The Paleo Solution
Episode 5

Andy Deas: Robb, Andy Deas back for Episode 5, Paleolithic Solution. How are you today, man?

Robb Wolf: Oh, dude, good. Nobody has sniper shot me nor cut the cables on my car, you know, my brake cables yet, so I'm good to go.

Andy Deas: Well, I'm staring at an enormous Americano and so I think I'm perfect, you know.

Robb Wolf: I'm hoping that that's not like some sort of a Latin lover sort of thing. I hope this podcast isn't you coming out of the closet.

Andy Deas: It is explicit, Robb. We clarified that for the listeners.

Robb Wolf: I'm even going to try to ring myself into. I'll try to ring that in so we can get a PG-13 rating at some point.

Andy Deas: You know, we actually have the ability to possibly change that, Robb. I'm just a bit concerned that someday you're going to go on a rant against your hatred for dairy or something and then, you know, you're going to get someone yelling at us about swearing and ruining their kids' ears. And so I just figured we should warn people ahead of time.

Robb Wolf: That's probably a good idea whether it's explicit or not just in case.

Andy Deas: That's right.

Robb Wolf: Yeah.

Andy Deas: Always be prepared like the Boy Scouts.

Robb Wolf: Right.

Andy Deas: All right. So we got some really good questions today. Also I want to remind folks that if you like the podcast, please go to iTunes. Give us a ranking. Give us a review. I think we've got about 10 people that posted reviews, which is super helpful and I appreciate that. So if we don't make you too miserable, please add some nice words of encouragement because it's a lot of work to get Robb to talk, I mean as you can tell.

Robb Wolf: Yeah, totally, totally.

Andy Deas: All right, cool. Well, we got two related questions about dairy. So I think I'm going to read both of them and kind of go through them together, Robb, if that makes sense, rather than answering them individually 'cause I think they're interrelated.

Robb Wolf: Totally, yeah, sounds good.

Andy Deas: So we got an email question from Greg, and he wanted to clarify the role of milk in relation to the Paleo diet versus consumption for mass gain and the physical side effects of dairy products. Also any thoughts on the benefits of raw milk would be helpful.

And then Anthony has a related question asking us to talk about the Paleo-ness of dairy, specifically little-to-zero carb foods like butter and cheese. I think we might also add heavy cream to that discussion. And then he's also curious about the general recommendation of milk consumption related to CrossFit Football. Do the muscle building benefits outweigh leaky gut symptoms and giant insulin spikes?

Robb Wolf: From lactose.

Andy Deas: Yes.

Robb Wolf: Yeah, that's a key point to look at. Okay. So gee, whiz, the role of dairy in relation to the Paleo diet. You know, obviously, dairy is a Neolithic food but it also has stunning growth promoting properties. It typically contains protein, carbohydrate, and fat so it's calorically dense, nutrient dense. It has this whacky characteristic which I guess kind of addresses something in the second question of a huge, huge, inordinately large insulin spike. And not just insulin, insulin-like growth factor, growth hormone, epithelial growth factor.

Professor Cordain talked about the fact that both dairy and say meat-derived proteins increase IGF-1 but something that dairy does is that it blocks a ligand for muscle protein. Insulin-like growth factor protein 3 I believe is the ligand for that and it blocks that, and what this does is it actually makes the whole process even more anabolic, far above and beyond what just meat does.

So the bottom line is that dairy is massively growth promoting. It literally flips on the growth or replication switch in like virtually every cell in your

body which for body building, muscle building, that sounds great. If you happen to have breast, colon, or prostate cells and you're worried about any of that stuff turning into cancer, it could be not so great, and there's really telling information about like dairy consumption, particularly early dairy consumption, increasing the rates of cancer and whatnot.

But something that Welbourn has talked about this is you see kids that are -- we'll just focus on the kids. We'll focus on the Welbourn example. You see these kids, who want to play football, high school football, college football, and they want to get big, they want to put on mass, and these kids end up going on just the junk food/seafood diet and they're eating horrible quality food.

Kids in high school are weighing upwards of 300 pounds. It took Welbourn into his late college, early NFL career to get to 300 pounds and this was 300 pounds at like 8% body fat, 38 to 42 inch vertical leap, amazing metrics in the gym and all that. These kids are just looking at the scale weight, the football coaches are just looking at the scale weight, and these kids are getting enormous but upwards of 50% to 60% body fat, like they're effectively morbidly obese. And then these kids end up getting done with school and they have developed eating habits that are absolutely abysmal.

