

Paleo Solution - 160

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Robb Wolf: Hey folks, Robb Wolf here. If you can feel some sort of tectonic shift in the show, that's because we have doubled everything even larger. We don't only have Greg Everett in the house, we have Kiefer from dangerouslyhardcore.com. Dude, what's going on?

John Kiefer: Hey, not much. Glad to finally be on this show.

Robb Wolf: We were just talking, Kiefer pinged me like 6 months ago right when, literally I think the week that Zoey was born, or like the week before, and I'm like, "I'll get you on soon. I promise." And then it was 6 months later and then we just told him that it's gonna be an incredible let-down when we finally get it. But I'm super stoked to have you on the show since Greg just reminded me we will mention the show sponsors right upfront here before I goof that up. We've got Evolve Foods. Go to evolvefoods.com Put in Wolf Pack 2 and receive 10% off of your order.

Also we have frondeskhq.com if you run a service based business, fitness in particular but it could be a hair salon, anything that's basically a service-based interface where you work with folks bludgeon them on the head, steal their money, all that sort of jive, go to forntdeskhq.com. This will probably be the last week that they actually are a show sponsor but this is something that my wife Nicky has been working on. Really cool application for helping you to manage the front and back end of your business. Okay. Here we are. Kiefer, what's going on, man?

John Kiefer: Not much. Just looking forward to this because when I had you on my podcast you said you wanted to get me on yours because you have tons of questions that we didn't really get to on my podcast. So I'm curious what those questions are. I like the good, high level conversation and I had- do you know Dr. Rocky Patel?

Robb Wolf: Oh, yeah! Yeah.

John Kiefer: Yeah. I actually- talked to him this weekend and it was a great conversation. He had all kinds of topics to talk about and he's doing some amazing work at his clinic.

Robb Wolf: Yeah. Remind me to talk about his stuff later because especially health program that I'm working with here in Reno. They're pretty geeked out on the HTL labs, NMR profile for blood work and looking at like LDLP and then Rocky just has really interesting story of his LDLP - his LDL particle count is actually going up when he started doing the Carb Nite but then he went in a...well shit, I guess we'll just talk about it right now.

John Kiefer: Yeah, yeah. Might as well.

Greg Everett: Perfect segue, Robb. You are so smooth.

[Laughter]

Robb Wolf: Kiefer, give people some background. You've got a master in physics, you've got a power lifting background, you've been scratching around in this performance based nutrition and training for a long time. Give folks a little bit of a background.

John Kiefer: Ah, well, actually you just summed it up. I started in engineering—hated it; thought I was gonna go into sports med—hated it; got railroaded into physics—loved it; stuck with that all the way through my masters; decided to actually come out here to California to finish up; and then got sidetracked on Nutrition and Software Development. So I did the Software Development mostly for a couple of years. That's when I wrote Carb Nite, had absolutely no idea how to market to anybody. I wrote that totally for health people, really just to help people lose weight.

I mean everybody's getting so fat. I can't stand to go back to Indiana. I mean just the gravitational pull you feel trying to walk around Walmart, you can't walk in a straight line—people are so big.

Robb Wolf: It's like a....

John Kiefer: Yeah.

Robb Wolf: An event horizon, you're just sucked in and you never come back.

[Laughter]

John Kiefer: All right. Exactly. I'm pretty convinced most small children aren't with their parents—they're just caught in orbit around some of these large people.

Greg Everett: Nice. There's definitely some time space continuum issues going on there, too. If you really drive between Chicago and New York, it gets pretty interesting.

[Laughter]

John Kiefer: Right. Right. And so I don't know. Actually, my background's in body building competitively. I only got into the power lifting 'cause I knew a lot of power lifters and started helping them with their diet but when I did the software, I was sitting like literally 14 hours a day and it was just wrecking my body, I mean, everything was breaking down. I look like crap, and that's when I- I was like, "That's' enough. I'm gonna make a full push and basically do everything I can to try to start to get these messages out there," and that's why I discovered carb back loading which took off in the performance community and I found it was a lot easier to get those people interested than just general health conscious people because for the general public, people are just confused. So they see 10 different things a day about how to be healthy and they can't really discern what's real and what's not whereas the performance community, they're a little more savvy.

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They can at least look and see, "Okay. This makes sense," or "I'm willing to at least try it to see what happens," So it's easier to get my foothold in there.

Robb Wolf: I think that's probably the key there is, the performance community, we've had some really good success like in the military special operations scene but anybody that's looking for some sort of a performance boost or I guess in the case of like you've had a lot of success in the body building and figure scene, just anybody that's looking to optimize performance, optimize body composition—they're just simply willing to try something. Maybe it sucks, but they're just willing to give something a shot whereas when you're, like you said, when you're pitching to the general health scene, folks are in this kind of paralysis.

Part of it is just that you're inevitably suggesting that you're gonna take away the Twinkies and ho-ho's and all that although I guess that's going away now.

Greg Everett: too late for that.

[Laughter]

John Kiefer: Right.

Robb Wolff: One of the things that I've been rattling around a lot is there's some different approaches out there. One of them being more I think kind of the lineage that you and I come from which is more of this macronutrient cycling, not really paying a ton of attention to like weighing and measuring of food unless we have to really get in and tighten things up but then you've got another camp that is fully geeked out on like the weighing, the measuring. They feel like the calories are kind of the primary issue in the whole story which I wanna talk about that a little bit later, but how did you get into more of the macronutrient cycling? I mean, particularly, it's just intriguing to me.

You've got a Physics background. I've got a Biochemistry background and I tell you I would rather shoot myself first when you measure my food. So like how did you get at this? You're a detail oriented dude, you've got a phenomenal science background, you understand the value of attention to detail with what you do, but why did you go for kind of a shooting from the hip kind of approach like what you developed with Carb Nite?

John Kiefer: Ah, well, basically because it works better. Einstein said it best like "Make things as simple as possible but not simpler." And weighing and measuring your food everyday, trying to figure out exactly how many calories you're getting in and looking to how many calories you burned today, I mean, that is overly complex when you start to understand that you can drive your body into these states of inefficiency so what I'd learned is-

And some of the most interesting thing about the low carb diet that I found and that is mimicked in a lot of these calorie deprivation diets where people are eating 600-400 calories or less per day is you get these wild swings in inefficiency, in thermogenesis and uncoupling protein production when you take carbs out of your diet and then introduce them all in concentrated lumps at some point either during the day or the week depending on what your lifestyle is like and realizing that it became much, much easier.

