely not get that. They see the word “max” and they want to absolutely dig themselves into the deepest hole possible every single time.

Robb Wolf: Cool.

Greg Everett: All right. We move on?

Robb Wolf: Yes.

Greg Everett: Oh, God. Maybe we shouldn't have moved on. I just looked at this next one. Okay.

Robb Wolf: This will be quick, I promise.

Greg Everett: Allen says, "Hi Robb, Love your podcast. I recently read an article in the LA times that reports about a Harvard medical study that indicates that all red meat, any amount and any type, is bad for you." Must be a good study. "I have been mostly Paleo for the better part of 1.5 years and have seen great results in terms of strength, weight loss, muscle recovery, et cetera. While I enjoy the Paleo lifestyle, I don't want to increase my chance of early mortality by 19%.

I am just curious if you have any thoughts on the study or if you can make suggestions on other studies that indicate otherwise. A fan of your podcast, Allen."

Robb Wolf: Hopefully folks have found, although by my twitter feed and whatnot. It's obvious that they have not found it yet, but we did a post on this. I definitely addressed this. So the big takeaway from this stuff is that every two or three months it's like, "Red meat will kill you." Then when you look at the study, what these things are is they have people keep a food log and they record what they seem to remember eating. Then they do some statistical analysis on this stuff and inevitably, the people doing this statistical analysis are going in already with an axe to grind against red meat or saturated fat or whatever the soup de jure happens to be.

So this is what the story was with this. This was a retrospective cohort study where they basically had people try to recall what they had eaten and the approximate amounts and they did it on like a month by month basis or something like that.

Even saying that this is science is just at this point ridiculous. There was a food frequency questionnaire, there's been a bunch of call to just do away with the food frequency questionnaire entirely and this thing is just the backbone of epidemiology because this stuff is cheap and it's easy to kind of implement and it looks like you're doing science, but it is just bullshit. I mean it is wanton one-ton bullshit.

At this point, anything like this should not be funded. We should be doing metabolic crossover designed clinical trials. We should not be dicking around with this stuff anymore.

At this point, let's put this stuff head to head either apply in sick populations, healthy population, whatever you want to do, but we need to quit screwing around with this stuff and actually run this stuff head to head. In the news piece, one of the most concerning features that popped up for me was that when people are looking at this study, they said, "Well, Robb, if people ate grass-fed meat, they would have a different result." This is something that just makes me bleed from the ears. It's like, "No, because the data that they collected is worthless. It's like they collected data on how many birds flew over your house and that's somehow correlated with breast, colon, prostate cancer. Even saying the correlation versus causation is spurious gives this study more weight than it deserves. It's just bullocks.

I'm kind of stumped at how to explain that more clearly. The data set that they collected is just worthless. I used in my write-up an example. There was a piece that some folks produced that basically said that increased starch intake was correlative with increased rates of breast cancer in cancer survivor.

So these people had cancer once and then they were tracking via a food frequency questionnaire the amounts of protein carbohydrate and fat that the people are consuming and in the study interestingly they were being counseled to eat a vegan like plant based diet. They found some correlation between starch intake and increase cancer rates. Now, I would love to jump up and down on this thing and say, "Do the shitty science that these assholes did and say, 'look at this, carbs cause cancer,'" but it's the same spurious reasoning. They did a food frequency questionnaire and then when they did their data analysis, they we're ascribing differences in cancer frequency to as little as three grams of starch per day in the different cohort.

Greg Everett: That seems reasonable.

Robb Wolf: It's just ridiculous. You just can't hang your hat on this stuff. So even though I would like to ship that thing around, it's kind of like the riposte the counterpoint to this meat piece that would be as bad as giving this thing air plays in the beginning. I don't know, it's kind of funny, I'm not religious at all, but I have some lamentations or the deal with Moses. It's like, "Hey, I've come down out of the mountains and I have these tablets from God. You guys should do X,Y and Z." The people are like, "Go fuck yourself."

People have been eating this paleo shtick, they look, feel and perform better. Their biomarkers of health and disease improve, and then every

time a crap study coasting down the pipe. It's like, "Oh, my God. Everything changed. Science changed." It's like, "No, science didn't change. Assholes in academic institutions did poorly designed studies. Don't freak out." This might be like the last time I tackle one of these things. I may just continue to refer back to this thing because it's going to happen again. People are going to freak out.

I remember there was a study maybe four years ago where they were describing all these negative attributes to processed meat. One of the things that was in the process meat category was "pizza." So the fact that sausage and pepperoni were on the pizza, when they got in and they did their data analysis on the whole thing, the total caloric content of that pizza was ascribed to meat.

So this is the type of shit that passes off as science from our research institutions. I get that not everybody has a scientific background and stuff like that, but being an informed citizen, you should be at a point of being able to say, "Okay, what type of study was this thing? Was it a epidemiological food frequency questionnaire kind of gig or was this a metabolic ward clinical trial where every bit of food that people were eating was analyzed? Every bit of poop and urine that they created was analyzed? That starts getting into the gold standard when we've got some sort of metabolic ward crossover clinical trial thing. This other stuff is not worth lining a bird cage.

