

The Paleo Solution

Episode 80

Robb Wolf: Robb Wolf here with Greg Everett. What is this episode 80 of the Paleolithic solution podcast.

Greg Everett: That's right and it seems like we were just doing this 20 minutes ago.

Robb Wolf: It does. And how are you doing?

Greg Everett: Not to say that I'm not super excited. I feel a little bit kind of Groundhog's day kind of feel about it.

Robb Wolf: Yeah, it's true but there's -- I have absolutely no fear of you ever running out of questions to answer.

Greg Everett: No, there seems to be an infinite need and infinite interest in all things you know Paleo, Nutrition, Exercise. Sounds like there was some pretty good feedback about folks wanting to get Nicky on the podcast and do what business oriented podcast so.

Robb Wolf: I have 157 unread Paleo emails in my thing right now.

Greg Everett: Sweet and that's from like yesterday.

Robb Wolf: Those that's from the last like 2 weeks.

Greg Everett: I haven't actually been reading them. Been a little backed up so those of you who are sending emails. Understand that there's a bit of a line.

Robb Wolf: Yup but we'll get to it but make it sassy and interesting and it's a lot more likely to make the list so.

Greg Everett: Yeah if you have a really good. You got to write it kind of like a press release. Give me a really good subject line and then you got to start with the good stuff. If there's like 6 paragraphs of back story before you even get to your question there's a good chance I might just get kind of distracted and accidentally delete it.

Robb Wolf: Semi nude photos can help too.

Greg Everett: Yes but well. [Laughing] they may also hinder depending on who sent it.

Robb Wolf: That's true. So what do we have cooking. Paleo Solutions seminars in Vancouver, July 9th. Another one on Boston Massachusetts on August 20th. We've got the ancestral health symposium at the end of August. Greg, how's the DVD coming?

Greg Everett: It's great. [Laughing]

[Cross-talk]

Greg Everett: I know I kind of feel like you're just doing it to make me feel bad about not finishing it.

Robb Wolf: Well you're usually the most productive human being that I know so its.

Greg Everett: Well it's going to get better. I'm kicking everybody out of my office and so now I'll have no excuse. Right now when I try to actually write or do anything creative or productive I've got like 8 people in the background just f-ing off and showing me funny stuff on YouTube and various forums and then I get all engrossed in that and forget about the fact that I actually have a job.

Robb Wolf: And you find that distracting?

Greg Everett: Well yeah. I mean I'd prefer to just do that all day long most of the time but it turns out that I can't actually pay my bills dicking around on YouTube. It's weird.

RobbWolf: Well you know maybe someday that will be a cash paying item but also want to remind people that we have the new consulting page. Amy Kubal. Greg Everett's bad cells. Glen Cordoza's all available for consults whether we're talking training or nutrition so check out the consulting page and we have a couple more dietitians coming online also and we'll have the profiles up soon.

Greg Everett: And so this ancestral health symposium. Are you actually presenting there, are you just going to be there hanging out talking to people. What's the story? Yeah and actually I'm one of the primary speakers I guess there's a ton of speakers but I am one of the folks that are going and actually we wanted to get Matt Leland cracking on that Ancestral Health Symposium offerings but all the slots were filled up so I'm actually going to split my 45 minute time slot with Matt Leland.

So that's going to be advertised here pretty soon but when folks go to that event which its sold out already so if you want to get into that you need to start looking for scalpers and get tickets from someplace else but Matt Leland and I will be tag teaming in that one but I mean pretty much everybody who's anybody is going to be there. Mark Sison, Ortovani, Loren Cordain, Stefan Lindaberg, Milan Fontes. On and on and on so it's just pretty cool.

Robb Wolf: So are you going to set it up kind of like as mothers brothers thing like he's going to be the smart one and you're going to be like the pissed off brother?

Greg Everett: That's probably the way it'll play out. Usually the way I introduce Matt is younger stronger better looking you know smarter guy so yeah. [Laughing]. I pretty much suck compared to Matt- is what it all boils down too.

Robb Wolf: And you just got to lie low let him get it all out there and then you come in and attack.

Greg Everett: That's right. That's right. Make it look like it was all mine.

Robb Wolf: Exactly.

Greg Everett: Mine. Mine.

Robb Wolf: Cool. So if you actually do something related to what folks came to listen to this thing.

Greg Everett: Yeah that would probably be a wise course of action here and I think we got some, definitely got some new ones today. Like this one hopefully is not repetitive at all so if I mean you are really getting sick of this stuff then this should be new and exciting for you.

Robb Wolf: Indeed and if not then it will help you fall asleep so we're good either way.

Greg Everett: Yeah. Alright. Darren says hi Rob! I'm a 36 year old male with a benign thyroid tumor and a beard. And that's hopefully that's not a malignant beard. [Laughing] I have been eating Paleo for almost a year now and while I felt as though the tumor was diminishing sometimes it feels aggravated and sore.

The beard I'm totally capable of getting rid off but this tumor is still around. Since learning of it almost 2 years ago I'm tired of the bloody thing and want it gone naturally if at all possible. Since switching to Paleo my diet and energy levels have improved greatly. I have good body composition and a healthy workout schedule. Olympic lifting 4 times a week. Kettle bell once a week. Aikido three times a week with a little balance work sprinkled in here and there. I read your book 3 times. Listened to every podcast and I' attending your work shop at the end of the month in Toronto.