So John's idea here is that a Paleo plus dairy approach could be huge for helping promote mass gain and he has seen that play out with the thousands of people that are following the CrossFit Football site and the people that are experimenting with that. So it's very, very, very effective for increasing lean body mass while minimizing in my opinion the likelihood of some sort of collateral damage with high insulin levels from just crap food.

But the questions is are there any other side effects to it? And we really don't know. For sure, your likelihood of acne is much worse. Sleep apnea, sleep disturbances, any of the hyperinsulinemia issues are pretty high on the dairy consumption and it's a dose response curve. I had somebody just ask me, you know, "Is a quart or a gallon okay for mass gain?" And I'm like, "Christ, man, what do you want to do? Do you want it all on or do you want to sneak up on it? What are your ultimate goals?" So there's just tradeoffs with this. It's an economic tradeoff. There's cost-benefit with all that stuff.

Andy Deas: Before we -- maybe just to interject, I want to talk about I guess raw milk and maybe this is the time too to kind of throw in if you had any different perspective on goat's milk versus cow's milk.

Robb Wolf: You know, the goat's milk -- one point I want to make really clear is that tons and tons of people think that it's the lactose that causes the bulk of the insulin spike. Lactose is synergistic in that, but the proteins alone cause an insulin release and this is kind of the somewhat unique feature of dairies that it causes a very powerful insulin release but very, very little glucagon release so you're not really getting all that grade of a control in that regard.

Now, the raw milk, if it's grass-fed, may be pretty damn good from the standpoint that it has significant amounts of Omega-3's in it. It has conjugated linoleic acid which is actually muscle promoting and anti-tumor agents and all the stuff that's great, great nutritional supplement. It also has a ton of alpha-lipoic acid in it, fat-soluble, water-soluble antioxidants. It enhances liver function.

So grass-fed dairy, just like grass-fed meat is just like infinitely more nutritious. It doesn't have the problem of containing a significant amount of grain lectins, largely just corn-derived lectins because that's what we tend to feed our dairy cattle. So it's all better from that regard but it still has a real potent insulin spike so folks need to weigh whether or not that's a benefit to them.

The goat's milk, I find that I just tolerate a little bit better. The analysis that Loren Cordain and Pedro Bastos have sent to me is that it is effectively the same with regards to growth promoting properties, like dairy is dairy, but there are obviously a little bit of differences with them. People will digest the proteins and whatnot a little bit differently. I find that I can handle goat's dairy a little bit better than regular cow dairy when I've experimented with that stuff, like I did a mass gain last year and did a significant amount of goat's milk.

Andy Deas: Now, continued on that line of thought, if you want to share perspective craps on cheese compared to milk, and then also I think butter and some of the heavy cream stuff.

Robb Wolf: Yeah. So cheese ends up having the bulk of the -- depending on how the cheese is prepared, usually the bulk of the carbohydrate is actually removed out of it and you've just kind of got protein and fat. Hard cheeses I think being more the protein form, usually a little lower fat or maybe the fats has been removed. But fundamentally, cheese still has a very, very potent insulin spike, and from an acid-base balance, cheese is very, very net acid yielding.

So if you're concerned about like acid-base balance and ironically if you're concerned about like bone mineral health, cheese isn't all that good of an option. It has a lot of calcium in it but you end up actually behind the curve because it's more acid yielding than what you get calcium out of it. So that's kind of a problem.

Now, foods like butter and whole whipping cream and stuff like that, if you are an individual that has no autoimmune diseases then you'd probably be okay with that stuff. Those items, butter and cream, because they have virtually no carbohydrate or protein content from the dairy, they're not going to really be insulin spiking. So you should be okay in that regard; but here again, like if you can track down a grass-fed source, I would say grass-fed butter like even though I'm pretty Paleo-ed out, if you had access to legitimate pastured or grass-fed butter, I'd be pretty fired up about that. I would use that on a consistent basis.

Butyric acid is very, very healing to the gut and does some interesting stuff to the gut flora. You get way more of that in the grass-fed dairy. And then also again, you can get the conjugated linoleic acid, alpha-lipoic acid, all that sort of stuff. So that's kind of how I would approach all that jive. If you have an autoimmune disease, then I really would avoid dairy of any kind completely, as well as obviously grains, legumes, and even eggs.

Andy Deas: And so I think what we typically see from folks that are playing around with this, I guess my personal experiences in most cases, with the exception of the people that are bulking up for a specific sport or having a bit of compromise there where you got a 100-pound kid that wants to play offensive line and we're going to need to do some stuff to put some weight on him. But we see folks in the gym that will start messing around with some of the milk stuff post workout to help with some bulking, but we typically don't, I'll use the word "advise" lightly them to try that until they've sort of achieved their desired level of leanness.

