The Paleo Solution Episode 52

Andy Deas: Robb Wolf, Andy Deas, back with episode 52, The Paleolithic Solution.

Robb Wolf: One year, baby. Whoo!

Andy Deas: In honor of our one year, we decided to play the intro created by our

friend, Scobyone, and Robb and I are not super technical so that was

perhaps the most ghetto attempt to hijack the audio together.

Robb Wolf: Just so folks know, this is as close as it could get to like sticking like a

Walkman with a cassette tape in it next to a boombox, and then trying to create some sort of a radio show off of it. That's the level of technology that we're dealing with on this. But yeah, thanks, Scobyone. That was --

that was awesome.

Andy Deas: And you and I may or may not be technologically retarded or

handicapped. I did not use the retarded word, sorry.

Robb Wolf: No, no, no, you did not.

Andy Deas: Sorry, I did not.

Robb Wolf: You got chastised for that the last time so...

Andy Deas: So apologies again. So Robb Wolf, a full year, man. How are you feeling

about this?

Robb Wolf: I'm shocked. I didn't think we would make it out of the first week. I'm just

stunned, but full steam ahead, man.

Andy Deas: All right. Well, let's go, man. Episode 52. First question from Allison. She

says, "Hi, Robb. You rock! I am a 30-year-old female. I'm new to Paleo and a couple of months in to cross fit. I do three to four classes a week in the evenings. In the mornings, I am an avid Bikram yoga devotee. Yes, that is the hot yoga done in a heated room for 90 minutes. I usually pound water with one packet of Ultima after class to replace my electrolytes. It has no sugar but it does contain stevia. I'm giving this 30-day Paleo challenge a shot as I'm completely inspired by your story (I'm reading your new book). I'm trying to eat as clean as possible. Will the stevia in the Ultima do anything? Thanks for all your useful info to keep

athletes strong. Like I said before, you rock! Live long and prosper, Allison."

Robb Wolf:

I think that little dose of stevia is probably not a problem. If some fat loss was like a major, major concern, then I might say ditch it for the one month deal. But even if that was some other artificial sweetener, a dose that small and mixed into an otherwise pretty good training regimen and going -- she's basically doing a workout doing the Bikram, I don't see a problem with that at all.

Andy Deas:

Yeah. I'm not a -- I don't really like the hot yoga because I don't like to sweat that much, but....

Robb Wolf:

I'm just always concerned about all the other hippie sweat that's around in there. It's definitely a good way to get bendy real fast, but it's -- yeah, I don't know. Especially in Chico, man, when it's hot, it's really hot here. Maybe in the middle of the winter, it's not too bad. But I would want some full spectrum lighting and get a tan while I was doing it.

Andy Deas:

Cool. There you go, Allison. Enjoy your Ultima.

Robb Wolf:

Yup and your Bikram.

Andy Deas:

Yes, yes. Good. Next, we got a question from Jennifer. She says, "Okay, I'm sure you've already covered this, but I just started the Paleo way, and I have a question about which seeds are okay. I'm finding tons of info about nuts, but not much about seeds. If you've covered this in a podcast, just let me know which one, and I'll look it up. I've downloaded all of them, but have only gotten to #11 so far. Thanks so much."

Robb Wolf:

Yeah. I mean the deal with the seeds, it's similar to most of the nuts. They tend to be a little bit heavy in omega-6's. There's definitely some issue of a little bit of gut irritation from lectins. If you're going to do them, I would just kind of rotate through different seed options, and then sprout them. If you can sprout them ahead of time, that's great. A really good way to do that is basically soak them overnight, and then either put them on a cookie sheet and dry them for a couple of hours in an oven on low with the door left ajar a little bit or it's definitely worthwhile to get a food dehydrator, and then throw them in a food dehydrator and dry them out. They taste a lot better. They digest a lot better. And then the lectin issue definitely gets decreased in that regard. But I would just use nuts and seeds sparingly because of the omega-6 content.

Andy Deas:

Yup. Cool.

Robb Wolf:

Yeah. Next, we got a question from Angela. "Hi, Robb. Thanks for all of the great information, you have changed the way I eat and look at food in general. I won't bother you with the fluff and get straight to the question. My husband and I are in our 40's and will be adopting a baby. We don't have any other children as we met and married late in life." I'll pause. Are we saying 40 is late in life, Robb? I'm saying going to live to be like 120, that's not late in life.

Robb Wolf:

Since I'm knocking on the door to 40, it's a little bit -- it's like, "Ooh, middle age."

Andy Deas:

I know. I feel young so.... "Unfortunately, with adoption breastfeeding is not an option. I have done some research on alternatives to conventional baby formula as the stuff in the store has all kinds of crazy ingredients that I and my husband do not and would not consume ourselves, and we certainly do not want to feed that crap to a baby. Most of the alternatives suggest raw cow's milk (this is a bit scary) or goats milk (from what I understand the closet to human breast milk) with additional vitamins added.

Needless to say, I am super confused and a bit overwhelmed by all the information and could use a suggestion from a pseudo scientist. Been eating Paleo for a year and love it. The husband has taken off all medication due to the lifestyle change, and we are fit and super happy and want to give our baby the best chance at being happy and healthy and one day fit. Thanks so much. I am off to buy the book. Been a listener since episode 10. Angela and Mike."

Robb Wolf:

Man, beautiful situation the fact that they're adopting and all that stuff, definitely some challenges involved with the feeding and watering of the little one. Weston Price Foundation has some pretty good recipes on making some at home formula options. I would definitely give some of that a look and see which of those look pretty good. I think playing around with some of the goat's milk or the grass-fed cow's milk is definitely an option, and see if you can track down any OBs or midwives who are a little bit alternative in your thinking and see what they have experienced in that regard. I think sniffing around some of Weston Price forums though you can track down some pretty good information on the alternative formulas.

So that would be the direction I would go. And worst-case scenario, although the regular formulas are obviously far from optimal, you just do the best you can with that until you can get the little eating real food, six

months down the road, something like that. And then you start preparing some of your own baby food using a pressure cooker, puree meat and vegetables and all that sort of jive, and then looking at some probiotics to help ensure that the gut is good and healthy with the little one. So definitely good luck with all that. Whatever you end up doing, it would be really, really great for you to kind of document and track that information, and if you're game for writing it up and doing a blog post, like I think it would be really, really helpful and very informational for a lot of folks.

Andy Deas:

Yeah because I don't think we've actually had a question related to this yet. This is a new one.

Robb Wolf: There have been a few on the blog itself, but we definitely haven't

covered in the podcast so....

Andy Deas: Nice.

Robb Wolf: Yeah.

Andy Deas: Cool. Good question.

Robb Wolf: Totally.

