

The Paleo Solution

Episode 86

Robb Wolf: Hey folks, Robb Wolf here with the ever large Greg Everett and the even ever larger John Wellborn. Guys, what's going on? Oh, it's Episode 86.

Greg Everett: Yeah, speaking of that, the couple of times I've stood next to you, John, I've literally felt like an infant.

John Welbourn: Really it's – I don't know if that's good or bad. I kind of want to like pick up and cradle you like a baby now.

Greg Everett: Well, now you're just making it weird.

John Welbourn: Yeah. Dude, there's nothing wrong.

Robb Wolf: I can't believe that went weird in less than 30 seconds.

Greg Everett: It's pretty shocking.

Robb Wolf: We headed into homoerotic, good natured tell snapping at the NFL locker room at no time at all.

Greg Everett: Well it's early in the morning.

Robb Wolf: It is. So what's new with you guys? John you just got back from Denmark?

John Welbourn: Yeah, we flew over on a Thursday, got there on Friday and talk Saturday and Sunday and then I flew up on Monday. So it's pretty much like 20 hours of travel to each way. And I think one of the comments I got to one of my reviews from the seminar was I didn't seem too lively.

For that comment or I would say that I sat next to a German guy for nine hours on my flight across the Atlantic that coughed on me. And needless to say when I got there I was feeling a little bit under the weather. And then I flew back to Dale and had a doctor's appointment on Tuesday. And then I'm getting me knees silk on Wednesday. So I'm having a kind of a whirlwind week to say.

Robb Wolf: You know it's an after market modification, how's all that going?

John Welbourn: Yeah, pretty good. You know, you played 10 years in the NFL. It's tough to get out without some bumps and bruises. And that was my fourth clean out on my knee.

I had – when I got hurt in 2008, I'd come back and got a scoped on and they just remove some debris and a couple of things. And I had – over the last three years just lost extension of my knee. And because of it, I had some kind of changes in the joint and they'd said to go on down there to shave it down to kind of help me get full range of motion. And my knee was really kind of hurt me pretty bad. Honestly probably six weeks ago, I think I tore a part of my ECL and for the last six weeks I've been really just pretty hammered and not really being able to train and just been a lot of pain. So it was nice to go and then get my knee cleaned out.

And actually I came out of surgery feeling better and walking in. So I don't how many people really wake up in surgery and say, "God my knee feels better."

Greg Everett: I've actually even told that about scopes from the knee by a couple of different people. You can go and get one.

John Welbourn: Yeah, it's just – it's kind of a bumper because you think, you know, "Hey, they're going to – here's another surgery I got to come back from." But it was kind of cool to wake up and be like, "Oh, man my knees are actually moving better." It's not grinding. They removed a bunch of osteophytes and debris and it's just I have better range of motion that I did coming in.

Greg Everett: Nice.

John Welbourn: So I was pretty excited with that. And I'd hope that they did a little more aggressive because I was just **[0:02:53] [Inaudible]** in the back. But my doctor said who did my surgery is pretty good. I mean he's kind of the OB one of the knee surgery. So I kind of trust with, you know.

Greg Everett: So does that mean that you'll be able to squat all the way down to the Madison Bolt now?

John Welbourn: You know what, I hope so, one of these days.

Robb Wolf: Well speaking of that, John, do you want to share with folks what you were up to when you possibly tour the ACL?

John Welbourn: Yeah, well I had, you know, me I'm always ever testing things and I'm trying to further my knowledge and increase my knowledge across the

football and more important how do I redesign my template. So I've been really working on the kind of the professional, the advance. And I've gone out and trained with Lewis Simmons and those guys at Westside Bargo. I'm trying to figure out a little bit more of what the [0:03:41] [Inaudible] stuff was with the speed work and the mats effort and just a lot of the Russian stuff.

So I came home and decided, "Hey, I'm going to give this stuff a shot." And I decided that I was going to train for power lifting meet. And so we kind of revamp the diet and I was going probably about 285 and about – was is it about 10, 12, 14 weeks, I was up to about 327.

Robb Wolf: I do that all the time.

John Welbourn: Yeah and then I box 780 for two by two and then lift at 700. And we had done the box rots with the doubles on Friday and we did like a death by power thing on Saturday and then I dead look at 700 on Monday. And then my knee pop and just exploded with like swelling. I just couldn't bend it. And when I went in that was about five weeks ago then I went in to see the doc, he was like, "So let me get this right, after 10 years of the NFL you decide everything is feeling pretty good, you're training pretty well, you decided you want to train on power lifting meets. So you put on all 30 plus pounds and decided to squat 800 pounds for reps and dead with big weights. So how was that doing for you?" I was like, "Not so good."

Robb Wolf: Yeah. John and I had a few conversations about that. I was like, "Don't do it."

John Welbourn: Yeah. I mean it was great. I mean my bench was probably up well over five, maybe a five in a quarter, 540 and I dealt with the 700 pretty easy. So in my head I was like, "Hey, you can't suite some wraps. I might be in the nines and benching the six and sevens and dead lift in the sevens." And I might come up for my training for power lifting meet for four months and a total of a week. So I kind of have these visions of grandeur and yeah, just kind of ended with a scope and veil.

Robb Wolf: I think if we had more morphine, we could get you on your training template. You would have been fine and you could have totally...

John Welbourn: No. The problem is I'm 35. If – when I was 23, I was literally like indestructible. I could train hard every single day and run and do everything. And I just think that once again the 21 year old in me is getting the 35 year old in trouble with some crazy crazy stuff that's far

off. But I just think when you play the NFL for as long as you did, it kind of ages you in dog years. So I'm a lot older than my chronological age.

It's just – what's crazy is to go into the surgeon and you're sitting there and he's going through everything and he's like, "You realize if your knee wasn't banged up, you'd still be playing." And I'm like, "Yeah, I know." And he's like, "Your body other than that looks pretty good and feels pretty good. So it's just." But it just is what it is.

Robb Wolf: Yeah, yeah. Talk folks a little bit about your experience at Westside. You wanted to go out there and get a little bit better handle on just that conjugate template. When you went in to all that it seemed like you have a lot of questions, a lot of the methodology didn't really make sense. You weren't too sure about the volume and intensity tradeoffs and stuff like that. Tell folks about that.

John Welbourn: Well, I guess this start – I mean this process starts a long time ago when I was 14. I trained with a power lifter named George Zhargas who is one of the – he actually invented the super suit and the wraps. And George owned a company called Marathon Nutrition and they invented super suit.

So we started training with George when I was 14 and there was a reverse hype in there. We always look at all his power lifting mags and Louie Simmons and those guys were in there. And George had known me for years and he start to talk about the reverse hype and a bunch of other stuff. And so we have done some of the stuff when I was younger. And then when I went to lifting weights in high school and when I went to college, we did some more power lifting and then I had an Olympic lifting strength coach a guy named Todd Rice who came in and we did just pretty much anything that look like power lifting to me. It looked pretty much we were training probably like some version of the Russian or Bulgarian Olympic lifting team. I mean it was basically a steady diet, a front squats, power cleans, power snatches and presses. And the only time we really got any assistance work is when we just did it on our own time.

And I end up getting really strong. I mean I think I had squatted 600 before I was 19 and then when we switched over the template I ended up front squatting 500 when I was like 21 or 22. So I was pretty pleased with that. And then – and it was kind of interesting coming from a power lifting background and I remember coach Rice told me something that basically if you never get your knees in front of your toes in a squat, you'll never strengthen your knee to the point where it will be able to handle

the pounding of football. And when we look to a lot of stuff because Olympic lifters don't have ACL problems, look how much squatting those guys do and they're hardly ever injured. So I ended up kind of switching over and really looking at sheer angles with some bit thing. And when I started squatting with my knees over my toes with a little more heel on it, I really – a lot of the knee problems went away.

And then fast forward, a bunch of years into the NFL and I'd always done kind of a Westside template where we have done kind of a speed work and then we would also do kind of volume. And everything was based on volume and intensity or either it was an intensity day or a volume day. And there were never any percentages. We didn't really go off any type of like periodization in that kind of way. It was always like, "Hey, if I'm going to do singles today, I'm going to push as hard as I can. If we're doing volume we're going to push as hard as we can." And we end up doing a lot of sprinting in this ton of piles.

So when I – probably about a year ago Louie called me on the phone because he was starting a new certification to certify his Westside barbell method and he want me to sit on the board. So as he called we started talking about everything from training. And he's telling me these tails, these guys are squatting 1,200 pounds and how they can bang weights every single week, setting one rms. And I had known about the conjugate method, but we had never really done it the way Louie had done it with off the boxes with different bars. We use more of a conjugate method more with lifts, you know, with the front squat, back squat or different poles and different Olympic movements.

So we've done it in a different way than he was. So it was just something kind of foreign to me. And when you tell me that, "Hey, I got a guy that can squat 1,200 pounds," I kind of have a hard time wrapping my head around it because I've been lifting weights for 20 years and I know how like that's just – that's just not an arbitrary number. That's like some guy at the gym, "You know what, I squat 1,200 pounds." "Bullshit."

And Louie was like, "Hey, I think you should come out and train with us and check it out." So I ended up going out there for a couple of weeks and seeing these guys. And I couldn't believe how explosive they were. And I couldn't believe how strong they were. And then I started an understanding that they can take those mats effort type of movements and do it off the box because the box is such an interesting lift and that it's not nearly as hard on the body as doing a free squat. So I mean these guys can come in and nail these big numbers off of the box and continue

to really really train and then take big squats when they go in to a contest.

So it was just really interesting to me and just a lot of his assistance work and the way he kind of put it. So it was just kind of something that was outside of what I really knew. And it was awesome. And I was just amazed at how explosive and strong and just all around just thick, big these dudes were.

So I came home and I was like, "All right, well, let's play with it." And the hard thing is if you go train with somebody for a couple of weeks, you only get to see maybe one cycle of training which is in the grand scheme of things is nothing. So I just – what was cool was Louie is like probably one of the most hospitable people I've ever met. We actually ate three meals a day with him for like 17 days.

Robb Wolf:

Wow.

John Welbourn:

Yeah, it was like breakfast, lunch and dinner. We met at Bob Evans at like six in the morning and then after **[0:11:34] [Inaudible]** we can go eat lunch and then he meet us for dinner. And for like two hour or like six hours a day, all we talk about was dynamic effort, max effort, conjugate method. And I was able, after about 17 days to like kind of really pull it all together because Louie can be a little all over the place and anybody seen his videos Louie is a guy whose brain moves 100 miles an hour. So we ended up going home and playing with it and it was just – it was very interesting how we could continually be adding the weight to the bar and not really getting beat up by doing the box squat. We saw a pretty big carry over **[0:12:09] [Inaudible]** trainings with me. Bo – jeez, I think Bo had about 350 pound squat and we end up – he end up squatting about four on a quarter off of the box, a pretty short period of time. And he goes up and PRs his clean, and jerk, and his snatch by I think a couple of kilos which he had done in like seven years.

So it was interesting to see how well Bo did with that whereas another one of our lifters ended up going backwards and we start to kind – when I started trying to figure out a little bit, I went back and start rereading a bunch of the super training and a lot of the stuff where the stuff came out of. And it's – the thing which was kind of very apparent is that yeah, this style of training is for very specific, very advance athletes and they make a huge distinction between, the difference that people who want to work out and athletes. And kind of like the difference between golfers and people that like to golf, right? I can get a golf ball, but I'm not golfer. Just because I like to exercise, it doesn't mean that I'm an athlete. And

there was a huge distinction that. That was something I really wrapped my head around that there has to be a certain volume or training, there has to be a certain history. There has to be a certain bulk building a metabolic pathways and all that stuff builds like a base of pyramid up to this special strength training where you take these guys and you can use a very specific method for a very like desire, or want, or goal. And the problem is if you jump on it too soon, you don't build the base of your pyramid, you'll never make the gain.

So that was something that was very interesting for me because all Louie's lifters are the tops of the world. I mean he's got a guy **[0:13:49]** **[Inaudible]** who shows up at 15, 16 years old and squats 800 pounds, **[0:13:53]** **[Inaudible]** squats under 800. I was fortunate that I was pretty strong so I can work in to the groups. But I mean they'll be the first to tell you that if you're not strong when you show up here, you probably not going to get strong or you're not going to survive the training. You're going to be broken and beaten. The only guys that really survive are the guys that are really really strong.

So it was just very interesting for me to sit there and really see the training, take it home and play with it and then watch my numbers scream to the roof and then have another lifter who isn't – didn't know we had a volume of training behind him all of a sudden go backwards and then we had to go back and look at the program and then kind of rebuild him and figure out what was wrong with him and then get him moving in the right directions. So it was really great for a kind of a strength experiment.

Robb Wolf:

So do you guys, you know, it's always been intriguing to me that within Olympic lifting we have typically a lot less variety in training. You've got anything like Bulgarian method where it's like back squat, front squat, clean and jerk, power clean, push jerk, power snatch snatch and that's potentially like the whole repertoire of movements. Whereas like within power lifting, you've got – probably you've got I think some Russian methodology where they stick really close to the three basic lifts and then you've got obviously Westside barbell which they end up potentially not doing anything but looks like the lifts that you're been testing in.

Greg, Do you think that because Olympic lifting is so much more neurologically demanding, the speed component and the technical component, is that part of why we see a lot less variety within the training in general or am I totally off the launch and there is more variety?

Greg Everett:

Yes and no. I mean I think – I don't think that large of a percentage of lifters out there are training in a strictly Bulgarian approach. I mean you still have like China, a lot of the Asian countries, pretty much all of the south American countries and Russia obviously are all pretty much still sticking to that old Soviet methodology which does have a huge variety of training exercises. It's much more volume variety base as opposed to Bulgarian thing. So I mean you still have ongoing arguments about the whole Bulgarian thing.