I have recommended your work to everyone I know and they have all received great benefits from Rheumatoid Arthritis, Crohn's and Type II Diabetes. While I'm totally things have been working out for my friends why the heck isn't it working for me. Is it the beard or better yet what can I do to get better and move on with my life. I just found out I'm going to be a father and want to make sure that I'm around for as long as possible. It's sad to say but I was a vegetarian and vegan on and off for a few years similar to you and felt as though things were pretty dialed in. Little did I know both my grand mothers had their thyroids removed but after reading your work I feel as though this shouldn't determine my fate and there's something more I can do. Please any information you can offer is greatly appreciated, thanks for all you do.

Robb Wolf:

So you know this is an interesting one. It would be nice to know maybe some histology, some pathology on the type of tumor he says its benign tumor but is it in fact like thyroid tissue if you're really trying to get in and figure this thing out definitely knowing a little bit more about like some of the scientificals behind it all would be helpful but that aside whenever we see any type of exaggerated growth and you know I'm immediately thinking things like hyperinsulinism and things like that. In this situation this is you know kind of a hold over scenario from an earlier time and so you know although Paleo was very, very effective for a lot of stuff, obviously and generally being healthier is good.

It can't fix every single thing that we have going on and I think that probably what we have here is just the fact that we have some tissue growth which has occurred in the past and then we're not getting like reabsorption or a diminishing of the tissue despite the fact that you're probably healthier, have lower inflammation, decreased levels of growth factors and stuff like that. If you want to get a little geeked on this, Doctor K's book; Kharrazian. Why do I still have thyroid symptoms would be a really good read.

His stuff mainly relates though to like Hashimoto's thyroiditis and some specific problems in that genre but I think really understanding the thyroid metabolism really well and the tissues, they play into thyroid metabolism would probably be helpful overall in this scenario and then as to the beard we just have to take a look at that and see how snazzy how it is whether or not that's a good idea to keep.

Greg Everett: Presumably you do not want to get rid of your beard.

Robb Wolf: Yeah. I think Greg is pretty heavy on the beard maintenance. I just tend to go with the -- I use actually a pair of you know beard and mustache trimmers to keep a Don Johnson-esque kind of thing going on so.

Greg Everett: So you can spend a lot of time looking like you don't spend any time on.

Robb Wolf: Exactly. Yes. Yeah. Yes.

Greg Everett: Amy always bugs me to not shave but I either have to have a beard or I got to be clean shaven otherwise I feel like a total d-bag.

Robb Wolf: Yeah, I do these scroungy scrabble muffin pretty good so I -- that's kind of the look I run with but hopefully that helps with the on the benign thyroid tumor scenario but if you do have some further information about histology or what type of tissue type that is and you want to resubmit that information, we could do a little more digging that I might be able to give you a more specific answer.

Greg Everett: And so one last time what was the name of that book.

Robb Wolf: Oh, let me scroll up on my notes here again. Dr. K's Book. Why do I still Thyroid symptoms. Really outstanding book. He's very dialed into the gluten free thing. More you know essentially Paleo like super sharp guy. I'm looking forward to attending one of his seminars at some point.

Greg Everett: Cool.

Robb Wolf: Yeah.

Greg Everett: Good luck with that. Alright Jeremy says since fish get their omega 3 from consuming algae and sea veggies. Can I boost the omega content of a dish by adding in some ground up seaweed and bypassing the fish? I'm thinking of adding it to shrimp coconut curries or are the fish actually converting something into the omega 3's and the human body is either incapable of or inefficient at the same conversion.

Compared to wild caught fish, sea weed is so inexpensive at Asian markets that this seems like an economical alternative to buying wild caught fish.

Robb Wolf: Well, this is definitely thinking outside the box but the fish concentrate the omega 3's from the sea weed and so it's kind of a bio chemulation story. So even though seaweed, some algae contains DHA for example and it's actually a smart way to get the long chain of omega 3's. Possibly smarter than doing fish oil at the end of the day because of you know. It is a little bit wacky to considering limited fish stocks and stuff like that to catch a bunch of fish and then basically you know distill it down, extracting the oils out of the fish and then put it in the capsules when we could do a similar item with sea weed and it's probably a lot more sustainable and then people could actually eat the fish but that's a whole you know hippy tree hugging save the planet kind of side line but that aside you know what you're proposing here by adding the sea vegetables into a curry would actually be a great source of iodine but not so great a source of omega 3's so it's a good thought but that's not going to work in this scenario so you're going to have to do a concentrated form you know from like algae or something like that. The DHA typically.

Greg Everett: So now do you have any idea how much omega 3 you might actually be able to get out of a typical service size. I mean is it totally insignificant or.

Robb Wolf: Tiny amount. It's a tiny amount. Yeah and I'm not -- oddly enough I'm not a sea weed expert although I play one on podcast but you know I do know that different sea weeds have either have some, a lot or none of the longer chain omega 3's and so we'll also determine a little bit you know which variety you want there but again even in the varieties that contain relatively high amounts of omega 3's typically DHA we're still in a situation where we need to accumulate that so we need to take quite a large amount of sea weed and then extract the omega 3's out of that concentrated.

Greg Everett: Cool.

Robb Wolf: Yes.

Greg Everett: Well. It was a good idea.