Andy Deas: Next, we got a question from Cindy. She says, "Hi, Robb. I am a faithful

listener to the podcast and just received my copy of the book. Thank you for all you do. Some background, I am a 49-year-old female, CrossFit two to three times per week, cyclist, Paleo lifestyle. Had thyroid cancer seven years ago, thyroid removed. When they sent the organ to pathology they found I also had Hashimoto's disease. I had been treated for years for hypo thyroid. My question is this. You often talk about not eating eggs and nightshades if you have autoimmune issues. If my diseased organ was removed seven years ago would this still apply to me? Again, thanks

to you and Andy for the great work."

Robb Wolf: Yeah, definitely it still applies because that autoimmune potential grows

out of potentially leaky gut kind of scenario. And so we've kind of explored that with some type 1 diabetes in children and then understanding that they have some gut pathology brewing. They tend to have very high frequency of celiac or pre-celiac type symptoms. I wrote about this in the book, and then we've talked about it in the podcast a couple of times. If there's any type of autoimmune condition brewing, and so obviously she had Hashimoto's in the past, the only reason why the Hashimoto's technically is gone is because the thyroid is gone, but

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there's still that autoimmune potential brewing in there, and very high likely, that there is some systemic inflammation that's growing from gut pathology.

So I would definitely go for the full grain, legume, dairy free, cutting out also nightshades and eggs, nuts and seeds, and just see how you do. One thing that you could definitely do is check, C reactive protein which is a general marker of systemic inflammation. It's not giving you indicators of some of these other common autoimmune markers like ANA, antinuclear antibodies, and there's a whole slew of different autoimmune indicators. But the C reactive protein will give you a pretty nice indicator of basic inflammatory status. And so that coupled with how you're feeling, should be a pretty good indicator of whether or not, say, like eggs are problematic and whether you want to reintroduce some of these other foods. But I would give it a shot for sure.

Andy Deas: Cool. Yeah, I don't want to give up my eggs. I was just going to say that.

Robb Wolf: Well, Andy, your thyroid is probably still okay. We'll go with it for right

now.

Andy Deas: My adrenals are not.

Robb Wolf: Yeah, your adrenals are gone, but yeah, yeah.

Andy Deas: My thyroid is okay. Thank goodness. Next, we got a question from Krista.

She says, "Feel free to ignore this question, but your previous podcast mentioned that hormonal birth control almost always limits the amount of fat loss women can achieve. I know there are plenty of other side effects that hormonal birth control can have, but what about a non-hormonal method like the copper IUD? Since there are no hormones, it seems like you would be metabolically unaffected. This sounds like the ideal option for Paleo eating women, but are there any additional things to worry about? Thanks. And don't stop the 'holy cats.' They're my

favorite part of the podcast."

We will not stop --

Robb Wolf: Andy's favorite part of the podcast is "See you next week."

Andy Deas: Well, the "holy cats" is part of the vodka drinking game. So someone out

there to do a shot so we can't get rid of it. And frankly, that's one of the Robb Wolfisms that hasn't been overused yet. So I'm really onboard with

holy cats.

Robb Wolf: Anything that irritates you less.

Andy Deas: That's true.

Robb Wolf: Like the six listener deal is just massively irritating to you.

Andy Deas: Well, maybe it's because I love cats, right? so....

Robb Wolf: So back to the actual question. Yeah, the copper IUD is definitely a good

option in this regard. The only thing in my experience that I could see as a potential problem, I had a girlfriend in high school who ended up developing an astrocyte brain tumor, and she eventually died from this. If you do a search on the RobbWolf.com blog Cancer in Ketosis, you'll see a little bit about that whole story. And the one thing that they found in common, when she and her mom went to Children's Hospital in UCSF for chemotherapy, there were several other kids about her age who had

astrocyte brain tumors.

The one thing that everybody seemed to have in common was that all of the mothers conceived these kids with an IUD. It was theorized that there could have been some -- the way that the IUD works is it creates a low level oxidative stress in the uterine environment that makes it uninhabitable or disadvantageous for an egg to implant. So there was thought that potentially there was some oxidative damage that could have affected the DNA in such a way that the end-result was astrocyte brain tumors in these kids. I have not followed up on that, checked in the literature. This is just pulling from memory at this thing that happened when I was 16.

So that's the only thinking that I could really say that pops out on this is that potentiality. And I don't know if the copper IUD has been improved since that time, such that say, like conception rates are further decreased or -- I'm not sure beyond that.

Andy Deas: Good. Good question. Cool.

Robb Wolf: Yeah.

Andy Deas: A question from Alex. "Hope this is an appropriate forum to send in a

podcast question, since Robb Wolf is, I'm guessing, currently in the process of receiving a much-needed facelift." So apparently this was

when Robb Wolf was down for like a day.

Robb Wolf:

Okay. There was panic and pandemonium among six people so....

Andy Deas:

And I'm not sure if -- I think this one probably came through via Facebook to me, but who knows? Anyway, I can't remember anymore. "I guess you have to look the part in order to spread the psuedo-science. Anyways here's my question. I have a tendency to burp frequently after I eat. It happens every time and no matter what I eat. I eat a pretty solid Paleo diet. Low to average stress level. Sometimes it is immediately after eating and sometimes it is hours later. It even starts sometimes when I wake up before eating or drinking anything.

Here's what I've tried so far: drinking raw apple cider vinegar mixed into water before each meal, digestive enzymes, and chewing my food really, really, good. None of this seems to help. From my research it seems like it's possible I could have some kind of candida overgrowth, but I don't know for sure. Do you have any thoughts on this, and what could be done to help or alleviate it? I have heard how critical gut health is so I'm a little concerned about this, and it's been going on for several years. Thank you."

Robb Wolf:

Yeah, it's the only thing that really pops up in my mind is the gut health issue. You could try going really, really low carb. Some of the Polaquinesque gut health protocols involve going really low carb. Gosh! I'm trying to remember -- Scott Hagnas of CrossFit Portland had some protocols that he used in case people had some sort of like -- it wasn't necessarily candida overgrowth, but if there was some bacterial overgrowth, you have both beneficial and maybe non-beneficial flora in the gut. And definitely, based on what type of critters you have, you can get different type of gas formation. And so doing a low carb diet, supplementing with a really solid probiotic like Jarrow Formulas, Jarro-Dophilus, which you can get just about at any health food store coop kind of scenario.

The whole food should carry them. I don't thing Trader Joe's has the refrigerated variety. It definitely needs to be refrigerated. But I would tackle this maybe from a microbial change kind of perspective, trying to change the gut flora so you go low carb diet for about 30 to 60 days and really supplement aggressively in the morning with a good probiotic and then slowly reintroduce the type vegetable matter, fruits, yams, sweet potatoes, all that sort of jive and then seal on the way if you're got any type of resolution with the problem. Ideally, with the low carb diet then we should see some improvement with the burping just from that. And if that doesn't work, I don't know. Any thoughts, Andy?

