

# The Paleo Solution

## Episode 50

Andy Deas: Robb Wolf, Andy Deas, back with the milestone episode 50, halfway to 100, Paleo Solution.

Robb Wolf: I feel dementia is setting in right now. I think I may poop my pants during the podcast just for this auspicious occasion, the downhill slide into oblivion.

Andy Deas: I don't even know if I can recover from that comment right now.

Robb Wolf: We really are back down to six listeners so....

Andy Deas: All the book copies that are going to be sold, have been sold out.

Robb Wolf: Yeah, they've all been returned now.

Andy Deas: All right, man. Well, I say we jump into the questions. Episode 50, we got a list of nice ones. One handle that I know this guy is trying to say. So I'm going to make a rule that if I can't figure out what your handle means, I'm not going to post it anymore. That's my new rule.

Robb Wolf: Or we could just make a lot of fun -- make some fun of it.

Andy Deas: That's true. That's true. All right. we'll stick with that for today, and we'll see what goes from there.

Robb Wolf: Cool.

Andy Deas: Anything else exciting going on?

Robb Wolf: Not too much. Just trying to stay on top of stuff, trying to generate -- ideally, I'm trying to get one kind of sciency blog post up on Mondays; then we have the podcast on Tuesdays, some sort of a road forger-esque thing either Wednesday or Thursday. And then I'm trying to do something out of email grab bag which I'm on a number of research groups, like the Cordain group, the Pedro Bastos group, and all that, so different people around the world. I'm fortunate enough to be on these email exchanges, and we have some really cool just kind of little snips, quips, one-liners where people will kind of talk about some of the contents of the research that's coming out. And without putting a ton of

analysis into it, I think that there's some really interesting stuff so I'm going to try to drop some of that in on either Thursday or Friday to just keep some good content going on the blog. So I've just been chipping away at that.

Andy Deas: A blog is back alive.

Robb Wolf: It is alive, yup. It's nice to be writing that stuff again. I have a ton of back material that I want to work my way back to, but it's also kind of nice when something new comes in. There were just a couple of studies that came in today. One of them huge paper looking at saturated fat, and that fact that saturated fat does not appear to be causing cardiovascular disease and a real mainstream nutrition journal. And then the same day a big analysis of a two-year comparison of a high carb- low fat approach to eating and weight loss, and blood lipid parameters versus a low carb way of eating, and this is just for free-eating humans.

So I mean there's some varied building within this, but at the end of the day, the weight loss was similar but the blood lipids in the low carb people were significantly better. So just a couple of good victories for kind of Paleo low carb stuff lately.

Andy Deas: It's shocking.

Robb Wolf: It is. It is.

Andy Deas: I'm literally on the edge of my seat right now.

Robb Wolf: That's because you're about ready to pass out as are most of our listeners. So maybe we should keep going.

Andy Deas: All right. First question is from Theresa, "Hi, Robb. I'm reading your book and love it. My husband and I are going to start the 30-day Paleo trial period. However, we have some concerns because my husband is in the Army and there are times when he is in the field when he has no choice but, to eat the processed crap the Army feeds him. He will be deploying in March to go to Afghanistan.

We are wondering if it might not be a good idea for him to go full Paleo given the risk that he might become more intolerant to a regular diet. We don't want his job performance to be compromised because of the side effects of eating MREs. What do you recommend for him? Thanks a lot."

Robb Wolf: Yeah. This is spot-on, and it really -- to some degree this depends a little bit on what one's job description is. If somebody is facing the potential of being out in an austere environment and MREs being the only thing that they can eat, and possibly more important than that like a latrine may not be immediately available, then folks should probably consider keeping a cookie, a piece of toast, some noodles, something like that in the mix every day because people do experience on the one hand, much better general health, particularly digestive health when they go Paleo. We pull out the grains, legumes, and dairy. The gut heals. People start functioning better.

But then upon reintroduction, they can have some really bad effects, basically very similar to some food poisoning type effects on people. If you're in that kind of special operations community where you could be dug into a hillside or in a really kind of dodgy austere situation, this could be a bad, bad scenario. So I think definitely folks in this sort of situation, you need to kind of assess your job description and then kind of figure out, okay, yeah, I might be able to get away with going full Paleo, and then if I get stuck with an MRE it won't be the end of the world if I've got the trots for a day versus somebody else who it could be a really big deal.

Andy Deas: Yup.

Robb Wolf: And then this is a nice point to pull in here. Folks who are facing deployment probably keeping their fish oil at about 2 to 3 grams a day maximum, and that's because of the potential blood thinning effects. And that's about the amount that you would get out of a tin of sardines, so that seems like a pretty safe amount given all the other factors.

Andy Deas: Cool. Right on. Good question.

Robb Wolf: Yeah.

Andy Deas: Next question is from Spanky. What the heck do you think that means after his name, Robb?

Robb Wolf: Spanky McMcMc.

Andy Deas: I don't get it.

Robb Wolf: I have no idea. I don't know, man. We have some -- we have possibly more creativity in the handles than we do in the questions, and the questions are darn fine. So it shows how good the handles are.

Andy Deas: "Hi, Robb and Andy. Great work, love the podcast, have my copy of the Paleo Solution so fight the power, er uh, gluten, er uh sugar. I have changed many things in my diet and especially taken the advice about upping my omega-3 intake. This has included supplementation with fish oil and an increase in my consumption of fish like Jack Mackerel and sardines. On a side note, have you ever had smoked sprats? They look like you just fished them out of some rotten leaves in the gutter but are quite delicious. Not even the cat will eat them." I can't say that I have. Have you, Robb?

Robb Wolf: Smoked sprats sounds like some sort of weird sexual deviation or something. I just don't know. That I can -- I have no experience with smoked sprats.

Andy Deas: "So I think I am doing well, then when I looked at the contents of the sardine can, oh, horrors, they are packed in soybean oil? WTF? Does that not defeat the level of omega-3 if they are packed in an omega-6 rich oil? I do drain them well, but there is still a fair bit of the packing oil on them. Should I be concerned? Thanks for all you do, Spanky McMcmc, one of your at least dozens of Ontario, Canada fans." There you go. More than six. Thank you, Spanky.

Robb Wolf: They're breeding up there. They're breeding.

Andy Deas: They're gremlins, just gremlins.

Robb Wolf: Somebody fed them after night. If you look around a little bit, you can usually find some sardines that are at least packed in olive oil. I think I did a blog post quite well back, Bela-Olhão. They're like these Portuguese sardines. Maybe we can drop in a link to them in the show notes. They are really, really good, and they have like a plain smoked sardine in olive oil.

Occasionally, and I remember Protein Power Lifeplan, they talked about this. You would find sardines actually packed in sardine oil which was kind of like the winner, winner, chicken dinner because you had omega-3 fats left, right, and center. If you could find an alternative to the soybean oil, I would definitely go for that. But at the end of the day, it's possibly not the end of the world, but it's definitely kind of driving the boat in the direction. And I think it should be fairly easy to look around and find some alternatives.

Andy Deas: Yeah. Yeah. Like in Chico, at least Trader Joe's stopped carrying those brands of sardines.

Robb Wolf: Yeah. You can still find them at Raley's and better supermarkets, and then you can order them online also.

Andy Deas: It's preposterous. Nobody orders anything online, Robb.

Robb Wolf: Crazy thought. Yeah, that whole internet thing, it will never catch on.

Andy Deas: That's right. Cool. Next, we got a question from James, "Just received your book this morning. I haven't put it down. Got to the chapter about gallbladder functions which gave me cause for concern. I had my gallbladder removed several years back. Are there any special concerns I need to take into consideration before I try this plan? Any feedback would be great."

Robb Wolf: If James has his gallbladder removed from a non-impact injury, then there's just kind of general gall stones or gallbladder dysfunction, high likelihood of some gluten intolerance there. So the basic like gluten-free, dairy-free Paleo diet as a baseline. And then because the function of the gallbladder is to store bile which is then released into the small intestine when the food contents empty from the stomach and then to small intestine, and the surgeons and medicine in general, they just kind of figure, well, we'll just let that stuff dribble out of the liver instead of it being ejected from the gallbladder into the food chime, and it doesn't work very well. It's not nearly as efficient as a functioning gallbladder.

So I would definitely recommend tracking down some oxfile and taking that with all meals and then potentially adding in some NOW Foods Super Enzymes as well. And I think you would notice, like, if you have any type of brittle nails, dry hair, stuff like that, any type of potential fatty acid absorption problems will be really improved.

Andy Deas: Cool.

Robb Wolf: Yeah.

Andy Deas: Rock on. Next, we got a question from Floris, "Hi, folks. I'm 55, male, lean, BMI=19.5, and in good shape." Please don't ever tell us your BMI again. That is not a valid metric of anything. But anyway -- "Since three years I live a very low carb (about 20 grams) life. I don't consume grains, nightshades, legumes and dairy. I've noticed now that when I eat blueberries, raspberries, citrus fruits, prunes and curcuma," I don't even know what that is.

Robb Wolf: Curcuma?

Andy Deas: Yeah, what is that? Is that a fruit?

Robb Wolf: When I hear that, I'm thinking more like curry type things.

Andy Deas: Ah, okay.

Robb Wolf: But yeah.

Andy Deas: "And I go in the sun, I get a sort of photo allergic psoriasis kind of reaction around my nose. I live in the south of France. When I stop eating these foods the rash goes away within two days. Any thoughts? Lectins? Could it be that you get more sensitive when you eat like I do? Would be very interested in your thoughts. Thanks."

Robb Wolf: So there's a --

Andy Deas: Hold on. We got part 2, man. We got part 2.

Robb Wolf: Okay, okay.

Andy Deas: And then he says -- he then goes on to say, "Dear Robb, I think yesterday I submitted a question regarding lectins and gluten. What I forgot to say is that I have the feeling that the allergic reactions occur after eating foods high in antioxidants. So another thought is that my body does not know what to do with these antioxidants because it does not need them. My body easily makes enough antioxidants by itself. Also, I kept thinking about my diet and came to the thought to make a omega-6 to omega-3 calculation. Due to almonds and Brazil nuts this quotient is almost 7. When I leave the nuts, it goes back to 2. Quite a drastic change. So I'll leave the nuts from now on and see what it does."

Robb Wolf: Yeah. That's a biggie there. Now, in a lot of plants, there's a ton of different photo-reactive constituents in plants. We consume them, and certain carotenoids are actually kind of photo-mitigative or photo-protective. They actually provide an SPF factor of 4 or 8 or whatever when you eat dense carotenoid things like carrots and yams and sweet potatoes and all that sort of jive. But then there are other things in the family of furocoumarins. They call them actually psoralen, so they're known to be kind of psoriasis type inducing chemicals that are in different plants, and you can definitely get a phototoxic effect out of different plants.

And St. John's wort is kind of another one that you can get a phototoxic effect. I really think that in this situation though that elevated intake of omega-6 fats may be some of the precipitating factor here. It definitely is leaving one more kind of pro-inflammatory, in general, just because of the elevated omega-6's, but then also if we have a lot of polyunsaturated fats floating around in the cell membranes, those things are more likely to be photo-oxidized just in general.

So the two things to play with are definitely dialing down the omega-6 content and then maybe playing with specific plants to figure out which ones are causing the problems whether it's like curcumin containing things like if it's curry. If it's something else, maybe getting lost in translation like English, French deal may be breaking down there, but some of the berries -- usually, berries I would put in kind of a photo-protective category. So that's kind of a big picture type stuff and the things to tinker with are reducing omega-6 intake and then the other thing is just kind of going item by item and see if you get a photo-reactive effect.

Andy Deas: Yes. Cool.

Robb Wolf: Yeah.

Andy Deas: Robb, can you survive on 20 carbs a day personally. How do you with that kind of level of carbohydrate intake?

Robb Wolf: I've done great in the past. I don't do so well now. And I seem to do better with a little bit yam, sweet potato. I've been really cracking out on squash lately because they've been super cheap and really yummy at the Farmer's Market, and I usually -- I usually do some sort of activity every day even if it's just a walk. And so I'll throw some denser carbs down the hatch, "post workout" and then work out maybe just like walking around, doing a 20-minute walk with Nicki outside so we can get some sun on our faces and not be inside. And I feel like I'm doing a little better with that. I'm going to play with that as we head into fall.

Usually, I do my yearly call to arms to think about Lights Out and going to bed earlier and eating fewer carbs and all that sort of stuff. Which I still -- I think that all of those recommendations are really, really solid and interestingly enough we have kind of a Lights Out question further on here, but I've been talking with Scotty Hagnas a little bit and playing around with keeping 50 to 100 grams of carbs in the mix a day and just kind of seeing how I do with that. And I'm really not supplementing a ton

of fat with my meals because my activity level is not real high. I've been feeling pretty good with that.

I was really, really tired. I think kind of some adrenal deficiency, like exhaustion type stuff after the book tour that we did, because I did three Paleolithic Solution seminars back-to-back going East Coast, West Coast on basically each one of those. And then we were back and forth again a couple of times, East Coast, West Coast in a 30-day period, and I was crushed at the end of that. I mean absolutely wiped out, and I'm just now getting my feet back under me. So part of that, I've just been keeping a little bit more carbs in the mix, and I seem to do better with it.

Andy Deas:

Nice. Nice. All right. Good. Moving on. A question from Melissa, "Hi, Robb and Andy. Great work on the podcast as always. You guys make the subway tolerable. I have really bad female cramps usually on the first day of menstruation. I have cramps for a few days, but on one day I have terrible cramps usually for about 4 hours. Nothing really seems to help the cramps. I take Midol, Tylenol, aspirin, ibuprofen, everything, though not all at once. When I have discussed this issue with my doctor, all they suggest is getting on the pill, which I would like to avoid as I don't see it's worth the health risks. The pill has eased the cramps in the past, but I would like to find a non-pharmaceutical solution.

My question is, are there any foods I could eat or shouldn't eat to help alleviate the cramps? I've tried adjusting both physical activity and diet, but have yet to find something that works. Is this something that can even be addressed by diet? Thank you. P.S. The website changes are amazing. It's hard to imagine what you had just a few weeks ago. Welcome to the 21st century."

Robb Wolf:

Seriously. That was my 8th grade project. And actually, that was a huge improvement which Craig Zielinski had put together. That was a huge improvement over the one prior to that.

Andy Deas:

I don't even remember the pre-Craig Zielinski one anymore.

Robb Wolf:

That was bad. It was pretty bad. So yeah. But a couple of thoughts here; possibly adding in about 40 to 50 grams of GLA per day on weeks like 1 through --probably 1 through 3, 1 through 2. You'd have to play with this a little bit or even weeks 2 through 3 of the cycle, and you can get this from primrose or borage oil, but it's -- what I would call an activated omega-6. It's partway down that omega-6 pathway. The GLA, DGLA can be helpful with some of the prostaglandin inflammation that we get in menstrual cycle irregularity. So that's kind of one area to look at it.



From kind of a Chinese medicine perspective, you could also think about maybe trying some milk thistle, getting a really solid milk thistle extract which can help with some liver kind of metabolic pathways for detoxifying estrogen, in particular, which can be one of the problems here. And then if neither of those help or if they only help a little bit, I would really recommend tracking down some acupuncture for this. It is really, really effective for helping with cramps, female irregularity, or breast tenderness and really, really hard couple of days of the beginning of the menstrual cycle.

So I would think about the GLA. I would think about some milk thistle extract and even within all that stuff, I'd also consider tracking down a good Chinese medicine practitioner. If they just do acupuncture, they could probably be helpful. But I think somebody who has done the education of both Chinese herbal medicine and the acupuncture, they tend to have a little bit better grasp and frequently you can find somebody who specializes in female issues, and they can probably help a ton.

Andy Deas: Cool.

Robb Wolf: Yeah.

Andy Deas: All right. Good. Robb Wolf, answering everything in the 21st century.

Robb Wolf: Making it all up, man. Making it all up.

Andy Deas: It's all not real. Next, we got a question from David, "Hey, Robb. I'm a type 1 diabetic who wants to gain some strength and mass. I am 6' 2", about 170-175 lbs. I try to eat a relatively clean lacto-paleo diet because it's the easiest way to control my blood glucose, but it's hard to gain a lot of mass this way. I have been doing the Starting Strength protocol and have definitely gotten stronger (squat: 205 lbs; deadlift 250; bench: 150), but am still not anywhere near where I want to be.

Can you think of a reason why I shouldn't emulate skinny non-diabetics who want to gain mass? That is, I'm thinking of just eating a lot more, not always clean, and dosing my insulin accordingly. I don't need to be huge, just closer to 185-190 lbs so I can throw my weight and strength around a little more on the basketball court and increase my lifts. Thanks so much."

Robb Wolf: I would keep this stuff pretty clean. I think give a linear progression, starting strength protocol a shot. Definitely, you can go for eating more, but I would keep it pretty damn clean, and I would really keep an eye on the A1Cs. And if the A1Cs start marching up into the 5's or God forbid getting up into the 6's, it is not worth it. The damage you are accruing on your body is not worth it. If this was a make or break deal and you were a professional athlete and you were getting paid 6-7 figure type stuff and you just had to perform, it was kind of like, okay, this is cost benefit analysis we're talking about. But otherwise, I would do some sort of cyclic low carb-ish type thing.

I would actually keep things really clean. Use some coconut products for extra calories, and I would definitely keep an eye on that A1C, and I would plan kind of a month -- maybe six-week long overeating, hypercaloric phase where you're really eating more, resting, lifting heavy, doing all that sort of stuff, and then go into a maintenance mode where you kind of lean out and give your body a break and see what type of mass you maintain out of that and just keep pushing the linear strength deal.

Andy Deas: Yes. I would not really sacrifice your health for a little extra mass.

Robb Wolf: Yeah. I mean at this point, it took me so long to get my health really back after the mass gain and part of that was just I had some cortisol issues to deal with and all the rest of that stuff. But just take a long approach to this. Even at your current height and weight, we can get that squat up to 300 pounds, deadlift up to 350, bench up to 225, 230. There's going to be some nice body composition changes that happen with that. It takes some time. So you could certainly pop your food up, but I would just keep the quality clean and really keep an eye on the A1Cs. I wouldn't want to drive that thing south at all.

Andy Deas: Yup. All right. Next, we got a question from double X, Xi Xia, from CrossFit Portland. "Congrats on the book. I love it and want to give it to every new member in On Ramp. Will there be a paperback copy coming out?" Robb Wolf, go.

Robb Wolf: One year.

Andy Deas: One year. There you go.

Robb Wolf: One year, yeah.

Andy Deas: "My question is about the sleeping in pitch black. I haven't read Lights Out yet but have done some searching on the internet but can't find the answer to my question." I'm going to pause right here and say I'm shocked that you have not read Lights Out there, Mr. Double X.

Robb Wolf: Seriously under the guidance of Scotty Hagnas. I might call Scotty and get him kicked out of the gym. This is a peasant uprising here.

Andy Deas: Do not admit to that on the internet. "My question is what conditions do/did hunter-gatherers sleep? I imagine they slept outdoors in moonlight/starlight, and not just in caves. If so, how did the exposure to this light affect them? I'm not an outdoor person by any means but the few times I've slept outdoors, the sky is just lit up with starlight. However, I can't see my hand in front of my face and it is just pitch black around me. However, moonlight is much brighter and it is not pitch black on nights when the moon is out. Thanks for taking my question."

Robb Wolf: This is a good one that pops up every once in a while when we start talking kind of Lights Out type stuff, and they touched on it a little bit in Lights Out just basically with the cyclic photoperiod animals, humans. There are some just kind of woven in to our DNA some kind of changes that we experience with our metabolism that kind of attracts the moon. And so there would be a little bit of change possibly some more activity on periods when it's full moon and stuff like that because it's fairly bright. But overall, the still basic take home is that when our body is exposed to light above and beyond that which we are exposed to in a kind of normal, natural background radiation, we start getting some problems with it.

Now, I made this point that even people who are blind, they know when the sun comes up and when it goes down and like they have a normal circadian rhythm. So people will make agreements about I'll just use a sleep mask and then my wife can still have a night light on or something like that. The porphyrin proteins in our blood receive blue wavelength of light and kind of store that information and then give that information to the hypothalamus in the brain. So there's more signaling going on there than what we would normally consider.

And so when you think about the intensity of a night light or a streetlamp outside your bedroom window or something like that, it's quite a bit larger than what we would get in a natural environment. Okay, if we're sleeping out on the savanna under the stars, that's kind of one thing. But if you were under a cover, if you have any type of blanket, each layer of that then it starts reducing the photo exposure. And also, we're thinking about both the amount and the intensity, and when the sun goes down,

that's it. So even if the stars are out, the total intensity of light that we're being exposed to is much, much less than what we're generally being exposed to in front of our TVs and computers and all that sort of jive.

Andy Deas: Yes. And Xi Xia, go read Lights Out ASAP.

Robb Wolf: I'll buy you a copy if you need me to. Let me know.

Andy Deas: It's a stunning admission coming from you.

Robb Wolf: Seriously.

Andy Deas: Wow! All right. Cool. Next, we got a question from Mia, "Hello. I am very new to the Paleo process. I have been gluten-free for years, not out of diagnosis, but I feel better without wheat in my life. However, being gluten-free has never made me feel 100%. Mexican food was on my menu list weekly or even more frequently. And I think I've gained a little too much weight eating gluten-free -- rice, potatoes, corn, tortillas -- you get the idea. Now that I am in research mode with this newly adopted lifestyle, I am curious about the information I see widespread with different websites about fasting.

Now, maybe it's because I've been eating a lot of the wrong things in my lifetime so far, but the thought of being without food for 24 hours makes me feel shaky just thinking about it. It seems that if I don't eat regularly I get hypoglycemic conditions so this worries me to experiment with. Do you recommend this endeavor after getting more involved with the process or will I get over the hurdle as I am in the moment of fasting. I know this really depends on the individual, but I wanted to seek your advice and if there is already archived material you can surely direct me there. I will be buying the book soon."

Robb Wolf: We never have talked about this stuff before. That's great.

Andy Deas: It will never happen again, Robb. This is one unique moment in time.

Robb Wolf: So for me when I'm reading this, on the one hand, an intermittent fasting protocol could potentially be really not that big a deal. You wrap up dinner at 5:00 or 6:00 p.m. and then you don't eat again until 8:00, 9:00, 10:00 a.m. the following day, and then it's anywhere from 15 to 17 hour fast, somewhere in that time frame. So on the one hand, it need not be really severe or really all that wacky or that far removed from the way that people are normally eating, but it's also sending like Mia probably has a little bit of insulin resistance going on, probably was consuming a lot of

carbohydrate in total, probably a caloric excess, and maybe has some metabolic problems going on here.

So I think as a baseline, it's just basically head into this with a kind of low-ish carb Paleo approach, good protein, lots of veggies at every meal, and some good fats. And just call it good with that and just eat as per your appetite. When you're hungry, eat. When you're not hungry, don't worry about it. And I would really get way down the road before you start dropping in some intermittent fasting. That's for me when all the ducks are in a row and everything is kind of squared away, if you're a little bit nervous about going a chunk of time without eating because of a potential blood sugar crash, I wouldn't necessarily drive the boat that direction.

I would just go kind of low carb Paleo and get real healthy -- make sure you're taking your fish oil and make sure you're getting your sleep in a pitch black room and all that sort of stuff. There's a bunch of other things to start doing first. Make sure you're getting a daily walk, getting some exercise, all that sort of jive.

Andy Deas: Yeah. Intermittent fasting is like dynamite for some people.

Robb Wolf: Yeah. And it really is. It's a great analogy because dynamite in the right location like blasting a tunnel or something, can be amazing, can drive the whole thing forward or can collapse the whole tunnel, and that's the end of the endeavor. So I think for so many people, it's like are you sleeping in a pitch black room? Yes or no? Are you eating three good grain-free, dairy-free Paleo meals a day -- protein, veggies, good fat? Yes or no? Are you taking your fish oil? Yes or no? Are you exercising? Yes or no?

And those are all way more important to get done early and then think about, okay, maybe I'll start wrapping up my meals earlier in the day. And so you're used to your eating dinner at 8:00, now you start eating dinner at 6:00. And usually, people just doing that type of a shift were like, wow, I noticed being leaner, and I noticed sleeping better and stuff like that. So I would do some very graded approach on that.

Andy Deas: Yup. Cool. Good question.

Robb Wolf: Yeah.

Andy Deas: Next, we got a question from Russell, "I'm just wondering if you've heard about anyone having a big increase in vivid or lucid dreams while in a

ketogenic state. I ask because I would have one or two normally a month but recently I've been lucid dreaming every night for very long periods. It's not a problem by any stretch but it's certainly out of the norm for me. It does make me think about how some of our ancestors put a lot of thought behind their lucid dreams and took them to be omens. But if that's the case, well, let's just say the morality of the world would have to change a lot to accommodate my dream world. Anyway, just wondering if you've heard anyone else discuss this. Thanks, Andy and Robb."

Robb Wolf: That's where we're having the porn riff intro would have been perfect. I haven't heard that much about lucid dreams associated with ketogenic diets. I definitely don't remember having them. ZMA and stuff like that and some other kind of herbal sleep aids, but I haven't heard much with regards to ketogenic diet and lucid dreaming. That's a little bit of a new one for me.

Andy Deas: Yup. I got nothing on there. I will experience it with ZMA and stuff sometimes but never with ketogenic diets.

Robb Wolf: Yeah, yeah.

Andy Deas: Well, so let us know if this continues. Keep us up-to-date.

Robb Wolf: Yes.

Andy Deas: All right, Robb Wolf, a question about the book, number 10, "In your book on page 211, you mention the Food Matrix. I'm not sure if I missed it or overlooking it but I can't seem to locate any information on this in the book. Where can I get more information on this? Also, where can I get more information on tubers. Thanks."

Robb Wolf: Okay. So the Food Matrix, I haven't finished yet. I've been trying to figure out how to get it in a web format. I was going to release this thing, and this is probably Andy's way of putting me into finishing this thing. I wanted to do some sort of a free iPhone app kind of deal where -- basically, what the idea is is you've got a column of say like 20 or 25 protein sources -- chicken, fish, various types of meats. You're got a column of 20 or 30 vegetable sources, 5 or 6 different types of cooking oils, like coconut oil and extra virgin oil and avocado oil and different things like that. And then you have 20 or 30 herbs and spices.

And basically, what this whole concept was, was a response to one of our clients that we had a long time ago who was just a pill. And one day she came in and she was just like, "I'm bored with this eating." I was like,

"Bored? What do you mean you're bored? I can't believe you're bored." And it just totally spun me out, and what I did to kind of convince her that she wasn't bored, that she was in fact just actually a little bit lazy in the kitchen, was that I went through, and I showed that if we had 20 protein sources which we could have at any supermarket anywhere. I don't care how Podunk or backwards you live, you go into the supermarket, and you've got like 20 different easily available protein sources. You easily have 20 or 30 vegetable sources on hand, five or six different cooking oils on hand that are all totally Paleo-friendly and approved and all that stuff, and then 20 or 30 spices.

What you have there, if you were to take one protein and then one vegetable, one cooking oil, and one spice, and throw them all together, you have literally like 200 or 300 years of meals of like singularly unique meals. So when people say they're bored, usually what the implication there is that they are exposed to something too frequently; that they see something too often. And so this was my way of kind of nipping that argument in the bud and just saying, "No, you're not. You're not bored. You're just a little bit lazy. You need to get in the kitchen. You can get creative."

And you know, most of my meals are throw some oil on a pan, maybe infuse the oil with some of the spices that I was just talking about. Brown the protein that we're going to cook and then throw some vegetables on top of that. Put a lid on top of the whole thing, and then let the whole thing cook for 5 or 10 minutes. Turn on the timer and let it cook. And that's like 80-90% of my meals, and they turn out really, really good. They're not gourmet cooking but they're like a B+ meal. Virtually anybody who eats them, they're like, "Wow! That was pretty damn good."

And now occasionally, I'll cook something that's kind of a dog. Like I tried making a French onion soup about three months ago that was horrible, and the whole pressure cooker full of the stuff went down the sink. It was horrible. Every once in a while you pull a bad one out of there. And I talk about this a bunch. I covered the food matrix in the Paleo Solution seminar, but this is just a way of kind of empowering yourself, empowering your clients. Like this is a very simple way of information logging, like, hundreds if not thousands of different meals.

And this isn't even considering combinations or recipes or anything else like that which goes into the question about the tubers. I mean Google and just -- Google-fu, man. Chop and slice that thing on there, and you can get any type of information you want -- USDA nutrient database, you can figure out what the nutritional characteristics are, there are botany-

related websites that end up talking about the phytochemicals. I mean you just got to Google-fu that stuff a little bit, which also swings back around to just the food prep side of things. If you're into recipes, man, there are so many good Paleo low carb related websites out there that generate recipes. Our NorCal site generates a lot of recipes, Everyday Paleo, the Paleo Chicks. There's just tons -- tons and tons and tons of people.

So this is one of those things when people are kind of like hand-wringing and like, "Oh, I'm just -- I don't know how to cook this way. I don't know what to do." And one of the things that kind of makes me really chuckle, I'll ask people, and they say, "I don't know how to eat like this." I'll ask them, "Have you ever had scrambled eggs and a little bit of fruit for breakfast ever in your life?" and inevitably it's like, "Yeah, I've had some scrambled eggs and some fruit at some point." I was like, "Okay. Cool. Have you ever had some grilled, say, chicken on a salad for lunch?" It was like sure, somebody's had some grilled chicken on a salad for lunch at some point.

And then, "Have you ever had some grilled meat or some barbecued meat with some veggies for dinner ever in your life?" It was like "Yes." I was like, "Okay. You have actually had hundreds if not thousands of Paleo meals, just not all of them strung together. You just had other stuff thrown into that. But you've eaten a breakfast before that was Paleo. You've eaten lunches before that would pass for Paleo. You've eaten dinners before that will pass for this." So what this is now is just pulling out the stuff that doesn't really belong there -- the bread, rice, pasta, and all that sort of jive, the sodas, the diet sodas and Goldfish crackers and all the rest of that crap. And then all of a sudden you're there.

So when people are doing all this hand-wringing about the stuff, "I don't know how to eat this way" or "I'm bored" or whatever; it's really a very weak argument. I don't have a lot of sympathy for it because it's usually not true. You start doing a little bit of probing and folks have actually eaten closer to this various times in what they think. It's just a matter of peeling the garbage out more often than not, and then you're off and running. And then on that creativity side, you just need to give this stuff a little bit of a shot. I guess that this is a decent spot too that I could plug the whole Paleo brands concept also where we've got frozen meals.

If you want to eat some of that stuff, you can go to PaleoBrands.com and order some of the grass-fed meat, wild-caught fish, organic foods, flash frozen. They actually taste good so you could give that whirl too. But honestly, I'd rather see you cook the stuff yourself.



Andy Deas: You're a great marketer.

Robb Wolf: I'm a huge marketer, man. Yeah, maybe you could give a couple of them a shot, but why don't you just cook instead?

Andy Deas: All right, Robb, that was the last playing question for today, but we're flying so I think we're going to go Kelly Starrette performance art, and I'm just going to start grabbing some questions out of the queue.

Robb Wolf: Okay.

Andy Deas: So we'll see what comes up. Are you ready?

Robb Wolf: Okay. And folks, I have not seen these questions, so we'll see what happens here.

Andy Deas: First, somebody I think -- this first one is easy. The first one is from Whitney, "Is there going to be an Kindle ebook or an Audiobook for the Paleo Solution? Thanks."

Robb Wolf: Yes, and actually by the time this podcast flies, it will probably be out. The reason why we didn't release them initially is that the electronic versions for whatever reason do not count towards the New York Times' bid, and so we saved that for a little while trying to get folks to buy print edition so we could get on the New York Times, and we achieved that. And so we will have the e versions out pretty soon. I would like to do a little bit of tinkering with the iPad version and get some embedded links in it at some point with some other goodies. I don't know if I'll be able to get around to that, but for the second book that I do, I really want to play with a mixed media format and do some embedded links and do some other stuff with the second book I have in mind.

Andy Deas: Cool.

Robb Wolf: Yeah.

Andy Deas: Next question is from Diane. She says, "In your book you say no dairy and then there is a gray boxed section for butter. There you say it is okay for 'occasional' use. Now pretend I am a moron and tell me what your definition of 'occasional' butter use is. Thanks."

Robb Wolf: Oh, man. I'm the moron in that I actually gave people a gray area in which to have a little bit of latitude and try to figure out what was good for

them. If you have an autoimmune condition, then don't use dairy, in my opinion, unless it's grass-fed dairy. And that really is kind of my caveat. I'll say use grass-fed butter pretty much at your leisure. If it's not grass-fed, then I would use it once a week since people -- you know, at most. Actually, let's say once a month just to make you go get the grass-fed stuff. And since people want a hard fast number, and they don't want to think on their own, then I'll say once a month for dairy that's not grass-fed. Otherwise, if you have butter that's grass-fed, use it at your leisure. Just keep eyes and ears open for any type of inflammation or dairy intolerance.

Andy Deas: Yup. All right. Good. Next question is from Barry, "I travel internationally quite a bit for work and am wondering if you have any suggestions for 'Paleo' bars I can take on the road with me. I have used Paleo Kits but many countries do not allow transporting meat products into their countries. I actually had 10 Paleo Kits confiscated from my suitcase recently in Singapore. Thanks in advance for your advice."

Robb Wolf: Wow! That's a little tough. There was an Atkins bar that was like a -- was it a peanut butter bar? I forget. There was an Atkins bar that -- it had some whey protein in it, it had like some hydrolyzed collagen. I mean it wasn't the best stuff in the world, but it actually tasted pretty good, and I didn't feel like garbage after eating it. I wouldn't recommend that you make --

Andy Deas: Live off them.

Robb Wolf: Yeah, live off them, but I think in a pinch like that -- I forget what it was, like Trader Joe's carries it, and I think they still carry it. They have one Atkins bar that has like some gluten in it, and then this one was gluten-free -- I think it was a peanut butter bar. I think it was what it was. And then people were like, "Oh, my God! It's peanut butter. It's a legume." If you're traveling to Singapore with any regularity and you want to have some food that you can bank on, then this is some of that cost-benefit stuff.

And so that is something that I would travel with and pull out in a pinch because I tell you what, you get pretty damn hungry on a plane. And I've had travel days that were like 30 -- longer than a day like 36 hours from start to finish, and it's an ass kicker. And so you really are oppressed to get any type of decent food. But the Atkins bars are pretty good. The Larabars don't have any protein in them which then brings you back around to that problem of like are you going to be able to bring meat into

a country like jerkey or something like that which I think is just ridiculous since it's all packaged, but everybody gets to make their own rules.

Andy Deas: What are in those Paleo brands cookies?

Robb Wolf: Oh, you know what? I forgot. That actually could be a pretty good option. It's almond, butter, honey, egg protein. Actually, the Paleo brands cookie would be pretty good. I totally forgot we had a cookie. There I am, my awesome PR in marketing stuff.

Andy Deas: I never even had one, but I was just looking on the website, I'm "Oh, yeah, remember these cookie things."

Robb Wolf: they are actually really, really yummy and they don't have -- Nicki just like pins my ear back when I say this. They remind of a biscotti but they are not crunchy, but they are insanely delicious when dumped in coffee, so, any variety, particularly espresso. Now, would I recommend these for somebody who is on a fat loss protocol, hell no. it's just like a --

Andy Deas: Robb, you're lying. You mean yes, five times a day.

Robb Wolf: Yes. You can have five fries. Again, and I know we have a lot of new listeners, the podcast people who are maybe reading the book and haven't been in this Paleo/Primal/CrossFit kind of scene so they're kind of new to this stuff. Processed foods, shocker, are not that great for body composition improvements, and so I would still steer people towards real food in lieu of stuff like the Paleo brands cookie or like the Atkins bar and stuff like that.