Robb Wolf: But it would make a Jim dandy curry and you would not be deficient in iodine which I think is easy to happen on a Paleo approach because people are typically not eating as much salt. If they do salt then they tend

to use sea salt which is good stuff but you know like the iodine input in folks diet I think can be on the low end so that's not -- I actually eat a fair amount of sea weed or I'll make some kind of sashimi-esque items with some you know sushi wrapper type stuff or I'll just crunch it up in a soup.

Greg Everett: Steve brought in spam musubi several months ago.

Robb Wolf: Oh wow.

Greg Everett: And I was not impressed. I mean I ate it because I was curious. It was one of those things that you just had to do once in your life but.

Robb Wolf: Gay or spam curious.

Greg Everett: He was pretty excited about it and I just didn't. I couldn't get on board but.

Robb Wolf: Definitely a nice way to get in some sea weed with your spam. That's good to know.

Greg Everett: Alright.

Robb Wolf: Who put that in a fourth coming eBook of spam recipes Paleo style. That will be a best seller for sure.

Greg Everett: Alright, well talking about spam this next one is about digestion back up. Maui says; hi there I'm just going into my 4th week and feel completely different and almost all for the good. So I'm fourth week of Paleo eating. I have dropped almost 8 pounds. No tummy bloat. My skin has improved. My energy is confident and I have no ups and downs. Generally I feel fantastic. Prior to starting Paleo diet I had diarrhea every day for about 1 to 2 years. It became the norm. It took about a week to get that turned around and the second week was quote and quote normal. Now, however for the last 2 weeks or so I only quote moved once every 3 to 4 days so I end up feeling full and heavy all the time despite not being bloated so what can I do to make things more regular. I'm drinking a lot of water, started working out and walking the second week which I know are things to help digestion etcetera. I had my gall bladder removed about 10 years ago if that helps in the responses. Hope to hear some good suggestions. Thanks for your time.

Robb wolf: Well, I'm glad that it was included about the gall bladder. I think we've talked about this a ton in earlier podcast but the typically the loss of the gall bladder or any type of gall bladder problems is indicative of some

problems related to glutamine intolerance. We get some damage to the gastro intestinal lining. That can be very negatively affect cholecystokinin signaling and then it's really off to the races what can go wrong from there. We can have problems with gall bladder. We can have problems with normal peristaltic movement.

Irritable bowel syndrome type of stuff where people can either have diarrhea or be constipated or alternating bouts of both. We can see these problems kind of migrate North and manifest into dysphasia, difficulty in swallowing so I'm guessing that probably what's going on here is we still just have some signaling problems that are occurring in the GI tract I think like good old standard now food super enzymes introducing some of that with your meals and following that protocol starting with one tablet per meal and then 2 and then 3 until you get a mild warmth and then backing down a little bit.

I suspect that that would probably help both in the fat absorption and the absorption of lipid soluble nutrients but then also it should help kick the signaling on. That normal peristaltic signaling. Make sure you're getting adequate fat you know all that sort of stuff but that would be my thought on this if there's actually probably a little bit of signaling issues going on so if you play with the Now Food super enzymes and it seems to help resolve that would definitely be cool to hear back from you and find out if that helped.

Greg Everett: Now what about I know I've heard you recommend in the past a little bit of kind of warm water in the morning like a little kind of stomach massage to encourage.

Robb Wolf: Sure.

Greg Everett: The peristalsis there.

Robb Wolf: Yeah you know and that's some good stuff too. The warm water in the AM also starts kind of stimulating digestion and then also just the manual massage in which you kind of touch you know index fingers both hands together. Put them right under the point where your ribs meet together and just kind of push in and this is where you would be like sitting or kind of lying back a little bit so that your abs don't have to contract. You push in maybe 2 to 3 inches then you just do circular movements in a clock wise fashion because that's the way the GI tract kind of runs and you can stimulate some peristalsis and get things moving along by that action and you know also the addition of a little bit of magnesium like the before bed, the magnesium citrate.

That's the kind of key feature of a lot of the laxatives of some sort of a magnesium oxide actually because it pulls some water into the stool and kind of moves things along but a mag citrate like the natural come or something like that can also be pretty helpful but yeah I forget about the warm water and the manual massages. Its super helpful. People do that a lot with kids. Little kids, kid will get a little bit of GI problem and a little bit of manual massage on the belly will help kind of break stuff loose.

Greg Everett: Cool. Now after you take your next, have some salt bath you just got to drink some of the water. **[0:17:46.4][Phonetic]**

Robb Wolf: Exactly. Yeah. Yeah. Reduce, reuse, recyle. [Laughing] and probably get some sort of weird foot fungus in your GI tract.

Greg Everett: Oh men. Athlete's mouth.

Robb Wolf: Yum.

Greg Everett: Dirty. I had a hell of a joke right there but probably should keep it to myself.

Robb wolf: We do want to do like a bee roll podcast some time and it would I don't know we might make it like 25 cents for a download or something like that just so that like you have to be 18 to download the thing but we have some really piffy stuff that we would like to say at times and reign it in so if folks are interested in that then we can definitely do one of those too.

Greg Everett: Yes or several.

Robb Wolf: Or several. Yeah. It would be therapeutic for us also.

Greg Everett: It would be good for everybody. It's important to add a little levity to these serious matters from time to time.

Robb Wolf: Indeed.

Greg Everett: Laughter's the best medicine.

Robb Wolf: Which is a nice segway into the staying Paleo cyclic stress.