Andy Deas: No. that's a tough one. And actually, I like that Alex put all the things he

tried in there because those are things I think we probably would have

tried what he suggested.

Robb Wolf: Yeah, yeah, totally, like chew your food better, try some digestive

enzymes, all that jive. So this seems like a good spot to go. I've heard using chlorophyll in between meals. Liquid chlorophyll can help a little bit and stuff like that. But even then, I think that it's largely trying to modify either the gut flora or some of the activity to the gut flora. So that's the

direction I would go with it.

Andy Deas: And sorry, I was blinded by the email in the queue that claimed that

claimed it was better than the NorCal Margarita. So we'll reveal that

recipe at the end of podcast.

Robb Wolf: Oh, that's brazen. That's brazen.

Andy Deas: Yeah, I've never even considered trying it.

Robb Wolf: Okay, okay.

Andy Deas: So we'll get there. Exciting. Exciting stuff. All right.

Robb Wolf: Indeed.

Andy Deas: A question from Jenn. This is a Facebook question. So hi, Jenn. She says,

"Hi, Andy. I am a faithful listener to the podcast and have learned tons about nutrition and fitness from both you and Robb. I am completely at a loss for what to do and have decided to defer to the experts." I hope

you're not talking about Robb.

Robb Wolf: Yeah.

Andy Deas: "Since my life --

Robb Wolf: Because if we become the experts in that. The plug that the universe is

plugged into just got kicked out of the wall from somebody walking to get

a cup of coffee. It's all going down now.

Andy Deas: It's all going down from here. "Since my life has completely been changed

already by adhering to your recommendations, I completely trust your opinion. I sent my question to Robb, as well, but I know he has loads of emails to go through too, so I thought maybe a multi-directional assault

might be the best way to see if you can offer any insight. I really appreciate anything you and/or Robb can offer.

A little history: 5'8", 185-pound female, diagnosed three years ago with functioning micro prolactinoma, which has remained stables, monitored by annual MRI's, after a MEN1 and pancreatic cancer scare, was put on a three ounces a day protein restriction and promptly gained about 25 pounds, moved to a new city, got a new doc, who promptly told me to 'Stop doing that!' which I gladly did, do CrossFit-like workouts two times week and dedicated strength days four times a week.

I also do a 60-minute cardio type class at least two times a week in the form of spinning or kickboxing. I did 11-13 block Zone for about 6 months and then switched to about 85% unweighed/unmeasured Paleo. Last time I tracked, I was approx 1500-1800 cal (which seems like a lot to me) with about 50% of cal from fats, 30% protein and 20% carbs. Went from 240 to about 185-190 over the course of 1.5 years and saw really great results in the way of performance and blood work, reversing lots of metabolic issues.

Problem: I'm currently on 2 milligrams of cabergoline a week that I take half on Monday night, half on Friday night. Have been adjusting medication every three months, but have been unable to get my prolactin down to a normal level. I was 74 when first diagnosed and has been as low as 41, but is currently back up in the 50's. Still having symptoms of high prolactin but my cycle is relatively normal.

Question: I have been stalled out for about 5 months. I continue to make progress, performance wise, but this is not really my primary goal at this point. I have been unable to lose more than about 4 pounds in that time. I want to lose about another 35-40 pounds. Do you think this could be the result of the high prolactin? The medication? My endocrinologists are very unwilling to reduce or remove the medication. Or do you see a completely different problem all together? My trainer and I have explored everything to start moving forward again, but are completely stumped. Please help!"

Robb Wolf:

The prolactin could definitely be derailing things a little bit. It's interesting when I was researching this. There is some linkage in the literature with this type of tumor and some autoimmune issues like very high linkage with Hashimoto's thyroiditis, some thyroid autoimmunity, also some Graves' disease type stuff. So I think there might be some autoimmune potential here. And this particular type of tumors has a kind of wacky tendency of coming in and going away. And so I would probably give a

shot at really getting aggressive with grain, legume, dairy free. Run it for a good 60 days, and see if you don't see some improvement with the symptomology there, both with the prolactin itself and just with the overall weight loss issues.

So I think it would definitely be worthwhile to give that a go. From there, if you wanted to further to tweak things, I think going a little bit on the ketogenic side becusae even though this type of tumor is not shown to respond super well to a ketogenic state, it definitely can help kick things over. The protein intake is probably okay. you could even cut that down a smidge, a little bit more fat and then limit to carbs a bit more, and see if grain, legume, dairy free really aggressive autoimmune protocol or also cutting out eggs, nuts and seeds and nightshade type stuff and then a ketogenic type deal all in concert would be interesting to see what you could get out of that.

Andy Deas:

So there you go, Jenn. The question has been answered. Robb Wolf will delete that email from his queue, I promise. Just messing with you, Robb.

Robb Wolf:

Yes.

Andy Deas:

Just so you know, Robb. In the question queue alone from your blog since we switched, we have 500 questions. That doesn't include the hundreds of questions on the blog posts, blog itself. So we're a little behind.

Robb Wolf:

We might need to start doing two podcasts a week, but I don't know where we would fit that in. we barely get the one done.

Andy Deas:

Well, you'd have to admit there's more than six listeners because now I have proof.

Robb Wolf:

There's possibly more than six listeners, but I'm standing by that.

Andy Deas:

Moving on to a question from Cybil, "I'm going to go back to episode 22, item 4 to recheck that this wasn't addressed, but since I listen to all the robcasts and do my best to remember them verbatim, I don't think I will find the answer. My husband and I own Pikes Peak CrossFit and we are loud and proud about our Paleo ways (so much so that Dr. Cordain will be speaking at our gym), hoping to lead our clients (and anyone else who will listen) to a gluten-free life full of longevity, wellness, and happiness. I think I've got a miracle brewing.

Background: My aunt who is 37 years old found me on Facebook and saw that our 10 year old daughter has type 1 diabetes. She inquired how her

blood sugars are because she too has diabetes. I told her how well my daughter is doing and in large the success is due to the Paleo way of eating. She is asking me for help with her multiple illnesses, by way of the Paleo Diet. You keep posting pictures of delicious looking food. Once I heard her list of ailments, including diabetes (insulin dependent but late on-set, maybe type 1 1/2?), fibromyalgia, osteoporosis, arthritis, pretty bad neuropathy, and..." what is that?

Robb Wolf:

Tremors.

Andy Deas:

Tremors. Oh, sorry, sorry. "Yikes! And spent 2.5 minutes on the computer I asked her if she has had her gall bladder removed. As I suspected, yes, last year, because the doctors thought it might be part of the problem. Bummer. Question: I have never advised anyone who has had their gall bladder removed. Is there issue with suggesting they eat a Paleo-healthy amount of fat instead of low fat when their gall bladder is gone? How to proceed, the much-respected Robb?"