Just have a little bit more faith in the science that you guys have learned. Have a little bit more faith in the results that you've had. Don't just freak out and assume that this bad science has any bearing on things. At least sit down, read through the study design and do a little bit of analysis on your own. The sun will come tomorrow when the moon flips.

Greg Everett:

There's definitely a need for the common person to be a bit more discerning. I think the most stunning part of these types of things is the level of irresponsibility I see from these guys. Not so much even doing really, really poorly structured studies, but drawing the conclusions that they do and then making them public. That to me, is the absolutely incredible part. How you can pull that off in what is considered to be like the gold standard of research publishing, peer reviewed studies all this bullshit it looks like if your peers can't even tell you that that study is a complete waste of time. I don't know what to do other than say, "You better read the whole thing and use a little bit of reason before you draw conclusions like that." Fudge.

Robb Wolf: Yeah. This is where a ton of our research money goes into stuff like this. I had a back and forth with some folks who are in epidemiology and they were kind of defending this point and I'm pretty inflexible on this. Like the time for research like this is done. We should never fund another food frequency questionnaire study. All of that money should go into clinical trials, metabolic ward quality.

They're very expensive, they're complex to run and that doesn't matter if we want some answers other than your own personal experience which I tend to ascribe a lot of value to, but if you want some more global answers to these questions, that's what we need to fund. We need to step up to the plate, do the big kid science and quit dicking around with this stuff. That's kind of the long and the short of it. If this puts a bunch of poorly trained scientist out of work, I'm sorry.

You're just going to have to do some work retraining and call it good. I'm sorry I'm a dick on that point, but this just reshuffling of the cards, protein, carbs and fat. Is this good? Is this bad? With no steeping and evolutionary biology, with no orientation towards like a guiding principle to even consider are we even asking a question that's worth asking? Is it even couched in a term that is worth investigating? We don't even have that stuff going on. So it's a remarkable waste of time and we need to get better. We need to get more sophisticated than that. Allowing this shoddy science to pass muster is not doing anybody any favors.

Greg Everett: Yeah.

Robb Wolf: That's all I've got to say on that.

Greg Everett: Well, as much as you're probably sick of answering questions like that, I kind of like doing them because it gets you all pissed off.

Robb Wolf: It does. It gets me a little spun.

Greg Everett: All right. Well, here is a super depressing one.

Robb Wolf: Yeah, seriously.

Greg Everett: Kay says. "What's up Robb and that other dude? Just joking, what's up Greg?"

I'm 25 years old and an avid follower of the podcast and all things paleo. Been a strict paleo eater for about a year and a half now and I'm constantly researching/learning as much as I can.

Three and a half weeks ago I was living my dream: going to University studying nutrition/biochemistry, working as a professional skydiver filming tandems and teaching people how to fly wing suits, gigging music on weekends, lifting heavy and focusing on strength (with prior experience/overtraining in CrossFit), and eating well.

I came back from school on Wednesday, February 15 and went to make a few practice jumps before leaving that evening for a canopy piloting competition in California. My passion in the sport is canopy piloting: flying very small, very fast parachutes with focus on speed, distance, and accuracy. It's the most dangerous discipline in skydiving, with little margin for error. For those of you interested, look up 'swooping.'

Anyways, I had a catastrophic accident which has effectively changed my life. I shattered my back at T12, broke my right ankle and left tib/fib. I went in for emergency surgery that day and had my spine fused from T3 to T12 with reconstruction of T12. I also developed compartment syndrome in both thighs and my right leg resulting in big time fasciotomies. I have sutures down the entire length of my back, on both sides from my hips to my knees, and down the entire right leg, on the inside and outside. As of now I am a paraplegic with no bowel, bladder, or sexual function. I have some patchy sensation in my legs, so there is hope. I started rehab and was there for a week but was pulled out five days ago because the incision in my back split open and became infected. Wound revision surgery was carried out and that's where I am now as of this writing. Pretty gnarly shit.

I find it rather comedic that the food here in the hospital is so crappy. Being a place for healing, wouldn't you really think they'd get their shit together (rhetorical question)? I've been ordering as much real food as I can: meat, veggies, fruit, and have had friends bring me some stuff, but avoiding additives, preservatives, and the like is not totally possible here. I am at a fantastic facility (Barrows Institute in Arizona) that is world renowned for spinal care. I've already had the dietitian talk to me once about the importance of eating heart healthy whole grains and told me I shouldn't keep avoiding them, and that I should be careful of my moderate to large meat consumption. I smiled, nodded, and wanted to punch her in the face. She was fat.

I guess my question is: what would be your dietary/supplemental focus if you were in my situation? My body has gone through a shit load of trauma and still is. I know miracles happen and I so hope I'll be able to walk again. But nonetheless, how should I eat to promote the best

progress? Before I was eating high fat/high protein/low carb on non-workout days and high carb/high protein/low fat on workout days. I would say my hospital intake has been low fat/high carb/moderate protein if I had to guess. What general ratio would you recommend? 40:30:30? (Just kidding). What supplements would you recommend, if any? Any other advice? Thoughts?