You know, I did the whole thing— 6-8 meals per day, watching everything that went in my mouth—everything was partitioned perfectly every meal and my body was like a clockwork if I went more than 2 hours without food, I was starving and miserable and cranky and people hated me. Well, when I started using these other methods I learned, my body reacted so differently. I would go hours without eating and not even realize it.

And then you can feel those inefficiencies when they happen like your body temperature goes to the roof, you start sweating as opposed to going hypoglycaemic which used to happen when I miss meals and things. I started to learn with myself that it was far easier to control how I looked by just eating as I was hungry, tricking myself into being able to eat more at certain times by the foods I chose, and then just looking to see how I look the next morning.

And that also became far more effective with my clients. It was much easier to dial them in very quickly and then just kind of hold them there until contest time. Most of the people I work with would be ready for a show about 3 weeks out and then from it was just letting them yo-yo a little bit and then bring them into the shows and it's frustrating 'cause everybody's like "Do I need to know exactly how much of this to eat?" I'm like, "Well, I don't know. How hungry were you? Is this happening? And if this is happening, then eat more butter."

"Oh, well, if that's happening then you need to throw in some coconut oil at this time." It just became far easier and also the research backs up that idea that all these equations we have, all these metabolic equations, all these calorimetry studies, and all the health studies, they're all done under the paradigm of heavily carbohydrate-based diet.

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Well, all those rules change when you take carbohydrates out. It's like a car. If you run your car on regular- well, if you run your car with alcohol-based gasoline like the E85- things like that- then engine health can be defined by all the clogging and shit that goes into the fuel injectors which is just like your arteries.

If you're eating a carbohydrate-based diet, then you can kind of judge health on how clogged your arteries are and everything 'cause you're putting something in it that shouldn't be there on a regular basis whereas if you run your car on pure gasoline, then you've got a whole other set of parameters to look at for what's healthy in your car.

Well the same thing happens in the body. If you take all the carbs out, you take out all the shit, then there's a whole another set of parameters and they vary wildly and I found the only way to get a handle on it realistically was to not count the calories—just look at yourself. You should be able to just look at yourself and that will give you all the information you need on how to tweak your diet everyday on a day to day basis 'cause every day, you're different. You didn't have the exact

same day you had yesterday, you didn't have the exact same week you had the week before, so that's what kind led me to that path.

Robb Wolf: No, I like it.

John Kiefer: Kinda long winded answer.

Robb Wolf: No, it's really good.

Greg Everett: You're so concise.

[Laughter]

Robb Wolf: Usually to the point where I'm like, "Greg, what was I talking about?" So-

Greg Everett: We don't know, though.

Robb Wolf: Yeah. Greg just sends me off on another wild goose chase after that. You know it was interesting, both Greg and I were involved with the very early incarnation of Crossfit and obviously Crossfit, they like the zone and they like this way of measuring deal because of this accuracy and precision kind of idea but it just struck me that this completely randomized approach to training would advocate a completely static and dead approach to nutrition instead of looking at what did you do, what are you going to do, what are your recovery parameters, and stuff like that, and being a little bit more dynamic like meal by meal, day by day, week by week, to be able to meet the needs.

Like if you are doing kind of a strength oriented cycle, you probably don't need as much glycogen if you are doing a ton of 800 meter repeats with like 6000 pull ups, then you probably need a ton of glycogen and you should probably fuel appropriately to that. I don't know. I guess it's just kind of validating-

Greg Everett: I think it's a comfort thing. Like Kiefer just said, people were freaked out about not knowing exactly what they needed to eat for the next 3 weeks and I think there's so much information that people are overwhelmed that if they don't know exactly what they're supposed to do, they just go off the rails completely.

So I think that's where the zone stuff comes in and is so popular even though on the same hand you can say it makes people crazier. It's that weird sense of comfort and security because you know, "Okay, well, I have my 4 blocks right here. This is it." It doesn't matter if it's made of a

cheese burger and coolers or whatever it is but I think that's a nice reliable thing to fall back on.

John Kiefer: Right. It's kind of that it's one less thing to think about during the day. I mean your day is confusing enough and now if you don't have to think about exactly what that meal is gonna be, somebody's written it down for you, that's way easier than trying to figure it our yourself like, "Ugh! Oh, gosh! What do I look like this morning? Should I eat more fat or should I have more carbs tonight or should I-" all those questions that somebody in that kind of self analysis, it takes time and most people just don't have that time or don't wanna spend that time.

Robb Wolf: I guess the way that I've kinda pushed this stuff like I tend to to start most folks 'cause a variety of- the majority of people coming to my website, they typically have some health issues, they have some weight to lose, so I'm starting them in that kind of lower carbs, cyclic low carb kinda spot and then we can start moving forward from there and if we find that they are gaining body fat then we might need to ratchet -

Maybe they're eating like a stick of butter in every meal. Okay, we may need to modify that, we may need to tweak carbs, or on the other side of that, if they're feeling like their legs are kinda leaden, if they're feeling lethargic, then we up the carbs and we try to primarily up the carbs in the post workout window although I've been steering more people in the direction of the carb back-loading direction so maybe it's in the post workout window, maybe it's simply in the evening which we'll talk a little bit about that but we've been able to get people up to UFC calibre, MMA performance.

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Some folks have done really well at rowing in the international level by simply just looking at how do you feel kinda day by day and look at the work load ahead of them and then kinda tweak and go from there.

John Kiefer: Yeah. Your body tells you so much. Your body communicates with you constantly. And it seems like all these really strict prescriptions of weigh and measure this is exactly how you eat everyday, it forces you to not listen, it forces you to just kind of ignore some of the signals your body tells you. I don't know how many competitors I've had from other coaches. There's like, "Ugh, I felt miserable everyday for 6 weeks and is something wrong because I don't feel bad?" Like why should you feel miserable for 6 weeks? You're trying to get in the best shape of your life

even if that percentage of body fat level isn't healthy for a long period of time.