Robb Wolf:

You could tackle this a couple of different ways, one is to eat a little bit on the higher carb side using yams, sweet potatoes, squash, all that sort of jive. But no matter what you do in the scenario, if somebody has had their gallbladder removed, I would really recommend a couple of different avenues at digestive support. One is some sort of like NOW Foods Super Enzyme that has protease and lipase and all that sort of jive, some oxfile also with every meal, and that will help to emulsify fats. And whether the reading high carb meal or a higher fat meal will definitely help you to get more nutrient content out of all those meals, and then definitely doing some sort of a solid probiotic, and then just encouraging good chewing and all that happy type of stuff, not drinking a lot of liquids with her food.

She definitely wants to start optimizing absorption and definitely, definitely it's critical that she remove the Neolithic foods because she's obviously got a bunch of systemic inflammation going on here, obviously has some gut pathology brewing. This is usually what's the preemptive problem with the gallbladder issues. So nowhere to go but up with this and Paleo will definitely help a lot.

Andy Deas:

You know what I like, Robb, is all the people that will get to this question where they say, "I will be buying the book soon." Just buy the book. You don't need to tell us.

Robb Wolf:

They're just feeling guilty. They're feeling guilty.

Andy Deas: Like I'm going to put a question in and tell you we're going to buy the

book. That way maybe you'll answer it quicker.

Robb Wolf: Right, right.

Andy Deas: All right. Question 2 from Cybil, "Total shift in topic, why are women told

to eat grains due to their estrogen striping nature? I've heard this two times; first from a friend of a friend recovering from breast cancer who she was trying to get to try Paleo (and couldn't because she needs lots of grains for their estrogen striping properties) and second from Jillian Michaels talking about 'healthy, whole grains' and how all women need them for their estrogen striping properties. WTF? I will be buying the

book soon."

Robb Wolf: Thank you. Thank you very much. This one was a little bit of an old question. Professor Cordain did his talk at Pike's Peak and apparently it

was a rousing success so that was totally cool that they hosted him, cool that Professor Cordain came down the hill to do that. So that's super cool. Loren is getting out on the road and hitting some CrossFit gyms and some other gyms much more frequently now so that's super cool, really

huge resource. So that's all that stuff.

The deal with the grains is just basically any type of fiber combined to bile or bile salt type items and can pull this stuff out of the -- basically carried out in the feces. And what happens is that a number of hormones get detoxified or partially detoxified by the liver, and then they get associated with bile salts and then this is a way that we can remove different types of chemicals out of the body. This is one of the detox pathways in the body. But the thing is is that whole grains are not the only item in the world that contains fiber that bile salts can adhere to.

Flax seed is really good for this. It has some mucilaginous components that really bind to these estrogen containing bile salts and whatnot, and I think it has some other constituents that directly bind to some of these either spent hormones or quasi spent hormones. If you don't have this stuff, the fiber, then there's more of a likelihood of what's called enterohepatic reuptake which is basically a circuit between the gut, the intestines, and the material that gets absorbed out of the intestine which then make its way to the liver, but then the liver theoretically can concentrate and excrete this stuff into the bile salts which then makes its way into the intestinal tract.

So you have kind of a circuit here, and it's either a close circuit if you're not excreting materials or it's an open circuit materials via the feces. And

so if we've got more fiber containing items, then we're potentially pulling out some of these spent hormones like the estrogen and this would be beneficial from the perspective that if you had some sort of estrogen dependent or stimulated tumor, then decreasing estrogen levels would be beneficial, but it also neglects the fact that or the consideration of why do we potentially have too much estrogen to start off with which usually is related to some dietary estrogen sources like soy, xenoestrogens from plasticizers, and then also just problems with liver detoxification with all these items, and then also looking at increased problems with androgens from decreased sex hormone binding protein which is a byproduct of increased insulin. I cover all that stuff ad nauseam in the book.

So again, the standard Paleo approach is low to moderate carbohydrate intake, lots of seasonal local fruits and vegetables, carbohydrate intake based on what your activity patterns dictate, ideally grass-fed wild cod fish, all that sort of jive. And then a lot of these problems just in mass are dealt with instead of doing kind of a reduction to this deal and recommending grains for this kind of reductionist approach of thinking about reducing estrogen levels, but there are lots of other ways to do this that also don't damage to the gut, don't expose us to too high of carbohydrate intake and some other problems.

Andy Deas: And please note, do not listen to Jillian Michaels for your nutritional

recommendations or possibly for any recommendations at all.

Robb Wolf: Well, you could maybe make that argument but....

Andy Deas: Although her TV shows are funny.

Robb Wolf: Yeah, they're funny, yeah.

Andy Deas: And scary. So anyway, good questions. Go by the book.

Robb Wolf: Yeah, yeah. Next, we got a question from Barry, "Hi, Robb. Just got your

book in the mail this morning and cannot wait to start reading it. I was at your seminar at Potomac CrossFit in July. I hope that you can answer the following questions I have. Just some background on me. I am an owner and head coach of a CrossFit affiliate outside of Philly. I teach over 20 classes a week and the strength and conditioning coach for a local high school football team. I have been CrossFitting for the past four years and this year I have really gotten burnt out from training. I have done a few Catalyst Athletic lifting cycles as well mixed in there. I am just burnt, beat up from CrossFitting, and have lost the desire to train. I don't feel like

training in any aspect.

I follow a 90% Paleo Diet and get 8 to 9 hours of sleep per night and take your recommended fish oil dosage. Here are my questions: Is this common to lose desire to train because of coaching all the time and being beat up from training for a long time with that intensity? Should I take some significant time off from training to let my body heal completely? What can be recommended to be able to start enjoying training again? I appreciate your time and best of luck with your book. I know it will be a success."

Robb Wolf:

Wow! I've never heard about this before.

Andy Deas:

This is like stunning in this community. I would never even have this discussion like 30 times a week, I swear.

Robb Wolf:

The first question, "Is this common to lose the desire to train because of coaching all the time and being beat up from training for a long time in that high intensity?" Absolutely. It's interesting because the CrossFit stuff I think strength and conditioning in general, but CrossFit is really one of the really cool things about it is because it's broad. Strength and condition to the masses, and because it's -- mainly the idea of kind of owning your own gym or owning your own strength and conditioning practice, very accessible to a large number of people, then you have people jumping into this.

You have people from wide variety of backgrounds, and they're getting in and doing this stuff, and usually they're kind of secondary love -- like what was going on with me when I was doing chemistry, which was I would do enough chemistry to not get fired, and then spend the rest of my time surfing the internet reading strength and conditioning and nutrition stuff. And so I think that that's a common deal, and so you have people who are very passionate about training, about athletics and nutrition and all this stuff and they get in, they start doing it. And the reality is that like running your own business, doing a training practice, it's a lot of work. And it's just a huge deal, a huge undertaking especially if you're kind of the sole prop and the main person doing it.