Obviously it worked really well for the Bulgarians, but like John was saying, there are certain things that work for certain people and they don't work all for others. And there are certain things that work at certain times and not of other times for the same person. So I think yeah there are definitely some many things to be said about the neurological component of the lifts and I think people do need very regular frequent exposure to them in some form. It doesn't necessarily mean you have to do the full competition lifts every single day. But I think if you took like full on kind of Westside, what Louie Simmons has talked about doing as an Olympic lifting coach. I think that's going too far towards the other end.

John Welbourn:

Well not to cut you off, but I think the problem and what Louie is kind of missing is that the Olympic lifts are so technical in that they are a sports specific movement. So you can't necessarily get go to the sports specific movement by training general strength. And the analogy I always get to people like a Bulgarian stuff and that was interesting, coach Bergner and I kind of were talking about it. And he goes, "You know there's probably one or two lifters in the United States that could probably survive or even benefit from that type of training." And the only analogy I could get is that I played next to a guy name Will Shields who is by many people considered probably the best guard that ever played football.

Will was an incredible technician, had like natural talent, athleticism, strength, everything you would want to probably be the one of the most dominant guards that ever played in football **[0:17:37] [Inaudible]**. So for me Will can go out and practice and just do the plays and be incredible at it. For me I'd actually go back and work technique and do different things and put steps and I have to go lift weights and train and knew I have to be as strong as possible. Whereas a lot of those guys never had to train, they never really had to lift weights heading to the practice. And I was unfortunate to be in that realm. And I think with the Bulgarian guys, I think that all they had to do was just their lifts because they had such a small population and they probably had a ton of guys and they worked up to probably a few and found out one special guy that could kind of

manifest in that program. But I think when you're looking at working with bigger groups, I don't think you're going to have that many special people. So you're going to need more work into it, but in the same time, like, Greg said, you're going to need to do some version of the lifts because it's so sports specific.

I'd never understood the idea of being generally good at other things if you want to be specifically good at one thing. For me, I just want to be really good at football. So I went to practice football. I didn't go out and played hoops all day. Whereas Tony Gonzalez got better at playing football by playing basketball whereas I – it didn't work for me that way.

Greg Everett: Well I think the tricky thing with weight lifting too is you look at a game like football and even when you're talking about specific positions there is still such a huge number of skills and physical characteristics that a player needs to be good. Whereas if you look at weight lifting, there are two lifts, and they're very similar. It's a really narrow range of abilities and not to say that it's not as valuable or making a judgment call in that. But you don't need to get out there and necessarily do so much variety.

The other tricky part is that the competition lifts you can't separate the strength component from the speed component from the technical component. They're all just completely tied together.

John Welbourn: Well the training is the competition which...

Greg Everett: Right. When you look at football, there are all kinds of different things you can do to train those various physical characteristics. You obviously got to get out there and play. But I think there are more options to train those things. And I'm not really beholden to either method with regard to kind of Bulgarian style or Soviet style. I think both have merit. And I think if you look at Simmons, he'll even admit like all of his stuff comes from old Soviet training manuals.

John Welbourn: Oh, yeah.

Greg Everett: I mean straight out of it. So it's not that weight lifter aren't doing that, it's just that he kind of reinterpreted and applied it to something different.

John Welbourn: Well, he **[0:20:13] [Inaudible]** and he was like, "Hey, this is shock method." And he was able to adapt it for those guys. And there's something to be said about, you know, lift heavy, lift fast, jump high. I mean Louie stuff has worked very very well. I just think that a big part of Olympic lifting was always the timing. How many times you've seen the

guy over pulled the bar, under pull and people need a certain volume of training to be able to really meet the bar and have that timing. And some people need more and some people need less. But there's no way to really get good at it without practicing.

I worked with a speech guy, if you can't tell I mean sometime my speech is terrible. But again **[0:20:53] [Inaudible]** he always jokes and says to me, "You know you get to kind of get off," and he always say practice. I always think that he says that to me constantly when I get frustrated. And I got to believe Olympic weight lifting as much as anything it will probably fit in that same thing. The only thing I'd really notice is all sports whether its Olympic weight lifting or football, the stronger you are usually the better it works out.

Greg Everett: Yeah.

Robb Wolf: Absolutely.

Greg Everett: The truth though is that you have to – that strength has to be there not to the detriment of all the other skills. And that's where people get tripped up I think.

John Welbourn: Oh, sure.

Greg Everett: Do you know what I mean? It was like, "Oh, we got to get stronger and stronger and stronger." And it's like, okay yeah, you got to get stronger, but you can't neglect everything else and I think that's the hard part is finding that balance.

John Welbourn: Sure yeah. I mean you have to be able to put in enough technique time. But in the same right if you have a population and unfortunately Olympic weight lifting isn't really big here in the United States.

Greg Everett: **[0:21:48] [Inaudible].**

John Welbourn: I know, I know, at least tell people – one of my teammates Grommer Greikspeed was our fallback. We went into the weight room one day and with metal plates I watched him pretty much reverse power clean 405 instead of push strict press it and bring it back down and set it down on the ground. And it's going to **[0:22:07] [Inaudible]** and all the platform and look at me and goes, "Is that pretty good?" And I said, "It's really good." And he's like, "Okay." And he's kind of just like, "I'm going to do it a couple more times." And I'm like, "Go for it."

And one of the funnier and scarier and like really interesting things I've ever seen and that's when I realized that there's some really really strong guys out there that unfortunately aren't in USA weight lifting.

Greg Everett: Yes.

John Welbourn: They're getting paid a million dollars a year to run down on a kick off, you know.

Greg Everett: Yeah, but see with weight lifting, they can be guaranteed a life of obscurity and poverty.

Robb Wolf: I like it.

John Welbourn: Lifting weights in a...

Greg Everett: Win like 10 gold medals and still no one will ever know your name.

John Welbourn: I know. It seems crazy. You got to think that there are so many athletes out there that are **[0:22:56] [Inaudible]** and everything. But it's interesting.

Greg Everett: Well, it's hard. You grow up and you always see, you're exposed to football, basketball, and baseball, even tracking field events. I remember doing that stuff all through school and not once that I've ever seen any weight lifting. So it's not a big surprise that we're not having kids get excited about weight lifting when they don't even know it exist.

John Welbourn: Sure.

Greg Everett: And they're definitely not getting offered any college scholarships on weight lifters. There are two schools in the country that do that and they've got a dozen spots at the most.

Robb Wolf: And the first time that the Olympic lifts got on my radar was actually training for power lifting and reading a lot of Fred Hatfield's stuff because he started off in Olympic lifting.

Greg Everett: Because he's awesome?

Robb Wolf: Because he's awesome and it was interesting like he stuff is, I would say not as sophisticated, not as delineated as what Louie does with like the conjugate method, but a very powerful eye toward reinforced development. Fred Hatfield would call it a check mark. Like you wanted

your amortization when you turn a movement on whether it was a dead lift or a sprint or a box jump or whatever it was wanted to just be lightning fast. And his deal was basically moved as fast as you can all the time. Like if you can go up the stairs, leave up the stairs and stuff like that.

And I – it was interesting like till to this day, I don't really have low gear on this, like getting their goes or doesn't go at all. And it's typically been fairly explosive and obviously there's some selection criteria there like a not super fast switch but relatively so and then kind of gravitated towards these endeavors that kind of bring that stuff about. But it's pretty interesting.

John Welbourn: You know I mean my training probably for years was training fast, be fast, training slow, be slow and quite in the NFL, if you move slow, you **[0:24:52] [Inaudible]**. So I never could really understand the idea of like, "Hey, I'm going to do a slow motion training," and that's kind of a lot of those time and retention like time reps, like forward countdown, three, zero, all that. I was like, "Dude I'm going to move this way from point A to point B as fast as I could because we're moving fast twitch, well the only twitch muscles I want to trade are the fast twitch ones." So I never even wanted to even get the slow twitch ones an opportunity to get in there which ends up killing me if I have to run more than like 40 yards because I hit that 41st and also my legs felt like cement. But I can move quick from the beginning. And that was really successful for us.

Greg Everett: Right.

John Welbourn: First exposure to weight lifting came or look at weight lifting when I was pretty young when in high school we did only strong shall survive template by Bill Starr. So we would – it was like bench squat dead lift and power clean. And then it was pretty easy and all look like these guys were just trying to like stand up really fast and curl the weight with their hands on, you know.

Greg Everett: The best thing about Bill Starr is that he was always about shrugs power shrug.

John Welbourn: Bill Starr was ridiculously strong. I'd tell you. That guy was, yeah, he was a freak of all freaks. I mean what was he like 181 pounds and had some crazy lifts. So I always was a Bill Starr fan. But that our first exposure. And then when I got to college and by the – you know I was there and second year Todd Rice came in. I mean that was really eye opening because he brought us some videos and showed Olympic weight lifters during their

training, the things that they were doing. I mean the one, you know, these guys were like cleaning and jerking like 450,500 pounds and then going over and jumping up on 50 and **[0:26:33] [Inaudible]** like it was nothing.

So seeing the explosive nature and the ability for those guys to generate force and that fact that they were injury free or so we thought was really appealing to me. I'm like, "Man, those guys are lifting huge weights. They're doing it really dynamically. They're really explosive. And on top of it, they're injury free." I always figure out it's a pretty good style of training for me.

Robb Wolf: John, you've done a ton of training with Raphael Ruiz. How does his approach in the weight room and the whole thing like how would it compare and contrast with Westside? Like what's he up to with most of his stuff? Because I mean he's a hell of an athlete and as a stand alone and an amazing coach. So I mean how is he tackling a lot of this stuff?

John Welbourn: Let me see. It's really hard to explain Raphael's stuff because it's so specific. Raphael, his whole training is – if it doesn't fit directly or have direct application to on the field to sport then he doesn't really add it in. everything is kind of built upon that. So if we're going to squat or we're going to damage, or whatever we're going to do, it has to have some direct correlation to us doing that sort of that's not going to fit within the program.

Where else he did a ton of balance work. There was a lot of you know kind of basic **[0:27:59] [Inaudible]** the word gymnastics **[0:28:01] [Inaudible]** but I call it body wearing stuff where we did a ton of work on gymnastics mats.

Robb Wolf: Gym kata.

John Welbourn: An appropriate stuff. What's that?

Robb Wolf: Gym kata.

John Welbourn: Yeah, Gym kata. You know what's crazy is I watch Raph, he weighs about 165 pounds and lots of our squat 140 kilos for a triple in the set of **[0:28:21] [Inaudible]** shots below parallel. I also watched the guy do a slip front squats where he was jumping up and did splint launches with 150 kilos on his back. So the guy is an absolute freak of nature. He could do – what he would do is do some pull ups or he would hold himself up and I would get on his back and try to pull him down and it would take a

few seconds for me to pull him down. So he's just very very explosive, very strong. The base of his program is mainly pulling. I think that's where I got kind of the idea that if you pull a lot more than you push, you're usually going to be – you're going to be okay. I mean, it's almost three four to one in terms if you look at the reps. So Raph's deal was all the big go muscles are in the back. All the pretty ones are in the front which is the strength to go muscles. And we just did a ton of explosive movement. Everything was done a lot of plyometrics and lifts that – Raph's training is always kind of evolving. I mean he's a huge user of – he loves to prep muscles. So we did a ton of manual resistance. And we did manual resistance sets and be able to go over and then go over and do the lifts. And so he was always big on prepping muscles, turning them on, getting them firing and...

Robb Wolf: Why don't you tell people what you mean by that? I think a lot of people don't really understand what that is.

John Welbourn: Manual resistance is actually the idea of like I'm actually going to use a partner to kind of do eccentric, concentric movement against by another partner's kind of pressure. So let's say we're doing handshake curls, I'm lying on my stomach. Your partner is actually going to resist you on both ways and kind of really get those muscles firing in a kind of interesting way. And then we would go over and do a ton of pull. So he use big on the manual resistance movements and just a lot of stability, lot of isometric holds. It's just – this program it's just so diverse and very interesting. And for some reason I'm drawing a blank on most of it right now. But for some reason I dropped weight on a lot of his training. But it's – Raph's always been an incredible athlete and just an incredible trainer and worked with some great coaches. And I would credit probably the best of my NFL career for when I was training with him. And that unfortunately when I came back to California and he stayed in Florida I ended up having doing version of his stuff and I think that was kind of the end of me.

Robb Wolf: That's a huge endorsement. That was pretty cool.

John Welbourn: Yeah, no, it's – he travels with us across the football and it's interesting to sit there with 20 people in the room and listen to him talk and not only training them for bunch of years and heard him speak and the people are just crickets and big eyes being like, "What is this guy talking about?" because it's so far outside the realm of anything they've heard. And he's really getting into the physiology of it and kind of – how he kind of put this whole thing together and he kind of developed his own – his own program.

And a lot of the movements that we did whereas kind of in that prospect that idea like **[0:31:17] [Inaudible]** capacity and let's go faster. Raph's whole deal was like let's just try to do everything heavier. So instead of trying to beat your time on different workouts, we would just keep adding weights to the bar. And I thought that was always a lot of fun when we did our workouts because I always did gage myself on speed it was more like how heavy can I do something was always a better mark for me.

Robb Wolf: Which one we're thinking about like reinforced development and all the attributes that come out of just maximum strength that totally makes sense.