You're trying to get in the best shape of your life and yet you are willing to suffer through 6 weeks of constant misery, you're throwing up because you hate the meals you're eating, and yet you thought that was okay because you had this prescribed plan that you had to follow. Whereas now, you tell me how you feel, I tell you how to adjust and you keep feeling good. What is wrong with that? What is wrong with listening to your body and giving it what it needs?

Robb Wolf: Right. Right. Now it's funny, funny.

John Kiefer: Yeah. It's frustrating.

Robb Wolf: So you developed the Carb Nite was it like 4 years ago? Was it longer than that?

John Kiefer: Carb Nite, I think I wrote in 2005.

Robb Wolf: Okay. So it's almost like 7 years ago.

John Kiefer: 7 years, yeah.

Robb Wolf: So tell folks a little bit about what goes in the Carb Nite and like who you—so you design that initially as kind of an effort to help people more on the health level and then it's transition more into performance and aesthetics and then I wanna talk about the transition going, what you started thinking about with developing carb back-loading. But tell folks a little bit about Carb Nite and kind of the thought process that went into that.

John Kiefer: Okay. Carb Nite is pretty simple. What got me started on that route and also talks about the mistakes I made when I wrote it but what got me started on that route was Doctor Di Pasquale. His book, the Anabolic Diet, it was the first little manual I ever saw with like a good amount of research in the back and that prompted me to start looking that stuff up.

But secondly, it was the first diet that ever help me get rid of my love handles. I could like it didn't matter how hard I try, I could not get rid of my love handles, no matter how much I worked out, I stuck to the normal diets—and so that introduced me to the Carb Cycling but I could never get as lean as he suggested and since I started getting into the research, I started learning more and more about basically the road Gary Taubes

went down. I just learn how carbohydrates screw everything up by- they pretty much change what tissues are efficient in your body for storing calories and so you get fat.

So I became this huge advocate of just no carbs for a little while but that didn't work out for my body building goals especially when I was leaning out. Things really slowed down and I started to feel miserable and then I went back to remembering the Anabolic Diet and started doing a lot of research on that and at the time I was prepping for a body building show, I was miserable. I'd eat literally nothing but chicken, cheddar cheese and hot sauce for about 6 weeks. Yeah.

[Laughter]

Robb Wolf: Dude, I would not want to be within a mile of your bathroom. Good God, man.

John Kiefer: It was horrible. And then that's when I broke down and had massive carb feeding with a couple of dozen donuts.

[Laughter]

And it produced- Yeah- That was a story in itself like the first dozen went down, my stomach was not ready for that and I threw up the entire dozen.

Greg Everett: Shocker.

John Kiefer: Then, yeah, immediately after throwing them up, I was starving. So that prep phase of the first set of donuts expanding my stomach allowed me to keep down the second dozen donuts. So I pounded another dozen and I woke up like so tired and shredded and that whole week, I made progress that I hadn't made in a while.

So that got me thinking back to the Anabolic Diet and I started just digging in to more of the research and that just exploded into really understanding how the body works without carbs but understanding how important carbs are as a tool to make sure that you continue to make progress. So I did shit ton of research to optimize that as fully as I could at the time of the research.

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And that's what came up with Carb Nite. You only need carbs once a week. It looked like it was better to eat them at night although we have direct studies now to show that they are. It is best to eat them at night. You only need them literally depending on how lean you are. You only need to eat carbs for 6-8 hours one time per week to respark all your fat-burning hormones and to elevate thyroid hormone and to increase production of the uncoupling proteins. It's amazing that it took so little but you needed that big insulin spike to give you a week worth of results.

And I started using on just regular people and they got great results and it was really easy for most of them. The problem they would have was at dinner with their family and things like that but they always found alternatives but it worked incredibly well and as I learned to refine it for performance, that's what I started taking on clients for body building and things like that and really refined the version specifically for them that I still don't talk about that much. It's still just the health version that's out there.

So that's what let me to do that. It was more for myself for aesthetics then I learned all the health benefits, I got normal people on it, they started doing blood tests, of course, 'cause they were scared shitless to eat the saturated fat that I'm recommending and they got healthier and they got leaner. It was like everything they could want. What the mistake I made was not understanding- what I've come to understand in all the research and all the diet- any diet you look at that's actually ever been effective for weight loss, it has a very, very specific structure of food and that structure is there's a base level.

Most of the food comes from minimal processing. And minimal processing to me includes cooking. So your first 2 layers are fibrous vegetables and meats essentially. Those require the lowest level of processing so you can either look at a really strict vegetarian diet— they're eating mostly from that level or on the other hand, a very strict ketogenic diet is also eating mostly from that group. They're just choosing different groups to base their diet on. And if I'd understood that one I wrote Carb Nite I wouldn't have recommended so many processed foods because I was really just looking at what is your fat to protein ratio?

And now I understand that if you go a level deeper, you can get even faster results, better results and results that are easy to maintain for a longer period of time.

Robb Wolf: I don't know if you follow Stephan Guyenet's work about the hyperpalatability of foods and like neuroregulation of appetite, do you think that that's some of what's occurring there that if we- even if we're partitioning a ketogenic phase, cyclic carb up phase and stuff like that, but if we have these kind of modern hyperpalatable foods, is that kind of kicking people into over consumption of calories even in a cyclic low carb deal or what's the mechanism there?

John Kiefer: Oh, definitely. I mean, the research there is so clear the way you can manipulate food and I've actually used it for off season body builders to help them eat more. If you try to eat those whole foods, their consistency and their base really gives you satiety signals pretty early on but you can circumvent those all by just changing the viscosity of the meal. That will make you eat more before you get a satiety signal and when you look at the sugar and also I still have this strong theory and there's some support for it that milk products, KC products, can also cause food to be hyperpalatable because they can stimulate cannabinoid receptors in the brain.

There's all these tricks that we know conclusively make food hyperpalatable like you're talking about. They just literally trick your body into not recognizing a satiety signal so you can eat more and more and more before you even feel full and you won't feel full until you basically clog the duodenum just enough food can't get through there and then you'll feel full.

You'll probably just feel sick and pressurized but that's the point that people have to reach under that paradigm before they'll stop eating. It's just literally a physical limitation to the food that they can put down which for a lot of people is a shit ton of food.