Greg Everett: Oh look at that. Alright. Is that your way of telling me to shut up and move on to the next question.

Robb Wolf: Move it along, nothing to see here.

Greg Everett: Alright. Justin says. Hi Robb, I work as a consultant and I have noticed that when deadlines roll around and work gets stressful by ability to keep my food choices Paleo becomes more challenging. The morning starts out alright with my normal breakfast of ground meat and greens but my ability to resist the free food that makes its way into the office diminishes as the day goes on and stress levels go up. Over the holidays I had multiple deadlines and developed a severe case of the fuck-its. I ate worse than I have for over a year and picking up the pieces since then has been a struggle. My question is what suggestions do you have for dealing with this cyclic -- stress levels. This question may seem stupid with a default answer of stop being a pussy and stick to you know what you know works.

Based on the reading I have done so far. Stress seems to be related to the types of food people crave. You also talked about how writing a book and other stresses have impacted you over the last year in a recent post so I thought I would ask the question. Here's a little background and what I've been trying over the last couple of weeks. 5-11 175 pounds, reasonably lean, work too much. I've shifted my training to be strength based with short conditioning workouts twice per week. Lower carb Paleo during the week oh carb. I was trying to figure out if this was some kind of new thing that I hadn't heard of. I do the low carb Paleo.

Lower carb Paleo during the week, more carbs on the weekends. Normally sweet potato, squash, apples, etcetera. Taking super enzymes, alpha low acid. Acetylcarnitine, Fish oil and some herbal adaptagens. Freezer full of grass fed beef and eat a ton of grass fed butter. And fortunately I don't have any immediate reactions to gluten or other known inflammatory foods people have problems with. Any supplements or food tweaks that can make the help with the stress and find off the fuck-its. [Laughing]. I just like his phraseology in that one.

Robb Wolf: It's some good stuff.

Greg Everett: Stop being a pussy. [Laughing]

Robb Wolf: I'm going to adopt many things from Justin's question here. You know I'm not a good one to ask on the self control side of this stuff. I mean I'm really not. I -- you know I have a pretty good gig because I generally get to work from home. Obviously I travel a lot but like I obviously I'm doing the podcast from working on the blog. We're in Santa Fe right now and so

normally when we're in Chico we're kind of rolling in and out of the gym so right now it's kind of cool because that element is kind of gone and so I've got pretty good control over my day and definitely the stress level's less and things are better but what I end up doing is just controlling my environment and I don't have dodgy foods in the house. That's really tough when you're in an office where people are throwing stuff in front of you and it sounds like Justin kind of has the you know he said unfortunately I don't have the immediate reactions of gluten and inflammatory food.

I guess in a way it is unfortunate because like I get so hammered by bad food. I just have absolutely no desire to eat it. I mean it's just not even an option for me so I feel a little bit you know weak in my response here other than you know eat real big when you're at home. I think everything that you're doing is spot on and then to whatever degree you can you know you just have to have that reason for why you are hanging in there on your food and I will say this even if you don't notice like the GI stuff and all that from the worst foods. I know for a fact that as stress levels go up in folks if they can maintain their nutrition, the stress is less impactful on them. You have less of the blood sugar crashes. It tends to not feed into kind of a cyclical mess in which you know you get stressed out you eat bad food you get more stressed. You eat more bad food and it kind of goes on and on. That was a really nice piece that came out of Harvard. It wasn't a research paper per se but just one of their newsy pieces and they were talking about resiliency and they've done a lot of studies in say like this special operations community particularly among the seals and talking about the different strategies for dealing with stress and trying to make stressors acute as opposed to chronic.

Trying to break up your day. You know to what degree you can control that and know like work deadlines can be terrible and what not but if there's any way that you can get a sense of control in which you are not constantly assailed by stress but where you can chunk it. You have blocks in which you are working very, very hard and then some blocks of downtime and that can be both within the day and within a week and within a month kind of you know periodizing your work stress. If there's any way possible to do that then that would be helpful. Something that I noticed that I do because I have so much you know media stuff going on. I'm constantly on a cell phone or an Ipad or on my computer.

Checking Facebook, Checking Twitter, doing all that sort of stuff and what it boils down to is I never have any down time and so something that I've been trying to be better about is particularly because I do work largely from home is I block off periods of time in which okay I'm at work and

then I'm done so you know like Greg and I were recording the podcast today when that wraps up I get all my gear together. I go to jujitsu and then the rest of the day I'm helping Nicky in the garden and doing other stuff. Even though I may have some stuff that was brewing you know it's going to wait till tomorrow. I work six solid hours on this stuff today and then I'm going to have a little bit of me time and then do a little bit of you know like family around the house time. So to whatever degree you can break that stuff up I think it's better and for sure the stress is going to be mitigated by improving your nutrition. There's just no doubt about that.

Greg Everett:

Yeah I think it's all good suggestions and I would just add a couple things and that is you know during the times of the week, month, year that you're not under deadlines you know you need to be at 100% and I don't mean that in terms of nutrition but in particular sleep and just general kind of stress relieving behavior so that when you go into those super stressful periods you're not coming in to it way behind already. So that will help a bunch and then you know if you're not able to block time quite as well as Robb as describing because obviously that would be the ideal situation.