Robb Wolf: Yeah. There's no doubt that if you lean people out first that the hormonal response that they get from exercise, from their food is totally different than what it is when people are heavy. And typically, this isn't a female issue so I'm going to address men on this thing. Typically, if we get men below 10% body fat, then the nutrient partitioning that we see in these individuals is much, much better. We have a tendency to see much better hormonal response flowing into muscle gain versus fat gain when we start getting hypercaloric.

John Berardi, I think in his old Appetite for Construction series, had touched on that fact or maybe it was some follow-up stuff, but he had

some pretty good data on that; and just observationally, I've seen that in the folks that we've worked with, with myself, and then just talking with other strength coaches that you want to get people ideally fairly lean before starting a mass gain protocol because you're just going to get more mileage out of it. You're going to get less fat and more muscle and really, that's what you ultimately want to get.

Andy Deas: Yeah. And I think this is just another good opportunity to throw out there, you know, folks need to think about what their goals are with regards to their training, their nutritional approach. All these things has sort of, as you pointed out, economic tradeoff depending on what's the main goal we're trying to get to, the end state.

So I think it's hard to answer this black or white; yes, dairy is good; yes, it's bad. It's sort of well, it really depends. I guess in a perfect world I would probably advise against dairy, but I think that depends on what your goals are, what your situation is, do you have any autoimmune situations going on. All those things are factors that I think need to be carefully considered when either messing with dairy yourself or recommending it to your clients.

Robb Wolf: Yeah, totally. And, you know, I really try to hang my hat on the basic Paleo concepts and all that, but then the reality is olive oil is not technically Paleo if you really want to get geeked out on it. And this is where I think people get all freaked out on this. There have been people with various thoughts along this line that "Well, Paleo says not to eat salt so Paleo is pseudo-science and this and that."

And it's just kind of ridiculous. It's like let's take the best that this technology has to offer and use that to guide our endeavors to the best of our ability. But then if there are things like running water is not Paleo, indoor plumbing is not Paleo; but my God, I like indoor plumbing and I like a good commode at home and all that.

So it's not a thing of trying to create some sort of a cult or a religion out of this stuff but trying to find, okay, what are the tradeoffs? And again, this is where when Art De Vany's stuff was new and not quite as weird as what it has turned into, but he really did some fantastic work discussing the economic tradeoffs of everything. It's like yeah, you can gain muscle mass but there may be some tradeoffs to that, and just be aware of that and the economics of your physiology and your genetics and all that.

And this is something that people just need to really drill in because they just kind of willy-nilly make decisions and they really have no guiding.

They don't know what they're doing and so they can't really assess like what the effects of what they're doing are going to be.

Andy Deas: Yeah. And I don't know why that reminds me of the old Dr. Ken Leistner stuff where he'd always talk about some of his clients that whatever. They had 16-inch arms at 250, but they wanted 16-inch arms when they lean down to 205 and couldn't wrap their head around it. That maybe the fact that you weighed 45 more pounds increased your overall muscle mass in addition to fat mass and that if you wanted arms that big you're going to have to stick maybe a 250. That's your genetic limitations.

Robb Wolf: Right. I remember Dr. Ken. He's legit.

Andy Deas: Yeah, good old Dr. Ken. Anyway, okay, cool. So anything else you want to add to dairy? I think we kind of beat that to death but --

Robb Wolf: I think that's it. Again, the first podcast was on post-workout nutrition so obviously if you're going to use dairy, post workout is kind of the preferred time to use it. And then be clear about what the heck you're up to. Dairy is a really powerful tool and use it to your best benefit and be smart about it.

And again, if you do use it, try to focus on some quality like get the best stuff you can. I think even Costco has some clover dairy like clover milk and all that, so it's essentially grass-fed milk. It even is a little bit orange looking because of the carotenoids in it and all that. So use it smart, use it at the right time, post workout, and just be clear about what the heck you're up to with it.

Andy Deas: Yeah. And that as a butter plug, Trader Joe's Kerrygold butter is fantastic.

Robb Wolf: Is that stuff pastured? Is it pastured?

Andy Deas: I believe it is. How it was explained to me via some folks that were doing some research related to the whole cattle industry and stuff is I believe that's Irish butter, and so theoretically, Ireland is run much like Australia and New Zealand. Everything, all the cows are grass fed, etc. etc. So that's my understanding. I don't notice any of the same kind of whacky side effects that I do if I use other brands of butter so it could just be prepared slightly different or it may actually be legit, grass fed, all that good stuff.