John Welbourn: Yeah, I mean big horse power. That was always our deal, this big, big horse power. I just want to be able to move as fast as I can and be able to move those weights as violently as possible. And then be to go out and run, be able to change direction, be explosive and fast and actually look like an athlete. That something that has really come to my mind in the last couple of years was you go out and you watch people move, you watch **[0:32:12] [Inaudible]** do this too, you watch people Olympic lift and some people are so good underneath the bar and you look at them and it's like pleasing to the eye. And then other people you like want to cringe and look away from.

Robb Wolf: Yes, that is certainly true.

John Welbourn: So a big part of him was learn to move athletically, movement patterns and a lot of that stuff. And I think of those things can be trained overtime. But that was a whole deal for us. Look like an athlete and be an athlete.

Robb Wolf: John, you got to hang out with Romanoff pretty recently. What was it – tell folks who he is, one. And then what was that like, like you were pretty fired up about that exchange.

John Welbourn: Yeah, I got invited down to a cross fit, you know, SME Subject Matter Experts, for those who don't know what an SME is. And we got to go to breakfast and I sat across Dr. Romanoff. And I was pretty excited just to meet him and that I didn't really understand the post method, the idea of pushing and pulling when you run. It didn't really make sense to me. I understand the idea of a mid-foot strike, but the fact that anybody that mid-foot strikes is a post runner, I mean it was just a lot of questions I had and I just was confused by a lot of it. And I just didn't understand

what he was trying to teach. And so I was fortunate enough to sit down with him at breakfast.

And I knew a little bit of his history, but I didn't necessarily know all of it. And when he started giving me his pedigree, I realized like did I just shut up and let this man talk?

Robb Wolf: Because his classmate was Zatsiorsky the guy that wrote, "Science and Practice of Strength Training" and then his professor was...

John Welbourn: **[0:33:53] [Inaudible]?**

Robb Wolf: **[0:33:54] [Inaudible]** yeah, yeah.

Greg Everett: Yeah, I have heard of him.

John Welbourn: Yeah, you heard of **[0:33:57] [Inaudible]** his just, yeah. So that – this will be the guy who's a master sports scientist which is like PhD level on our deal for like the University of Moscow which is like eastern block which doesn't exist anymore where they took the population and they're like, "Okay, you are ditch diggers and you are athletes. Athletes will live in special little villages, you'll eat special food and you'll do nothing but training all day and the ditch diggers will go dig ditches."

So there wasn't this like I'm an accountant and I'm an athlete. No. Your title is athlete on your driver's license. And your goal is to go win gold medals and be the best in the world. So not only was he a master sports scientist, but he was also a triple jumper for Russia and a doctor of biomechanics when the guy basically designed his own style of running. I mean, he broke this model down and when we – I asked him all my questions. The guy had some incredible answers for it and I was really blown away by what he was teaching and realized I just need to shut up and listen to this guy. And he actually started forwarding me articles and we kind of created an open dialogue. And I realized sitting there this guy is probably one of the best in the world and he's a guy like Louie Simmons. He's an innovator. He's developed his own style of running, goes out and teaches it and is just a very switched on dude and one top of it, an incredible person to hang out. I mean we talked for an entire day and the guy had me in stitches. I was laughing my ass off the whole time. I mean he was telling me my girlfriend and soon to be wife is pregnant with twins for those of you that don't know. And we were sitting there talking about teaching children how to run and he was telling me stories about they taught the children how to run in the athlete villages. And he's like, "Get baby to fall forward," and it was just incredible just really

talking with this guy about how to develop athletes, what they did, how this whole thing kind of progress in the idea of GPP transitioning in the sports specific training and what the Russians really did.

I mean it was just – it was so enlightening. I was just – it was one of those things where I like I'm actually going to try to go down to Florida here pretty quick and maybe go out and hang out with him and just try to pick his brain so much because he is such an intelligent innovator, an incredible guy that you got to go learn from those guys. And it's just worth – I mean so many people are just so content to sit on the internet or listen to a podcast and never venture out of their basement or their garage. And I think the internet is really, you know, done some great things. But kind of the negative that now it's allowed people to learn stuff without having to go learn from the people that are really teaching it because you can just read a blog, listen to a podcast, read a book, get on the internet, get on the forums and just ask questions and pretend you're an expert because you have 3,000 posts. When before this, you actually **[0:36:44] [Inaudible]** with. You want to coach beast. I mean, Greg, how long did you live to coach beast?

Robb Wolf: It he there?

John Welbourn: I don't know. I maybe just mumbling but I know he went travel to San Diego and...

Robb Wolf: Yeah I think occasionally somebody comes in to Greg's office and distract him. But he was at North **[0:37:04] [Inaudible]** for a pretty good chunk of time and then I think he was done at coach beast for at least two years.

John Welbourn: I mean look at **[0:37:12] [Inaudible]**.

Robb Wolf: Right.

John Welbourn: You know you're telling me stories about him traveling and going in training with John Bros and actually going and meeting this people and doing the system. And that's the good stuff. I mean you got the travel and meet people. You got to do their system. You got to get into their environment. Talking about on the internet and looking into the form and then going into the basement and replicating it with your dog watching, it doesn't work. And that's why you have so many lost souls.

Robb Wolf: Right.

John Welbourn: You got to show up in a place like Westside barbell. You got to show up, go see a guy like Romanoff and go figure out exactly what he's teaching and go learn from him. And I think that's the important stuff.

Robb Wolf: John, when you're putting together your program, I mean how much do you rely on like the **[0:37:56] [Inaudible]** charts?

John Welbourn: Oh, that's – yeah, I mean that's kind of our guidelines. **[0:38:03] [Inaudible]** is huge for us. I mean sometimes we train outside of it. And anytime I've trained outside of it, I haven't got my desired effect. So I really use it for our basic lifts and also for kind of programming volume. I'm not a huge fan of kind of periodization in terms of like percentages. Like, "Hey, I want you to train at x percentage today." The problem I found with that is everybody is so different. Female athletes can lift a higher percentage of their one rm for more reps whereas I'm on the exact opposite. I mean we did a kind of a test where we brought in a whole bunch of people from our gym and we set them at like 85 percent and had them do max reps. And it was like for me I could do maybe four or five and we had women getting 11, 12, 13 reps at 85 percent and we had then one of our lifters getting eight, nine reps at 85 percent. And it was just – it was amazing to see that the percentages didn't necessarily work for everybody. But what was good about **[0:39:03] [Inaudible]** chart is it gave me an idea on the volume and how to kind of control volume. So it was like the max effort and a lot of that stuff like, "Hey this is the target amount of reps I need you to get at this percentage." And that was how I kind of worked backwards of it.

Robb Wolf: And after you went out to Westside barbell and started really tinkling with the **[0:39:21] [Inaudible]** chart, it really dropped your overall volume and intensity quite a bit did it not?

John Welbourn: A hundred percent, yeah. What I did is I found just better ways to do stuff. I have been kind of using like a ton of fives and singles and doubles. And I kind of ended up getting away from the vibes and mainly going to singles and doubles and looking at total volume instead of looking at, "Hey, I'm going to lift this mini reps with this many sets and this is the rep range I want to hit." I looked at that at more like, "Oh, I need to – this is volume. This is my intensity or my level of percentage. And this is the total number of volume I need to get. What's the best way for me to get there?" That's when we started to kind of look at this thing and realizing like, "Oh, there's more that one way to skin a cat." And if you look at the whole process of football today, there's a squat cluster where we're trying to hit 25 reps where we're basically doing singles, doubles, or triples and then racking away at 85 to 90 percent and then trying to get

25 total reps with no longer than 30-second pauses. And that little cluster was great to help kind of add that petrify and really kind of blast through some sticking points. So I kind of cycled that into the program and I'm kind of go back and looking at some of my old training stuff and realize like, "Oh, shit this thing is," we were doing some dynamic stuff and then we're going into some five rms and always trying to hit the same amount of volume, just trying to play with the rep ranges and the percentages. And the system is kind of fun.

And what's cool is like that email I forwarded you, I get email all the time that people are like, "I've been training for a couple of years and I found this stuff in a matter of a few months I have made exponential gains over what I've been doing in the previous years." And we get a little from two three, or four of those emails a day.

Robb Wolf: Yeah. You got a couple of like a world judo champion and some other people following your program and really digging it.

John Welbourn: Yeah. We had a guy this week and big Josh who post on his site. He's one of the top **[0:41:20] [Inaudible]** guys in the world and I know he competed this weekend. And he finishes either first, second, or third in the world every year. And he follows this stuff. And I've written a programming for him. And we got another guy who's been doing power lifting meet and we had some really – we had a judo guy. We've had a masters track. I mean we've had some really pretty incredible athletes that have used the programming to really do some amazing things. And for me that's what I'm excited about.

The other one I've been really excited about and we talked a ton about is that not only was I able to go out to Westside, I was able to actually influence those guys a little bit by doing Brand and Lilly and AJ and Dave Hoff's diet stuff. Those guys have been incredible and have really packed in some monstrous numbers. So it was cool to go out there and learn their training and also kind of help them a little bit with their diet stuff and get them on track.

Robb Wolf: Yeah, I mentioned that a little bit I think in the last podcast night. I didn't, you know, it wasn't my story to tell so I just kind of alluded to it. But tell folks kind of like the Westside philosophy of nutrition before you arrived and then what you did with these guys and then kind of what the results were.

John Welbourn: You know those guys kind of looked at it like if you make the engine hot enough, it will burn anything. And it kind of – a lot of the guys kind of

pride themselves and eating like shit and it's just kind of, "Hey, I'm going to bank heavy weight and I'm going to do this and I'll be big and sloppy and just bang heavy weights and who cares what I feel, what I eat." And we definitely know that diet is probably 70 percent of this thing. So I know when I was out there I got to be tight with AJ Roberts. So we were sitting there and they were doing some nutrition stuff for the Westside deal and I was like shaking my head there and like, "That just doesn't make sense." And so I started explaining a little bit of what we do with what I call the Chuck Norris' power athlete diet and kind of pretty much what I guess viewed that night kind of evolved in this thing into and I just started to kind of just explain what we were doing and then AJ contacted me and he's like, "I'm stuck at about 2,600 and I need to do something. I'm looking for anything that kind of help this thing. And I'm going back to a more standard Westside template. I just need to go out and set the world record. It's time for me to make my mark."

So I ended up sitting down and doing hid diet stuff and in about two and a half, three months time he came in and added over 200 pounds to his total. And he was in our lifting magazine that the only real change that he had made was going back to a more traditional Westside template and my diet stuff. So that was huge. And after AJ's total was I think 28, 25 and then the guys is just a monster at 308, I got contacted by Brandon Willy who's another one of the lifters and I helped did Brandon's stuff and now Brandon weighs about 320 and 330 and sent me a picture yesterday. And the dude looks like a one of those **[0:44:16] [Inaudible]** bulls, bigger and stronger and leaner and more muscular than I've ever been that he give me the heads up with Dave Hoff who holds the world record in I think in the 275s. He's been eating the same way and he's packed on 20 pounds. So he was like 258, 260 when he set the world record in the 275s. I think he was up to like 285 now. And Brandon said he's probably got a chance to set the world record for the old time total in any weight class.

Robb Wolf:

Wow.

John Welbourn:

So these guys have taken an incredible style of training the Louie designed. And on top of the training and this is the thing that is so hard to kind of explain to people is the Westside method is one portion of the training. Training at Westside in the groups, in the environment is probably the bigger portion of it. I mean its like **[0:45:10] [Inaudible]** I mean there is 300 pound big dudes that are squatting monster weight expansion. I mean everybody is big and toddled up. It kind of reminds me of a prison yard. And I've been out there. I haven't been in an environment for a long time since I retired in the NFL. And it was – I got excited. I got stronger. It was like I came home and like come out with a

new desire and like put on body weights and started gawking on this thing. And I'm like, "Dude when I go back out there, I'm going to go back there and be like, "Dude, I'm ready to compete this whole deal."

So I think Dave Windler wrote kind of an interesting piece I read that they were like, you know, what people don't realize at Westside barbell is that Westside barbell is what kind of builds these things and that competitive environment and that if you're some guy just training your garage by yourself without training partners and without that generally pissed off attitude, you just never going to really maximize your potential. And that was something I really took away. But these guys are some of the strongest dudes in the world. And I was glad that I was able to kind of help a little bit. So that was pretty awesome. And then AJ brought me kind of a nice **[0:46:15] [Inaudible]** in the Power Magazine **[0:46:17] [Inaudible]**. So I was pretty sentimental.

Robb Wolf: Right on. That's cool. And last question here for both of you guys, really what's one of the secrets for mass gain? Everybody always wants that. Like...

Greg Everett: The real secret?

Robb Wolf: The real secret.

Greg Everett: Or the more accessible secret?

Robb Wolf: We'll go with not necessitating a view going back and forth just the one for right now. What is the interplay with ball game and intensity? I mean you've got some protocols out there like **[0:46:46] [Inaudible]** with lean gains. He has abbreviated kind of schedule. He's got some other situations where folks are recommending some real high volume type of stuff like **[0:46:56] [Inaudible]**, like a 70 percent of your one rep max and what not. Is it all good? Is it what you rotate through? Is it just having some plan and trying to knock out some goals and move it forward? Like what's the deal?

Greg Everett: Well, I would let John start that one off since he weighs four times as much as I do. I think his skeleton weighs more than I do for sure.