Robb Wolf: Greg has a 85 kilo lifter that I don't think has a duodenum like he has- Stefan has no off switch whatsoever that I think that guy could have done the full 2 dozen of donuts and not even blinked on that so-

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Greg Everett: No question.

Robb Wolf: Yeah. Yeah.

John Kiefer: It's amazing.

Robb Wolf:

So maybe- gosh, I'm thinking here- maybe 2004-2005, some folks like John Berardi, they put out some approaches of partitioning carbs earlier in the day because that's when we have a natural insulin sensitivity and that seem to make some sense. Folks seem to get some benefit out of that but you're advocating something quite different than this and we'll get into some of the mechanism where I think the carb back loading it just so sleek because one of the challenges I've had in thinking this stuff through with a cyclical low carb approach is it typically in that kind of ketogenic phase we induce the state of metabolic insulin resistance, people are running on ketone bodies were sparing glucose for the brain.

And so I've- in talking to Mat Lalonde and some other folks, I've actually been a little bit nervous about the carb feed that comes in that metabolic state because you have some fairly significant transient insulin resistance because people are running on ketones. What are your thoughts with that? Is there any type of hazard with that or should we ideally be fixing that with the approach that you advocate in carb back loading by creating some enhanced glucose transport. You make the great point that it's not insulin sensitivity, it's non-insulin mediated mechanism to shuttle some nutrients specifically glucose in the muscles. What do you think about that whole thing if that question makes any sense at all?

John Kiefer:

Yeah. It's kind of a big question. Before some really exciting recent research has come out and also my knowledge base has increased recently so- before I wouldn't have recommended carb back loading if you weren't gonna train in the evening but I've started to change that. First of all, they've actually done some direct studies where they kept everything isocaloric, they took 2 groups of people, had one front load- their carbohydrates, basically another eat carbohydrates all day and another eat carbohydrates only at dinner and only at dinner group actually lost more body fat and maintained more muscle mass.

They didn't necessarily lose more weight but they lost more body fat and maintained their muscle mass and that was without resistance training. So there are some mechanisms there and that's mimicked in actually caloric back loading studies where they have people eat most of their calories in the first part of the day and then they'll have another group that eats almost all their calories right before bed. Those studies mimicked the results exactly. The people who eat most of their food right before bed lose a lot more body fat and maintain a lot more muscle during their weight loss even though the weight loss numbers are almost identical between the groups, the composition of weight lost is very different.

And I think there are several reasons for that. One, I mean, if you think about it, you wake up every morning in a ketogenic state. You are making ketones and you're burning ketones. There's almost no way around unless you get up periodically through the night and eat food. People wake up ketogenic. It's rare not to although if you are already deeply in the type 2 diabetes, that's not the case. You actually don't necessarily wake up ketogenic but for normal healthy people who haven't crossed that threshold yet, you wake up ketogenic so the first thought is why mess that up?

Your body is burning fat. It's happy burning fat at that time. You actually have a hormonal situation where it wants to burn more fat. Why screw that up? And then the second question is, "Okay, yeah, in general we're more insulin sensitive in the morning although again not true for type 2 diabetics—they have insulin resistance first thing in the morning. In general, we're more insulin sensitive in the morning but what does that mean? People really I think—not to knock any of the experts making these recommendations—I don't think they ever sat down long enough to think about what does that mean.

And there are only 2 tissues in your body that really have a strong signalling mechanism for insulin when it comes to carbohydrate use and that's fat tissue and the muscle tissue. So if you're insulin sensitive first thing in the morning, that means those 2 tissues are both gonna be competing for the material that you eat and although it's hard for carbohydrates to be turned into body fat, carbohydrates make it a lot easier to store the fats in your system to esterify the fatty acid into triglycerides for fat cell storage. So you're getting more raw material into the fat cells so that they can store even more fat.

And then your muscles have to compete for that and in the morning they may not be in an optimal situation to do that whereas in the later part of the day, like we're talking about, and if we'd only talk about resistance training that first half of the day with carbohydrates will actually decrease the enzymes necessary to get fat out of fat cells and will increase the enzymes necessary to get fat in the fat cells but it does the opposite in muscles.

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It actually decreases the ability to get fat in the muscle cells and increases the ability for them to release so even without exercise, you set up this paradigm by eating carbohydrates in the first half during the day where your body, your body fat especially wants to store even more

carbohydrates at night whereas when you take carbohydrates out of the diet, it does the exact opposite. It increases the enzymes that make fat cells get rid of fat, decreases their ability to store fat and carbs and then muscle cells go through the opposite change. They're more apt to store intermuscular triglycerides and less apt to get rid of them at night.

So you've got this situation where the healthiest tissue in your body is willing to store the fat that I would imagine you use for fuel the next day in your muscles because that period without the carbohydrates it's priming them to be better at using fat earlier in the next day so you've got even without resistance training, that's the scenario that's going on that I'm guessing is a huge component of why eating carbohydrates at night opposed the first half of the day works regardless.

Greg Everett: Interesting. Interesting.

John Kiefer: If that wasn't too technical or-

Robb Wolf: No, no. It's good. I'm gonna love when our transcriber goes through all that stuff. She's gonna be like, "Yeah, I'm done. I'm over this stuff."

[Laughter]

So we're talking about the potential of just having some kind of better optimized metabolic processes, a little bit of nutrient partitioning, ideally sticking calories and nutrients in a more optimum location which ideally would be more within the muscles and then you talk at length about the importance of resistance training and the way that that will change nutrient partitioning. You make a strong argument for an afternoon training session or an AM training session but that noon time is kind of like the no man's land.

Could you talk a little bit about that stuff and it's miserable for me because that's when I do jujitsu like 3 or 4 days a week and so I was like, "Damn it!" So I'm in that completely non-optimizable spot. But could you talk about the advantages/disadvantages of like AM, later afternoon versus midday training.