Robb Wolf: Cool! Now, what's the name of it again?

Andy Deas: Kerrygold.

Robb Wolf: Kerrygold.

Andy Deas: So it's K-E-R-R-Y-G-O-L-D.

Robb Wolf: Cool!

Andy Deas: And they have it in salted and unsalted. I've never tried the salted but the unsalted is super yummy.

Robb Wolf: Okay.

Andy Deas: So give that a shot. Mileage may vary as I say.

Robb Wolf: Cool!

Andy Deas: All right. Next we got an interesting question from Troy basically talking about "For those who have access to self-monitoring, what blood glucose levels and in what ranges should we be looking for in our clients who do monitor them but may not be a diabetic?"

And he also wants to know, "Is there any differences to the ranges we'd be looking on whether or not they're on a Paleo diet?" He basically says he has some folks that have switched to the Paleo diet and they've tested their blood glucose levels and they are between upper 90s and low 100s. And basically, most diabetic websites list 90 to 110 as normal but wanted to get your perspective as we all know that being borderline isn't necessarily the same as having normal ratings.

Robb Wolf: Yeah, yeah. You know, the folks that we've seen, the clients that we've tracked, we see them significantly lower than like that lower edge of 90 -- I think it's like millimoles per deciliter I think. I forgot exactly what the units are on it, but 90 to 110 is kind of that standard lab value. If I see people 90 or 100, unless if they've been working out, you can see elevated. If they've been driving or stressed, they can be elevated.

So I mean to some degree, you need to factor in when are they monitoring their blood glucose levels. This is where an A1C test, HB1AC, the glycated hemoglobin is more telling of the blood glucose levels over time. Just a general look at your blood glucose levels from moment to moment isn't really going to tell you all that much.

All that said, we usually see our clients just kind of cruising around. If they're well adapted and insulin sensitive, their blood glucose levels are going to be more like 60 or 70, which normally, this would be some sort of like kind of like diabetic coma setting in after somebody has taken too big of an insulin bolus and their blood glucose is dropping.

I operate on that lower end. Most of our clients who have adapted to this operate that way. The people who have shot in information from the website, that's where they tend to operate. So when you're more insulin sensitive you're able to use more fat. Essentially it's either fat directly or it's ketone bodies for fuel, and so you just necessitate a lower blood glucose level because you don't have as much of your tissue running on it.

I would again probably look more at like the A1C. If you really wanted to help your folks, I would have them check out their A1C maybe once every two or three months and having low numbers on that. Like the lower the better really on that. That's just a direct indicator of how much sugar is glycating or sticking to your body's proteins. They look at the red blood cells but this is happening in every protein in your body, and a significant amount of aging is related directly to advanced glycation end products, the sticking of sugar to your body's proteins.

So this blood glucose monitoring is okay. If you wanted to really help people though, I would focus more the A1C. It's going to give you a more clear picture of what is really going on with the person's health. Interestingly, the American Diabetic Association is moving away from oral glucose tolerance test, seeing how people respond to glucose and looking at the A1C, interesting to that because it's more telling about where the person's health really is. When I did a post a couple of months ago, maybe almost a year ago on gestational diabetes, I suggested that the whole diagnostic criteria for gestational diabetes should be changed to the A1C. So I feel like I was a trendsetter on all that.

Andy Deas: Kudos to you, Robb.

Robb Wolf: Thank you. Thank you.

Andy Deas: And I think in general, I guess once again we're talking really in general here, but on most of the kind of diagnostic numbers that we've seen thrown out by various associations, most of our folks are typically well below what's considered normal on most of the criteria that I can think of.

Robb Wolf: Yeah. And, you know, as time goes on and like our population gets sicker and sicker from bad food and bad lifestyle, what counts as normal is just a statistical snapshot of who's walking through the door. So if everybody who's calling through the door is like sick, then normal really doesn't tell you anything. I mean it tells you nothing at all and it lulls your doctor, it lulls pharmacists, all these people into a kind of a state of complacency because kind of like, "Well, everybody is safe so this is just normal. This is normal course of things." And it's simply not true. All this degenerative disease, all this stuff is 100% preventable, but --

[Audio Gap]

Andy Deas: Robb Wolf.

Robb Wolf: Holy cats!

Andy Deas: You're back.

Robb Wolf: Okay. I don't know what happened.

Andy Deas: I got really nervous there for a minute but I think we're all right.