John Welbourn: You know what putting a mass was always fairly, you know, it always seemed pretty easy like I'm always amazed that people like struggle so much to like really gain body weight. And I think it more has to do starting eating up calories. And the other one is don't get really get your heart rate up that much for extended periods of time. Like I know I would

weigh myself everyday or two when I was playing. And if I was underweight, I just wouldn't condition that day. And like my weight would come up and then when I condition it would come back down. I think most people are just so – like this is kind of weird, but I think everybody is just kind of full of shit with wanting to gain weight because everybody is like, "I want to be big. I want to put on weight." But you had never really committed to it. Like all of a sudden they eat good for like three days and they start putting on weight and they get like this nervous feeling like, "Oh, my god I'm not going to have abs or I'm going to be fat or I'm not going to fit my jeans." And they don't eat. It's like you have to have – it's kind of like I guess if you just went trained hard for one week and then took three weeks off because you are so sore, I mean, you got to just build the consistently pack on the calories. And on top of it, I don't know how to get bigger or stronger without lifting heavy weights. I never got – I never got bigger. I never got stronger by lifting like sub maximum weights for lots of reps like 70 percent for like sets of eight to 10. Never did shit for me to get thicker and bigger and stronger. I always had to train 85, 90, 95 percent and try to push it out and really bank those reps.

I mean other than maybe some body weights or some assistance work, the majority of my training is never been more than fives, you know, I mean we did those 20 reps squats and I tried to play with things. But all that stuff I ever did was just getting me weaker. I just figured the stronger I could get and the more force I could generate, the more food I could eat. And then just don't condition.

Robb Wolf: Right.

John Welbourn: If you want to gain weight, just lift weights twice a day and sit on a couch and don't burn calories.

Greg Everett: A guy who said, don't run when you can walk. Don't walk when you can stand. Don't stand when you can sit. And don't sit when you can lie.

John Welbourn: Yeah, that makes complete sense.

Greg Everett: Just kind of relax.

John Welbourn: Yeah, I mean just take it easy. Like all these people, "Oh, okay, so I want to get bigger. I want to get bigger. I want to get bigger." Then you look at their training and they're like, "Oh, I trained three times a day and I do – I'm at 180 beats a minute on my heart for 30 minutes each workout. So I have a 100 you know somewhat like 90 minutes a day of total training at a 180 beats nonstop." I can't [0:49:54] [Inaudible] and I just lift 35

pounds squats for a set of 50 and you're like, "Dude do you even understand muscular endurance? Do you understand hypertrophy? Do you understand hyper..." When you start playing into these things, you're like, "Dude take this crazy women that come in, "I don't want to be big so I'm just going to lift light weights for like lot of reps." I'm like, "Oh, how's that going to work out for you?" I mean it just blows my mind. I think people have so much ADD that they just don't know what they want to do. And the end thing is nobody ever sticks to a program. In this shit, I get 100 emails a day of people that are trying to like cherry pick programs, "Like, hey I'm going to do this with this and this. I'm going to cross fit football and seal fit and cross fit. And then I'm going to do cross fit endurance in the weekends and then I'm going to follow Greg Everett's Olympic lifting on Sundays." And you're like...

Greg Everett: Now, you're just making shit up.

John Welbourn: I swear to God, right?

Robb Wolf: Greg's never got that email.

Greg Everett: I get the same emails everyday. Like I'm going to combine your program with this, how's that going to work? Well it's not going to fuckin work.

Robb Wolf: I do mind if you would probably combine the program.

Greg Everett: Yeah.

John Welbourn: It's like I got an email the other day from somebody that was like, I'm on this great strength program that focuses on the squat, the bends, the dead lift and the press, how am I supposed to incorporate heel sprints into your program? And I was like, I don't know, but I got two **[0:51:18]** **[Inaudible]** email. We're good friends. Jim's program works great. A lot of people got really strong on it. If you want to do Jim's program, do it. And don't be **[0:51:27]** **[Inaudible]**. Don't be a pussy basically. And the guy was like, "Oh, isn't that obvious I was trying to ask you about Jim's program?" I'm like dude.

Jim and I went to dinner at Columbus and test back and forth and I'm like come on man, just fuckin follow the program. I mean it's written for a certain deal. Stop trying to be this – everybody has this idea that they're going to like find their own magic secret sauce by blending like 80 different things and they're going to somehow build themselves into this like super monster athlete that has capacity and endurance and strength and power and explosion and can sprint 100 miles barefoot.

Greg Everett: On a cross meter?

John Welbourn: I mean it's like crazy. It's like I just looked at it and said, "Hey, what do I want to be really good at? What's going to fit my job description? What's going to allow me to be the best one I can be or the best John I can be? Oh, I'm going to be really strong, really fast, and really explosive." And that's what my training skill is going to like and I'm never going to be **[0:52:29] [Inaudible]** from it.

Robb Wolf: Right.

John Welbourn: So I think the problem is most people just don't understand what the real goal is and I think if your goal is to be excellent in everything, you're just going to be a mediocre in a lot of stuff. And a lot of people are cool with that. They're like, "Hey, I just want to be like decently good in a bunch of stuff." "All right well then put a bunch of stuff into your program to be decently good at it."

Robb Wolf: You know what it's interesting even within that with like the cross and games ruling and what not, like I know John you were coaching several people, I've been coaching some folks, even within that scenario we still end up really stripping like the good coaches strip the whole thing down and people are doing some very specific skill works and very limited curtailed metabolic work throughout most of the year if they want to get to a technical levels which are going to give them any type of contention for going into the games and getting into regionals or something like that. The **[0:53:25] [Inaudible]** of people have gained nothing and this is kind of a funny thing because Greg and I wrote about this god, you know like 2006 or something like that, 2005 or 2006 but the people entering in that scene and doing really well are former collegiate all American wrestlers, a few high level college football players, I think one or two professional football players and these people are generally just big and literally tough like strong, very very powerful. And then we're graphing on some metabolic engine on the back end of that. And they're destroying stuff.

John Welbourn: Well I mean it kind of comes down to this thing that if you are a good athlete and you have a capacity you should be able to do a lot of things and then we get the back end of that kind of we talked earlier where you got a guy like with Romanoff tell me there's a difference between people that exercise and athletes. And if you are somebody that exercise, that's fine. You can go out and sweat, have a good time and run around. But just know that there's a distinction between those people and the people that are showing up to play on Sunday or the people that are running in

the Olympics and those two shall not pass. And it's just – I think what you'll find is that you're going to get really some good people that mentally can't suffer because at the end of the day, at least for me, when I look at cross fit, the people that are going to do really really well at cross fit are the people that can suffer more than anybody else.

Robb Wolf: Yeah.

John Welbourn: And hardly enough I don't like to suffer. I like other people to suffer. I mean this is crazy. When I play football my goal was to try to put my head through your head until you gave up. And I wanted you to feel the pain. I wanted you to suffer. And I had this analogy that every player used the hammer the nail and as long as I was the hammer more than I was the nail, I would win. And it worked for me for years because I knew if I could make that guy suffer more than me then he would give up. And the only time I really ever got into trouble was when that dude can suffer. And then I would suffer and then I'd be completely miserable. So it's something that cross me I'm like, "Damn, these people can just go out and suffer and like absolutely destroy themselves for" – I mean we were doing it for a lot of money. And I guess now, there's a huge price involved that people are just going out to suffer for suffer.

And I think it goes back to the idea that anytime that there's a marathon there's thousands of people that show up to do it. If there was a 400-meter race, how many people are really showing up to run the 400 meters? You got a lot of spectators but should – I mean there's – if you look at the Boston Marathon it was 30,000 people out there wanting to run 26 miles. It just goes to show you that people like to do triathlons and people are good in suffering. And there's people that like to suffer and there's probably more people who like to suffer than not. It's just – I look at cross fit and it's just, hoooh, it looks somebody's workout just like, "Dude, I would be suffering to do that." And anybody wants to do it, I'm more than ecstatic the help them with it. And the problem is you just got to be really really good. You got to be a rower, a wrestler, somebody that has that ability just to like suffer through the worst of things. And I think that's why I see people that are like spilling these guys. I was interested to see that there was a college football or a pro football player that finished pretty high in one of the regionals who hadn't been cross fitting that long and I think he was a **[0:56:44] [Inaudible]**. And I'm like those dudes get hits and definitely suffer.

So I think that when price money gets big and they can save it for years, but in the same realm look at Andy Sakamoto comes out and finishes

third in the regionals in the California which is pretty competitive and she's what, 37?

Robb Wolf: Right

John Welbourn: Cross fitting for a long time and came out and actually just – I mean and she's tiny. I think she's like 116, 118 pounds and just going out there and just hammering people. So I mean it definitely goes to show that if you got the motor and you can suffer through it, then you will be all fine.

Robb Wolf: Yeah, that is not in my wheel house. Anything over 10 seconds is way too long.

John Welbourn: No I mean I always look at it like if the training is not getting me better for my given goal, then the training has got to change. And I think that's, you know, people has asked me where would I do a difference from kind of the .com stuff and it's like my goal isn't the workout. I've said from day one. I mean if the workout in the training isn't helping you get better for your given task or your sport on the field or your eyes on the grid or on the pitch, then you know what, then the training needs to change. And I don't care what the times are. I don't care what you do. I mean you don't measure players, you don't measure athletes base on what they do with training. You measure what happens when the gun fires or the whistle snaps. I mean you could be the – we've seen with weight lifting especially power lifting and Olympic lifting you guys are probably set world records in the training room and then go out there on the stage and just crumble into a million pieces.

Robb Wolf: Yeah, it's pretty common actually.

John Welbourn: Yeah, yeah. I mean it's – in football there are guys that were we used to call them all crow practice. The guys would come out in practice and would be like stoning you, throwing big cloves and crushing your life, I mean offence alignment that could get bend your knees and explode hips, hands and dude it's just savage. Get out there on the game day and in our game innings and all of a sudden the guy would snap and the dude was nowhere to be found. He couldn't move fast enough. He couldn't hit. He couldn't play to the speed. And I think that's what really separates the good from the great. And that's what you really look for I think with or without athletes and more importantly this thing like you got to be able to transition from doing it in your garage or training to be able to go out and do it on the big stage. And I think that what would really separate people to those people that can rise to the occasion.

Robb Wolf: That's cool. That's cool. Hey, John, it was fun to having you on. When can we get you back on here?

John Welbourn: You know what I'm not that mobile right now. I'm crutching around. So you can kind of catch my anytime.

Robb Wolf: You're easy prey. You're like a chicken on high heels right now. So that's cool.

John Welbourn: Well.

Greg Everett: Now you're making it weird.

Robb Wolf: Awesome guys. Well good show. And, Johnny, thanks for being on. And Greg, thank you. We'll – let's **[0:59:41] [Inaudible]** right? This one is going up in a couple of weeks. I'm going to be out in the pocket for awhile. So we're trying to bank a couple of these guys. But if folks have another questions for John, definitely drop them in the comments on the podcast and then when we get him back on here, we can hit those down the road.

John Welbourn: Cool, thanks.

Greg Everett: Sweet.

Robb Wolf: Awesome guys. We'll talk to you soon.

John Welbourn: All right, guys. See you.

Robb Wolf: Bye.

Robb Wolf, Andy Deas, episode 17, Paleolithic Solution. What's going on?

Robb Wolf: Dude, haven't been kicked off the airwaves yet so we're barnstorming. I am not medicated this week though, so it's guaranteed to be way less fun than previously.

Andy Deas: And I only have a coffee. So there's not like a lot of excitement going on other than the fact that it's raining again in Chico. So once again my mood is low, Robb.

Robb Wolf: Yeah, yeah. I definitely was considering a Kurt Cobain exit after this episode. So I'll wrap up the book and then, you know. I regret nothing and launch myself off the cliff so....

Andy Deas: Well, you survived medication. You survived comments around women's hormones. I don't know. There's much left for you to survive, Robb.

Robb Wolf: I don't know. I don't know. And then why are you -- you're going to do Ohio? What do you have cooking in Ohio?

Andy Deas: Oh, yeah, going to visit the folks this weekend, so we're recording this a couple of days earlier. Recently put grandma in the nursing home, so I'm going to check that all out and spend time with the family. And then my best friend just had the first baby a couple of weeks ago, a baby boy. He was hoping that it was born on Super Bowl because he told me if your son is born on the day of the Super Bowl he will play in the Super Bowl. And I told him, "I don't think that's how it works." And I wanted to know what his 40 time was and et cetera. He said, well, his 40 time is kind of to be determined. It's probably seven or eight hours at this point. And his squat form sucks right now, but he said they're going to work on it. He's only like five weeks old so....

Robb Wolf: His spine is still more gelatinous than actually calcified so....

Andy Deas: Exactly. So in a year he's expecting scholarship offers to come in, but he's got a little time of development to go before we actually test his 40.

Robb Wolf: Right on. We're never too early to start planning I guess so....

Andy Deas: We're dreaming, you know.

Robb Wolf: Yeah, yeah.

Andy Deas: So that's it, man. That's excitement. Hopefully, there won't be too much snow in Ohio, and the farther I move west the longer it takes to go back

east or even the Midwest as you well know. So I'm like, you know, just longer trips than I prefer.

Robb Wolf: You need to start having kids so the parents come and see you.

Andy Deas: We'll see what we can do on that, man. Patience, Robb. Patience.

Robb Wolf: Well, it's all in the trying anyway.

Andy Deas: That's for sure. All right. So we're going to see how we do with the questions there, Robb. I think as you said there are some nice overlaps on a couple of them. I think we have some good questions as always so we're going to roll.

Robb Wolf: Cool.

Andy Deas: Actually, the first question is from one of my friends. I'm not going to name her name, but she'll figure out who it is. So I got an email from her recently, and she said, "I started my Paleo diet cold turkey and tried to keep it minimal on the fruit intake." So I'm just going to pause there and say for this young lady who probably weighs 115 pounds, her food intake is amazing, and you're talking about like a girl that could have like, you know – she'd go to lunch and get like a foot long sub and a six-inch sub, and she could just eat a tremendous amount of food, although very carb intensive, low on the protein side. And she's one of the lucky ones that would then still weigh 115 pounds.