John Kiefer: Yeah. I'll start with the evening training 'cause that kind of a good segue from what we're just talking about. You know one way to enhance that idea that you can stop fat cells from being able to store those sugar and fat as well but shift it to muscle tissue is through- there's the specialized proteins and I don't wanna talk over the head of your audience necessarily but they're the glucose transporters and they're little protein

to sit on the cell, every cell on your body. And the type in muscle and fat tissue that's a really big interest are GLUT 4s and GLUT 12s. I just call them T GLUT in my book. But usually what happens as insulin hits those cells- fat cells and muscle cells- these GLUT raise the surface of the cells and then the GLUT is what actually grabs the sugar, pulls it into the cell.

Well it turns out you don't need insulin to make those things translocate. It's called GLUT move from the inner part of the cell to the surface and in muscle cells, all you have to do is resistance train. So if you lift heavy loads and the key there is heavy load although anyway, I'll stay on this train of thought-

[Laughter]

Heavy load- yeah, I don't wanna spare this and sort of turn this into a pretzel. The heavy load increases GLUT 4 translocation which means essentially your muscle cells can soak up all the sugar that they want and your fat cells can't if you do it later in the day. So you just optimized your circadian rhythm to partition even more nutrients into your muscle cells instead of your fat cells. That's what's going on there. In the morning, you've got these really interesting kind of growth potentials that you don't have on the rest of the day and I don't have an explanation for this. It just comes up in the research.

If you resistance train first thing in the morning fasted or- we'll start with the resistance training- if you resistance trained fasted first thing in the morning, if you take in just a little bit of carbohydrates after that training session, you actually get double the growth signals that you can any other time during the day which is one reason like if you haven't trained first thing in the morning, it's not that bad and actually you do an introduce a small amount of carbs.

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Again, you've created the situation where your muscles are more prone to store those carbs still again limiting your fats' ability to do so and you get this huge growth spike from it. So that's really interesting. And in doing cardio type activities first thing in the morning fasted mobilizes more body fat. It increases ketogenesis although most exercise increases ketogenesis but it helps you burn more fat, you get a greater mobilization of free fatty acids so you get kinda this twofold punch—you're burning more fat and you were able to get a big growth potential after your training.

In the middle of the day, the problem is there's just, as of right now, there's absolutely nothing we know about that you can take advantage of that middle part of the day. I mean, really, all you're gonna do is screw up your hormones for the rest of the day, there's no kind of optimization that I've found yet there. So not that one doesn't exist, it's just I don't know what it is.

Greg Everett: So now, I mean, how would you define middle of the day so is this based on an actual clock time or is this based on- is this relative to when people are actually rising and sleeping?

John Kiefer: It would be relative to when they're rising and sleeping so your early AM fasted training should occur about within an hour when you wake up and then how I would end that window is after the first time you eat no matter what it is you choose to eat and then the end of that window is again, it's different for everybody but on average I put the end of that window around 3 or 4PM. If you can start your training at 3 or 4PM, then you're back into a situation where you can optimize with your food.

Greg Everett: Got it.

Robb: So you just had Jill Jamieson on your podcast which was phenomenal. I love that guy like you guys were a great combo on that but for let's say, we have a lot of folks that do Crossfit, that do MMA and jujitsu and stuff like that, I've found within my own training like I've tried doing just the carb back loading which you make a great point on this which I think is really important to point out and it's something that I have kinda intuitively recommended for a long time and again it's just kinda validating to hear this from you. But today's carb meal should actually be oriented more towards what am I doing tomorrow and less focused on what did I just do today and I think that that's a huge thing but I just found it really difficult to get the type of recovery that I need from just an evening carb load.

I felt like I needed to do a couple of meals like how are you tweaking things for somebody that's more of like a glycogen dependent athlete, crossfit, jujitsu, kickboxing, MMA, and that sort of stuff. How are you tweaking things to help folks with that or what's kind of the rubric that you help people to figure out where they need to go to optimize their situation?

John Kiefer: The first place I go is adding more back loads. So most people shouldn't backload every night but if they find that their recovery is suffering or their energy levels then I start having them add another night of back

load and then depending on their goals, where I go from that especially MMA fighters- I've got an Olympic level judo competitor- what we start to do there is actually ratchet the carbohydrates back time-wise in the day so they've got their carb back-load after their training but they'll actually do something to spike insulin levels without a big glucose spike about 20 minutes at the beginning of their training.

So I usually do that with leucine protein hydrolysates are really good at that. So they get a little insulin spike and then they'll start training in about 15-20 minutes into the training, they introduce a carbohydrate-based shake and they will sip that or drink that at whatever level they need to throughout the rest of the workout. And then if they need even more carbohydrates which I found in very few instances but some people have, then I'll actually introduce about an hour before that a meal that's pretty high fat and carbs so like peanut butter and jelly sandwiches or kind of the go-to for most people but anything—peanut butter and bananas- something like that.

[0:40:06]

So those are the steps I take. First add another back load during the week or maybe add one Carb Nite during the week. Just have one night where you go all out to try to replenish those things. And then from there, I'll start ratcheting it back during the day to help compensate for that and one of the best ones I found- and John Meadows uses this somewhat intuitively is he backloads in a sense he trains in the evening but he introduces all of his carbs almost during the workout and then really has not many carbs afterwards.

And that's what he does when he's prepping for a contest and he feels good the whole time. It almost looks like he puts on muscle. I'm not sure that he does but he stays full, he stays like muscular and he stays in good spirits by doing that. So there's just so many scenarios. The basic process like I said is add another carb back load and then maybe start rationing those carbohydrates back further in the day.

Robb Wolf:

Interesting. Okay. Okay- which is kinda counter intuitive if folks are healing some recovery issues would almost think that they would start say like sticking in a little bit of carbs with breakfast or something along that line but that's interesting.

John Kiefer:

Yeah. I pretty much keep carb- if you eat carbs in the morning, you've pretty much will changed completely the hormonal paradigm for the rest of the day. I mean, I've even shown just eating a bowl of oatmeal in the

morning literally raises triglyceride levels all day long. I mean, so if you want to adapt the paradigm like that, you really do have to watch the saturated fat you eat because you've created the situation that's an increased heart attack risk for the rest of the day. So you can't eat fat the rest of the day if you wanna have that high carbohydrate low fat breakfast.

Greg Everett:

Gotcha.