Robb Wolf: Yeah. I though the rendition squad had rolled through the basement and up into the house to carry us away, but apparently not yet.

Andy Deas: It's just good cable service, Robb. Don't be nervous.

Robb Wolf: That's weird. We've never had that before. Sorry about that.

Andy Deas: That's all right. I will forgive you.

Robb Wolf: Okay, excellent. So where did I drop off? I was blathering on about normal lab values that are not --

Andy Deas: The last thing we heard was the preventability of these diseases. You were talking about --

Robb Wolf: All this stuff is preventable, you know, but we're hanging our hat on bad lab values and it kind of lulls us into a sense of complacency frequently, our doctors and other healthcare practitioners.

Andy Deas: Yes. Well said. Cool!

Robb Wolf: Cool!

Andy Deas: All right. And then the next question, I think we covered this a little bit before but I think it's probably good to just revisit it one more time. So during the first podcast we mentioned the temporary drop in performance that comes with the transition to a Paleo or Zone diet. Would you advocate a deliberate transition period? If so, how would you implement it?

Patrick goes on to say, "I could see the benefit for everyone from trainers looking to keep their clients to sedentary albeit busy professionals who can't see their performance drop off while their metabolic machinery acclimates. But is the benefit of getting to your endpoint faster that overwhelming? Thanks a lot and keep it up."

Robb Wolf: This again is -- I think so many of these questions need to be couched from where is -- who is the person, where are they at when they walk through your door and they start working with you? This is kind of assuming you're working with someone new. If the person is really significantly overweight and metabolically deranged, it's going to be a hell of a transition for them and they're going to feel like hell. It's just going to be a really rough deal.

If somebody is already generally pretty athletic and eating well and more or less insulin sensitive, it'll probably not be that rough of a transition for them, but even then, we've seen people that are very athletic, kind of endurance athlete sort of thing comes to mind, that they've just eaten all carbs all the time, inadequate protein, inadequate fat, but they may be running pretty lean because of genetics and activity level, but the transition is also going to be rough for them.

It really kind of depends on what type of person you have, like are they okay with ripping the Band-Aid off all at once or do they just want to peel it off a little bit at a time? So you can do either all at once or at an incremental approach. And then also with regards to the performance, this is that monkey, you know, the hand in the jar thing again. If it's super compelling that you not see a significant slump in your performance, if you're actually competing at something, then maybe that's okay. But Mat Lalonde's example is perfect in that he switched his nutrition, saw a significant downturn on his performance initially, didn't feel good, but sucked it up and just dealt with it, and then a month later he was crushing everything and putting PRs up on everything from strength to metabolic conditioning.

So people need to be willing to just change gears. This was part of our problem of lack of periodization in the CrossFit scene. We never end up changing gears and focusing on those deficient elements. So if somebody is insulin resistant, if they are overweight, the best thing that they can do is get lean; and if they sucked for a month or two months because they're low carb and they're shifting their metabolic machinery, that doesn't matter because it's still more important to have them lean and healthy. They're still going to get better performance in the long run than it is kind of sliding down sort of like much more gentle grades still using crappy food and bad eating practices.

So I think to some degree, it's like tear the Band-Aid off, deal with it, get it done; but obviously, personalities are different. Some people may just need to sneak up on this. Like we have our whole meat and nuts breakfast where we try to get people to just tackle breakfast for one week and then breakfast and lunch; breakfast, lunch, dinner; breakfast, lunch, dinner, snack, with each one of those transitions being about a one week of working at the previous level. That can work too but I kind of like seeing folks jump in and really get it all done.

Andy Deas: Yeah. And I think, you know, your point about personality is well taken. I think that's a critical dimension to consider although often challenging when you're working with someone new. And then generally, my thoughts are the sicker the person is, the quicker we want to get this transition going, although it may be a bit more painful for them as opposed to someone that's generally a little fitter and leads a pretty clean lifestyle.

Robb Wolf: Yeah. And if, you know, the way you feed and water yourself is training, then you want to get people results and you want to get them results in a timely manner, and so if that's the case then you may just need to draw some lines in the sand and be like, "Hey, if you're going to work with me, these are the parameters, this is what we're going to do, the reason why I'm holding your feet to the fire on this is that we want to see some legitimate results and you can see the power of the program we're doing."

So that's another point too. You got to love people enough to put your foot in their ass and really encourage them to do it because then they can really see how it's going to go. And it's not like you're selling the undercoat to a car or something like that, like you're selling people their health and wellness. So I think pumping their knee pretty vigorously to get some compliance is always good in that regard.