I was really, really lucky in that Nicki came on the scene very early in our gym's development and started helping me with a lot of the backend. But we had no business background when we started this thing. So it was kind of trial and error, getting some input from some of our clients who had very successful businesses. And over the course of time we've been able to create a schedule that's actually livable. But this is totally normal

and there are a lot of layers to it. You were just in the gym all the time in this scenario.

You're doing your own training, trying to stay fit and stay active and stay healthy and you want to stay competitive with the sport of fitness and all that. And then you've got the deal of just training people, so you're in the gym a bunch. And then you've got all the back end element to deal with which is -- it's a lot. It's time-consuming. And the thing is, is that folks in this situation and it's interesting you get three, four, five years into this, and you haven't taken a vacation; you haven't done anything new. There's nothing like different. There's nothing that's not gym related in your world. Your totality of your existence has kind of narrowed down to this very narrow frequency band, and there's nothing new coming into it. And so you've got different layers of different potential burnout like the intensity and the volume of the CrossFit training.

We've talked about this a ton. If people aren't putting some sort of periodization into this, then you're going to get destroyed and going back to that Josh Everett learning this stuff that he shared with me which was that he had a middle distance running coach that he really, really respected. And this running was of the opinion that you have about 12 Max Efforts in you a year, and some of those need to be spent in practice, some of them in competition. But when you view that perspective that maybe you've only got 12 white buffalos in the sky, essentially like one Max Effort a month with regards to your training, and then when you look at the way that people are actually approaching their training, they're doing 12 Max Efforts a month, not a year and oftentimes, 20 or 30 Max Efforts a month. You just can't sustain that stuff.

So that's kind of number one. It's massive potential for overtraining on the training side really big potential for just general burnout from the coaching load and from the demands of running a business. And this is where it's really important for folks to think about creating systems and scheduling in downtime, going on vacation, making the vacation nonwork related. So your vacation is not going and doing a seminar. Their vacation is like Nathan from last week and going to Little Corn Island which is as remote location in the Caribbean as you can possibly get, and there's no cell phone and no internet, and you just check out and you're done. And you need to do that probably once a quarter for at least three to five days or you're just going to be cooked.

And then that goes into the question 2, should you take some significant time off? Yeah, you definitely should. And again from Josh Everett when he did a write-up on this for the performance menu, he took a month off

of doing any type of physical activity, and he said the first week he felt terrible, the second week he felt great, the third week he felt so good that he couldn't imagine why anybody would ever work out at all. And then by the fourth week, he's started feeling not so good again, and it was just kind of this sense of like, "Man, I really need to get in and start doing some training, " and then he got in and started ramping himself up, and I think he's had a lot better go of things because of a little bit of planning and some unload and periodization and whatnot. And then what could be recommended, he started doing the training again.

You've got to have some downtime, and part of that downtime is like in your life you've got to find some other things that you do. For Nicki and I, we've got in, and we've started doing some Italian. S he's been teaching Italian. We just spent a week in Italy on the back end of the Denmark trip, and that was awesome. All I did was work on learning Italian. And we've picked up some dance classes, and we've just made a do or die proposition that every day we have to spend at least an hour outside stomping around.

We're really lucky in Chico that we go just a minute or two out of our house, and we're into some kind of greenbelt area, and we're just outside and we're away from everything. And all of that stuff has really improved the quality of our life and we're really more motivated to do the things that we need to do related to the gym, related to Nicki's business development seminars, related to all the stuff that I have going on. And then we have some new experiences that we bring back to all this.

I love the training and coaching like lifestyle and the whole scene, but anything can be taken too far and you need to find some sort of balance with it. You just have to do it especially if you want to make this something that you want to do for like 10 or 20 or 30 years or something like that versus just being absolutely burned out five years down the road.

Andy Deas:

Yeah.

Robb Wolf:

Any thoughts on that, Andy, having left like a legitimate America job and are now -- you have a really busy training practice now.

Andy Deas:

Yes, so I'm in the -- it's different about the training thing that I'm finding, which I think my total number of hours I used to work was a little more, but the fluctuation and how it breaks apart the day and screws everything up -- like I had a much more structured schedule, and I'm struggling with getting up in the morning, being busy from 6:00 to noon

then having four hours off, and then being busy from 4:00 to 8:30 or something, and then getting up and then doing it again. So still trying to figure all that stuff out and realizing that I didn't have a lot of hobbies in my corporate life, but I did make sure I took my six weeks paid vacation every year which help breaks some of that up. So I need to figure out a way to have to incorporate that into my new world.

And this issue with the CrossFit style intensity, we see this with people that have really low stress jobs and not even those that are running their own business and all that stuff. And so periodization, smart planning and all that stuff we've talked about I think is critical for folks if you want to be training in 10 years or coaching in 10 y ears. If you just want to do it for four years like you said, and then retire and do something else, then go ahead and run yourself in the ground but --

Robb Wolf:

And then you end up like a Bulgarian Olympic lifting coach where you drink scotch all day, and you smoke and you just like curse at people while they're doing their own training. I mean you just go so far out of it and get so scorched on it. I know before we started getting some systems built into our gym, maybe about three years ago, like both Nicki and I were just torched because we were on the road all the time trying to do the blog, both blog for like the RobbWolf.com stuff and the NorCal blog, in coaching.

And it's weird because it just slowly catches up on you because you love doing this stuff initially, and then you come up for air and it's like three years later and you literally have not had a day off, and it's a crusher. And then when you're able to get some balance back into the whole mix, it just so revitalizes you and makes everything so much more enjoyable. It's just really, really important to get that balance going. And this is -- there's tons and tons of folks who run their own business or like they're a physician or have a law or whatever that's very, very demanding and hard to check out of that scene, but it's critical that you get some downtime.

Andy Deas:

Yeah. And I think what's interesting about running a gym, I feel like for a lot of our clients that come into the gym like some of our doctors and stuff, the gym is their downtime a little bit, which is different for Barry that he's actually owning and working in the gym. So I feel like the working out sometimes cannot be as relaxing as it is for some of the folks that are able to put their pagers and phones away for an hour and no one is going to bother them because they don't own the gym and they don't work there.

Robb Wolf:

Yeah. I mean Nicki and I definitely experienced that. When we'd come in to work out, there's a little trepidation because you never know what's going to be sitting in your mailbox. You never know if one of the rollers snapped in half or something. You're like, "Great. Okay. Now, we need to deal with this stuff." So as the owner, it's not that relaxing sometimes. It's still a great environment, but you're still kind of the dude in charge or the chick in charge and you just -- it's a different deal. It's a different deal for sure.

Andy Deas:

Yeah. And then for question 2 with Barry, what can be recommended to be able to start enjoying training again? I think from my perspective maybe starting back after some time off with some strength work and maybe finding things that you like to do that are enjoyable. I'm counting dancing as exercise whether that's like, light walk, something active but staying away from some of the really high-intensity stuff at least for a while until you actually get the desire to go that hard again.