John Kiefer:

Yeah. It's just so- so I always try to keep carbs out of that morning cycle unless, like I said, what does seem to work really well and I've used this primarily with competitors so I can't say how it works in the general public so well but when they train first thing in the morning, that little bit of carbs after their training which is usually just an overripe banana, helps them lean out and keeps them consistent through the rest of their preparation cycle.

Robb Wolf:

You know the overripe banana, that's a really interesting piece of the carb back loading methodology that you use which is so counter intuitive for the vast majority of folks and everything that we're getting out of kinda mainstream media which is historically, the recommendation is to eat these slow release carbs to whatever degree people will get in and talk about the insulin and the issues with insulin.

So the recommendation is this slow release carb so that you get a long period of release even though the area under the curve ends up frequently being larger than even the insulin spike which is I think the point that you made in there but you actually make the recommendation of some pretty processed carbs or low, in Paleo land we would look more it like ripe bananas, white potatoes, sweet potatoes, but even the sweet potatoes maybe being a little bit high in fiber and/or fructose but you make the point that you're better off just getting that carb in and out— get the insulin pulls, get it partitioned and done.

Talk about that a little bit. That is so counter intuitive for what most people are talking about like you tune in to Dr. Oz and it's like "Eat beans because it'll keep your blood sugar up for 8 hours like—"

[Laughter]

Greg Everett:

That was an amazing Dr. Oz impression, by the way.

Robb:

Oh, thank you! Thank you.

[Laughter]

Greg Everett: "Eat beans!"

[Laughter]

John Kiefer: That guy, man. I watched one full episode of that and almost killed me. I thought I was just gonna die.

Greg Everett: I watched a few minutes with Gary Taubes on there and I was just- yeah- it was horrible.

Robb Wolf: Just do like Kiefer is not to turn this into a pretzel but it's funny. The dude will get some shit right like he had a great piece on like gluten intolerance and celiac and I'm like "Oh, this guy is not so bad," and then he had a fucking faith healer on there after this, and then he's giving Gary Taubes a ration of shit and I'm like, "So the faith healer is cool. He talks to our deceased relatives but Gary Taubes, he's just an asshole," I'm like okay, whatever, right. Anyway, on to quick release versus low release carbs. Talk to us about that.

John Kiefer: Yeah. Actually, I mean, you brought up most of the rationale and the research shows this- you don't need like these high levels of insulin for or even intermediary levels of insulin for a long period of time to get the effects that you want like get a big burst, you get all the benefits and you can avoid most of the downside with these huge spikes.

[0:45:17]

S it's basically this: the longer cells are exposed to insulin, and it's not necessarily the maximum dose that they're hit with at a time; it's the exposure time that they're hit with. That's what really starts to push and set in these hormonal enzymatic changes within the cells that make them more adept at storing fat or whatever. So what you really want is the limited exposure to insulin and from a cellular level which you want the spike. The spike recalibrates, increases thermogenesis. I mean it does all the great stuff, it's anti inflammatory so right after workout, that's great. You can start to recover and kinda optimize that hormetic effect of all the oxidation that you've caused during your training.

So you want this big spike. You wanna take care of all that. You want all your benefits but you wanted to end this quickly as possible because the longer you cells are bathed in that insulin, the more tuned they become in the future to storing fat. So that's why I hate the fact that low glycemic

is so heavily recommended and I think that most of the researches are misinterpreted for these recommendations because you've got this long release of insulin so your cells are bathed in a high level of insulin for a prolonged period of time. Well, guess what that makes your body really adept to doing? Storing fat.

And it does not carry the same metabolic benefits of those big spikes. And then especially at night time, even those low glycemic carbs, you've got that window of insulin that's elevated throughout the night which then pushes off - basically it can destroy your entire circadian rhythm of hormone release at night from growth hormone to cortisol to ghrelin, can just totally fuck all that up for- sorry, I hope this isn't PG-

Robb Wolf: No. No. We have an explicit standby.

[Cross talk]

John Kiefer: Oh, okay. Yeah. I mean, it just totally destroys that for the evening so my thing is you wanna be able to control exactly what's going on in your body as much as possible which means like hit it, it's done, now you can let your body reach homeostasis and let it do what it's best at instead of trying to force it to do something that it doesn't necessarily wanna do. And the reason I think these recommendations were made and they're so bad are from things like the Campbell Oxford, China Study, things like that where they looked at these populations that are eating extremely low glycemic food but really they're just eating vegetables all the time that are a lot of fiber, some protein wrapped up in there, a big mix—they weren't eating foods that had high glycemic load.

They were eating very low glycemic load foods that were also low glycemic and research with diabetics has even shown the researchers themselves—these are experts in diabetes who are trying to help people make food choices, they're like the worst parameter you can look at to try to control your diabetes is the glycemic index of the food. It's totally useless. And yet here we are pushing it to everybody everyday for health, longevity, blah, blah, blah. I think it's just total bullshit all the way around.

Robb Wolf: So interesting. And just funny when you look at the kind mainstream wisdom and all that. I had two things in my notes from when I was on your show that I wanted to bounce off of you. One of them is related to cortisol like adrenal fatigue, cortisol issues- I wanna talk to you a little bit about that. But before that, so when we're talking about carb back-loading we're wanting- just to circle around back to that- so we've got a

situation. We wait until the evening when insulin sensitivity is lower both in adipose and muscle tissue. Ideally we do some resistance training.

This increases like the GLUT 4 proteins which are gonna pull glucose preferentially into the muscles, what about insulin sensitizing things like cinnamon and alpha lipoic acid and stuff like that. This seems like that would be a bad idea to use those because it's gonna bypass this right?

John Kiefer:

Exactly. That's exactly right. I get these questions all the time 'cause there's a whole family of product of supplements coming out now that are supposed to increase insulin sensitivity and blah, blah, blah.

[0:50:01]

The question is, is this whole body insulin sensitivity that's being stimulated? If so, then you're shooting yourself on the foot by taking it. If they've shown it, I haven't seen this in any studies for this to be the case 'cause it usually looks at whole body glucose clearance and not specific tissue disposal. But unless it specifically increases insulin sensitivity only in certain tissues like muscle tissue and not adipose tissue, you're just making the- you're basically destroying carb back loading.