Andy Deas: Absolutely! Cool! All right. So the next two questions are related and I think these are good questions related to nut intake so following up on some of our early discussions.

So Margo from Red Bluff says we suggested subbing out nuts for avocado, but unfortunately they aren't in season year round or we suggested using coconut, which she comments "only has so many uses," which I disagree. You can put coconut on everything, but anyway. So for clarification, is the goal here to sub with something that has less saturated fat, although obviously the coconut would be medium chain saturated, or is just to get away from the nuts regardless of what you sub for it?

Robb Wolf: Yeah. And Margo is confusing the Omega-3/Omega-6 problems inherent in nuts with a saturated fat problem. So the real issue with consuming nuts that I think we've seen observationally here is that nuts, generally almonds, pecans, except for like walnuts and macadamias, most nuts are very, very heavy in Omega-6. Then if you have somebody following a kind of Paleo/Zone diet, particularly if it's Zone because people are really keeping an eye on their fat intake, they tend to just eat nuts as like one of their primary fat sources, which isn't the worst thing in the world other than it can significantly skew your Omega-3/Omega-6 balance, which we're already fighting that because of grain-fed meat and all the rest of that stuff.

So this is the suggestion of stuff like avocado and coconut and some things like that. Even olive oil is 10% Omega-6 fat, the linoleic acid. I always forget, linoleic, linolenic, alpha-linoleic acid, so it must be linolenic acid. So the short chain Omega-6 is found in pretty high amounts in even olive oil, less as the percentage than what you would see in most nuts.

But if you have people who are still having problems with getting lean, with systemic inflammation, different things like that, then this is another step in refinement that you can do. You're trying to shift more of your fats into things like pastured dairy like the butter, coconut and just anything along that line, avocado, some of these fat sources that really have no Omega-6 fats in them at all.

Andy Deas: Yeah. And I think to just piggyback on that also, we've seen anecdotically a fair amount of gut irritation with some folks, continued acne with high nut intakes. And so in general, I think in a lot of cases, we're suggesting folks just take it out and try and see if they feel better, because in a lot of cases we find they do just from a simple -- they run leaner, their skin may look a little better, and so it's just something to give it a shot really.

Robb Wolf: Yeah. It's that same deal. Give it a whirl, give it a month, and then check how you look, feel, and perform. And if it's not working for you, if you're not seeing benefit, and it's like complicating your life, then by all means, change it, but we're noticing some people benefiting from shifting some of their fat sources around that away. If you had Katie DeLuca in your gym like we do, then you could just buy pastured pork products and just eat bacon grease, but not everybody has that.

Andy Deas: Yes. We love legit bacon grease.

Robb Wolf: Really, truly, especially at NorCal's.

Andy Deas: Absolutely! And then Randy has a question on the blog that's kind of a related question. So he says he was curious that you mention taking in less nuts and using more things like avocado and olive oil. Are you implying taking straight shots of olive oil? If so, how well does one's body absorb straight oil? Would it be good to avoid nut oils such as times when eating a hundred nuts per meal just gets old and it would be more convenient and efficient to use oils as another fat option along with coconut milk?

Robb Wolf: So I mean I've definitely swigged olive oil before when I've been in a hurry. Obviously, you just want to throw that in with a meal. That's when you're going to get the best digestion on it. Welbourn does this a lot. Is it the best thing in the world to do? I don't know. The Sardinians actually drink a glass of olive oil for breakfast and they're some of the most long-lived people on the planet. That would be a really hard thing for me to do.

But coconut milk by contrast, I can chug that down pretty well. So your body will absorb it if you eat it with a meal. I'm not sure where the rest of Randy's question is here. It's a little vague for me. I think again, just getting a diversity of fat, I really, really like coconut a bunch. Avocado obviously when it's in season, all that sort of jive.

Andy Deas: Yeah. And I think we'll kind of hit a little bit of what Randy was talking about on the next question too from Paul. So Paul says we talked a little bit about acne with excessive nut eaters but didn't say much more than the word "acne." Can we expand on this?

Robb Wolf: Yeah. The Omega-3/Omega-6 balance, again, the Omega-3/Omega-6's play into eicosanoid production. The eicosanoid production feeds into prostaglandins and all the inflammatory stuff that we produce in our

body, both good and bad, and there's a product epithelial growth factor, which is released by dairy, but the Omega-3/Omega-6 balances can influence this too.

Essentially, acne is kind of a sign of pro-inflammation. There's too much inflammation going on and there's going to be insulin levels, epithelial growth factor levels. It can be Omega-3/Omega-6 imbalances.

Occasionally, in females, and I talked to James Fitzgerald about this, maybe about one female in 50, one female in 60, you start putting them on fish oil Omega-3's and they will actually get acne. And so we need to dial those folks back, and usually, those folks end up needing a little bit of GLAs, some gamma-linolenic acid if they actually need a propping up of one of the intermediaries of the Omega-6 pathway.

So it's very dependent on what the person has going on, but generally, that acne is a sign of inflammation most typically from too much Omega-6, but in some rare individuals, certain females typically, they actually need a little bit of the intermediate chain Omega-6 to balance out some other stuff upstream.

Andy Deas: Yeah. And Paul goes on to say he eats his predominantly Paleo/Zone diet. He slips in some extra nuts and butter. He kicked dairy a few months ago thinking it was causing his acne, but he is still breaking out. He thinks he's going to try to wean back on the nuts, or "is it something I should completely remove from my diet?" And I think what we would start with is try removing it completely and see what happens.

Robb Wolf: Yeah, totally, totally. Just give it a whirl. That elimination approach is just money to me. You can do all kinds of diagnostic work but the gold standard is like do you pull it out? Do you look, feel, and perform better? Reintroduce it. Do you look, feel, and perform worse? Done. You don't need any diagnostic data other than that. That's plenty.

Andy Deas: Yeah. And I support fully, Robb, drinking straight olive oil. You just need to have the right kind.

Robb Wolf: Yeah, the better quality stuff is what you need. It's got a whole load of acid load to it. Totally!

Andy Deas: Yeah. All right, great! We're going to move on to another blog question. This one is from Julianne and this is kind of a mouthful so I'll do my best to kind of read this and then we can kind of hit each of the questions. She says, "Hi Robb. I notice you frequently talk about insulin spiking

properties of different foods, and has also seen some of the info you're talking about with respect to dairy and insulin spiking." She notices she gets hungry really quickly after eating yogurt for example. Not that she is eating yogurt anymore though. She wanted to let us know.

"So the other issue I notice with myself and some clients is getting the carb amount at the meal right. If I have too little carbs at a meal I have this nagging hunger as my blood sugar is not up to a point that I feel just right at. I've noticed that I want to keep eating to get that just right feeling.

One thing I notice about the Zone amount of carbs at a meal is that I get that feeling that I've had the right amount of carbs but not too much. Usually what works is a balance of quick release carbs like a little pumpkin or sweet potato or fruit plus a lot of non-starch veggies. That way I feel just right but also don't eat the wrong carbs or proteins that cause an insulin spike. On the other hand, just eating non-starchy veggie carbs leads to quicker fat loss, but I have to wait about half an hour after a meal before I feel my blood sugar has gone up enough."

All right. So let's pause there. Any thoughts on that?

Robb Wolf: It's sounding to me like there's just a little bit of insulin resistance happening here. And, you know, this reminds me of my mom when I just beat my head against the wall trying to help her. God love her but she is type 2 diabetic and it's almost like somebody carrying an oxygen canister around in which she needs to breathe out of the oxygen canister. In this situation, you have somebody that needs to dose their fueling very, very precisely based on what their kind of metabolic machinery is wired at.

And just my gut sense here is that she is probably insulin resistant and therefore is not able to access some body fat. Her energy is not able to get normal kind of glucagon or liver-mediated glucose release to regulate her blood glucose levels between meals, and so this is why she needs to so precisely dose this stuff.

You could also look at it different and just say she's really wired into what's working for her body, but for me, I would like to see someone who is a little more dynamic than this, that's got a little bit more robustness in them than having to just eat this exactly specifically proportioned meal.

Now, that said, a big bowl of fruit is going to put me to sleep so I don't really have spectacular response to carbohydrates, but I think that's more

of the norm than not. What I would like to see is somebody able to eat like a protein/fat meal with some veggies and just be like stellar from it. So there's probably some adaptation that just needs to happen here.

Andy Deas: Yeah. Generally, I think what we see is that you don't need to be this precise after most of our meals to feel healthy, energized, be able to do all your normal activities.

Robb Wolf: Exactly. Yeah. Totally!

Andy Deas: She goes on to say that she's noticed that some women in particular slimmer pear shapes don't tolerate lower carbs. Atkins for example makes them feel terrible, not energized. She'd be interested to hear if this is also your experience.

Robb Wolf: I can't say I've really observed that. No, no. I haven't really. But, you know, the thing again is like when people say they feel terrible and they're not energized, we go back to the article that I did on the Zone and athletic performance and we looked at the adaptation period that is necessary to getting into a lower-carb diet and being okay with that. You may in fact feel horrible for two to three weeks.

So this doesn't really tell me anything. It's like I need a good month of following the person, and if after a month the person is still not really doing well on a lower-carb approach, then obviously, it's kind of like, "Okay, this person is just very, very insulin sensitive naturally and they're going to do better on a higher carbohydrate intake.

Poliquin, when I was at the Biosignature course, he said that that's probably about 15% to 20% of people, and these are people who are already naturally just kind of jacked, like they're lean, they're muscular, they tend to do well. They've just kind of intuitively done well on all that stuff and had never really been super tight on their nutrition. They seem to have a little bit more headroom with regards to that.

Andy Deas: Yeah. And this reminds me of -- I heard Cassandra Forsythe talk once and she worked with Dr Jeff Volek at UConn doing a bunch of the low-carb studies. And I recall her talking one study in particular and I can't remember how many subjects were in there, but it was low carb, it was 12 weeks adaptation period, etc., etc., and she said they had one or two outliers that just did really bad on the low-carb approach. Even after 12 weeks they felt like crap, they didn't perform well.

Her observation was most of them tended to be they were already very lean. They tended to have really high activity levels. And she said they were pretty surprised. That's not what they were expecting. But she was like, "We gave them a long enough time to adapt. We monitored their diet. We don't believe they were cheating." She just said they were one of those folks where it just didn't work really well for them.

Robb Wolf: Right, right.

Andy Deas: Okay. She goes on to say in her nutrition studies a couple of years ago, "We were given this paper with regards to fat loss on either a higher carb or lower carb diet in women. Some lost weight better on higher carb, some on lower carb depending on whether they were high insulin secretors or low." And she goes on to quote the study and says, "A low-glycemic load diet facilitates greater weight loss in overweight adults with high insulin secretion but not in overweight adults with low insulin secretion in the calorie trial."

Robb Wolf: Yeah. I have not dug through this trial yet. What I would really like to see is what's the diagnostic data or studies that they did to determine what does high insulin secretor and what does low insulin secretor even mean? What is their quantifiable measure for all that?

Another thing that I would want to look at, we know from things like the Kitava studies and whatnot that people can have a relatively high carbohydrate intake but not from grain sources and probably manage things betters so we've got better leptin and better ghrelin management and all that on the kind of neuro-hormones. So there are some stuff that I would really want to dig deeper on this to know, okay, yeah, this is legit or no. People were just kind of stacking the deck here.

I mean on the surface it's like, yeah, okay, low insulin secretors or high insulin secretors, people who eat a meal and produce a bunch of insulin would intuitively do well on a lower glycemic load diet. But then the question is why is there a difference between people? Some people are high insulin secretors. Some people are low insulin secretors.

And so that's kind of my thought about the Kitava stuff. Are some people more -- are they having like an autoimmune deal from grains or something like that? So what is explaining the differences between these two people or groups of people? Was their body mass index accounted for? I just don't see anything like that.

On an intuitive level, it kind of makes sense. Okay, if you produce a bunch of insulin in response to food then maybe you should have lower glycemic load meals, but it still isn't really answering all that much stuff for me.

Andy Deas: Yeah. And I think in general, our experience is that the lower carb approach tends to work better for the majority of folks, but I certainly think there are outliers to that, and yeah, I think that's just a fact of life.

Robb Wolf: Yeah, yeah.

Andy Deas: So all right, good answer. So Robb, I think that's all the questions we have for today unless you have anything else insightful you'd like to share with the world.

Robb Wolf: Dude, I am just full of crap so I have nothing insightful to share.

Andy Deas: All right. Well, with that, I think that ends Episode 5. I apologize for the technical difficulties. We will talk to the cable company about do not mess with Robb's internet when we're recording the podcast because these things are important.

Robb Wolf: That was weird. We literally have never had our internet go down and that was just like a 5-minute deal and it went down. So yeah, sorry about that folks.

Andy Deas: Well, maybe Keystone the cat is unhappy with the amount of attention you've been paying to him and you need to give him some love.

Robb Wolf: Well, he is sitting in my lap right now so hopefully, I'm making up for it a little bit. But I'll be on the road significantly less for the foreseeable future so we'll try to make amends with the cat.

Andy Deas: Awesome! Well, thanks, Robb for your time, and I'll talk to you next week.

Robb Wolf: Thanks, Andy.

Andy Deas: All right. See you.