Robb Wolf: Got you. Got you.

Andy Deas: So even though her boyfriend is super strict, she is just starting. So "I started my Paleo diet cold turkey and tried to keep it minimal on the fruit intake." So by day 3 she felt so sick that she couldn't do anything. She wants to know, "Is there a reason or did I do something wrong? Just wanted to see if you have run into this before or you have any article you could maybe send my way. Thanks."

Robb Wolf: Oh, man, do we have articles? I did a piece awhile back. I think the title is the Zone and Athletic Performance and that was actually a rebuttal piece to this guy, Mike Caviston, who is kind of a SEAL trainer and coordinator, and I was just kind of making the point in there that a properly planned Paleo - Paleo Zone kind of approach can not only be like -- not injurious to performance but should actually augment it and make it better, and there's a whole list of reasons for that. And one of the things that he had listed in this kind of slam piece on the Zone was one or two clinical trials

in which they looked at the Zone and it was very, very short duration where they took a calorie restricted lower carbohydrate diet and put it into hard training athletes and these athletes absolutely exploded.

And so it's not really too surprising if you think about it, (1) they used like a basic Zone approach out of the recommended by, like, Enter the Zone. And then also when we look at some of the references that I had in there, there's a paper from the Journal of Nutrition and Metabolism on ketosis and athletic performance. We find that there's an adaptation period that takes about a month in which people shift over from a primarily carbohydrate base metabolism to a fat and ketone base metabolism. And during that transition you can feel rough, like really, really bad particularly like you're seen to have laid a picture here in which this girl was eating really carbohydrate dense foods particularly some grain-based stuff.

So her metabolism was just wickedly attuned to running on carbohydrate, very, very dense, very refined carbohydrate. You pull that stuff out, and then it's funny you mentioned day 3 she felt so sick. Day 3, 72 hours is about the point at which you've completely depleted your liver glycogen, and your body starts looking around for some other nutrients to run off of, and it starts shifting into ketosis a little bit, but there's a rough transition point there because all of the metabolic machinery to use fat as a fuel source and ketones as a fuel source have not been ramped up.

So she's in this kind of no man's land in which one fuel tank is empty, the carbohydrate fuel tank. The fat fuel tank is full, but the ability to access the body fat or even a dietary fat are very, very limited. And so this is a large part of why she's having such a problem with this. Now, one good question to ask her or something to really point out with this, occasionally folks will get this notion that Paleo means low carb as in like only non-starchy, non-dense carbohydrate sources, no fruits, no yams, no sweet potatoes. But really from my perspective, the whole Paleo gig is mainly focusing on quality proteins, quality fat and quality carbohydrates that are not grain and legume based for a whole variety of reasons -- gut integrity and glycemic load and all that.

But certainly having some fruit in the mix for this girl would make her transition much, much easier. In that article that I wrote, the Zone and Athletic Performance, there's a link to I think chapter 9 of the Paleo Diet for Athletes in which Joe Friel who is the USA Olympic triathlon coach; he's made a bet by Loren Cordain. Cordain bets him that if he starts eating a Paleo diet, Friel will feel better and will perform better. And so

Friel takes the bet. He has a three-week period where he feels like complete hell, and then he ends up ramping up and doing better, and he kind of lists all these performance improvements and all that. But Joe was not limiting his carbohydrate intake. He was eating fruit. He was eating squash and all that sort of stuff. But even then he would still have a rough period of transition changing over to the kind of more Paleo approach.

So there's kind of graded steps here. She could jump in on this and keep fruit and yams and sweet potatoes in the mix because it doesn't sound like she had -- she's maybe tackling this from a performance perspective and a health perspective, so she doesn't necessarily have a lot of body composition issues. There's probably some metabolic derangement lurking in there but she may be asymptomatic from the standpoint of weight gain, but she would probably still benefit from a [0:08:22][Audio gap] because most people do. But you don't necessarily have to tackle this thing from a super low carb approach. It's not entirely necessarily.

So she could jump in and have some more carbohydrate or she can recognize that there definitely is a transition period even if she had more carbohydrate in which she's probably not going to feel great anywhere from a couple of weeks close to a month. But then she should adapt. Everything will ramp up and she should be good to go from there.

Andy Deas: Nice. And now that her boyfriend doesn't count almonds anymore, they'll be like one perfect happy family.

Robb Wolf: Awesome. And she will be even hotter than she is now.

Andy Deas: Good. I thought that was a very good question, so I thought I would throw that in there.

Robb Wolf: Yeah.

Andy Deas: Cool. All right. Next, we got a question from Jeremy. I don't think we have a perfect answer to this, but I think this is interesting question to consider how we might work through a problem like this kind of in our gym, kind of how we see the world. "Hi Robb, my name is Jeremy. I have a client who would like to start strength training in preparation for a fitness test conducted by her employer. She is a police officer who has been diagnosed with degenerative bone disorder. I'm waiting for a list of parameters from her doctor as far as exercise goes but wanted to address her nutrition in the meantime. Any advice? Would this be considered an autoimmunity? Do think it is possible to reverse this

condition or just prevent further degeneration through proper coaching of strength training and nutrition?"

Robb Wolf:

Definitely a goodie. For me I would need a little bit more information from this person. So a degenerative bone disorder like what exactly is that? Is it for sure like a degenerative bone deal? Sometimes people will mistake this stuff, and there's a very common situation of degenerative disc disease or degenerative joint disease. Degenerative disc disease can happen in the cervical spine of the neck or in the lumbar spine, low back. You can get some degenerative joint disease which Andy Deas can actually commentate on with regards to hips and stuff like that.

So you have to be really specific about what she has going on. Is this just kind of run-of-the-mill osteoporosis? Is this rheumatoid arthritis? Is this degenerative disc disease? Is this degenerative joint disease? So let's tackle each one of those maybe from easiest to fix to a little more difficult to fix. If this is just run-of-the-mill osteoporosis, this is just kind of classic; probably not enough weight bearing activity, probably not enough vitamin D, and then definitely I would almost bet money that she has some sort of an acid-base imbalance in her diet, probably a lot of dairy, a lot of grains, possibly some soda because of the kind of phosphorus load from soda, and that in the net acid load format can end up leaching calcium out of the bones.

And so our solution to that is lean protein which causes an increased uptake in calcium, magnesium, zinc out of the intestines contrary to the whole vegetarian kind of approach to meat. It actually ends up creating a net calcium retention environment despite the fact that meat is definitely net acidifying at the kidneys. It ends up producing an acid load so you can actually fix it with that, and then add in fruits and vegetables and you get the calcium cofactor which is magnesium which ends up balancing so much of the metabolism that we would normally use calcium for when we're in a magnesium deficient state. It ends up relaxing smooth muscles, you know, like a vascular bed so that brings down blood pressure.

There's a ton of things that we end up using calcium instead of magnesium for because we don't get enough magnesium in the diet. So there's an article from Loren Cordain. It's in his Frequently Asked Questions section. If you just Google acid-base Paleo, then you'll find that paper and maybe we can drop this into the show notes. But that really explains the whole acid-base balance and how a Paleo diet tackles the acid-base problem and how we end up with a net base or net alkalinizing diet, and it's very, very beneficial for bone health.

So if her situation is osteoporosis, that would be the thing to do. Have her take in some vitamin D, maybe 2000 IUs of vitamin D3. Start strength bearing exercise, load bearing exercise, squat, deadlift press, push press, body row, pull-up, all of that, just standard strength training stuff working a little bit of metabolic conditioning as you see fit but really focus on the strength work.

If she has an autoimmune condition like rheumatoid arthritis, then we need to immediately start looking at grains, legumes, and dairy because if we're thinking autoimmune then we're thinking leaky gut autoimmune response. I think we've talked about that quite a bit. I have a huge extensive chapter on all that stuff in my book. Basically, to deal with that you remove all of these gut irritating foods, primary ones being grains, legumes, dairy. You might also look at nightshades like tomatoes, potatoes, eggplants, peppers, red peppers, and all that sort of jive too. Just an initial intervention, you pull all that stuff out of the diet. Make sure that she's getting plenty of fish oil like about that half a gram per 10 pounds of body weight, and then see how she's doing a month later.

Like these -- Pedro Bastos, our good friend who is at the University of Lisbon in Portugal, they are right now running another rheumatoid arthritis intervention in which they stick these people on a grain-free, dairy-free Paleo diet, and they've had stunning, like 10 out of 10 people get resolution of their rheumatoid arthritis. Like it essentially goes into remission, and it's a very aggressive, you know, gluten-free, dairy-free Paleo diet but with stunning results.

So I can really -- I feel like anything autoimmune related we can really hang our hat on removing any of the gut irritating foods and seeing some remarkable benefit with that. And then from there if she does have an autoimmune disease, you want to be particularly careful of the ramp up on metabolic conditioning. Rhabdomyolysis is greatly increased risk because her tissue is already inflamed; her immune system is already kind of hyperactive, so you want to really gingerly carefully ramp this person up. You do not want to beat the dog piss out of them right from day one. You need to give some thought to scalability and all that sort of stuff. So that's osteoporosis.

Rheumatoid arthritis, if we're talking degenerative disc disease, I'll mainly look at the lumbar spine because that's the much more common one, even the cervical spine. Most of it will -- actually I'll look at cervical spine first. I was going to bypass that. Largely a postural issue which can emanate from cross syndrome like tight chest, weak scapular retractors, tight hamstrings, weak belly in which the person -- it's kind of the belly

sticks out, the chin sticks forward, the butt is kind of ramped back, and it's just a horrible postural position which puts an anterior kind of slide, kind of anterior impingement on the cervical discs. And what will happen over time, these discs will get loaded because they're best designed -- it's like a column. They're best designed to distribute load when they're in an even plane, but when we push them forward then we start compressing the anterior aspect of that disc and at some point that compression will then start impinging on a nerve.

And so I don't know if that's what this woman has, but if that is what it is then you need to really, really address everything related to cross syndrome. So you need to do some Google searching. Coach Michael Rutherford is a guru on that stuff, both in addressing it and -- or kind of recognizing it and addressing it in a mixed modal strength coach format. Obviously, people like Dallas Hartwig and Kelly Starrett from rehab perspective are going to be excellent on that. But you need to address just the basic postural set-up. And then in the lumbar spine, if you hear about degenerative disc disease L4-L5 kind of degenerative disc disease, in my opinion, it is like 99.9% hamstring tightness, hamstring piriformis, hip mobility tightness.

Normally, when we walk the hips precess. They raise right to left. It's almost like the Marilyn Monroe walks kind of thing. The right hip goes up, left hip goes up, but the spine essentially stays neutral in its orientation because the hips are precessing side to side. When we have super tight hamstring, super tight hips, instead of the hips raising and falling side to side, it becomes like a mortar and pestle action on the L4-L5 discs and you end up with disc rupture at some point because it kind of wears them down. And then also you add to that any type of loading, sprinting, jumping, landing, lifting when the lumbar spine is not in a solid position is also going to expose the discs to potential problem.

So that whole gig and then if you have something like a degenerative joint issue, like a hip or a shoulder, there can be various issues with that. Usually, there's some sort of a movement or recruitment issue, either tightness or impingement that starts wearing out the joint prematurely, and then there again you just need to be on top of that with proper mobility work and somebody like a Kelly Starrett or a Dallas or somebody like that who is well-versed in manual therapy to help open up the joint capsule, re-establish normal mobility so that you can cease damaging the joint. So that's hitting like every stinking thing under the sun. We still don't know for sure what this woman had going on, but that's like the -- that's like everything it could be as far as I can understand. Maybe we'll

get Dallas to chime in on that. I doubt if Kelly would be game for that because it would probably get him fired so there you have it.

Andy Deas: Oh, Robb.

Robb Wolf: Any thoughts on that, Andy? I mean given your --

Andy Deas: No, I'm on board with you. The only other thing on the -- especially on that lower disc stuff and that's part of some of the -- I got some wacky hip stuff, it's just also same thing, teaching folks how to use their stabilizers -- to properly stabilize their spine, under load, and not use some of the emergency stabilizers like the psoas and rectus to do some of those jobs and then kind of mess up the whole system. In other words, as Kelly says, "Andy, get a freaking plan before you pick up that weight tear your spine in half."

Robb Wolf: Yeah. And I don't want to get too far a field because this was already kind of a long answer, but this is again some of my problems with the lack of a directed entry point for people doing various types of strength and conditioning. The simple statement of like, "I'm going to scale something," when you start looking at it from a perspective of dealing with a mixed population of people is nothing short of preposterous because we still have people -- we were working with some folks last night who are overall pretty good movers, pretty good athletes, but they absolutely do not use their core stabilizers the way that they should. They're still using psoas as an anterior stabilizer of their midline, and they have low back issues as a consequence of that.

And it just- takes some time to teach people how to properly engage all the muscular -- how to shut off the stuff they don't want to fire, how to turn on the stuff they do want to fire. And if all that they're being exposed to are deadlifts under like a 2159 format for a time, it's not a great -- you're drilling in thousands of repetitions of shitty form instead of building a base that is built on sound strength building movements and then doing metabolic conditioning type stuff with movements that people have aptitude with that are more safe and then layering in that complexity over time.

And there's no 100% perfect answer to that, but I think just an orientation towards perfection in the compound movements, squat, deadlift press, push press, and really gingerly, hesitantly introducing that stuff in the metabolic conditioning format for the sake of producing a better athlete in the long run. There's still plenty of things you can do

with people to beat the dog piss out of them that are not reinforcing poor technique.