I'm going through a lot right now, emotionally and physically. The big thing I guess is coping. I appreciate all you guys do for the world. You truly are amazing individuals. Kay.

P.S. I apologize for incorrect grammar, run-ons, etc. I'm high on fentanyl."

Robb Wolf: Nice. Jesus, man.

Greg Everett: Well, first thing I have to say is Jesus Christ, Kay. You have probably the best attitude I can imagine in your situation. I would be a raging asshole. Shit, I don't know what to say other than big, big, props to you.

Robb Wolf: Yeah, seriously. Words kind of fail with this stuff so huge props to you. Cutting to the chase, what would I do in this? I would eat a ketogenic diet like moderate to low protein, high fat, and low carb. There's been a ton of work on traumatic brain injuries, on spinal cord injuries, a lot of it coming out of Japan.

In general, if somebody is put on an IV drip, it's like a Lactated Ringer's solution, carbohydrate derivate lactate. Instead of that, they put folks on a Ketone Ringer's solution. They put folks on a ketogenic diet. The biggest problem under a spinal cord injury or traumatic brain injury isn't the initial injury; it's the ensuing inflammatory response which then kills neurons. The neurons are very slow to grow back if at all. For a long time they said they didn't grow back. Now, we're saying, "Okay, maybe they do, but it takes ages and ages for that to happen."

So the big determinant in this stuff is how much inflammatory response do you have at the injury site and what type of nerve death do you experience? There just seems to be crystal clear data on the fact that ketosis and ketogenic state tends to stabilize calcium homeostasis. Calcium homeostasis is critical in whether or not a nerve cell or cells in general live or die.

This is one of the problems with training to failure ala crossfit is that when you completely deplete the fuel substrate of a cell in a non-adaptive like very severe manner, and then you can't stabilize calcium

homeostasis. Calcium floods the cell. The cell undergoes apoptosis, get rhabdomyolysis and all that fun stuff.

So for me, I wish that the standard of care, I wish that the neurosurgeons and the folks who are working with you were on educated on the fact that a ketogenic intervention could be hugely powerful in stabilizing the inflammatory process, minimizing neuronal cell death. Giving you the best fighting chance that you have to recover and maintain whatever functionality you are going to have.

From there, this ketogenic state, the neurological tissue is stabilized under ketosis. Part of the problem that also exacerbates all this is is that if you start becoming insulin resistant, then the neurological tissue cannot access fat as an energy source because they've got to use ketone bodies for that. They also can't access glucose as an energy source.

That's so much of the problems with Parkinson's and Alzheimer's. The reactive oxygen specie, the inflammatory response that's a part of it, but part of it is just the cells are actually starving. They're dying. That's what happens in diabetic peripheral neuropathy. So why we would feed somebody who is now comparatively sedentary a high card diet which is going to feed into this metabolic derangement? That just seems ridiculous to me. It borders on malpractice kind of gig that people are not educated on this topic. It's time to step folk's games up.

When I was at PaleoFX, it was Dr. Amy Myers who's a functional medicine doc, she was talking about people who have different say GI problems and then their primary care physician or their rheumatologist or whatever wants them to start eating gluten again so that they can prove via blood work that the person is reactive to it. She feels like that recommendation is paramount to malpractice because you're exposing somebody to a known carcinogen, to a known food entity that can kill them. It's not always clear that they're going to come back positive on the blood work whereas in elimination diet has no potential downside and if the person looks, feels, and performs better, then we've pretty much done our job.

So I think the medical scene definitely needs to step its game up here. So ketogenic diet, supplementation, some insulin sensitizers like maybe a little bit of alpha-lipoic acid, like 100 milligrams a day. You don't want to go overboard on that because it can be kind of hypoglycemic inducing. So I don't know, that's what I've got and definitely keep us posted and let us know what's going on.

Greg Everett: Yeah. Well, I'd say we should probably wrap up there.

Robb Wolf: You want to wrap up there? Okay.

Greg Everett: Yup. So anything else going on that you need to announce to your loyal listeners?

Robb Wolf: Not too much. We're about five weeks out as of this Thursday from the Wolf Cup projected arrival. So we'll see how I do with all that. See how perky I am when the sleep deprivation sets in.

Greg Everett: Is he or she going to be joining us on the podcast?

Robb Wolf: Probably at some point. I don't imagine initially, but yeah.

Greg Everett: All right. Cool. I'm just worried if I'm going to lose my job is what I'm saying.

Robb Wolf: Oh, no, no. I think you've got some job security for about 16 years for sure.

Greg Everett: Awesome, nothing like being replaced by a 16-year-old.

Robb Wolf: Seriously.

Greg Everett: Cool man.

Robb Wolf: All right, G. Thanks for everything. So we'll remind folks that you'll have some information product on the Catalyst site probably the day after this goes up, yeah?

Greg Everett: Yes. The Portable Greg Everett, for you Henry Rollins fans you'll get that. So that will be an e-book. It should be out right now while you're listening to this. So check that out.

Robb Wolf: Cool. Right on, man, will talk to you next week.

Greg Everett: Okay. See you.

Robb Wolf: Later.