Even if you can force yourself to set aside 10 to 20 minutes in the afternoon or something to just turn off the phone. Turn off the computer and just like close your eyes and try to not think about work for that brief period of time. I think that helps a ton and for a long time I would not allow myself to do that because shit that was 20 minutes that I could be doing something. I got a lot of stuff to do. I got a never ending list but you know the reality is that if you're super exhausted and stressed out then you're not getting much done in that 20 minutes anyway because you're way.

[Cross-talk]

Greg Everett:

And it ends up you know just causing more problems and then with regard to nutrition you know this is probably a bit trite but you know the more prepared you are before hand, the easier it's going to be to eat well. So as much as possible if you can pre package your food and bring it with you to the office, you know if you already have some in front of you to eat then there's less of a chance you're going to go for whatever food is being brought in so and that's a pain in the butt I know I don't like doing it but that's probably going to help a lot.

Robb Wolf:

Yeah, it definitely pays back. Just in being more dialed on your food and you just feel better and feel better about yourself and all that so yeah.

Greg Everett: That's right.

Robb Wolf: Not an easy gig. Modern life and you know I won't dichorous in this too much but the way that we live in and I think that this is where there's a nice perspective we had from the kind of Paleo ancestral perspective. Whenever we look at kind of anthropological reconstructions of hundred gather living obviously it was stressful or you know there's all kinds of challenges; something might eat you and stuff like that but there's also a reality that people didn't work as long or as much as what we do and they had more downtime. There's a lot of data that just shows that being out in nature is very therapeutic just being in a natural environment and seeing natural landscapes and stuff like that and it's rare that we get a lot of these things that just kind of food our soul.

In Chinese medicine they kind of break things down into Yin and Yang. The Yang is like the active - productive - doing type things and the Yin is more restorative - rebuilding - being out in nature and our lives are typically very devoid of that kind of Yin element. That grounded, restorative element. You know the puritan work ethic of just go, go, go. More, more, more. Work harder, do more. It's all good when you have the deadline like Greg said and you need to do something but then really you know unplugging taking that down time and checking out is super important.

Greg Everett: That's right. Alright.

Robb Wolf: Now I just need to do it more.

Greg Everett: Yeah. Parent essential oil. What's the deal with this parent essential oil discussion? This is from Jerry Seinfeld apparently. The guy pushing this stuff says that there are only 2 essential fatty acids and they're the linoleic acid, is that right and alpha lipoic acid.

Robb Wolf: Alpha linoleic acid.

Greg Everett: Oh that's.

Robb Wolf: There's. Okay so linoleic acid, omega 6 and then alpha linolenic acid is the omega 3.

Greg Everett: There we go.

Robb Wolf: Yeah.

Greg Everett: He says that fish oil is killing us. That seems a little extreme. His name is Bryan Peskin and his website is peskinprotocol.com. Your welcome Brian for that.

Robb Wolf: The plug.

Greg Everett: Unnecessary plug. I'm so confused. I should just go back to eating Burger King and slugging back Michelob.

Robb Wolf: Indeed.

Greg Everett: I don't know about those 2 particular choices but.

Robb Wolf: I could step up both my burger and my beer from those choices so.

Greg Everett: Yes.

Robb Wolf: Yeah everybody needs a spin like everybody needs some sort of a new spin and particularly if you've got a product for sale and I guess I'm one to talk because I've got a book but pretty much everything that's in the book is available for free on the website so that's how I'll try to step out of you know putting a noose around my own neck but this deal about like a parent Essential oils pop up every once in a while with the idea being that the short chain omega 3 and omega 6's are the desirable oils in the diet and they absolutely are not.

They just flat are not and if what Peskin is saying is true then we would want to avoid grass-fed meat, wild caught fish, pastured dairy products in lieu of stuff that's been said essentially corn or soy oil because that's what these items are going to be brimming full of and when we look at the biochemistry of this stuff we do very well with EPA DHA arachadonic acid which are the longer chain of versions of omega 3 and omega 6 fats and we can kind of scuttle by with the short chain omega 3's and omega 6's but not good things come from the injection of these items relative to the longer chain forms so it would be really interesting to kind of look at the biochemical you know philosophy or you know where these recommendation's coming from because ultimately what we need in our bodies are in fact the EPA DHA arachadonic acid.

And so they need the short chain parent essential oils need to be converted into the longer chain forms anyway for them to be active so I don't really get the suggestion here and it may default back to like some oxidative stress or something like that but we've talked about that a ton in the podcast as well and that you know if you're really sick, severely

overweight something like that then typically I think that fairly high does omega 3's are smart for a period of time and then we would dial that back and get you on a lower maintenance dose and we actually want to dramatically limit the input of the short chain omega , omega 6's. It makes sense both biochemically with regards to oxidative stress. I mean I can't really figure out a reason around this other than if the individual were vegan and they were going to die from omega 3 or omega 6 deficiency then we would obviously supplement with these I hate even calling them Parent Essential Oils but you know the short chain omega 3, omega 6's so.

Greg Everett: Don't freak out and start going to BurgerKing yet.

Robb Wolf: Nor drinking Michelob quite yet.

Greg Everett: Yeah, you'd be alright.

[Cross-talk]

Greg Everett: Michelob ultra because that's good for you.

Robb Wolf: Okay.

Greg Everett: It's only got 64 calories or something like that.

Robb Wolf: it's golden a year.

Greg Everett: That's right.

Robb Wolf: Yeah.

Greg Everett: Alright I did, I had a friend who drank nothing but gin and tonics and MGD and it was great. It made me laugh.

Robb Wolf: Alright. I could find a person like that.