Robb Wolf:

You know what? Chris Masterjohn gave a great presentation at the Ancestral Health Symposium in Harvard back in the summer and he made the kind of the argument that the precipitator for insulin resistance is wrapped up - obviously just high insulin levels are an issue but we have this kinda metabolic consequence of ramming a lot of nutrients into the mitochondria. We start getting reactive oxygen species, we start getting damage in the mitochondria, damage in the cells, and so part of the adaptive mechanism is to become insulin resistant and you can shuttle some carbohydrates or lipids in the storage of fat cells and whatnot but what's interesting to me so a common treatment for type 2 diabetes is glucophage.

It used to be sulfonylurea drugs which are basically insulin mimetics and release insulin but you've got an adaptive response which is trying to forestall the injection of more nutrients into these cells because it literally are like burning up. You're creating a reactive oxygen species which are accelerating DNA damage, accelerating aging so and again until you clean up the nutrient profile such that we're not in a hypercaloric state, not in this over insulin resistant state. If you take a shitty diet, inject insulin sensitizers into that thing, it seems like it's going to kill people even faster.

John Kiefer:

Yeah. Yeah, I actually- that was a section in the carb back loading book. I mean, insulin has one job and that's to make things grow and when you look at everything that's happening in the body even to the level of mitochondria, when you become insulin insensitive and start moving into type 2 diabetes your body is doing everything possible to try to prevent you from becoming sicker and fatter.

And then here we are, we give metformin to people that then resensitizes these cells to absorbing insulin and whatever which means they absorb more nutrients which then forces people to reach a level of damage in obesity that I'm not sure they can ever come back from.

I mean, that's the thing that scares me as I think we're pushing people with these drugs to the point that they might not ever be able to get healthy in the same way ever again. That's what scares me about it.

Robb Wolf:

Yeah. We've seen Tara Dall from the National Lipid Association. She threw out this kinda no recovery point. Triglycerides above 200, A1C above 6.5. If we see an individual with that, then she said that you can take it to the bank that 50% of their beta cells are done. They've succumbed to oxidative stress and they're done which then, I mean, you are then fighting this battle of keeping whatever insulin production that this individual has and maintaining that or eventually- I think they call it type 3 diabetes now where the pancreas is just gone but it's not the autoimmune reaction, it's from oxidative stress.

John Kiefer:

Right. Yeah, actually. Rocky and I had an interesting conversation about that because I've had a few people and this was totally on their own. I didn't make this recommendation to them just to be clear. They used Carb Nite. They were type 1 diabetics. Most of them had developed the juvenile diabetes and they actually- I only have 2 case studies in this point so, not a lot of data points but both of them actually got to the point that including their Carb Nites when they would eat carbs, they're not using insulin anymore.

One of them is going on 2 months without an insulin shot. The other I think is at 4 weeks. No insulin whatsoever even when they're eating carbs so I would be incredibly interested to see what is going on in their body metabolically during those Carb Nites to know how they're surviving without their insulin essentially because general wisdom is they're done; they're not going to be able to process those carbohydrates appropriately without those insulin spikes and they shouldn't be able to produce insulin but something's going on there. I would love to get those people in for some data.

[0:55:07]

Robb Wolf:

We've had a ton of similar feedback on type 1 diabetics and there's a guy, Dr. Bernstein. He wrote Bernstein's Diabetes Solution years ago and he basically recommended a ketogenic diet with short exercise bouts throughout the day which would- maybe not in the optimum kind of carb back loading scenario promote this GLUT 4 enhanced expression but I think just empirically the guy was really on to something and one of the interest- the way that the type 1 diabetes thing got on my radar at all was a good friend.

His girlfriend was doing Crossfit, type 1 diabetic, and she would hit these hard workout and then she would have blood glucose in the 200 almost 300s post workout which I was kinda like "What the hell is going on?" And it took me a couple of days of thinking about this and I was kinda like, "Okay, cortisol increases glycogenolysis. We get that spike in glucose and so what we've had to do with these folks is get them to lift weights, to walk and to be mellow.

Get them to kinda cyclic ketogenic diet and they've been able to I mean, just shockingly decrease insulin bolus but it's so fascinating. If you dig around on my site, I think I've got 4 or 5 post on type 1 diabetes and the mechanisms and some testimonials and all that stuff. But what the type 1 diabetes community, they go into hysterics at this suggestion. They become hysterical that there might actually be a solution other than eating carbs and then driving the road with insulin.

I mean, basically the recommendation is eat whatever carbs you want. We'll pick it up on the back end with an increased insulin bolus. It's so interesting.

John Kiefer:

Yeah. I just think it's unfortunate because that's pushed so heavily at every level that you can't be healthy without a carbohydrate based diet and until that message is really blown apart in the public eye, like nothing is gonna get better in this country. End of story like no matter how effective our grass root efforts are, they will never rival that message from the top. I mean, really need to blow holes on that somehow. Everybody's doing their little part but there needs to be some way to coalesce and really just start pushing that message out there somehow.

I mean, the healthiest people in this country are eating nothing like the dietary recommendations of the US government. That right there should tell people something but it just gets brushed aside every time.

Robb Wolf: Maybe when the economy implodes and we don't have farms subsidies anymore it'll start to not fuck stuff up.

[Laughter]

John Kiefer: All right.

Robb Wolf: So this cortisol thing is interesting and this is something that I've kinda grappled with a lot so we can get this kind of adrenal food from just dietary drive stuff like sleep aside, work aside, just from dietary kind of input. I've seen 2 ways that we can kinda produce a adrenal fatigue, adrenal insufficiency and also some hypothyroid situations.

So the individual is overconsuming food, overconsuming carbs for what their tolerance is, they get into a hyperglycaemic and then a hypoglycaemic state, low blood sugar trough hits, cortisol is released. And that cortisol ends up over the course of time if we're really goosing that pathway, then we're gonna end up in some adrenal insufficiencies, some prednenolone steal where we start suppressing testosterone and estrogen production but then also that cortisol is going to antagonize t4-t3 conversions.