Andy Deas: Yeah. And I think that's one of the things I do like -- really like about how we use very long slow linear progression at NorCal just because now you can start folks that have reasonable amount of weight make sure we groove all those patterns that we want, and they get better as the weight slowly but surely increases. And then by the time they've gotten to the point where they're lifting a substantial amount of weight, they're entirely comfortable with their set-up, their stabilization strategy, and all they got to worry about is picking up the weight.

Robb Wolf: Right, right. And you can do it in a way where people are still getting the shiny object, the metcon, the kind of cardio dose that they're looking for. But just do it in a smart way so that you're not undermining that really important foundational strength work.

Andy Deas: Yup. All right. Good. Long answer, good question.

Robb Wolf: Cool. Really long answer, yeah.

Andy Deas: All right. Next, we got a question from Jay. He says, "I don't want to be a nag." Jay, you're not a nag, probably in the question queue somewhere but anyway....

Robb Wolf: Now, Derek might be a nag but not --

Andy Deas: Poor Derek.

Robb Wolf: We love you, Derek. We love you, dude.

Andy Deas: Yeah, 593 questions from Derek but we'll get to them.

Robb Wolf: We love Derek.

Andy Deas: As long as no one kicks us off the air.

Robb Wolf: Exactly.

Andy Deas: "Robb, I don't want to be a nag but I had asked earlier about training for health/longevity vs. sport/performance and never got a reply so I just wanted to ask again in a way that doesn't require a detailed answer unless you want to give me one. My goal with fitness is very much about health and longevity and maintaining a high quality of life (i.e. no nursing

homes). I have no desire to compete in the CrossFit games or have a sub 3min Fran. Given this I have the impression that training for my goals may be different than most in the CrossFit world. My inkling is that training for my goals might look more like 2-3 times/week lifting heavy and 2-3 times week doing short but intense metcons or sprints. Is this a correct assumption and if not could you point me in the right direction?"

Robb Wolf:

I think the short answer sort of gig is yeah, that looks good like some sort of lift some heavy stuff. Have a plan behind that so that you've got -- ramp up in loading, some unloading weeks and all that and then some smart time index metcons and then we -- I forget, was it two shows ago, three shows ago, Andy and I talked a little bit about the need for some kind of long slow distance kind of volume type stuff. Like I just had surgery, so I had been limited in what I can do. But I've been setting up some things where I'll have a clock countdown for 45 minutes, and I'll just have a very long kind of circuit that I'm working.

I'll do some parallel bar passes where I jump up on the gymnastics parallel bars to do some passes, do some sled drag, but it's all at a conversational kind of pace. I could maintain a conversation with somebody so it's at that, like, kind of 70% relative perceived effort. And I think a day or two of that in there -- I don't know what the perfect thing is. One week you've got three days of strength work, two days of metcon, one day of long slow distance, and then you kind of rotate that template. So like another week, three days of long slow distance -- and long slow distance is being pretty relative I think doing strong man type stuff throwing a med ball, hiking with a vest. There's just a bunch of different stuff.

If you have some aptitude with boxing or kickboxing just basically setting a timer and just kind of doing combinations on the bag, there's a lot of different stuff that you could do for that, and you could rotate that template very, very easily. I think that that's a really nice way to have kind of a health and longevity orientation within all the stuff but keep some pretty damn good performance too. You're not going to win the CrossFit games. You're probably not going to win no lifting meet or powerlifting meet, but I think it's kind of that classic some breadth and depth and like the 10 physical characteristics of Jim and then the Glassman derived broad general inclusive fitness I think are pretty good. I think there is some good stuff with that.

I think when you really -- early on he asked the difference between the sports performance and the health and longevity orientation, this is a point of departure that I have from the current CrossFit model which is

increase work capacity across broad time modal domains and then the health and longevity orientation. I don't really see that. When we present a model, the model should actually have some predictive value, and that model actually does not have the predictive value for either health, longevity, or optimum performance because we know, like Barry Sears even in his original book, he makes a strong argument for really limited exercise because the studies of exercise are pretty clear that above a certain level you start getting a decrease in longevity. We start getting enough oxidative damage and wear and tear on our body that it actually is driving us back the opposite direction.

And this is something that -- I think it was July of 2004 that I wrote an article -- when I wrote the first intermittent fasting article for the Performance Menu, I touched on this. And since 2001 in talking with Dan John, I had this idea in my head of performance, health, and longevity. Performance being basically whatever it is you want to do. It's more all-encompassing than just simply like work capacity. Work capacity may in fact be a performance parameter if you're a CrossFit athlete. But performance is way more specific of a deal if you are a shot putter or an 800-meter sprinter or a golfer or whatever; it's performance within your chosen field. And it's kind of interesting when you start digging around in some other definitions or looks at fitness, you get much more of an orientation on performance specificity. You are fit for x, y, or z, you know, golfing, football, or the luge or whatever it is that you're going for.

And so I was looking at this performance kind of thing, and then health is just your moment to moment measure of health like blood lipids, hormonal state, anti-oxidant status, all that sort of stuff, and then [0:28:16] [Audio garble] over time. And then there are certain [0:28:18] [Audio garble] with all that, and then I cooked up a model that ended up looking very, very similar to triple point of water in which you have inflection points or deviation points in which if you want better performance in a given activity you are probably going to compromise both health on a short term and longevity on a long term. And then vice versa if you really want to optimize health and longevity, health in the momentary format and then longevity in the long term format, there is no doubt that your overall performance most likely, whether your thing is CrossFit or Jiu-Jitsu or whatever, is going to be a compromise.

And this is that kind of Art DeVany economics kind of based view of training and lifestyle in which there are tradeoffs and the tradeoffs are inherent. We actually have some predictive value built around that. And I'm working on a paper with a little bit with Matt, a little bit with Professor Cordain looking at integrating some of the energy expenditure

of hunter-gatherers, food intake, hepatic glycogen repletion and all that to try to model some legitimate inflection points and then see if this stuff fits the data that we have out there. Can we support this with some data?

So produce a model. See if there's some data that supports it, and that's way farther afield from where this thing started from. But I think the health and longevity piece can be complementary to performance, but the greater that performance orientation gets away from our ancestral activity levels, like if you want to get really, really big and muscular, it's probably going to move you away from a health and longevity bias at some point. If you really, really want to orient on health and longevity bias then you would probably drop in some sort of pretty severe caloric restriction, maybe some intermittent fasting, but that's also probably going to limit your performance at any type of super high level in those things. There are some tradeoffs with all that.

Andy Deas: So what you're arguing, Robb, is that if I get 120 kipping pull-ups I may have negatively impacted my long-term shoulder health?

Robb Wolf: Well, we may see some downside to that. We'll see. We'll see. I think the kipping pull-up is therapeutic to the shoulder up until people cease to recruit properly on it, and then we start seeing some downside to it. So that will be interesting to see how the greatest end of physical experimentation history has ever seen. See how that plays out.

Andy Deas: Yeah. It's a super interesting question, Robb. That is my favorite Robb Wolf piece ever, by the way.

Robb Wolf: Which one is that?

Andy Deas: The triple point, health, longevity, and performance. It's a genius.

Robb Wolf: Well, thank you.

Andy Deas: Yeah, I like it.

Robb Wolf: Thank you. Thank you.

Andy Deas: I like it, Robb.

Robb Wolf: We'll see if it's genius if it actually offers some predictive value and is not just some hyperbolic flapping of my gums, and it might actually be valuable. So we'll see. Otherwise, it's just crap so....

Andy Deas: Well, no comment. All right. Cool. Good question. Next, we got a question from Ed. I like this one. "Robb, been reading some of Cordain's papers. In the one on Hyperinsulinemia (More than syndrome X?) he did with Dr. Eades, they say hyperinsulinemia causes increased growth. Yet, in the Paleo diet he states at the advent of agriculture people got shorter. What's going on here?"

Robb Wolf: Great question. Really, really good question. Also, just to toot my own horn I'm going to mention that in that paper one of the key points that are mentioned is this -- in the hyperinsulinemia just the tip of the -- syndrome X, just the tip of the hyperinsulinemic iceberg there's a section in there on epithelial growth factor in relation to hyperinsulinism, and I actually contributed all of the research work based around that. So there has been some statements from certain health and fitness gurus that I have not contributed anything to any papers, and in fact that's inaccurate and there are a few others floating around out there if they had taken the time to really research it. So that's one of them.

And it's going to be important later because there's a subsequent question that talks about a skin condition that we will link back to hyperinsulinism and epithelial growth factor. So just keep that stuff in mind. So the question here is about the Paleo diet. When we're recommending a Paleolithic diet, usually we're seeing ancestral growth patterns in which people were much taller than agriculturalist. And so that's one piece that we're seeing. But then also we're saying that with our now highly refined diet, we're seeing people with hyperinsulinism, and so what the heck is going on with all that stuff?

So basically when we -- if you look at the difference between the Okinawans and Japanese, the Okinawans get a pretty high protein diet. They get -- actually ancestrally a low amount of rice, but the main carbohydrate source was kind of a dense starchy tuber like a yam or a sweet potato, very high carotenoid intake. But it basically was very, very low anti-nutrient content. And that's one of the main differences between the Okinawans and the Japanese is that the Okinawans end up with a low anti-nutrient intake and therefore tend to be relatively tall. When you see first generation, second generation Japanese-Americans, they tend to get much normal, normal being kind of relative, but normal within the Western pop -- westernized populations, the height distribution. So they end up taller because they end up with less rice in the diet, typically more dairy which is also a growth promoter but more protein overall.

And so that's kind of the interesting thing that we're seeing here that the Paleo diet is growth promoting in that it's adequate protein, good mineral balance, and no GI damage due to lectins and whatnot, but also it's very, very low in anti-nutrient so you're not binding up like the calcium, magnesium, zinc, and all that sort of jive.

Andy Deas:

Good.

Robb Wolf:

Great question though.

Andy Deas:

Yeah. I like that one. And you actually contributed to a scientific paper, Robb. Well done.

Robb Wolf:

Hey, you know. Pseudoscience reigns supreme so there you go.

Andy Deas:

Your entire life is based on pseudoscience.

Robb Wolf:

You know what? To tie back in when they mentioned the hyperinsulinemia a good example of this is the early dairy introduction and even greater than normal height distributions. And so we see that pretty consistently with early introduction of cow's milk, goat's milk, whatever. You tend to see kids being taller which has some goods, but then also we see some interesting long term epidemiology related to cancer rate. So there are some ancestral norms that we either approach and then surpass, and then some potential collateral damage with that.

Andy Deas:

Are you trying to say something about my height, dude?

Robb Wolf:

You've taken care of everything. You will live to be 200. No problem.

Andy Deas:

Yeah, minus my hip.

Robb Wolf:

Minus your hip. Your hip will maybe make it to 40.

Andy Deas:

All right. Enough Tom Foolery, Robb. We're focused.

Robb Wolf:

Indeed. Indeed.

Andy Deas:

A question from David. "I've recently been doing a mass gain and have essentially been running on Paleo + milk. I've noticed a slew of sinus issues and congestion taking in so much milk so I am wondering if switching to Paleo plus a whey shake may be of benefit. I've read that you get less issues with just whey. Can you comment on that?"

Robb Wolf: This was from David. I actually did a brief little answer to David, and I said certainly give it a shot and then let us know how it goes. It makes sense to a whey only post-workout shake would be a good option. You're still getting some really potent growth promotion out of the way, but it's the casein that seems to be a little bit more inflammatory. The casein seems to be a little bit more, for me, quite a bit worse with regards to things like acne and some of the other collateral damage associated with inflammation, definitely kind of sinus reactivity in all that too. A couple of thoughts on this though. Can you track down a grass-fed milk source, raw, unpasteurized? I personally have not really played around with it a lot but there are a lot of people who claim that the raw, unpasteurized, grass-fed milk is orders of magnitude less problematic with regards to whole inflammation, sinus problems, and all that sort of jive.

And then the other thing is tracking down some goat's milk which is usually grass-fed anyway. They may throw a little bit of grains in it, but it's usually grass-fed anyway. And I've noticed for myself, I can tolerate goat's milk much, much better than I can any type of cow's milk even like goat yogurt versus cow yogurt which I love yogurt, but I occasionally will treat myself to a big jug of plain goat yogurt and I dig it. The goaty goodness is awesome. But that would be my thought. Definitely give the whey a shot if you want to. Other potentials are tracking down either goat's milk or grass-fed, ideally unpasteurized and homogenized milk. And in each of those maybe give each one a month and see how you run with it; a week, a month, something like that, and see how you run with it.

Andy Deas: So here's a question for you, Robb. So obviously, generally this Paleo + milk is sort of a short-term solution trying to reach some type of goal generally for most folks.

Robb Wolf: Right.

Andy Deas: What are your thoughts on the whey or the casein, as far as the effectiveness, related to bulking, adding strength, mass, et cetera? Any perspective on that?

Robb Wolf: Like one versus the other, I really -- I don't know. Somebody like Berardi could probably answer a question like that more. I have not really looked at the anabolic potentials of all those things. Actually, Pedro Bastos might be able to -- we might be able to hit him and see if he knows. All of these things increase a variety of growth factors -- insulin, insulin-like growth factor, epithelial growth factor like I mentioned earlier. There's a ton of different things that they stimulate. I don't know what whey hits, what

casein hits. A lot of -- the growth potential of dairy is a direct -- I'm trying to remember all this stuff. It's a direct activity of like insulin-like growth factor in the gut lining.