Greg Everett: He also ironed his sheets and his underwear. Hi Robb, My brother is schizophrenic. He is currently taking medication but is looking for ways to improve his symptoms without more meds. He recently noticed his worst delusions occurred after he ate nothing but Doritos and Mountain Dew for several days, which I would think would give anyone delusions, but 20 year old boys will eat anything.

Robb Wolf: Indeed.

Greg Everett: You don't say. He's cleaned up his diet and is eating eggs for breakfast, a sandwich for lunch, and meat and veggies for dinner. I'm pushing him towards Paleo, one meal at a time. Like a good little brother, he's been pretty receptive so far. Are there any foods or supplements that he should be taking or avoiding besides standard Paleo fare? On a lighter note, I love the podcast and nerd out to it on my way to work every week.

Robb Wolf: Gosh. You know Chris Cresser did just did a recent piece on the gut brain connection I think on the healthy skeptic podcasts so that would be a good place to do a little bit of digging for some real specifics on this there's really good mechanism, good epidemiological information linking gluten intolerance and schizophrenia. My talk that I gave Atomic Crossfit quite a while back maybe over a year ago. Gosh almost 2 years ago I think but no, no, no its been a year ago when before the book came out. We actually had in the audience a gal who was a physician for the Veteran's administration and she's a psychiatrist and she said that in her opinion we talked quite a bit after my talk and she said that in her opinion she couldn't come out and schizophrenia is unequivocally gluten intolerance.

But she said its damn close to being that sort of a scenario so I've seen and you know seen in the literature and seen kind of just kind of from people sending in information you know the grains, the legume, the dairy, the grains and dairy probably being more problematic than even the legumes by far. So that standard Paleo stick again making sure that you're getting in some sort of probiotics to deal with gut integrity. Really making sure the vitamin D status is dealt with and that's like the big macro picture that you're going to want to look at. There are some things that can really improve brain function in these scenarios like the Acetyl L - carnitine.

There's something's like reduced ANADH which you can get in a supplemental form which has been shown to be helpful for folks. Fish oil, fairly high dose fish oil. Really, really important. Co Q10. So there are definitely some supplements out there but the sleep trying to reestablish normal sleep patterns you know wake you know light, dark patterns and then good nutrition is just critical in this regard. Absolutely critical.

Greg Everett: Yeah the sleep thing stood out to me too because it's not mentioned in here but the Mountain Dew always makes me wonder I mean especially you got a 20 year old kid, schizophrenia and living on Mountain Dew is probably not sleeping a whole lot. Which seems to be a pretty common theme with the well pretty much any mental health issue.

Robb Wolf: Yeah.

Greg Everett: Schizophrenia in particular I seem to recall being pretty closely tied to like really chronic sleep deprivation.

Robb Wolf: Right, right. Yeah and the again and definitely again you know definitely not a psychiatrist, not an expert on this stuff by any means but the symptomology of sleep deprivation ends up looking very, very similar to schizophrenia. Like you can induce kind of that dissociative kind of scenario where people lose a sense of self and you know all kinds of things kind of break loose from there. I don't know if folks realize this but most anti depressants, anti you know SSRI's. MOA inhibitors and stuff like that, they mainly work on the brain's ability to sleep and they're affecting different neurotransmitters and there's obviously a host of things that go into sleep beyond simply just like serotonin and melatonin but largely what their mode of action is, is trying to re establish normal sleep and if you get in and read the pharmacology on this stuff.

It's pretty interesting since everybody's wired up differently and we have different manifestations of disease. You know this is where the different drugs are trying to target these things but ultimately what they're trying to sleep is sleep disturbance and that all ends up relating back to neurotransmitter status. Neurotransmitter status is massively influenced by the gut and the health of the gut, the gut and the brain both use the same kind of neurotransmitter repertoire to get their perspective work done and the gut functions because of the immune system interaction with the gut. There's a huge amount of information processing that happens in the gut and it's obviously different than our brain specifically but it's on par with the amount of information processing that occurs in the brain and it's all related again back to neurotransmitter status so we frequently see GI problems and mental health issues kind of go hand in hand and there.

And that's where Chris Cresser is very big on this gut brain connection. I don't know if I'm the first person that coined this but I mentioned this term brainflammation, inflammation in the brain so if I did coin it then hopefully it's worth actually repeating it so but yeah there's a deep pool of information related to this stuff that you could go wild with but the standard stuff is still kind of where you want to be. The good nutrition. Reestablish normal sleep. Good amounts of exercise but not exhaustive, etcetera, etcetera.

Greg Everett: Yeah so sounds like you got them on the right track so keep it up and maybe try to get the bread out of that sandwich eventually.

Robb Wolf: Yeah.

Greg Everett: And see how it goes.

Robb Wolf: That would be a good place to go.

Greg Everett: Cool. Alright. Next one. My name is Tiago, and I'm emailing from Brazil. I'm a radiologist doctor and have been on Paleo for about a year now. As a medicine doctor I used to think I was well informed about health despite the fact that I was weighting 92 kg and about 28% body fat. After a year on paleo diet and resistance exercise I am now 80 kg and about 16%. Thank you enormously for educating me and thousands of others. I can say I am trying my best to spread the good news here in Brazil, but I find myself really lonely as I know of no online paleo resources in Portuguese. My journey has been almost easy; as Brazilians love their grass feed meat.