Robb Wolf:

Yeah. And even within that, I would put probably a maximum of probably eight weeks a year, maybe 12. If I were training a CrossFit games competitor which I might be here and there, and I would recommend that they probably not see maximum intensity more than maybe about 8 to 16 weeks a year.

Andy Deas:

Yup.

Robb Wolf:

And so within that what we're doing is we're playing with a bunch of different time indexing and mainly trying to build capacity via the functional perfection, like movement perfection, and then playing with different energy systems in a way that builds and maintains capacity but is building and maintaining and developing a movement capacity and efficiency. And then we look at peaks in points where we need to peak and periodize and get people ready for a competition. And this is no different than what you would do with a wrestler or a boxer or anything like that if they -- let's say like an MMA athlete when they have a discrete dedicated event that they're going to compete in.

So thinking about that, like thinking about a little more from an athletics development standpoint and breaking your year up. Dan John had this great piece on his site. I think it's still around there, the four seasons of training and how he would kind of break up his year and change his stuff up. Michael Rutherford is really, really good at doing that stuff. When it's good weather, he's outside running around doing more cardio type activity, and then in the winter he really gets geeked out on his Olympic weightlifting, and it's a really nice way to break all that stuff up.

Andy Deas: Yup. All right. We're going to move on because we'll hammer this poor

CrossFit thing to death.

Robb Wolf: Cool, cool. But it's good stuff. It's really interesting.

Andy Deas: Oh, yeah.

Robb Wolf: Good stuff. There's a lot going on with it.

Andy Deas: Then if I ever finish my blog post, Robb, we will put it out there.

Robb Wolf: Do people even know you have a blog?

Andy Deas: Well, some people do. They found it on Facebook but --

Robb Wolf: Nice.

Andy Deas: -- you know.

Robb Wolf: Nice. Yeah, lots of people found it on Facebook.

Andy Deas: That's right, Robb. Well, your friend, Amber, is giving it a facelift so it is

cleaned up. We'll talk about it.

Robb Wolf: Okay.

Andy Deas: All right. Next, we got a question from Steve, "I've been doing Martin

Berkhan Leangains style intermittent fasting for a month, and I really like it. On mornings where I work out fasted, he advises taking 10 grams of BCAA's pre-workout, another 10 grams after the workout, and another 10 grams two hours after that, followed by the normal feeding window starting at noon. My question: are BCAAs Paleo? I'm currently using Optimum Nutrition's Instantized BCAA 5000 formula. Other ingredients: maltodextrin, leithin. Allergen information: contains soy ingredients."

Let's just start there.

Robb Wolf: So it -- the other day I forget where it went around, but a guy on my

Facebook and I'm totally blanking on his name right now.

Andy Deas: Dude, I got it right here.

Robb Wolf: Oh, you've got it? Okay. What was -- his name is Roy? Was that the

name?

Andy Deas: John Ryan.

Robb Wolf: John Ryan. Okay. There's an R in it. But read that thing. It's great.

Andy Deas: And he said, "Paleo is a logical framework applied to modern humans not

a historical reenactment."

Robb Wolf: Yeah. And like I -- I'm glad you grabbed that and if you could email it to

me, that would be great.

Andy Deas: Yup.

Robb Wolf: I want to make that my signature and give John some attribution on that.

It's just the most beautifully succinct treatment of that. And so we're using this concept in this framework to try to make informed decisions to improve our lives, and it's not to turn it into a cult. And there's been some element to that too. People come in and particularly if they've had health problems, they do Paleo, they do primal, they get a massive improvement in their health, and then they're like, "Holy cats! This is

totally amazing. It's changed everything."

And then there's this kind of cool community that they're a part of and all that. But then the rapidity that people will attack folks or concepts or ideas that don't fit or maybe aren't perfectly within this whole framework can be really amazing. And I've just been working on a blog -- a couple of blog posts but one of them is just like trying to mellow people out that we don't need to turn this into a cult. It's amazing. It's a movement that is changing the world. I think it's going to transform the

healthcare system.

I think it's totally world-changing and probably one of the only ways that we can blow it up and hamstring it, is if we totally turn it into a fringe movement and make it such that 80% good enough ends up being inaccessible or -- making 80% good not good enough, and so people are just forced to fail because they can't find a level of buy-in. Now, I always am telling people to get in and do grain, legume, dairy free when they're first doing stuff so that we can root out different problems. But then from there we start looking at how to optimize our lives. And so using this BCAA powder is a great way of doing that because it really seems to make the intermittent fasting process work better.

So it's not really a question of is it Paleo or isn't it? Does it help the process? And it seems like it probably helps it. It seems to prevent muscle

breakdown. It seems to maintain some insulin sensitivity, and people are getting better overall results when they're using some BCAAs in their intermittent fasting window. So that's really the more important issue here. And part -- on the other question, does there appear to be any real downside to it? I don't really see much downside to it. A little bit of soy lecithin, I'm just not freaked out by that. A little bit of maltodextrin, I'm not really freaked out by that, particularly with the type of people who are usually playing with this protocol which is a lean, fit, strong individual. And then we just keep our eyes open for, like, do we see any type of increased systemic inflammation or anything like that. And if we do, then we maybe reevaluate. But otherwise, do we look better? Do we feel better? Do we perform better? And if that's a yay, then shoot. Let's just keep rolling with that.

Andy Deas:

Yeah. That's a good question, and I love that quote from John Ryan. It's a very similar to something Kurt Harris would say; although, I don't think he's ever said it as simply as that quote is.

Robb Wolf:

Uh-hmm. That is the most succinct treatment of that, that I've ever seen. It's just genius. It's awesome.

Andy Deas:

Yes. Cool. All right. Next question, a question from Brent, "Good day, Robb and Andy (and you can insert the usual preamble here about how much your info has changed my life LOL). Seriously though, it has solved a lot of my problems. I love your book, by the way, very easy to read unlike a lot of others on the subject. I am a Law Enforcement Officer specifically the Bomb Squad (no stress issues there) and I have preached your sermon to a lot of my friends at work and my gym. Several have now started to buy into this and are making improvements.

The question I have concerns one of these guys. He is very fit and takes his nutrition seriously, doesn't drink, trains smart. Seems all good until a recent conversation we had regarding steroids. He says he has been using testosterone for almost 10 years. He claims there is a lot of misinformation about how safe the stuff is; how they prescribe it for patients, et cetera, et cetera. He brings up points made in the movie Bigger, Faster, Stronger." I think it's Bigger, Stronger, Faster.

Robb Wolf:

Yeah.