But again, what we're dealing with here is somebody who is traveling and really pressed for keeping any type of solid food on hand that they can rely on being gluten-free, and it's not going to go bad, and it might actually taste good. And so those would be some good options; the Paleo brands cookie would be a good one and that Atkins peanut butter cookie or peanut bar thing I think. And I think those would be pretty good. They're pretty clean. And those are things that I've eaten, and I haven't felt like garbage afterwards.

Andy Deas: Yeah. Someone at the gym let me try one of these Tanka bars. Have you had these?

Robb Wolf: The Tanka? No, no.

Andy Deas: Yeah, it's -- they wouldn't work for this gentleman, but it's basically a buffalo with dried cranberry.

Robb Wolf: Hmm. Oh, I've seen those.

Andy Deas: Yeah. They're actually pretty tasty, but -- yeah.

Robb Wolf: US Wellness Meats has a pemmican bar, and I can eat me some fats, but the pemmican bar I almost gagged it back up. And I want to give it a shot again because I'm just like, you know, a stick of fat and blueberries and meat just seems like it should be a good idea. But I was at Eva T's place for a weekend, and, like, she had a couple of them. She's like, "What do you think about these?" I'm like, I really -- I ate it all just to be a good little soldier, but man, it was rough.

Andy Deas: Yeah. I bought a box of those a few years ago, and I remember biting the first one I don't know what I was expecting, but it wasn't what I got.

Robb Wolf: That was not what you get. Yeah, yeah. Just the consistency and the shape, I was thinking like a Charleston chew bar.

Andy Deas: Yeah.

Robb Wolf: I was like "Oh, money," because I used to like those. And yeah, it was absolutely nothing like that, yeah.

Andy Deas: Yeah. Cool. All right. Moving on. "Hi, Robb." This is from Adam. "I'm really trying to focus in on this sleep quality issue. I just finished Lights Out, and it's made me way more paranoid about sleep than you had. I'm wondering what, beyond avoiding caffeine (never after noon) and sleeping in a totally dark room (installing blackout curtains tomorrow night, finally), if any, evolutionary anthropology angles I can work to get more and better sleep. I

I'm sleeping around 8-10 hours most nights a week, with no alarm. I've put yellow legal pad paper around my reading lamp as a bootleg filter for blue light and switched to a Kindle from my iPhone to avoid that stimulus as well (whilst still enjoying the fruits of tech dweebiness). I'm a paradoxical responder to magnesium, so that angle is unavailable to me. I do have it with lunch. Beyond any simple things I may be missing or unaware of (or have forgotten, I originally listened to the first 37 podcasts in 2 weeks and I don't know how much was lost as runoff)."

Robb Wolf: There's probably some brain damage. We need an intervention there.

Andy Deas: "I'm also curious about hunter-gatherer sleeping conditions. I imagine they didn't have mattresses, though from watching Man vs. Wild I'm sure they could've come up with some decent stuff if they had an inclination to. Mark's Daily Apple did a series about this a while ago, but I didn't glean anything useful from it. I have a cheapo IKEA foam mattress that's about four years old, currently on the floor, but I may be in the market to make an affordable change. Any advice? Many thanks."

Robb Wolf: Wow! That's a lot of ground to cover. The red tinted like rose-colored sunglasses are another way to minimize blue light absorption and kind of that stimulus that you get, but he's really covering all the bases with that. A really good mattress is a good idea. I kind --

Andy Deas: But firm. But firm.

Robb Wolf: But firm, yeah. I would be on the firm side. We bought a mattress a while back, and I thought it was pretty firm, and I thought it was pretty high-end and then we went on the road and my back and my neck got better got better while I was on the road despite sleep deprivation and all that sort of jive. I'm not a huge fan of the posturepedic stuff, like the memory foam type stuff. I think it feels pretty good initially, but I think over the course of time, I actually don't think it bodes well for your orthopedics and the memory foam people will probably come shoot and kill me. But I think Kelly Starrette kind of backs this up too. So I would look for a really good quality mattress but something that....

Andy Deas: Robb Wolf.

Robb Wolf: We had the full system meltdown on that.

Andy Deas: Yeah, I don't know what happened. I think -- I was just going to cut that show forever right there. That was the end. Robb Wolf was in the middle of answering a question. We never heard from you again.

Robb Wolf: Perfect.

Andy Deas: The last thing we heard was you talking about kind of a harder mattress -- firmer.

Robb Wolf: Oh, I just go on the firmer side, yeah. I'm almost at the point where sleeping on the carpet with a good carpet pad underneath it is almost better than a shitey mattress.

Andy Deas: Yeah. And I would actually -- I had a friend in high school totally unrelated that had a bad back, and he transitioned to sleeping on his back on the hard wood floor, and after a period of about a year he never went back to a mattress. So like 15 years ago, still sleeps on his back on the floor and he raves about it.

Robb Wolf: Yeah, yeah. I could totally see that.

Andy Deas: Yeah. So man, I think everything else for the most part is covered although hopefully you did get your blackout shades installed because I think that is the money.

Robb Wolf: Yeah. I'm so bummed that it took us as long as we did to get that in our second place. Normally, I would just kind of like Kentucky trailer park the place and put aluminum foil up, but Nicki wouldn't let me do that when we bought a house, so I paid for something nice, and then the nice fix ended up being pricey.

Andy Deas: Can I take credit for goading you into that, Robb?

Robb Wolf: Were you the one that finally goaded that? I guess you were.

Andy Deas: I was there.

Robb Wolf: Yeah, yeah. You're good at goading, man. You're large, and you're goad worthy.

Andy Deas: And obnoxious, yes.

Robb Wolf: Yes.

Andy Deas: All right. Moving on. Now, we got a question from Michael, "First off, a big Thank You to you and Andy. I've listened to all your podcasts and read your book. One topic I keep hoping to hear re-addressed is from episode #36 about a member being able to tolerate dairy post-workout with no problems but it destroyed him any other time. I've noticed this same exact thing. So you got anything? I ask because I've been considering using whole milk and/or whey post-workout. I'm 31, 5'4, 135lbs, I'd guess 8-10% body fat (have veins at my boxers. Yeah, too much information) have been doing Paleo for almost four years now and do CrossFit/starting-strength/ring-work/intervals/et cetera, but recently made quite a few tweaks (Less CrossFit, more sleep, more coconut). Thanks to things I've learned from you. Thanks again."