The major problem is that Brazilians also love their bread, beans and white rice. And that brings to my question: Dr. Harris of Panu recently has posted that he is nowadays consuming white rice as a form of safe starch. What are your thoughts onto the safety of white rice? Do you think it can be consumed moderately as a part of post workout nutrition, in addition to meat? That would turn more easily. I think he means that would be more easily accepted sorry I'm going to translate the sentence here. That would make the Paleo concept more easily accepted among Brazilians, especially my wife; we'll say it that way. Thanks for all. Sorry Tiago I totally butchered your last sentence there.

Robb Wolf: You needed to do that in the same accent as my Capoeira Maestre.

[Cross-talk]

Robb Wolf: More easily accepted the concept Paleo among Brazilians especially my wife. Thanks for all. Orazim.

Greg Everett: Tiago definitely speaks better English than I speak Portuguese so I'm not going to say anything.

Robb Wolf: Absolutely. You know really quickly there are actually quite a number of Portuguese language resources if you guys track down Pedro Bastos and I am completely blinking on his website but if you go Pedro Bastos in

Google and then Paleo then you'll find his website and he's in Portugal and publishes his material both in English and in Portuguese so this stuff I think of the grains rice is probably the least or one of the least problematic that you're going to find.

This is also that thing where I just generally recommend people try that 30 day 100% grain leguminary free just so they can really experience what the effects are. Rice even white rice still contains a protein rich protein or orzine in the case of rice where there's zine in corn and then you know gluten items in wheat and similar wheat related strains. So there are potentially some problematic proteins but different people react differently to all this. Some people will react severely, other people not so much. I know for me I can have some rice or some corn once or twice a week and I seem to be okay with that.

If I start having it consistently then I start getting some GERD. It's very, very different than what I get from say like I gluten. It was actually start getting a little bit of acid reflux whereas I can eat yams and sweet potatoes or say things like plantains or something like that. Mangoes, papayas, more high glycemic load stuff for my post workout food and I have no GI problems with that stuff at all and I seem to have good performance, good recovery all the rest of that jive so you know I think that this is a definitely a good spot that you could say hey why don't you try some white rice mainly keep it post workout and then otherwise it's like this kind of dedgies, meat, good fat, maybe a little bit of fruit for the rest of the meals and then how do you describe it like a halfway house or an easier, kinder, gentler way to kind of introduce people to this whole concept and so then you're just kind of partitioning the grains to a specific period of time and is it optimum? Not really in my opinion but it's not terrible for sure.

Greg Everett:

So I mean is it kind of the same story with rice as it is with most grains that the more refined it is the less gut irritants that are contained in it. Like if you had a choice between white rice and say like wild whole grain rice what's going to be your better option.

Robb Wolf:

Ironically and this is kind of the ironic thing is that the white rice is going to contain fewer anti nutrients, less of the prodiase inhibitors, less of these protein rich proteins and so in the gut irritation stand point its actually probably better in a way so as long as we're not going into a scenario you know like you can have completely denuded wheat flour which gets used for say like bagels or something like that.

But wheat containing items they also add concentrated gluten to these foods which makes it stick together and gives it better mouth feel and all the rest of that so there's some caveats to that so long as you're not actively concentrating some of the you know negative deleterious constituents and then reintroducing that into the refined parts it would be like you know pulling out rice bran.

Extracting all of the protein rich proteins and then putting that in with white rice so as long as squirly like that isn't going on ironically yeah, you're actually mitigating or decreasing your amount of kind of gut irritant anti nutrient load by eating the more refined products and people will kind of freak out about that they're like oh you know what about the vitamins and minerals you lose. That's where you want to get your vitamins and minerals, from meat and fruit and veggies and all that sort of stuff.

Greg Everett: Yep. Alright, you pretty much can't win.

Robb Wolf: Sure you can. Yams and sweet potatoes are yummy.

Greg Everett: Wow. Yeah.

Robb Wolf: They're pretty good. They're pretty good.

Greg Everett: Alright. Let's wrap it up with this one. This is always a good topic.

Robb Wolf: Indeed.

Greg Everett: Lawrence Says; Robb and Greg, What is your opinion on applying the Paleo diet to people with kidney disease? Is it an advisable thing to do, given that the Paleo diet is higher in protein than conventional dietary recommendations? The reason why I ask is that type II diabetics can greatly benefit from following Paleo dietary guidelines, due to it being restrictive on carbohydrates, but since a good portion of diabetics also have kidney disease, would the ingestion of higher levels of protein be deleterious to their remaining kidney function? Is there a way to modify the Paleo lifestyle to allow people with renal dysfunction to use it? My father recently passed away from kidney failure, resulting from diabetes, and I was just curious if other diabetics with kidney disease could alleviate their diabetic symptoms and control their diabetes without jeopardizing their already diminished kidney function? Thanks.

Robb Wolf: This is a great one and I actually think I want to do a pretty extensive blog post on this pretty soon here because this topic pops up a lot and there's a lot of confusion and a lot of fear and so it would definitely be a good

one to address so first off. One element of this is that my concept of Paleo is that this is a food quality approach. Pretty macro nutrient agnostic.

I've got some biases like I am biased a little bit heavier on the protein than the fat but I see people run well on the main feature that I see people benefit from is a food quality approach first and that's you know once we deal with say like if someone has hyperinsulinism or some sort of metabolic problem so that's one element of this is that people assume that Paleo is just like massive amounts of protein and it need not be dialed us in any way you want. A great example of this is actually a client that we worked with recently at North Cal who came to us 31, 32 years old. Borderline type II diabetic.