Andy Deas:

Anyway, "Not sure if you have seen it. I had no response to this because, well, I am not Robb Wolf. I do remember that in your book you explained that cortisol and testosterone compete, but he replied to that, 'So what? Do I looked stress or tired?' Anyway I thought you might be the best

source for some enlightenment on this issue as I am sure you must come across athletes with this. Thanks for your good work."

Robb Wolf:

Oh, man, this could be a whole podcast in and of itself. Not getting in real deep on this thing right now, but hormone replacement therapy of -- let's look at it from kind of an anti-aging perspective or just throwing the concept hormone replacement therapy out there. I think that when someone -- we'll talk males first on this or right now anyway. I think that when you buy into this can determine some things. I think that you want to be as healthy as you can, as long as you can, operating and running probably sans hormone replacement therapy in general.

But the interesting thing and this is probably going to get me lynched or stoned or something like that, but when you really look at the literature on anabolic steroids and hormone replacement therapy and stuff like that, the main side effect seems to improve the life. Now, people will point out some of these sensationalistic examples of like these WWF wrestlers; this guy killed himself and killed his wife and all this stuff but -- and there are some situations with some bodybuilders kind of going off the deep end. But these folks end up getting into massive steroid use. They start getting into painkiller use and all kinds of other drugs, and then you can make the argument like the steroids are like a gateway drug and all this stuff.

There's a reality that some people have some more addictive personalities and some people have less addictive personalities. But when you really get in and look at the literature on testosterone replacement and anabolic steroid use, they're really not that dangerous. They're less dangerous on a toxicological level than drinking alcohol is. And then there's some really interesting stuff where individuals who have done one cycle of steroids, they end up having better muscle gain and muscle re-growth after periods of down training, pretty much throughout the rest of their life. I've never stepped up and used anabolics.

I've seriously considered it when I was competing in powerlifting and was competing in a drug-free federation, and I -- even as a young man, as a kid, I've had kind of a libertarian streak in that I kind of feel like people should be free to go make their own decisions and do what they want to do. And I'm a big believer in personal accountability and stuff like that. So the main reason that I didn't use anything like this was because I just wanted to see what I could do with my body as it was. Just whatever genetics I had, whatever I could figure out that was non-pharmaceutical intervention, and that's kind of what I wanted to tinker with.

But it wasn't any type of like moralistic stance. It was just really just kind of scientific geekdom wanting to know what I could do. But I think that over time we're going to find that there's a lot of benefit for intelligent use of hormone replacement therapy at appropriate points in the life cycle, and that might even be during the really augmenting or improving the youthful side of the life cycle. And then there was an old Tea Nation piece, Cops on Gear, that was kind of interesting. And when you look at some of the demands that police officers face, you would want to be big and strong and agile and athletic when dealing with a lot of the situations that cops have to deal with.

So I don't -- I don't know. That's a whole other thing and maybe this is getting into like a little bit of an opinion piece instead of a biochemical helpful piece. But I think that by and large, like, the media has really vilified all of this sort of stuff. They totally sensationalized it and taken so much stuff out of context. It's just not even funny. And I think that there's actually a lot of benefit lurking in here, and it's interesting how puritanical people are about this topic. It's kind of shocking to me.

Andy Deas:

It's a good movie though. I like that.

Robb Wolf:

It is really a good movie. Wherever you fall out on the whole thing, like, the dude that did it, he did a really good job with the movie all the way around it. It was very comprehensive.

Andy Deas:

Yeah. And I think there was a part -- I don't even remember if it was in -- maybe it was in outtakes. I don't remember if it was in there, but it could have in there when they were interviewing Jake Cutler, and he was talking about how he likes to ride his motorcycle, but he can only ride for like 90 minutes because he has to eat every 90 minutes of something.

Robb Wolf:

Right, right, yeah, yeah, yeah.

Andy Deas:

And I was like, man, you're committed.

Robb Wolf:

Yeah. Anyway, moving on. A question from Tony, "Hey, guys. Thanks for the great work on the podcasts. I'm one of those geeks who like to know the 'why' behind the 'what.' I'm interested in the hard science. Depending on who you ask or read -- DeVany, Sisson, Cordain, Dr. Harris, et cetera, you see a range of opinions on protein requirements for individuals. Of course, I understand there are always N=1 considerations, but with DeVany you get far less than say a Sisson in terms of a recommendation. Okay, what's the science behind the protein recommendations? Thanks."

Robb Wolf:

Oh, man. I think that's a really good question, and it would be cool actually if we could at some point maybe to get like James Fitzgerald to chime in on this. He has had some really cool observations where he would have some guys who are eating really low protein when he would look at their kind of food logs, but they were muscular, jacked, really athletic. And he would try driving their protein up a little bit, and it didn't really give them any type of boost. And then other guys and gals that were floundering in the gym, not doing all that well, and when they increased their overall protein intake, then they saw a dramatic improvement in the gym. And he attributes it largely to digestive ability like how much you are actually digesting.

So it's not just a matter of how much are you taking in via your pie hole, but how much are you actually getting in your system. And I think that that's a really big consideration, and there's a lot of variability on digestive fire. So that's one piece of it. So I think that when you look at this whole thing you have some arguments out of the primal body, primal mind kind of realm of a low protein intake that would optimize health and longevity. I kind of buy in to a little bit of that stuff like some of the mTOR signaling and the SIRT1 signaling and maybe a little bit lower protein intake probably playing to that. I could kind of see that.

Most folks that I see though seem to do a little bit better on a higher protein intake when we augment and supplement digestion. That might be mitigated a little bit, but it's interesting, like, all the time we are seeing some studies pop up that seem to indicate that older people do better on higher protein intake, so they're wickedly protein deficient. Now, part of that is, are these folks just suffering digestive failure? Is it kind of a lifetime of eating Neolithic foods, and then their digestion is getting overwhelmed. There's probably an element to that. If we were to augment their digestion, would they need as much — augment their digestion and remove gut irritating foods, would they need as much protein? I don't know. There's probably some wiggle room in there. But I think anywhere from that probably a half a gram to a gram of protein per pound a body weight you're probably doing pretty good.

I think that you could -- and that's a fairly large spread, but I think that you could probably see some really good performance, health, longevity, good biomarkers of health and disease all from operating within that parameter. And then you have certain situations, say like people who are really training super hard, who are really trying to gain a lot of muscular body weight. You maybe even get up as high as 2 grams of protein per pound a body weight so....

Andy Deas:

Good. All right, Robb, we are near the end of the episode. So I wanted to throw this out there. Do you want to address -- I know I saw several Facebook questions to you about this, and we have like 20 questions in the queue about the recent article about the 30,000-year-old bread being found.

Robb Wolf:

Oh, you know, I haven't even finished reading the whole article, but like one piece of that whole thing is just a lot of these breads that were being made were from roots and tubers that were being ground and then kind of made into a flat bread. And so there's that piece to it. And then the other piece to this is that I don't know that it really changes anything that we know about this stuff. So we keep pushing the date of virtually everything that we're finding back.