So any thoughts on this, Robb? I think we've still never resolved this one.

Robb Wolf: I know for a fact that all kinds of transport mechanisms are up regulated post-workout, but my understanding of that stuff was -- it was happening more on the cellular side of things and not like on the GI tract side of things which seems to be more where these folks are saying that they're not getting lactose intolerance type stuff. So it's still kind of new to me, like, I've dug around a bunch in the literature, and I just haven't found anything that seems real compelling, like you get an uptick in lactase enzyme activity post-workout. I'm just not finding anything like that.

So I don't know. It's kind of one of those N=1 type things that's pretty interesting. I don't know if there are some other factors going on there. I just -- I don't know if -- if the main problem has been related to gas and bloating from lactose intolerance, I just don't know why post-workout you're not seeing as much of that, unless there's some up regulation in the processing of splitting of the two galactose molecules that make up lactose. I just don't know.

Andy Deas: All right. Right on. Next, we got a question from Meredith, "I started following the Paleo diet about five months ago. I love it and I have seen great results. However, I have noticed that recently I have started to bruise much more easily. I was wondering if this could be linked to my diet and if so, how to correct it. Thanks."

Robb Wolf: Usually, the bruising is more like a lack of phytonutrients, B vitamins, vitamin C, which normally with Paleo you would see an improvement with that. I would maybe do a little bit of playing around with the NOW Foods Super Enzymes and make sure that digestion is good. Is the food coming out digested or is it coming out kind of the same way it went in? if there's like a digestion or like a hypochloridia low stomach acid kind of thing going on, then you may -- even though you're eating good food, you may not be absorbing good food, which is always that thing to keep in mind. It's not just what we throw down the gullet. It's actually what we absorb into our system that really matters. So that's a little paradoxical. I would do a little tinkering on the digestive side, like again, the NOW Foods Super Enzymes, maybe some probiotics and that sort of stuff.

Andy Deas: Yup. Cool. All right. Next, we got a question from Jared, "Love the podcast. I was wondering about autolyzed yeast extract and also marmite/vegemite. I see products with autolyzed yeast extract labeled as gluten-free. Are gluten and glutamate the same thing at the end of the day?"

Robb Wolf: Gluten and glutamate are not the same thing. Glutamate is just glutamic acid, and that should be okay especially if you've got some sort of hydrolyzed yeast deal. Some people do have some yeast sensitivity so I would just be aware of that. Some people do fine with it, but it -- I've never tried vegemite so, someday I guess. I'll warm up to it. I will not be having a sandwich with it though. I'll probably dunk something in it.

Andy Deas: That sounds horrible. Next, we have question from Savage Canuck, subject line breakfast panic, "Guys, I love the podcast keep up the good work. I've been working on my diet for the last few months and I'm not going to say that I'm 90% Paleo or any crap like that. I'm working on it, that's all. I'm in the military and I get sent away periodically. When I'm away it's usually pretty easy to find good choices for lunch and supper -- salads, meats and veggies, but breakfast is a problem for me. I find that the choices on offer are usually carb heavy with eggs, bacon and sausages being the only non-bread, pastry, cereal or pancake type items.

The other choice is fruit or yogurt. I recently spent a few weeks away from home eating scrambled eggs every day, usually with tomato or grapefruit, dosed with olive oil and Tabasco. I'm concerned that there is a limit to the amount of eggs I should be eating. I'm sure I was eating up to 15 eggs a week. This can't be good, can it? What should I do in the future? I could probably beg for some scrambled egg whites every other day. Is this a possible solution? Thanks, guys. Congrats on your book, Robb."

Robb Wolf: No, you're fine. What you're doing is fine. Scrambled eggs and bacon one day, scrambled eggs and some fruit the next day, you're fine. I mean the reality is when you're on the road, it's just kind of tough sometimes. I mean if you can mix it up and have like a pork chop or something like that in the morning, like you hit a restaurant, and you can do a grilled pork chop or something. Go for that. But other than that, you're fine. And I mean you can also do like a fruit breakfast or something. Go have a big fruit bowl. I don't think it's really going to stick with you the same way that a good whack of protein and fat is going to, but you could certainly mix it up that way. But if you're concerned about cardiovascular stuff, I wouldn't be concerned about that. I wouldn't be worried at all.

Andy Deas: Yup. All right, Robb, and with that, that is the end of episode 50.

Robb Wolf: Sweet. Whoo-hoo!

Andy Deas: You have survived.



Robb Wolf: And we made it. We're like halfway to 100.

Andy Deas: That's right. We're almost halfway to the end.

Robb Wolf: Whoo-hoo!

Andy Deas: All right, man, well I --

Robb Wolf: Wait, does that mean -- wait, so we're coming up, 52 weeks in a year.

Andy Deas: That's correct, sir.

Robb Wolf: Holy cats! We're coming up on our anniversary.

Andy Deas: Yeah. I don't know what kind of celebration you have in podcast land. I will say on episode 100, the fit cast said Tom Menudo, so I'm just throwing that out there too.

Robb Wolf: I'm sure Tom would love to come hang out with us. All right, Tom, I've talked to massive shite about you.

Andy Deas: So we'll have to think of a way to celebrate our year anniversary, Robb.

Robb Wolf: Okay. Cool.

Andy Deas: Cool.

Robb Wolf: We'll figure something out. Yeah, that will be one year of spewing pseudo science around the globe.

Andy Deas: Yup. And the audio is almost correct now. We don't -- we see very few complaints anymore. It's amazing what -- 50 attempts at something we'll do.

Robb Wolf: Yeah, it only took us about 30 attempts to really even start doing anything to adjust that. So cool.

Andy Deas: Yeah. I feel bad for the new listeners. They're like, "Listen to episode 46," like "This isn't bad." And they go back to episode 2 and they're like, "Man, this sucks."

Robb Wolf: Ooh, okay.

Andy Deas: All right, man, well, I will talk to you next week. Thanks for the time, and that wraps episode 50.

Robb Wolf: Awesome, Andy. Thanks.

Andy Deas: All right. See you, Robb.

Robb Wolf: Okay. Bye-bye.