I think that he just had not been to the right doctor under the right circumstances to be diagnosed as a type II Diabetic but he had horrible Kidney damage, had only about 10% kidney function and his doc wanted to put him on dialysis and so I asked him, our client to ask the doctor could we try some nutritional tinkering for one month you know was there anything dangerous with that. Could we see if he would benefit from exercise and nutrition for one month and the doctor was reticent but he said okay that's fine, you know I mean this isn't life threatening right now but this is something that needs to be addressed and so what we did is we actually put this guy on with the help of a dietitian that we have on staff, we put him on a pedogenic Paleo diet so it was low carb, low protein, probably about 10 to 12%, 10 to 15% protein at the max.

Relatively high fat, fats primarily coming from MCT's, medium chain triglycerides mainly from coconut products. Very sparing in the starch and fruit. Mainly just veggies, just low glycemic load veggies and a month later this guy's function had improved to 80% so from 10% to 80% of normal kidney function. Now another month down the road he's essentially at normal kidney function and is increasing his protein intake and he's fine so if you had some existent kidney damage, yeah a low protein diet is probably really smart but a high carb diet is absolutely ridiculous and this is one of the things that just kills me.

Part of the damage that's going on you know everybody focuses on the protein fraction and like the ammonia, urea production and what not from the protein degradation but in fact the advanced **[0:48:17.8][Phonetic]** end products that are produced from high blood glucose levels which are really what typifies the type II Diabetic and the hyper insulinemic state.

That is the thing that is seriously damaging, the loops of Henle in the kidney and that's where all the functional elements of the kidney are really happening. That's where we're exchanging liquids. We're reabsorbing the in the distal tubules, the electrolytes so that we're maintaining electrolyte balance and whatnot. So something that is so frustrating within the kind of nephrology realm is that people do not yet understand the power of a low glycemic load kidney-genic diet in reestablishing normal kidney function. It's kind of interesting if you do a Google search you pop in ketosis kidney function.

Ketosis kidney damage what you find is a bunch of a new studies which show dramatic therapeutic benefit of a kidney-genic diet for kidney function. You also find this thing it's from the physician's committee of something I forget I'll pull it up here really quickly but it's basically this vegetarian vegan oriented group of bozos on I think I closed the tab here but basically these guys are cherry picking this data that's saying kidney-genic diet cause kidney damage that animal protein causes kidney damage or its vegetable protein that's not. It's absolutely ridiculous stuff so the long and short of all this is that you can modify a Paleo diet to whatever macro nutrient parameters you want.

There's a ton of situations in which a therapeutic effect can be had from a low glycemic load kidney-genic diet. This ranges everything from endothelial drive to tumors, breast, colon, prostate, astrocyte, brain tumors, glioblastomas to neurological conditions such as Parkinson's, Alzheimer's and different epileptic seizure type scenarios and then also we have kidney function and this is just looking at like the glycemic load element of the story and is completely neglecting the auto immune pro inflammatory issues that arise from trans glutamase reactivity in this case I think it's the isoform 5 which is associated with renal function if you remove the gut irritating foods and the things that are potentially causing cross reactivity or auto immune reaction with various isoforms of trans glutaminase. This is another element of kidney damage which can be alleviated with a Paleo diet so there's no problem with you know implementing this. If you want to track down a dietitian for some help then we've got some folks in the consulting area that can do that or you can maybe track somebody down locally but this is a completely safe sane reasonable approach to managing kidney function.

Greg Everett:

Cool. Sounds good so no excuse.

Robb Wolf:

Yeah, really no excuse on that. Yeah. Yeah. Other than if people have forgotten their basic biochemistry and molecular biology and vertebrate

physiology. In that case then we can just make up whatever shit we want and just assume that this stuff is a problem but.

Greg Everett: Actually much what I do every day. [Laughing]

Robb Wolf: Well, me too actually but you know its funny this is this thing again. I don't want to harp on it long at all but this is that thing again where if you walk people through the basic mechanisms you pull out a guidance textbook of medical physiology. A striars textbooks on biochemistry and you walk people through this process. Be they nephrologists or whomever you're talking to. Then the arguments go away and then particularly when you've got the support of literature that we are now generating because people are actually looking at kidogenic diets as a therapeutic intervention so that's some cool stuff but the biochemistry supports it. The anatomy, physiology supports it. It's all good to go.

Greg Everett: Alright. Well, you get antsy to go do some juts and shove some fools out?

Robb Wolf: Well I'm mainly am the one that's being used to mop the mat so I'm more getting the bowel of waiting, anxiety of getting the tar beat out of me again but its all good. It's fine, undisputed fitness in Santa Fe under Tate Fletcher. Really, really cool operation. Good folks there so I'm think I'm getting some training in there.

Greg Everett: Cool. Yeah, sounds good.

Robb Wolf: Awesome G. Thanks for another one. Episode 80 on the books.

Greg Everett: Alright. Oh man. Can't wait till a hundred.

Robb Wolf: Oh man. Want to do something fun for that one. We'll bring the **[0:53:13.3][Phonetic]** or something like that.

Greg Everett: There you go.

Robb Wolf: Sweet. Alright man.

Greg Everett: See you next time.

Robb Wolf: Later G.