So there's intact insulin like growth factor or proteins in the dairy which interacts with IGF receptors in the gut which then stimulates IGF activity throughout the body, and IGF, insulin-like growth factor, is pretty damn anabolic. It has a really potent potential. Dairy also can potentiate the action of growth hormone. Insulin-like growth factor and growth hormone and testosterone all work in a really beautiful synergy and promoting all of them is a huge benefit. When you stimulate the release of insulin you decrease a hormone called sex hormone binding protein which effectively increases free testosterone.

So there's a bunch of different angles in which dairy is growth promoting, and it is just growth promoting above and beyond the caloric content. Not only does it have big caloric content. Not only can you slug down a quart or a half gallon or a gallon comparatively easy as compared to like a gallon is 3,800 calories. It's comparatively easy to drink 3,800 calories versus eat 3,800 calories. So it's very, very calorically dense in that regard, but there's growth promotion above and beyond that. And the synergy does seem to work better. But to what degree they separate out, I don't know.

Andy Deas: All right. Well, it's worth the shot, Robb.

Robb Wolf: Yeah. We can try to do -- that's just outside my wheelhouse. We could try to do a little research on that, maybe see if Pedro Bastos can comment on that because he put together a hugely well researched paper on the, kind of the totality of the known endocrine response to ingesting dairy.

Andy Deas: All right. Cool. That may be worth a look.

Robb Wolf: Yeah, totally.

Andy Deas: Good. Here we go. Next, we got a question from Kim. "I've just started listening but I'm already a huge fan." So this is like fan 9, Robb, whatever number you're making up.

Robb Wolf: Sweet. I think people are dropping off the front end though. We're still around six. I know it so....

Andy Deas: "This podcast you mentioned sleep quite a bit. I am just starting to really dial in my food and have progressively been getting better at going totally

strict. This last week I have done strict Paleo and cut out fruits and nuts, getting my carbs to about 30 g from veggies. But now I've been sleeping quite a bit more (going on about 10 hours a night)," well done, "and still feeling pretty exhausted at different points throughout the day. Is this typical? When you talk about sleeping enough what is the range you're thinking of because 10 hours is kind of cutting into my schedule."

Robb Wolf:

Seriously. Two thoughts here, just bouncing right back to that original blog post or question here. You might be going too low carb. This is all in the context of like what Kim is wanting to accomplish, and maybe this is too low carb. Some of the lethargy may just be adaptation to a more fat base metabolism. So I mean maybe she needs a little more fruit, and she would feel better. If she's not trying to lean out, that seems like a totally appropriate way to go. If she is trying to lean out, this may just be kind of the way it's going to be until she adapts to the higher fat, lower carbohydrate intake.

So just need to think about what Kim's goals are overall. And then something to keep in mind too if you're in the Northern Hemisphere where kind of midwinter, there's niggling hint of spring looming out there, but we're still more winter than not, and people tend to sleep a little bit longer in the winter, anywhere from a half hour to one hour. And I think it's normal to be a little bit slower to wake, a little bit lower energy. I know Andy and I already commented, you know it's rainy and cold again in Chico, and you're just less energetic.

So I don't know if she has some environmental factors going on there. But I would just think about does she need to lean out? If not, maybe she can reintroduce a little bit more fruit because otherwise I mean I'm not super compelling that she'd be super duper low carb on this thing. If she is trying to lean out, then maybe just keep going along with this and just know that three to four weeks end she's going to feel better. And then also keep in mind that her -- if she's in the Northern Hemisphere a pretty high likelihood that her sleep requirements may be a little bit higher right now and then when the summer rolls around. It will probably drop almost two hours.

Andy Deas:

Robb, if you slept that much every night, you could not goof off on the internet and start arguments.

Robb Wolf:

I haven't really argued that much.

Andy Deas:

I know.

Robb Wolf: Well, I could. I just wouldn't get any of my book done, and then my wife would kill me.

Andy Deas: There would be a long line behind your wife I suspect, Robb.

Robb Wolf: That's good to know.

Andy Deas: You chase through the streets.

Robb Wolf: Perfect. Perfect.

Andy Deas: People have been plugging for like a year I feel like so....

Robb Wolf: Actually, it's about five years.

Andy Deas: That's right. Okay. But hard to sell it for a year, anyway.

Robb Wolf: Yeah, yeah.

Andy Deas: All right. Next, we got a question from Vinnie. When we get to the hard part, Robb, I'm going to let you pronounce this because I --

Robb Wolf: Oh, man. Okay.

Andy Deas: "Robb, I have an issue that I think would be a good discussion for the podcast. I have been an on and off primal eater for about eight months now. My original motivations were to achieve the all encompassing 'look good naked' status, but as I read more and find more research, my motives are also pointing me towards some serious health benefits I may receive as a result of eating primal.

So here's my question: I was diagnosed with ulcerative colitis when I was 17. The disease has been a constant struggle for me, and up until that point I had always been overweight and my diet was ridiculously poor. Even now, fat loss is a struggle (constantly yo-yoing and getting derailed for weeks after even the slightest deterrence from a strict Paleo routine). As far as my colitis goes, my symptoms practically disappear when eating a gluten-free Paleo diet, while extra fat also seems to melt away within a month or so of good eating habits and CrossFit WODs 5 times a week. Recently, I've also been displaying symptoms of..."

Robb Wolf: Hidradenitis suppurativa.

Andy Deas: Nice. "...a skin disorder resulting in big pustules..." what --

Robb Wolf: Pustules.

Andy Deas: Pustules, thank you. You can tell you're the scientist. I'm not. I'm just a hack. "...around my inner thigh and pubic area. After much reading on the subject, I've found that this skin disease can also be traced back to a gluten-laden diet. In my constant reading, I've also found that celiac disease can closely mimic the symptoms of ulcerative colitis and is often misdiagnosed as such. I was hoping that your science background could help shed some light on this. It all adds up too easily. It's hard for me to lose weight unless I cut out the gluten. My ulcerative colitis symptoms disappear when I do, and I now show signs of a skin disorder when I eat gluten-rich foods. I'd like to hear some of the physiology behind these occurrences and hear whether you think I may have been misdiagnosed and why or why not this would be possible. Also, you get this a lot, but I'd like to also thank you for all the work you do. Keep it up, and thanks again."

Robb Wolf: Big, big question. So I mean on the whole deal of the diagnosis/ misdiagnosis, something to keep in mind with all this stuff when we're talking about any type of like GI problem, leaky gut and autoimmune response, what we're finding is that a significant factor of the autoimmune response and we've said this thing a bunch of times as the transglutaminase enzyme. Transglutaminase modifies proteins. It modifies every protein that comes out of our body. And so we can see effects of gluten on literally every tissue and organ system in the body.

And so whether or not this thing is diagnosed correctly or incorrectly, you know like ulcerative colitis or is it gluten intolerance or is it actually irritable bowel syndrome, it all kind of boils down to the same stuff. And what we find is that you remove the gluten out of the diet and you seen an alleviation, essentially a restitution of these symptoms. They go away. You introduce it, and then you have problems. And this hidradenitis suppurativa -- let's see here.

Andy Deas: Suppurativa.

Robb Wolf: Suppurativa, had not seen this one before when I started researching for this thing. It was kind of the first go around at it. You see some linkage not only with autoimmunity and this condition, but you see a really, really high linkage with insulin sensitivity. It actually is a wickedly high in type 2 diabetics and then also particularly in women with polycystic ovarian syndrome which also underlying linkage in that situation is hyperinsulinism. It's high insulin.

So when we start trying to drag all this stuff together, when we consider some of the information from like the Kitavans we start seeing this distinction between elevated insulin levels and autoimmunity, in my opinion, starts becoming very, very gray because I think that there is a -- the leptin resistance, the body becomes non-responsive to leptin which may be precipitating the lion share of what we see as hyperinsulinism. The leptin sensitivity disappears. Leptin really strongly regulates our uptake of fats and carbohydrates and our sense of hunger. That cascades into insulin.

Our insulin is our primary storage hormone. We start becoming resistant to the actions of insulin, and we start getting some of these hyperproliferative growth situations like acne and like this condition. This condition is like a really, really wickedly bad case of acne. And so we see some very common linkage here, and it's really not surprising and the solution still boils down essentially to that same thing, this gluten-free, dairy-free kind of Paleo diet. It's funny, James Kreiger -- was that the guy's name?

Andy Deas:

Uh-huh.

Robb Wolf:

He was posting some stuff, like he really took Gary Taubes to task and was -- I think he's probably a pretty good dude. He's definitely in the camp with Alan Aragon and Lyle McDonald and all those guys who are very much not Paleo fans and that's fine. Whatever. State your case. Run with it. That's fun. I respect those guys for where they're at. But James was trying to make this point that obesity was a problem with NEAT like basically fidgeting. It's like -- I forget what the acronym for NEAT was. It's -- let me pull it up here really quick. It's non-exercise activity something another. But it's basically -- one second, one second. But he's making this argument --

Andy Deas:

Thermogenesis.

Robb Wolf:

Thermogenesis. Non-exercise something another thermogenesis. Okay. that's it. That's the stuff. So James is making this point that "No, no, no, it's not insulin. It's not insulin. It's NEAT. That's how much you fidget." And I was kind of like, well, you start doing a little bit of digging around on NEAT and there's massive disparity from one person to another and like if you overfeed them 1,000 calories, one person will fritter away all thousand extra calories by being fidgety, and their body temperature will go up and then somebody else they won't -- they'll only further away like 100 calories.

So there's some obvious difference there. And then when you do a little bit of digging, it looks like there's an autoimmune component to the NEAT deal. And so it loops back again to like, okay, Neolithic foods are probably at cause here. The thermodynamic deal. It's calories in, it's calories out. It's like yeah, kind of, sort of, but not really because we still have these really complex non-linear mechanisms going on. And until we see one uniform response across pretty much everybody, then it's kind of hard to hang your hat on it, and the thing that I'm finding nearly across the board is that if you remove these gut irritating foods then we see seemingly complete alleviation of these autoimmune conditions just across the board. So that's where I'm really, really hanging my hat more than anything is just on that gut irritation and everything that comes out of that.

So this is for sure an example of this in which he's got some obvious ulcerative colitis type stuff, some obvious gluten intolerance, and then some collateral things that look like insulin resistance. And it may be overt insulin resistance from grains, legumes, dairy; it could be insulin resistance plus autoimmunity out of those things, and we really don't know for sure what the total story is on that. But the fundamental thing is, you know, if he pulls this stuff out he ends up going symptom free. He doesn't have a problem then.

Andy Deas: Yeah. So this is why I think for us words like -- I don't know that it matters long term. It may matter to him, but I think the solution is still the same either way.

Robb Wolf: Yeah, yeah. If you want to be asymptomatic, you got to pull the grains, legumes, dairy out of the mix, and then experiment and see to what degree you can or can't reintroduce that stuff. And I think again stuff like corn and rice you can usually get away with on infrequent exposure. Gluten seems to be kind of a nasty one under any circumstance.

Andy Deas: For sure. All right. Good. Good question.

Robb Wolf: Cool.

Andy Deas: A question from Kevin. "Hey Robb, a bit off topic but would you happen to know of any sites which have references to studies done on dogs and gluten, wheat, corn issues. Possibly some sort of side by side studies of dogs feed an ancestral diet versus the conventional PetSmart garbage? So far I've found that our vet is pretty clueless about the dangers of corn, gluten, wheats, et cetera for dogs. The dog has already gone through a

several day bout with allergies because of this Purina crap food she recommended with corn gluten meal. The results of feeding Evo seem to be speaking for themselves but I would love to find some solid studies on this."

Robb Wolf:

Yeah. I do the quick little look, and there's a little bit out there but it's not that well developed. I mean it's kind of similar to where human nutrition is in which you get a few practitioners, a few doctors, a few vets who really get what's up with this, and then you have the vast majority that just have no idea. And so we'll do -- maybe if any listeners know about some specific sites or some specific veterinary practitioners who are savvy to the whole kind of ancestral diet for cats, dogs, all that sort of stuff, then that would be great. We could put some links up for some stuff like that. But offhand, I don't know a whole lot of them. But the results are obvious in this situation like the same deal.

You pull the grains out of the diet for cats and dogs, and I think it's even more stunning the resolution that they have with some of their problems -- arthritic conditions. A lot of dogs that are -- claimed to have problems with hip dysplasia and stuff like that, I think it's fully like a malnutrition scenario. They're fed crappy food. If you fed them more of a raw diet or even just like a cooked meat-veggies kind of diet, load them up with fish oil, they do great and these breeds normally are associated with hip dysplasia and stuff. They have virtually no problem. It's really, really interesting.

Andy Deas:

Yeah. And you do have what are called the Pottenger cat studies which is a little different, but they did a lot of stuff on -- man, it was -- I feel like it goes like 900 generations or something but a large number of skeletal deformities and all types of interesting stuff. And this is where -- I'll be curious just to see how old the vet is. Like my parents' vet -- whatever, we always have cats. I'm a cat person. But our vet is like in his late 70s, and he's still practicing. And over the 30 some years my parents have had cats, so obviously not the same one for 30 years, but some lasted into their early 20s. They would develop these weird kidney situations.

There's just a lot of weird gut irritation and stuff and finally -- in recent years my mom asked the doctor, and he was just like, "It's all the food." He's like, "Thirty years ago the cats I treated didn't get any of these things." He's like -- his opinion over time is like they just complete change in the diet has totally caused all these downstream consequences that -- his approach really isn't to worry about changing the food. He's kind of like, "It is what it is. The cats are going to be sick." But I thought it was interesting kind of from someone from an outside perspective not really

from the Paleo paradigm. We change what they're eating, here's what happened to them.

Robb Wolf: Right, right, yeah, just complete clinical observation on the whole thing. No real background theory at all, yeah.