So the use of fire now appears to be or tools appears to be about 3 maybe 3 1/2 million years old. The use of fire seems to be about a million and a half years old. And all of these numbers just keep getting pushed back further and further. It doesn't change the -- and so now we're saying, okay, maybe some Paleolithic heading into Neolithic groups in Europe were eating some grain and root and tuber type breads earlier than what we thought. It doesn't change the fact that there were in our deleterious health consequences to eating these foods, particularly when you're eating them on a consistent basis.

When we start looking at it like optimum foraging strategy and all that sort of jive, the reality is that the use of these foods was probably fairly limited, and that one piece from Mike Eades on the comparison and the relative health of the Hardin villagers versus the Indian Knolls peoples; the hunter-gatherer people versus agriculturalist people. It typifies that transition to agriculture which is increased bone malformations, increased infant mortality rate, the loss of height, the increased infections. People get sick. They are less healthy when they adopt the Neolithic foods.

So I mean it's just kind of -- for me it's kind of like okay, our ancestors were eating some of these foods earlier than what we thought. And Cordain has an interesting piece on the northwest or north-south pigmentation gradient in northern Europe, and a lot of this is related to the domestication of gluten containing grains. And so this just kind of fits into more of what we already know and understand, and it really doesn't change much of anything. I mean it's kind of like okay, that's interesting, but it still comes back around. So when you eat grains, legumes and dairy, there are still typically some problems associated with it.

Andy Deas:

Yeah. I think it fits nicely within that John Ryan quote about this is a framework we're applying and not a historical reenactment. So if we find some random society somewhere that ate grains, like who cares? Because we still see problems when people eat that stuff.

Robb Wolf:

Right, right. Yeah, it doesn't change that fact, and so I'm a little -- folks just need to sit back and think a little bit and use this Paleo perspective for framing some questions. But then it's kind of like, okay, so does this change what we know about grains, legumes, and dairy. So I was talking to David Pendergrass today who is a neurophysiologist in Kansas, I believe, and a really sharp guy. Hopefully, he's going to be involved in some of this educational element of stuff that we're doing with the whole Paleo education dealio. But his point was that we're at this really interesting spot where we have from the Loren Cordain's side of things, this really good understanding of what the anthropological underpinnings of our ancestry is and was and some good, you know. So what did we eat, what didn't we eat? What were the amounts? What were the ratios? Can we map some health changes associated to that?

And then Matt Lalonde was kind of one of the first people that made a really loud and very good argument that that isn't enough simply in anthropological perspective on this stuff is not adequate for refuting or -- either refuting, say like the claims of high carb, low fat camp or making any type of really solid claims about anything. It's like, okay, this is observational. It's interesting. We now have an opportunity to create some studies and frame some questions, but then we need some good well-controlled mechanism driven investigations to be able to answer these questions. And this is now what's happening.

We had some really good understanding on the neurophysiological regulation of appetite. We have understandings on the damage of the gut lining that leads into autoimmunity and systemic inflammation. We have some understanding about how metabolic derangement occurs at the liver, and we've got inputs of omega-6 fats and fructose and lectins from grains that are all co-factors in the development of metabolic derangement.

So we now have a very good comprehensive way of looking at this stuff that ranges from the Paleolithic perspective of like this is what our ancestors did so maybe we can learn some stuff from this all the way to the mechanistic reductionist level, but we can tie this stuff. It's so similar. It's fractal. It's scalable. This same stuff that we're finding on the microscopic level on the molecular level is also reflective in what we're

seeing at the bigger level. And so when we have these things that pop up and it pushes cereal grain consumption back further. It's kind of like, okay, that's fine. It's still -- even when we push the cereal grain consumption back further, okay, it's like, okay, now it's 30,000 years, maybe it's 100,000 years that we've been playing around with it, and collecting grains on a seasonal level, it still is a very small period in the grand scheme of things and the totality of human history. And it still doesn't really explain away the fact that on a mechanistic molecular level that we still find problems with these foods.

So folks just need to calm down a little bit and think this stuff through instead of like every little piece being a problem. I mean for sure it's a great opportunity to sit back and say, okay, does this kind of fit within the framework or does the framework need some retooling because we have a really compelling data point here. But this thing wasn't like a massively compelling data point. It was just kind of like, okay, that actually fits within what we already understand of all this stuff.

Andy Deas: Well said, Robb Wolf. Well said.

Robb Wolf: Thank you. Thank you very much.

Andy Deas: And that's -- this is like the discussion I had with my brother all the time.

He'll be like, "Oh, but didn't they eat such and such." And I was like, "Well, it's not really the point. It's just part of the picture we're looking at

in the framework."

Robb Wolf: Right, right, totally.

Andy Deas: All right, Robb, are you ready for the new Margarita recipe that is

supposedly better than the NorCal Margarita?

Robb Wolf: Welbourn claimed to have an improvement which involves some

habanero peppers in it, and he called it the SoCal Margarita, and it's good

but I wouldn't say it's better. So lay this one on me.

Andy Deas: Okay. So this is from Geoff. He says, "Hey, guys. Robb, got the book, been

listening to the podcast's, and my life is great. I'm a 35-year-old male who works in Law Enforcement. Since eating Paleo, I've leaned out nice and look and feel better than ever. So I wanted to give you guys another Margarita as a gift." All right, Robb, here you go. "Muddle: 1 slice of red and green bell pepper (sliced about a 1/4 to 1/2 inch thick), 1 slice of cucumber (1/4 in thick), 1 nickel size slice of jalapeño. Add: 2 to 3 shots of

your favorite tequila and ice. Shake well and serve over ice, mmm mmm

good. Enjoy, my friends."

Robb Wolf: Dude, I'm there. I'm there. I'll do it. I'm going to go work out, then I'm

going to have one of those.

That sounds pretty good actually. I never even thought about it so.... Andy Deas:

There you go. Potentially better than the NorCal Margarita. We will give it

a shot and a report back.

Robb Wolf: Maybe what we need to do is an archive of perspective margarita

recipes.

Andy Deas: Well, I was actually thinking, Robb, I was going to mention it, and then I

forgot that possibly if you did a Paleo alcohol blog post, it would be the

highest rated blog post ever on your blog.

Robb Wolf: It would. It would, but I would also probably be flamed massively with,

like, "Ethanol is not Paleo. Oh, my God! Oh, my God!" Okay.

Andy Deas: Well, you know, Paleo-ish, whatever.

Robb Wolf: Paleo light.

That's right. Paleo light. Well, Robb, that's it, man. The end of episode 52. Andy Deas:

One year --

Robb Wolf: One year down, man. Sweet.

Andy Deas: All right, man. Well, thank you very much, and we'll talk to you next

week.

Robb Wolf: Thanks, Andy.

All right. See you, Robb. Andy Deas: