

Paleo Solution - 279

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Robb Wolf:

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Hi, folks. Robb Wolf here, very excited for today's guest. Jamie Scott is one of my favorite people in the ancestral health scene. He is both a clinician practicing this stuff every day in both the strength and conditioning and the nutritional consulting side and he's pretty damn savvy on the molecular mechanisms of what the heck is going on in this paleo ancestral health scene.

Jamie, how are you doing man?

Jamie Scott:

Hi. I'm doing fantastic, Robb. It's such a pleasure to be on the show finally.

Robb Wolf:

It is like four years too late. You and Laura Schoenfeld, I was kind of like yeah those were obvious people I should've had like the very first week of the show. But you know sometimes the low hanging fruit and the obvious thing is the thing that you end up missing. So how are you doing?

Jamie Scott: I'm very good. So I'm coming to you from the deep, deep south where it's middle of winter here so.

Robb Wolf: Yeah so what type of temperature do you have? So for me its 2 p.m. currently, What time is it there for you?

Jamie Scott: We just come up to 9 a.m. Thursday morning so just a little bit in the future for you.

Robb Wolf: Okay.

Jamie Scott: Yeah, yeah. So it's not--So it went down. We're about 42 degrees south so it's not freezing cold so we're not that quite Antarctic temperatures down here but we get up to about 15 degrees centigrade at most days at the moment so that's as warm as we get.

Robb Wolf: So that's a good bit cooler than where I'm at in Reno right now which is about 37 to 40 degrees so yeah.

Jamie Scott: Oh, that would be nice. That would be nice.

Robb Wolf: It's not bad. It's not bad. It doesn't get much hotter than that and it's dry as a bone which makes you end up looking remarkably similar to most the people that end up in the casinos in Reno and Las Vegas, Nevada where they're smoking and drinking and staying up all hours and seems it's right amount and leave them looking like a mummy so that would be awesome.

Jamie Scott: Yeah. I can imagine.

Robb Wolf: So Jamie for the two people who don't know who you are, give folks some of your background.

Jamie Scott: Oh god, I think it'd be more that two. My background so qualification wise I completed through the 90s an undergraduate qualification in exercise science where exercise physiology and body mechanics were my majors on the bat and then went on to do human nutrition because that's sort of pathway through that exercise science degree. I decided that I'm going to be working with at that time I felt I'd be working with athletes. I thought I really need to know something about nutrition because I think the nutrition side of things might be a little bit important somewhere and then.

Robb Wolf: Right.

Jamie Scott: So I thought, right, I'll pick up science degree in human nutrition. In the end, I didn't want to go and get a real job any time soon so then I went on and started to do post graduate qualifications for sport medicine. Eventually, I got spat out of university. My student allowance run out. I don't think they'd let me borrow any more money to keep funding studies.

Robb Wolf: [Laughs].

Jamie Scott: I had to go and get a real job and so I started personal training for--I started in the fitness industry for a good probably eight to nine years which we end up being a mixture of personal training, doing the nutrition consulting and then I ended up embedded in a rehab clinic part-time for a period of about five years which was... I was mostly there to teach the physical therapists strength and conditioning from a rehabilitation side of things because it's not--for them they were heading down that pathway of using strength training as their primary mode of rehabilitation but they weren't actually being taught in the strength training as part of their qualification.

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So it was a very interesting time and great piece of learning for both myself and the people I work with. Along the way I mean it's a typical kind of I guess fitness industry type career where you just end up sort of following rabbits down holes and seeing where they end up. It's like you end up working with anyone Joe average through to elite athletes. So I ended up being a strength and conditioning coach for a small team of local track cyclists sprinters and then eventually that lead to working with a couple of cyclists who went on to both national and international race for a period of time. So again that kind of helped I guess develop my mindset in where I was going and then probably in the mid to late 2000s, I started reading books which was and that was a silly thing to do because I just questioned my entire worldview at the time. But I picked up Michael Pollan's--God, what was the name of the book.

Robb Wolf: Omnivore's Dilemma?

Jamie Scott: That's the one. Yeah, that's the one. That changed my mind like I need another cup of coffee. So I picked up there and I remembered going through that and within that book, he was discussing the whole heart diet, heart hypothesis and some of the references he was citing I'm

looking at that guy. We didn't even get taught of this because I got a degree on this stuff and we didn't even get given this perspective and all this information out there why would we not given that. So coming from a typical sort of fairly recent graduate type perspective of like I need to be spoon-feed everything I need to know rather than actually going out and find it myself. So that's really made me start to question a lot of what was out there like just how much research was sitting out there that I wasn't aware of. So I started reading further and further.

So that kind of shifted my perspective on I guess to recommending very, very low fat diets to people which was the thing you did at the time. Then in conjunction with that, I was working with some cyclists and in particular a couple of female cyclists to—one as it turned out had diagnosed celiac disease and the other one kept on referring to the fact that she had carbohydrate intolerance, which sounded a little bit weird to me at the time. But she just swore black and blue that she just could not handle any carbohydrate so she really missed her body out. So I had to find another way to keep her filled up to do her cycling by not carb loading her which was like oh god how do I this. So again I started researching. As a result of that, I picked up a couple of books by Loren Cordain and one of them was the *Paleo Diet for Athletes* and again going through this and reading all of these references in there and very mainstream references and not these sort of fringe happy references that are often referred to. So where the hell did this information come from. So it was kind of an around about why this sort of evolution of thought that led me into the paleo and then got from there I started to listen into this bloody Robb Wolf podcast--

Robb Wolf: [Laughs].

Jamie Scott: And read a blog by Mark Sisson and that was it. I was toast from that point on.

Robb Wolf: I'm surprised that they didn't revoke your training and nutrition license there once you crash-landed here.

Jamie Scott: Well fondly enough I was actually a New Zealand registered nutritionist for a period of time. But it came to the point where I really started questioning the value of actually why the hell am I registered. I'm not--I don't really get much out of it other than sort of pay this annual fee for nothing. And this seems to be this sort of--I don't know this sort of very quite closed worldview where all the nutritionist just go along and congratulate each other and smile and nod and not sort of really question anything. So it got to the point because I started to question more and

more of my own training and I guess looked to the world with a slightly more open mind, I thought I'm not even going to bother reregistering anymore so I took myself off of their radar pretty quickly after that.

[0:10:13]

Robb Wolf:

Nice. Nice. Jaime, you did--so you've really I mean you've really run the gamut from a clinical perspective doing kind of the guidelines that I think we're initially promulgated by the American Dietetic Association, American Medical Association largely adopted by medical institutions worldwide. You've clearly been well steeped in this ancestral health scene. But you've also had had I don't want to say losing your religion but maybe something like that where like the veil was peeled back and some of the paleo story was left wanting for you. Could you talk a little bit about that?

Jamie Scott:

It started I mean I guess it sort--I went through a period of time initially looking at this a paleo scene and it seemed to be coming at a purely from someone who had a strong background in evolutionary biology and certainly was very open to take in that perspective right from the get-go. That was a waste by my perspective because that what makes it from an evolutionary biology standpoint.

The he early days of paleo very much feel into that and there was this kind of move away from let's start on the nutrition side of things, let's start focusing on edible food like substances to stay alive from Michael Pollan and this aggregation of highly processed ingredients, let's start focusing on that on whole foods. Because it makes a lot more sense for us from the evolutionary biology perspective likewise looking at our sleep quality, sun exposure, all of those things and movement. So they make fantastic sense to us overall.

The ancestral health scene kind of feed into that where we were starting to I guess thresh over the details and using that ancestral health environment to actually question ourselves. I think you'll agree, Robb, there was a couple of those yearly ancestral health symposiums in the US where there were a few kind of ding dong battles going on and sort of everyone was dividing into their camps. But that was necessary to kind of shake the information down and thresh it out a little bit more and make it a little bit more robust. But then as we came through that, I started to get a little bit disillusioned with the paleo scene because it was started to get very heavily I guess commodified and marketed and then suddenly we seemed to be repeating the same mistakes that we'd been very critical of from say a big food perspective.

So in terms of just starting to aggregate ingredients together again to form a new paleo product and sure we cannot do that on a continuum, some of those ingredients are better than what would be dished out into the mainstream supermarket. But they still missed the point that it was the whole was greater than some of the parts when we were looking at the functions of eating whole foods and probably conversely looking at foods that probably weren't so good for us well as. It was like the whole package of some of those poor food choices. We're doing more damage to us than what we could gauge just by isolating them down to one particular component.

So we started making a lot of mistakes there in terms of I guess just taking over from what some of the big food corporations were doing. We were doing on a very small scale and lot of care and love which probably go into some of these products but it seems to just be repeating the same mistakes evolve and that's left myself and plenty of others that are actually quite disillusioned with we are that part of the paleo movement that is starting to go. Obviously, there are those who have stayed true to the original sort of evolutionary biology side of things but that certainly has been picked up as a I guess just. I loath to say this but it has been picked up as just another commodifiable fad that fits into the overall diet and fitness scene and it's just the same stuff that I've seen probably for 20 odd years circulating around that scene.

Robb Wolf:

Right, right. You know what? That whole story is a tough one for me that's why I really respect and appreciate your perspective on it. You know for me, I discovered my gluten intolerance around 1998-99 and I went a long, long time if a birthday or something happened, I didn't really have any options. So some of these gluten-free options and what not have come along and a birthday pops up or like if our two daughters, birthdays pop up then I can whip out a pretty darn good tasting gluten-free cupcake or cake or pie or something like that and it taste good but I largely constrained it within once every while kind of thing.

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But then we definitely--when you poke around the internet a little bit you'll find folks that say hey I heard about paleo. I heard about gluten-free. I've been eating all these snack bars, cakes, et cetera, et cetera and I'm gaining weight on it. What's the story here? And it's kind of like well those are still problematic and so I've never really--on the one hand, I really appreciate that stuff because my aperture of food options was really pretty narrow particularly on the kick your heels up kind of side of things but then at the same time some people are morons and can't

figure out that these things are every once in a while options. What are your thoughts on that? I mean you've kind of intonated a bit some angst towards kind of the market driven elements of this which I'm kind of capitalist running dog libertarian and I'm pretty fee willing with that and I think you've got some different feelings on that. Where do we--what's the story of that? Is there a middle ground or have we just completely shot ourselves in the foot with this whole thing?

Jamie Scott:

I agree with you. I think there's definitely middle ground there and I probably discovered what I suspect as celiac disease running through my family a little bit later than you but it certainly there. So I get kind of caught the same scenario at times where if you do one with as you say kick your heel up a little bit what can you have. So it's always good to have those options there but I think there's been a different pathway safe for both you and I going into it where we came in at a time where there was a very heavy focus of eating a lot of whole foods.

So we basically ditched this standard western diet which is highly processed and went back to eating whole foods and undertook a period of time of healing and self-experimentation to kind of find out what combination within this thing that we call whole food actually works best for us. I know with both of us, it's always under constant review is where we're going. It's never set in stone. But you know I look at others who have kind of come into things a little bit later and I always like to refer back to the sort of classic bell curve that goes with the diffusion of innovation so I think when I think about--

Robb Wolf:

Early doctors and all that?

Jamie Scott:

Yeah.

Robb Wolf:

Yeah, yeah.

Jamie Scott:

So you look at people who are those early innovators and I think in one of my blogposts at the start of the year, I certainly put the likes of myself in that sort of early innovational camp. Then I would put myself in early doctors camp kind of sort of picking up on some of the stuff in the likes of yourself and Sisson and Cordain and others were certainly leading with.

But then once you get through that early innovation, early adaption side of things where people are trying to find potentially I guess solutions to problems that they face and they kind of coming up with a better understanding of. Once you go through that early tale, that early latent

period, you start to hit this kind of big bubble in the middle and that is where I guess the battleground is for the hearts and the minds.

In particular it's the battle ground for the wallets of the mainstream that's like if you want to make--if you want to take any of this sort of stuff, it doesn't matter what side of camp your own and you want to make money, it's a volume driven thing and you have to appeal to that middle ground. So some of my disillusion with paleo has been the pitch in to that middle ground getting people to basically move from the sort of standard wasted diet that is full of all this nice little packaged conveniences. And keep reinforcing to them that their life is so busy, you haven't time to cook, we understand this so here's the solution and this crap in a bag type thing that we've been so good at marketing to people for so many years.

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And then paleo is kind of came in with the best of intentions but I started to see within that middle ground of people trying to commercialize and do sort of more volume based sales. They too are starting to tell people hey you want to do paleo? But you're too busy and life in the kitchen is too hard and cutting up vegetables is too hard and all of this stuff is too hard, well we've got the solution for you. Here's this paleo bar or here's this premade paleo something and it was just saying that flour. So I think while there is that middle ground there definitely of having options, we do need conveniences and we're in the same boat here where we decide to go hiking up in the mountains. It's a lot more convenient for us to go and take a Primal bar or something along those lines with this.

But conversely, we see people get fallen into the trap of going hey I can just live off this stuff on a day to day basis. So I think part of that is and I'm with you on this too is there's just far too morons out there looking for the easy line of things. They're just not willing to kind of think and not willing to commit and not really willing to do much different. They just want to be doing paleo without actually changing anything they're currently doing. So there is that side of the problem of the human behavior camp. But then also ii think there is definitely a trend of people thinking hey there's some money to made here. This is the new hot thing. How can I take a bar or a drink, whatever, how can I sort of wrap it in this sort of nice sort of paleo framework and appeal to that nutrient. And I think we're not quite in the middle with it. You know I think it's gone from paleo is a good idea through to let's just make the same--

Robb Wolf:

Commoditize it?

Jamie Scott: Yes, commodity and do the same stuff that we've always done so. It's certainly a trick that you want to navigate I think and I think--So you mentioned you came from a sort of a capitalism and that you being an American, not to go too far out of point, Robb.

Robb Wolf: Right, right.

Jamie Scott: I come from a little country in the south pacific which has a fairly some strong socialist history in terms of how we operate here. So while we're certainly still more of a free market country now I think I'm a little bit more sort of socialist leading my political views.

Robb Wolf: You know that's an interesting point and this will take us from six listeners down to like one listener but there's something to be said for that like I've spend a lot of time in Sweden, Denmark. I haven't gotten down to Australia and New Zealand. But there are a lot of places with smaller populations the inability to rally a giant military force to go procure resources and do things like that. It forces a certain austerity that the United States has never really had to face since maybe the 1800s or something like that and we have good friends that split time between the US and new Zealand and they make the point that if you go into a New Zealand supermarket, you pretty much get what's in season.

You don't necessarily get Chilean grapes in the off season and what not and there's much more of a closed loop sustainability mindset there. So it's kind of funny the kind of libertarian ideas when you really stretch that thing it ends up when it wraps around the bottle or wraps around the ball starts actually looking if you do in my opinion a closed loop analysis. You start getting some things which looked very socialized in their implementation because you've got to start thinking closed circuit and not just infinite energy, infinite expansion, more, more, more all the time so I suspect. I've talked to you before we've had offline conversations and what not. I suspect that we have much more in agreement on that with maybe a skosh of leaning one way or the other but you know I think that particularly people in the United States, they tend to not speak multiple languages, don't travel a whole lot, don't have a lot of forced interaction with people from other cultures. I think it's very easy to assume that what we're up to is the way to do things and I think that there may be some chickens that come home to roost and never got it some point so not to belabor that too much.

Jamie Scott: It's always a difficult one to sort of see which is the best pathway to go down instead of open the market up and let the market decide and if market wants nothing but paleo bars then so be it. But I guess my

background is that you almost of--I don't want to put too far on the point on a bit--like sometimes you just don't want to ask the population what they want, you kind of give them what they need sometimes.

Robb Wolf: What they need. Right, right.

[0:25:28]

Jamie Scott: Yeah. So I kind of tend to come from that side of things of I'm seeding the environment to allow the behaviors to happen a little bit better rather than just opening it up and what will be will be.

Robb Wolf: Right. Well in particular when you have in the US sets of incentives that are horribly misplaced, subsidizing the crap food so that a Twinkie is a theoretically cheaper than an apple and just as a very superficial example. Like we have set up the system where the incentives are incredibly broken and it's becoming very, very expensive to maintain that both on the food production side but also the health side. So who knows? I am still trying to figure all that stuff out. Maybe a kissing cousin to this discussion about just commoditizing food, we kind of shift gears a little bit and look over at the thigh carb versus low carb camps.

Jamie Scott: Oh.

Robb Wolf: Yeah, oh. Anastasia, just did a great second part to address some of this. My talk that I did at Paleo Effects this last year was talking about novelty and hyperpalatable foods and she makes a really interesting point that although hunter-gatherer groups and pre-agricultural societies did have exposure to a pretty remarkable breadth of food options. They didn't eat still some things kind of drive the boat like optimum forging strategy. So the people tended to eat within an actually more narrow frequency band than what we might think and she really makes a point in here that most people clawed, scratched, killed, fought to get starch sources and carbohydrate sources and looking at the ancestral model of this, this has swung around all over the place.

I think Loren originally did a great treatment which was we have cultures that ate pretty low carb. We had cultures that ate very high carb. Here's kind of a median area, get in and play around with that stuff. Like you said in the early iterations of this story I think that we had some pretty good understanding of that and I do think that low carb diets have clear clinical applications. I think that trying to build anthropological justification for them starts getting kind of dodgy. We maybe have some epigenetic changes like you mentioned that gal that was a cyclist that you were working with that had some carbohydrate intolerance and you had

to figure out had to do some work around with that. But where are you at in that high carb, low carb thing? I mean my thing is try it on like a sweater, see what works, track some blood work and you can either go higher carb or lower carb or middle ground and figure out if you have fad map issues like we have pretty good algorithms for figuring that out and I still can't figure out why this is such a contentious topic. But where are you at with all that?

Jamie Scott: I think I'm in exactly the same place and if I look back through both my own personal journey plus where I was at subclinically, I've done the full spectrum. So I came into this at point where we decided that hey all carbohydrates are bad but at the very least they're not particularly necessary so let's screw it down to nothing and without a doubt, it's like I got probably the leanest that I had been in years eating a very, very low carb diet but I felt fucking miserable and it's like... it's like yeah cool it's like hello abs, but goodbye brain.

Robb Wolf: Right, right.

Jamie Scott: I went through that period of time look I just to adjust. It's just an adaption period and it just didn't come. I was pushing fat, taped up higher and higher and I just didn't feel as good on that very, very low carb plan as what I did on something that was a lot more moderate so and I did that with clients too. We screw them down to very, very low levels of carbohydrate and for some of them without a doubt for some of them, it worked very, very well and it was typically the males that I worked with and typically those who were very overweight, very insulin resistant/diabetic. They did well. They got their life back on it and then over a period of time and typically past 18 months to 2 years, they find they reestablish some degree of insulin sensitivity. It can actually come back up a little bit but it's always the lowering of the spectrum.

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I found women didn't do particularly well screwing the carbohydrate down to nothing and they always tends to lose their head a little bit and you'd see a lot of anxiety that start to come up and I don't know maybe that's a result of such high cortisol levels or other hormonal changes going. But again they tend to do a lot better in that middle ground. So I sort of played around and came to the point where you just have to take the horses for courses approach whether you like--you have to work with the individual, dial it up, dial it down. It's never going to stay the same. There'll be different set of times and context where you have to kind of swing the carbohydrate curve one way or the other.

But that's the nature and that's just the nature of sort of trying to make this nutrition thing fit in a sort of controlled environment that we live in this modern world. So that was that but you do need to kind of draw a line of the same and say here's a really good starting point. I think that starting point for most people doesn't need to be down the very low carb and that's where I get a little bit iffy with some of the advice that I see when you take someone off this very high carb standard western diet and then they go from that down under. You know, they might be pulling on 300 plus grams of carbohydrate a day on a standard western diet and then they suddenly getting screw down to under 50 and in some cases on under 25 grams of carbohydrate a day.

Whereas my understanding is that just simply improving the diet quality is going to probably pull those 300 grams carbs down to probably under 150 and probably if not under 100 grams a day easily. Give them a period of time just to level out and that is sort of zone and see where they go. We factor in--there's difference between what we call those cellular carbohydrate versus the acellular carbohydrates and this is where I'm really excited about some of the work that a Canadian post doc Ian Spreadbury has been doing where he's been looking at this; is the cellular structure of that carbohydrate source intact?

If it is, it tends not to hammer the system quite so high as if their cellular structure being disrupted and your feeding in sugar and flour and all sort of things into the body. So I think there's a really nice middle ground there. If you take that qualitative approach first, get people to go there for a period of time and within that period of time and you know as well as I do, Robb, that whenever you deal with someone, you're not just dealing with their nutrition issues. You're dealing with the sleep issues, the movement issues that probably tank their body mass levels so they need to restore those because that's critically important.

There's managing all their stress levels. There's chucking them in the sunlight every now and then circadian rhythm resetting all of that stuff has to take place as well. I think too often we get impatient both within ourselves and perhaps as clinicians and go hey all they want is weight loss, easy pathway to that, screw them down on to a very low carb perhaps even ketogenic diet and they'll get exactly what they want within a period of weeks but I just like to think that does them any favors. I think in the long term first do no harm approach, we have to acknowledge the fact that there is potential and a very strong potential in my mind to potentially do quite a bit to someone just by screwing them down to a very low carbohydrate right in the get-go.

Robb Wolf: I know I've broken a few people doing that and helped some people, broken some people. When we're dealing with first responders that suffered from shift work and there's some really, really hard to beat insulin resistance in that story, we try to cover it with some supplementation like alpha lipoic acid and chromium and what not. But those folks, we tend to 100 maybe 150 grams of carbohydrate seems to be kind of the ceiling for a lot of these folks and that's about the most that we--until we get that shift work dealt with and that seems to be ceiling for a lot of those people.

[0:35:18]

Jamie Scott: I find it very interesting when you look at the athletic side of things. I listened to some of the debates and participated in few of them myself particularly in social media circles. I think you and I'm, Ben Greenfield and Mark Sisson was over at a panel at AHS in Atlanta discussing this. I really struggled a little bit with some of the dogmatic statements out there regarding endurance athletes in particular in how well they will do on a very low carbohydrate keto adapted type diet. Because no one really seems to want to define what an endurance athlete is from the start and an endurance athlete technically is anyone who is engaging a constant movement pass about 30 to 45 seconds after that point they're actually starting to get quite--

Robb Wolf: Aerobic load.

Jamie Scott: Quite in aerobic load so technically they become an endurance athlete but within that from that 45 second mark, you can go from 45 seconds out to 10, 11, 12, 16 plus and maybe even more than that when you're talking about some of this freaky endurance adventure race and events that are out there. There's a massive range within there and sure people who are doing say Iron Man type of events so that sort of 10 plus hour event where they are largely running at their own pace. Within those events whilst you are racing against others you're not actively engaging in and trying to keep with someone else's pace, you have your own pace and you hope like hell that your pace is enough to go on to win the race.

Robb Wolf: Right.

Jamie Scott: It's a very dangerous scenario say an Iron Man athlete to start really engaging in a sort cat and mouse duel on say the bike stage because you're just going to blow your legs to pieces before you even get them to the run. So you have to go at your own self pace and within your own training with that event, you can develop a very, very strong reliance on fat a fuel source.

You can maybe run yourself a little bit lower on the carbohydrate side of things but as soon as you come back to say much shorter event. It's always been mountain biking and cycling and you sort of take say 100 kilometer or 100 mile bike race where there's constant, there's bunches forming up, you're trying to ride at the pace of other people, you might want to go from one bunch to another bunch. You just have to fire the afterburners and hope like hell you can get across that gap. The races in actual fact that some and those sort of short bike race at least, there are series of sprints. That's all what you're doing is like you are constantly on off, on off, on off, or two, three, four hours at a time. You look at some of the metrics that they pull out of cross country mountain bikers like these guys are deep in an aerobic zone for a disgusting amount of time. Like it's just brutal with this setting and I just don't believe that those very high intensity, very sprint oriented endurance events can be fueled from a ketogenic diet because you're just going to blow to bits on it. So again you've going to really take that horses for courses type approach and go here's one type of endurance athlete, here's another type of endurance athlete. They actually both had very, very different demands. The endurance athlete label doesn't apply to both of them and you have to really dial in what suits each of those individuals.

Robb Wolf:

I just couldn't agree more like I've tried to crack the nut of ketogetic fueled MMA and Brazilian jujitsu and it's been an epic disaster. Interestingly, I am one of those people that tends to have really good cognition, just great energy when I'm more fat fueled and particularly when I'm ketogenic but the athletic pursuits that I kind of go after really fail me when without the carbohydrate so I've been back and forth trying to figure that out. I actually had a really interesting question from a guy on Twitter, Raffie, and he said that isn't odd that your best cognition doesn't coincide with your best athletic performance and I do actually find that incredibly perplexing and annoying. My life would be a lot better if that were not the case. Do you have any insights on that or any potential solutions or I'm just screwed?

Jamie Scott:

I think you're screwed.

Robb Wolf:

Okay. That's the easy answer.

[0:40:25]

Jamie Scott:

Yeah. It's easy answer. No, I don't know--was it cognition? I don't know if it was really cognition for myself that fell. I didn't walk around like a brain dead zombie when I was very, very low carbohydrate and in actual fact if I stayed in a very low carbohydrate state if I did go out on long bike rides

because I was still doing a lot of road cycling at that stage. I felt fine. I considered a really good pace and sit through all day on those very low carbohydrate fueled rides. But I think for me when I said got my head fell to pieces, it was probably more--there's just low level of stress and anxiety that I could feel in the background and I could feel myself just on the verge of snapping all the time. It felt just kind of like okay, I'm feeling pretty okay. I'm feeling pretty good about the world but if someone pisses me off, I think I'm going to rip their head out, out their shoulders.

Robb Wolf: Right.

Jamie Scott: And I just don't get that when the carbohydrate level come up is that sort of--

Robb Wolf: Just mellower effect and everything.

Jamie Scott: Yeah. There's some sort of chemical castration from that carbohydrate but you're just not quite so aggressive and sitting on a knife edge all of the time like you are. I do feel a lot calmer with a slightly high carbohydrate intake and Jesus let's be honest my carbohydrate intake is still probably sets 100 maybe up to 150 grams a day tops and that's me going out of my way. We eat a lot of stuff. We buy a massive amount of sweet potato every week much of the surprise of who in the heavens to be working on the checkout at the time that we buy them. They're like you got to eat all of those? Yes, we are. So we don't shy away from carbohydrates but because of the again cellular nature of what we're choosing, it still ends up being quite low anyway. We're not back up around the old days of 300 plus grams a day of what I used to probably eat.

Robb Wolf: Right, right. What do you--so you talked a lot about unprocessed food when we first got going and I've been even noodling on this, coconut oil and butter added to carbohydrate can get people into the deep end of the pool. If someone ask to crack a coconut, peel out the meat and eat it with a bunch of yam and taro and sweet potato. I really--I'm pretty suspicious how they can overdo that like I find that to be remarkably difficult to overdo. I mean it's just kind of that same altruism or truism coming back that if we just focus on these whole unprocessed foods whether it's squash, yam, sweet potatoes, if you're going to have some sort of fat added to your food crack the nut yourself, eat it, don't spoon on the additional fat. I mean that seems like a pretty good way to navigate all this stuff where we're getting as much variety as possible but it's going to be pretty damn difficult to overdo that.

Jamie Scott:

Yeah, I think it is and it's very interesting having just come back from a week in a remote pacific island in mid winter break. So we went to a small island. Its bout 3-1/2 thousand kilometers north of New Zealand called Māui and it's tiny. It's literally I think it's 65 kilometers to drive around the outside of it. So it's not much of it there. It was very interesting. We participated in a couple of ancestral type tours learning how they used to procure their food and how they prepared and just basically how they lived which is very, very kind of educational. You can see that a lot of focus on starches like massive amount of starches and I know--I'm diverting a little bit here, Robb. There's always I think within this sort of paleo ancestral community, talking about optimal bargaining theories and those things. People are often mindset that the yield out of those things are so low is why would you bother them unless of course you are completely starving and then you would go out of your way to forage for these starches. On this pacific island, the bloody starches grow everywhere and they feed a massive number of people like they're priced.

[0:45:03]

The staple of their diet is taro which the root on this they say it grows well over 6 foot tall and would feed the family for days. It's like you want to talk about being lazy and getting the most amount of calories for the least amount of work it's like you just got on and knock over a taro it's there on your backyard, boom, you're done, add a little bit of coconut to it and there's a meal for everyone. So there was a big reliance on that. But over you look on the way the people on the pacific lived to get a high amount of let say a coconut fat into their diets like you have to climb the coconut tree. You had to go and log them down. You had to husk them and fuck me like we tried husking coconuts.

We were watching these locals. They would husk a coconut probably 30 seconds per coconut. I would there for like 5 minutes trying to bloody rip these things apart on a steak. It's phenomenally hard trying to really husk mountains of coconut and then you have to sit there for another half an hour or so and grate the flesh out and then you have to add it to water... Add water to the flesh that you've grated and try and wring the cream out like it's a really labor intensive job just to get a moderate amount of fat into that meal. So in our modern context where we just kind of spooning this stuff on all over the shelves is that replicating perhaps what some of this what ancestral tribes had done. I'm not entirely convinced now.

I'm certainly less convinced now than when I was perhaps a few months ago. So I think if we do stick with that role of saying hey let's just eat food

and take whatever intrinsically within that food and without being too extreme about it like we need to accept that we are in a slightly modern world and it's not a case of having zero processed food. I like the Brazilian guidelines where they talk about having a diet that's based around natural food and minimally processed food which I think some of the fats like the likes of the butter and those such things fall into that category of being minimally processed.

I think we can strike a really nice happy medium of just having what carbohydrates come intrinsically within your stuff just having whatever fat intrinsically within your meat, chicken, fish, nuts, avocado, whole coconut like all of that sort of stuff. If it's intrinsically there, just eat it and don't think twice about it. But where we do need to be a little bit cautious is where we're taking a block of butter as you say and just lathering it on over top of everything. It's like I think there's scope there to chuck some butter on your starches, chuck it on to maybe some of your vegetables, maybe stick a butter on top of the steak. But then becomes a big job from that scenario in that context through to going let's just melt this stuff down and drink it.

Robb Wolf: Right, right.

Jamie Scott: That's a massive, massive junk because you got a high fat and if that's really good for us so let's drink all of this fat, it's fantastic and I think that becomes problematic though. It's context that's outside of the evolutionary context I think.

Robb Wolf: Absolutely, yeah and Richard Nicolai made a pretty interesting point along that line because the painful thing for me in all this stuff is that maybe because of epigenetic situations, alterations and gut biome who knows what the causes are. But we do have some people that really do respond well to a ketogenic diet even for a period of time. So I really don't want to throw the baby out with the bath water with that but then at the same time you have folks that really are not potentially good candidates for that and they would be much better candidates for just a largely unprocessed whole food approach to eating which is going to be sustainable over the long haul and probably have a fewer likelihood of problems and just it's been really hard to just keep either one of those nuances alive, you know?

When you've got the really hardcore keto zealots, the low carb jihadist pushing their agenda. there's no room for carbohydrate for anyone ever and then when we start singing the praises of these more ancestrally based carbohydrate sources then we often times don't leave the window

open for. But if we have somebody that suffered a traumatic brain injury or if they maybe they went through a gestational diabetes in utero, they were born via C-section, weren't breast fed, they were on antibiotics from the age of 14 to 21 to deal with acne then maybe that person is going to have some problems. We certainly want to try to fix those problems but maybe they're going to be in a different frequency band with the amount and types of carbohydrate they can take in which again goes back to the individualization.

[0:50:33]

Jamie Scott:

I think it's like without a doubt there is a very, very exciting therapeutic applications for some of us and we're seeing it with the research all of the time now. It's like when you look in a specific therapeutic application of applying to a ketogenic or at least a very low carbohydrate diet, there's some--it just opens the door for giving some people a lot of hope where previously there was even none or their only hope relied on pharmaceutical which probably came with a very sort of very nasty side effect that probably went with it. So I think we have to keep our minds open to therapeutic applications and start revisiting some of the things that we have been dealing with in a sort on the more sort of medical side of things and say here's the application for some of this here and give the people an option that is potentially better than what we currently face.

But now on the side that therapeutic application, I think we need to just kind of do the basics a little bit better in terms of just getting people to focus on the food quality not keep looking for those shortcut. I'm always mindful of the fact that we're not just talking about food or diet or nutrition when we start talking about eating. I think we missed the point that if we're going to make it acceptable for someone just to drink a cup of fat in the morning or in the evening or whatever the meal happens to be, you missed a golden opportunity to sit that person down with their loved ones and enjoy a meal, engage in some socialization that has a big flow in terms of stress mitigation and like all of those sorts of things that go with that.

If we just have say to people they can opt out of a nice sit down meal without distraction and all you have to do is drink this fat shake or fat smoothie or whatever happens to be because it fits your macros, they lose the opportunity for the other things that have always gone with food with humans. There's bringing people together, putting them into a parasympathetic state of bonding, of winding down, of sharing, everything goes with that and this is where I think sort of very zealot like people who would heavily focus on macro-ratios or whatever else, they missed the bigger picture here and my role is to step back away from that

and look at that bigger picture strange enough as a nutritionist who is being historically very focused on macro and micronutrition.

Robb Wolf: Right. Awesome and beautifully said. I will say this though having a 3-year-old daughter and an 11-month-old daughter, meal times are only sympathetic dominance. It's kind of like geez Louise, man. So I'm looking forward to that.

Jamie Scott: Food fight.

Robb Wolf: Oh, man. Let's shift gears a little bit and talk about protein here as we head towards the end. Loren's original kind of bracketing on the macros placed a kind of standard paleo diet as being reasonably high in protein. Some people would say quite high in protein. I've always felt pretty good at that level of protein intake. There are also some really interesting studies that seemed to indicate muscle mass is really a critical component of aging. But then on the flip side of that, we also had some interesting studies that seemed to indicate that elevated or relatively high protein intake accelerates the aging process and in fact we can mimic all of the characteristic of caloric restriction by simply restricting protein. So what's our happy medium in that? What are your thoughts on protein intake, muscle mass, aging? What's the middle ground with that or what are you thinking all that?

Jamie Scott: I have to--in that argument that whole sort of aging well argument I have to declare my bias and that I am someone who... I am not focused on longevity like a lot of the stuff that I look at and my world perspective is not about trying to get everyone in the world to live as long as they possibly can. I always come from let's let people live as best as they can in the here and now and whatever happens, happens as far as the longevity goes. Because I look around in a modern culture and modern societies and I see a lot of people who in their 30s and 40s and 50s. I'm like I hope you don't have to live through to 80 or 90 because you're near enough a cripple now like the last 20 or 30 years of your life are going to be an absolutely misery if you're going to live out this sort of standard human lifespan that we're looking at currently.

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So my focus is always on what can we do with human beings in the here and now to make them happy, healthy, robust, strong, hard to kill human beings in the here and now and so my focus is becoming increasingly on building lean muscle mass giving them good sort of strength and function as a result from that. And in seeing in protein argument fits into that side of things and so the stuff I've been looking at particularly around

sarcopenia, dynapenia. I did my AHS presentation at Berkeley on this topic was that to particularly in a very sedentary driven modern environment, we actually need more protein and perhaps we have needed historically.

So we're almost using the dietary protein signal to build and maintain a degree of muscle mass where some of that signal may historically have come from everyday activities like you just live, you got stronger. Again kind of going back to my story of people in Māui, husking coconuts, doing that all day, you'll just going to strong. So we have to look at evolutionary perspective. Where do we sit on our protein continuum? What were the ranges? And then look at a very modern context and accept the fact and this is where I think some people are right in the criticism of paleo, again we are not paleo hunter gathers anymore and this is true. Look at our modern context and so what do we require to overcome the fact that our environment just doesn't give us a signal to stay strong anymore.

I'm looking at a window now, Robb, as I talk to you. I'm looking to a group of guys across the road from our apartment building at another house and we were commenting on this morning looking the builders on site saying they don't carry stuff anymore. It's like all of the concrete blocks are being delivered by a crane. All of the timber that they are putting in place at the moment it's all being prefabricated frames and all they do is use a nail gun to stab it in place. So even people who we would historically consider to be very active and under a high degree of load all day, these guys are doing next to nothing. It's like they barely have to lift a finger to build a house now.

So I think we have to overcome that. So part of overcoming that sedentary signal that we get which is undermining our muscle mass is to power up our protein a little bit. It actually set slightly towards the higher end of the scale. We actually for the Ancestral Health Society of New Zealand symposium in October, we have a professor who is a New Zealander but he's now based in University of Sydney, David Raubenheimer. He's been looking at optimal protein intake and he tends to position at around about to the 20 to 25% of total energy intake which is I think if you look at some Cordain's numbers, I think it probably sits fairly it's in the sort of the moderate zone so I've seen numbers upwards of 30 to 35% total protein. So at 25% it's not sky high but it's not down to bottom in the range either when you look at the national diet surveys of countries like New Zealand. I think we come in at about we average about 16% protein which is right down the very, very bottom in the national recommendations and then we look at what makes up the most of our protein in the New Zealand diet, and it is bread. So I can tell you

right now that the vast majority of protein is New Zealand is getting will be gluten and best case scenario is that gluten is going straight through. They're not actually absorbing it. It's not a usable protein source for them if you look at some of the research that's around it particularly from the like of Fasano, Alessio Fasano.

Robb Wolf: Right.

[1:00:26]

Jamie Scott: So probably we're actually closer to where I would say I would say, stick my neck out and go we're actually probably getting right about 10% of total. Energy intake comes from good biological sources of protein and so that creates this massive gap between what we probably are eating and that sort of 25% maybe if not 30% for aging populations to restore some muscle mass on them. There's a big, big gap sitting here. So my focus, my bias is on how do we get people to bridge that gap with good quality protein sources, good sustainable protein sources so that were not ripping all of the fish out of the sea or have bloody CAFO farms and beef everywhere.

Robb Wolf: Right.

Jamie Scott: Start to throw that out of argument with it. How do we that sustainably and how do we get people to be happier, healthier, more robust human beings in the here and now. I haven't looked at the argument where you sort of preempted this question about does a very, very high protein intake does actually accelerate aging? In my mind, if people are sort of robust, healthy, strong human being and they die 10 years earlier than average--I'll probably get into trouble for this but I don't really care to be honest. If 70 is being kind of good lifespan because, you know, we're also living long and dropping dead. Hey, I'm happy with that. I would take that over a lifespan of 80 but with the last 30 years of that with some degree of disability and comorbidity that goes with that.

Robb Wolf: You know I think it's 80 or 90% of healthcare cost are spent like in the last weeks of life, definitely the last year like literally the last few weeks of life so there're some interesting implications with all that. I really like what you covered on the protein piece. Actually at 25% of my energy intake that hooks me at about 165 grams of protein which is kind of right in the ball park for what I usually try to shoot for. I just love stuff. I want to ask one more question, can steal you for a few more minutes? We're at an hour but can I steal one more question from you?

Jamie Scott: You go for it because as soon as I'm done here, I had to go back to work so hold me for as long as you want.

Robb Wolf: Okay. Perfect, perfect. Okay, 10 more questions.

Jamie Scott: Okay.

Robb Wolf: So you know you were describing the process on these folks on the island that you went to and like collecting coconuts. I actually have a 10 minute video of Mat Lalonde and I having a race, husking coconuts and I ended up kicking his ass on that but I have more experience of it than he does but he's like six times stronger than I am. Once he was like figuring it out, I was like okay we're done with that.

Jamie Scott: We're done.

Robb Wolf: So you know usually baked into the cake all of our lives up until very, very recently, there was just this base level of activity, lifting, carrying, humping stuff around being on our feet and everything. It seems very, very difficult to get that base level of just lower intensity high volume work then we've got CrossFit on the other side of thing which is a lot of high intensity activity in a fairly brief period of time. It really lends itself well to a sedentary busy lifestyle and that you can get a lot of work done in brief period of time. But again this is something that I've had a tough time trying to crack this nut. How do you strike a balance there? And I know part of it is just like dude get off your ass more and just go do more work but with people being so busy even as I'm asking these question, I'm like pile of shit, don't be so in debt, take more time off. I maybe answering my own question but.

Jamie Scott: How long do you want the answer to this one?

Robb Wolf: As long as you want. But I mean I see this to somewhat polarized extremes here where like you like you've got the super brief intense kind of activity which I think is good up to a point but it's really not ticking all of the boxes of needing like getting out and throwing hay and chopping wood and doing construction work and what not. I really feel like that type of frequent, not super intense but reasonably demanding work is just so therapeutic for people. I don't really know how to bake that back into our modern cake. What are your thoughts on all that stuff?

[1:05:13]

Jamie Scott:

It is difficult and this fits into the challenge I have with my day job. My day job now is largely trying to come up with an answer for that exactly that type of scenario for those who are stuck in the corporate rat races. How do we get that strength signal back into their lives and environment that is now so geared to removing it and this is what we have to respect when we look at how we come up with an answer for this. So we have largely and particularly in our biggest cities, we have a massive amount of urban sprawl which necessitates that we drive everywhere in a car, where up to our eyeballs in debts, we have all the stress and everything else necessitating that we work very, very long hours.

Our work environments largely require us to sit on our ass and do next to nothing and again going back to the builders I can see across the road, even we got something that is fairly labor intensive even in that type of supposedly heavy construction. The number of labors having devices that these guys are suing, they're not as robust as probably what they were 10, 20 years ago as builders. Now we have to respect that that the environment is now geared against us and we as individuals and as society needs to actually probably start rejecting that as we go through and remodel and re-imagine some of the societies and look at re-engineering some of the stuff that would keep us strong back. So as an example, we would try and deal away with the scenario where you have and escalate by default an extra set of steers because you know human nature is always going to be that they would default to the escalator.

They will opt out of the hard stuff so you actually need to take that option away from them and give them the harder option by default accepting that there's accessibility arguments and everything else that goes into that as well. So we need to look at the environmental aspect and say how can we make our environment harder because that is what keeps us healthy. There is a degree of therapeutic activity that goes with that and it's all warped up in movement of being outside of getting in the sunlight like all of those things go hand in hand and we need to construct environments that allow that.

So until such time as those environments are rebuilt, what the hell do we do? Again is this movement is actually making a day harder, look at carrying stuff, look at doing more activity. From our own personalized here and we the luxury of living in are relatively small city. We're in a city of 400,000 thousand, the second big city in the country but it's a relatively small city. It's a relatively easy city to get around so we actively said okay we're going to position ourselves where we live in that city so then in terms of our daily activities, we can either walk or bike. So we're always out moving. We go to the grocery store and do smaller shops with

a higher frequency knowing that were going to walk there, we're going to carry some stuff back again and walking while we do that. That becomes basically our cardio.

I'm not going to set aside extra time in my life to Bingo and do cardiovascular type exercise because I now get all of that working around on bike, doing the more frequent shops those sort of things, carrying stuff, just looking for the opportunity to put myself on go, the walking up a hill, climbing a tree. And then for the more structured side of things I think in the likes of CrossFit does have a part to play because for those who can't have the low constant signal running through their lives perhaps if we can really compress the period of time in which they receive the signal but the signal that they get in terms of its amplitude is way, way higher than what they would've done then maybe that's of a benefit too. But again you need to be very, very careful because you've really up the strength of that signal then you have to dial back on the frequency and I think where people start to get themselves some problems potentially with some real high intensity training modes is that the signal amplitude is sky high but I think they have to actually had to pull the frequency back.

So again you look at your life and go can I be build a high frequency low amplitude signal to become more robust into my life? If you can, cool and then perhaps you don't need to do quite so much CrossFit. But if you can't do that low amplitude high frequency and you go do the other extreme and go I'm going to do a very high amplitude, you have to dial the frequency back, you can't be doing that five, six days a week, twice a day in terms of some of the examples that we heard in the past. That's where it becomes problematic.

[1:10:49]

Robb Wolf:

I love it. I love it. Okay. Jamie, I would keep you out of your day job even longer but I know you have things to do. I really, really appreciate you coming on the show.

Jamie Scott:

It's been fantastic being on, Robb. It's such an opportunity to chat to you finally.

Robb Wolf:

I am going to try to get down to AHS New Zealand. We're trying to figure out how to pull this off with three kids or two kids, well three kids because I'm the third kid so this is more of Nicki's headache than my headache. But either that or figuring out a way that when I come home from that trip the locks haven't been changed on my door and I'm

sleeping under a bridge somewhere but I am trying to put that together. Where can folks find you internet these days?

Jamie Scott: The main site that I blog on and I'm not very frequent on there at the moment the AHSNZ organization but I blog with my partner Dr. Anastasia Boulais on re-evolutionary.com that's our main blog site and then outside of that on the Ancestral Health New Zealand site which is a ancestralhealthnz.org.

Robb Wolf: Fantastic.

Jamie Scott: You'll find us there.

Robb Wolf: Great, Jaime. We'll have links to that in the show notes your re-evolutionary website is literally I believe my favorite website on the internet.

Jamie Scott: In New Zealand.

Robb Wolf: No. You guys do an amazing job and the tops that you cover are really phenomenal, beautiful site.

Jamie Scott: Thank you.

Robb Wolf: So even though you may not post incredibly frequently on it. Back to the frequency distribution deal, if you want to produce schlock and just say here's five paleo hacks for abs then you can jam that out every day. If you do something that is thoughtful and graphically rich and what not is what you guys do is a less frequency distribution to be able to get stuff done just to cook up a good idea and then see it through to its fruition that's not an easy activity so I really, really applaud what you guys are doing there.

Jamie Scott: Thanks, Robb. I really appreciate that.

Robb Wolf: Well it's been a ton of fun. I look forward to getting down to see you. I will bring a bottle of tequila and we can have some NorCal margaritas if we can scratch up some limes.

Jamie Scott: Fantastic.

Robb Wolf: Awesome, Jamie. Take care, man. We'll talk to you soon.

Jamie Scott: Thanks, Robb.

Robb Wolf:

Okay. Buh-bye.

[1:13:23]

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