Andy Deas: All right. Good. Number 9, a question from Warren I think. "I just want to clarify, avoiding dairy would mean milk, cheese, yogurt, 1/2 and 1/2 but butter and cream would be" -- okay, let me say. Let me just start again, Robb. Clearly, my coffee is wearing off. "Avoiding dairy would mean milk, cheese, yogurt, 1/2 and 1/2 but butter and cream would be okay? Is it because they are mostly pure fat but the others have casein and lactose? I'm going to do the pull it (dairy) out for a month to see but butter and raw cream have to go too?" What are your thoughts on this, Robb? I'm totally tongue-tied. I had too much coffee right now.

Robb Wolf: Andy has gone beyond his therapeutic dose on coffee. He's starting to shut down. He's taken enough uppers for them to be downers now.

Andy Deas: Well, you know what it is? Is I had my three tablespoons of heavy cream in there.

Robb Wolf: Ahh, yup.

Andy Deas: So I feel like I'm spinning.

Robb Wolf: Yeah, the heavy whipping cream really -- like we talked about really enhances the caffeine uptake. What you need is a valium now, and that will perk you right back up.

Andy Deas: I don't know how that will help with the rest of the day.

Robb Wolf: Bring you back down it's a normal. So the people that I would pull dairy out of the line-up in totality would be folks who have autoimmune issues or who are really, really, really trying to lean out. I guess like scorched earth, give it a month, and we'll play around with it. And then like Warren is saying the things that I would try reintroducing would be butter and heavy whipping cream. Ideally pastured because of the fat content, and it would minimize the lectin issues in that situation. And that's kind of the main deal that I would look at for that, so leanness because of the insulin spiking, and then also the autoimmune potentially there.

Andy Deas: Yeah, sorry about that noise, Robb.

Robb Wolf: No problem. That was Andy popping a valium so he can get back in the game here.

Andy Deas: I misclicked. It was a poor click. All right. I'm sorry. I was trying to look something up. Anyway, go ahead.

Robb Wolf: No, that's it. We're good on that. And then he had a booze question.

Andy Deas: Yes, the ever important booze. "Also can you give small amounts of booze and dry red wine a pass but no mention of beer (I know I asked about this before in terms of gluten but not carb count/metabolic effect) some light beers carry about 3.5 to 5 g carbs."

Robb Wolf: Yeah. I mean the beer deal is mainly the gluten issue. You can track down some Redbridge or gluten-free beer. You might tolerate that better. But like I mentioned before, there are some people like Dutch Lowy and a couple of other people that are reactive to gluten in general but reacted worse to sorghum beer than they do regular wheat base beer. And so that's just kind of -- they seem even more reactive to sorghum. And so there's that thing again where there is a big variety within all this. Apparently, there are some people who react very, very unfavorably to corn too. I usually give corn and rice a pretty good pass, but I've been reading some stuff on some people who end up with serious GI problems looking like ulcerative colitis and some vector auto-immunity from corn intake.

And so I think that there's a big genetic variation on here. You legitimately like I -- Steve Rast who is a dude who helped set up CrossFit Fenway, and then he's moving out to Oregon, a really good dude, he's kind of reminds me of one of our guys, John Fugoso. He's kind of like Wolverine. He's just jacked, built, strong, and can eat 10 cans, and doesn't affect him. And he legitimately is a guy that -- he's like -- I've really tried gluten-free, dairy-free Paleo, and then I've done beer and pizza and I just don't notice the difference.

And when you look at him you're like, "So how much do you lift weights?" And he's like, "Uh, once or twice a week." And the dude is just like huge and jacked and "Okay, I hate you." So there are a few people out there that really -- they just don't -- man, their reactivity to this stuff is minimal. But the big reactivity issue for me with this is just the gluten content of the beer, the carbs. I'm not really all that concerned about.

Andy Deas: Yeah. I think this goes back to kind of that whole wheat bread versus banana thing. We're on the basically equality side of the equation versus the carb or that macronutrient breakdown on the side of the equation.

Robb Wolf: Exactly, yeah.

Andy Deas: All right. Two more questions from Warren. The last one may be the most important. But the question, "Pure stevia okay in small amounts?"

Robb Wolf: If you want to sweeten something, just use some sugar I guess. I don't know. I mean if you like stevia --

Andy Deas: Robb, it's natural. I'm waiting for your analogy here.

Robb Wolf: I've killed this analogy. Plutonium is natural too. Stevia causes an insulin response in a lot of people. It makes people hungry after using it. If you want to use it, go for it. But if you're making a mix drink or something, I would just be horrified making a mojito or something. You've got top shelf like Nicaraguan rum. You throw a bunch of mints in there. You mix it all up. You put some lime juice and some soda water and then you're like, "Hmm, some pure cane sugar or stevia?" I would just want to kill the person who would put stevia in there. It's like either make it like a skinny margarita or skinny mojito, if you want to sweeten it up then use the real thing. Just use some moderation on it.

And here again is the deal that if you're trying to lean out or you have some other issues, then don't use any sweeteners until you get your shit squared away. And then if it is squared away, then it shouldn't matter. You should be able to kick your heels up a little bit and have some fun and not worry about little details like this.

Andy Deas: All right.

Robb Wolf: Again, it really depends on where you're out in the whole spectrum.

Andy Deas: And then the last question, he says, "Most importantly why no mention of 'Thrashing'?" Well, because I think it's "Thrashin'" if I recall which is a phenomenal Josh Brolin skateboarding movie. It's amazing that Josh Brolin ever skateboarded, but actually I guess that shows how old this movie is. It came out in the early '80s. So I told Robb I'm going to try to tone down my movie references, but I appreciate the reminder of another fine movie from my childhood.

Robb Wolf: We just need to get some more Grosse Pointe Blank references. I'll be happy.

Andy Deas: Oh, man, you can never have enough of those for sure.

Robb Wolf: Yeah. I just want to put it out there. I wouldn't want to make you uncomfortable.

Andy Deas: Have you seen Thrashin', Robb?

Robb Wolf: I did ages ago.

Andy Deas: Okay.

Robb Wolf: Yeah, it's been ages. It was definitely a beta or VHS when I saw it so...

Andy Deas: For sure. Unlike Prayer of the Rollerboys. You have seen this bit of pop culture history. That's good. I feel better right now.

Robb Wolf: Yes.

Andy Deas: All right. Next, we got a question from Mike. "Hey Robb, I thought you may have discussed this at some point, but couldn't find it in the archives. Is constipation common on a Paleo diet? I've been eating strict Paleo, supplementing with vitamin D, magnesium, and fish oil, and I've recently started taking the NOW Foods Super Enzymes. However, I only go one to two times a week. Not sure if this is unhealthy or if there is a way to remedy it?"

Robb Wolf: It's really common for people in the beginning when they switch around to a Paleo diet to have some kind of slow bowel movements, to be a little bit constipated because their system is kind of primed or used to using the gut irritating effects of grains to basically stimulate peristalsis, stimulate the movement of food through the intestinal lining, and make you go poop more often.

The analogy that I use if you eat some hot food, you eat some hot peppers or some really hot Mexican or Thai food, what happens to your nose or mouth? And people say, "Well, it runs." Yeah, so you get a bunch of mucous discharge. This gets really yummy. Hopefully, people are eating some dinner while they're listening to this. But you get some mucous discharge, and this is identical to the scenario in which your guts get exposed to some sort of irritant -- grains, legumes, hot food sort of gig, and you get increased peristalsis, increase mucous production.

Because it's an irritant, your guts are trying to move it out. It's trying to dilute it, and it's trying to move it out.

So the things to do when you transition into a Paleo diet is you're getting plenty of fish oil, plenty of fat in general, lots of water, the magnesium and all that stuff. It's good to go. And then it's probably just going to take a little while to fully adapt to that scene. It's normal, and you should get some sort of adaptation within about a month -- three weeks to a month, something like that.

Andy Deas: All right. Yeah. We see this pretty commonly at the gym, and then eventually it does sort of resolve over time. But there seems to be a fairly wide window for folks. Some folks adapt pretty quickly, and some folks takes a few weeks easily.

Robb Wolf: Right. Totally.

Andy Deas: All right. And finally, a question from Sue, Robb. I don't know why. I think we've visited this before, but I was in the mood to put this in here. I think it was the rain. "Robb, what do you think of vegan athletes? Do you think it's possible for some to be at their best athletically while a vegan?"

Robb Wolf: I answered this one in a brief written response to Sue, and it went pretty much like this which is that we -- if we look to the -- and somebody -- I don't know if it was last time. Maybe it was the last podcast where somebody said -- was it the question where it's like "I haven't seen any elite athletes doing Paleo other than Art White," or something like that. It's in this kind of a genre which is you could find somebody who is ultra -- like Carl Lewis is one of the only gold medaling, vegan athletes that I can think about, but there are people out there who are -- God, who is the football player? There's a football player that just turned 50, and he ran a -- like a legit, like laser timed style time, 4.41-40, and he just turned 50 years old, and he used to have a 4.1 or something or 4.17 some ridiculous thing. I forget. I forget who it is.

But it's like I couldn't run a 4-7 unless I was shot out of cannon, right? I'm a reasonably fast guy. I had a good vertical leap and all that. So there's different -- there's just so much individuality out there. You could have somebody who is still a gold medalist but eating sub optimally, and we see stuff -- examples like that all the time. Welbourn mentioned guys who would do absolutely no training in the off season, sit and watch Scooby Doo all off season and come in the gym and beat him on all the lifts and on all the combined stuff. And they would just kind of laugh at

him. Where Welbourn would hire a strength coach and work his ass off during that time.

But he found pretty quickly that there was kind of this optimized nutrition that gave him better performance which was essentially a Paleo diet on kind of a cyclic low carb regimen and then smart training, talking to Eva Twardokens. He had the same deal. She had to train smart and eat smart to be at the highest level that she could be, but yet there were still people who out of the box could beat her, you know, at giant slalom skiing. So in my general heart of hearts I have to say that I don't think veganism is going to produce optimum performance for people.

Now you can have some funny -- what I think is funny interpretations of this like the Mike Mahler vegan in which he eats six meals a day, and he has a bunch of whey protein shakes or brown rice protein and all this sort of stuff. And what you're doing is you're taking vegan food sources -- I don't know. He's vegan so he's not doing whey protein. So it must be like brown rice protein or something like that like tofu or something. But you're essentially emulating a Paleo diet or at least a meat based diet with vegan concentrate which really when you get right down to it, that's all a cow is. It's concentrated grass.

So I'm just kind of like -- I'm completely unimpressed and nonplused by that stuff. It's like, dude, I get my concentrated and get grass from a cow. You get it from soybeans. I'm just not seeing the relationship there. Eat some raw unchanged food like eat beans, rice, nuts, seeds, fruit, vegetables and show me the same results, and then you've got something that would kind of impress me a little bit. And so Andy is like, "Dude, wrap this thing up." So my thought here is that you got huge genetic variation so you can have level people who potentially are vegan, but I think they would potentially train even better. Were they not the ways that people tweak the whole vegan thing to make it work is almost silly to me because it -- I mean if you want to do it, do it. I don't care. I really have no dog in the fight at all. Do whatever you want to do.

But if you need to eat a bunch of protein concentrates and stuff and you're doing it for moral reasons, fine. If you're doing it for some perceived health reason, then I think you're completely missing the mark. And then a lot of what I base this off of we trained a family of vegan and kind of really, really good people like love all of them, really good folks. One or two of the family members ended up peeling out and getting into the chicken, egg, fish. They never really stepped up to the red meat which is fine. That's not necessary to make the stuff work well. But those

two people who stepped out, now these are all essentially people from the same genetic lineage. They're all one family basically.

The folks who ended up maintaining this almost vegan-like, they would occasionally do some dairy or some cheese or something like that, but they were basically kind of vegan sort of deal. They saw better performance when they started training with the us. They saw an uptick in their lean body comp and all that, but it really plateaued rapidly. And then their siblings who ended up eating essentially a Paleo diet like a mix Paleo diet, they absolutely destroyed them, like crushed them. Body composition was way better. Recovery was way better. Performance was just astronomically better.

And then when we look at some examples that we have like Laura DeMarco, and again these are like kind unequal, but Laura was a very good athlete; unweighed, unmeasured, high carb, low fat vegan athlete, then became a vegan Zoner and saw better performance. Then became unweighed, unmeasured Paleo athlete, and she has destroyed every other benchmark that she's ever had. I just see this again and again and again. And so for the -- obviously, I beat this thing to death. If people are really adamant one way or the other about this, I would say eat vegan for a month and then eat straight up Paleo for a month and how do you look, how do you feel, how do you perform? And then you can completely answer that question.

From my experience I don't see veganism transfer the way that a mix diet Paleo works, and that's even with using stuff like brown rice, protein powder, and stuff like that. So there you have it, gato.

Andy Deas: The gato is interrupted. Well, we're in an hour and 15, Robb. We're back up above the hour mark, yeah.

Robb Wolf: Holy cats!

Andy Deas: We're close to an hour and 15. So with that, man, I think we're going to call it the end of episode --

Robb Wolf: Seventeen.

Andy Deas: -- 17, yeah. We survived. We're almost to 20. Whoever thought we would see that day.

Robb Wolf: I didn't figure I'd see episode 2. I figured we'd be shot at that point so....

Andy Deas: Or the cat would get tired of listening to you, seriously. All right. I'm going to let you go, Robb. We're 20 seconds to an hour and 15 so I'm going to stop it right now, and then I'll talk to you next week assuming it's --

Robb Wolf: Have fun in Ohio.

Andy Deas: Thanks, dude. See you.

Robb Wolf: Thanks, Andy. Bye.