So we end up with this completely screwed situation from we'll call a hyperglycaemic input, but then we can develop the exact same sort of problem from too long on a low carb scenario, too long in a ketogenic state. And maybe you touched on this a little bit earlier. What I'm seeing are some people who whether they were on the high carb side of things or low carb side of things, they reach a point where they're metabolically kind of broken and they're not well tolerating carbs but at the same time, the paucity of carbs is actually causing them some adrenal and thyroid issues, where do you go with that? I mean, give them a 9mm in one round or-

[Laughter]

[Cross talk]

And I'm sure very individualistic thing tinkering. What are your thoughts on that?

[1:00:05]

John Kiefer:

Yeah. I mean it all comes down to tinkering. That was one of the things and some of the research I found that made me put carbs in the Carb Nite that one day we carb burst actually has a pretty- it's about a 3 or 4 day effect that helps to solve some of those problems but for somebody who's chronically dumping cortisol, I mean, their body is totally in survival mode.

It is trying to find some way to break down any and all tissues for energy as often as possible and to store certain components as often as possible and like you said, it's causing A cells to be more sensitive. Oddly enough, cells become more sensitive to the catecholamines but at the same time any kind of stress or activity creates a faster burst and a larger burst.

So you get this burnout and then the increased metabolic demands, cause t3 to down regulate. I mean those are people that you just need some hard reset and half the time I'm just about there with you. It's like let's play Russian Roulette with a full revolver because I have spent literally months with people like that just trying everything and trying to reset and it takes- I mean, I've had very unfortunate few successes with that like where I felt like they were in a place where they could move forward without help but it's just almost constant tinkering.

It seems like the more I tinker, the easier it is but the more confusing for them because 1 week I'm telling them one thing, the next week I'm telling them something different and there's a little bit of progress but that doesn't last very long so then we've gotta tinker again and it's almost like you gotta constantly keep hitting the system with a hammer and see which resonance is gonna come to forefront, ride that for as long as you can and then do it again. So I wish I had a good answer for that but that's the best I got.

Robb Wolf:

You know a buddy of mine is a functional medicine doc and he works with a ton of military folk. And he sees this adrenal fatigue like- it's interesting like the whole process looks really similar to traumatic brain injury and like they're not sure if it's a sleep deprivation, firing 50 guns all day, bad food - they're not sure what it is and we're not sure if it's coming from the adrenal side, if it's coming from the brain side but something that he's been doing in addition to just basically supporting adrenal function, providing substrates for adrenals and whatnots.

What he's been doing is a 5-day cortisol reset where he basically provides bioidentical cortisol in the AM and a pretty high dose and then midday in a dose that's 50% of the AM dose and he does that for 5 days and then a 3-day taper and then off and what he's found is that- and this is

particularly effective for people who are in like a flip circadian rhythm where they're lethargic in the morning, super awake at night.

You're basically suppressing normal cortisol production in the AM and then in the PM because you've suppressed it, there's just none to be produced anyway and so the person actually starts falling asleep but he's had some pretty good success with this which I thought was pretty damn interesting. You're getting almost the same type of shut down that you would get under like an anabolic steroid kind of application but we're using it in a catabolic steroids and then using in this kind of a system reset to try to restore that circadian rhythm.

John Kiefer: That would be - yeah, that's almost brilliant.

Robb Wolf: He's a pretty sharp dude, I'm surprised he hangs out with me but-

[Laughter]

John Kiefer: Yeah. That's kind of in the way how I envision working with insulin as you know that when a week you're introducing this to reset a lot of things but that's interesting doing it with cortisol on a daily basis and then when taper, do they go back to- or do you know- do they go back to the normal cortisol pattern of release where it like ramps up essentially all night, peaks in the morning about an hour after you wake up and then taper it back off.

[Cross talk]

Robb Wolf: That's what he's finding and he's tracking all the stuff with a salivary test so he's doing DHEA and pregnenolone, testosterone, estrogen like the full battery the whole time he does it. He has some pretty interesting data on it.

John Kiefer: That's cool.

Robb Wolf: Yeah. Yeah. So my partner in crime somewhere on the other side of the inter web is a high level Olympic lifting coach. So where, Greg-

John Kiefer: Yeah. You've been pretty quiet, Greg.

Greg Everett: Oh, yeah. Just trying to actually take it all in and instead of getting in the way.

[1:05:04]

Robb Wolf: But, Greg, how much tinkering have you done- I know you and I have talked back and forth about like cyclic low carb and stuff like that- how much have you tinkered nutrient partitioning with your athletes. Have you tinkered at all? Do you see any good results?

Greg Everett: Not nearly enough and largely because I don't have a captive enough group of athletes. Unfortunately, I'm not in a nice training center where I have people who do nothing but train and I've got people with jobs and all kinds of other- well excuses would be a good word.

[Laughter]

So it's tough to really implement anything that's too jiggy. It's kinda like trying to steer them towards the most fundamental things they're gonna keep them on track and then from there, depending on how much compliance I can actually get, we can tweak but it's tough and 2 of my athletes are super heavyweights so that makes it really easy. Just eat what you want.

Robb Wolf: Perfect.

John Kiefer: It's kinda hard to go wrong there.

[Laughter]

Robb Wolf: Greg, can you think of anything else to pump Kiefer on here while we've got him?

Greg Everett: Well, I mean, what I would say is why don't you tell people what they could expect from the carb back loading e-book and I know it's obvious what the basics are that would be contained in there but I mean is it just kind of your general information or is there some kind of way that they can customize their own eating based on their own training schedule and whatnot kinda explain why people wanna go get that thing.

John Kiefer: Oh, yeah. You know of course it's really science heavy. The first half is a lot of explanation but as you move towards the back of the book, it actually just starts to break everything down for you like here's the optimal situation. Okay, if you don't have the optimal situation, here's how you can tweak it for your situation. Here's what you should do if you should eat, if you can only train in the morning. Here's what you should do if you have the opportunity to train twice a day and so on and so forth

as you go through the books. So you should be able to build the optimal carb back loading diet for your training scenario.

And then also in the back of the book there's appendix on like how to find your starting level of fat to protein ratio or how to determine your maximum glucose load which the new version will have an expansion of what that means because people assumed that the maximum amount of glucose that they can possibly store was how much glucose they should try to eat every night which-

[Cross talk]

So there'll be some more explanation on that but otherwise- and it goes into some modifications for women. The new book we actually have a whole appendix on how to modify for women because they burn calories differently and use substrates differently in most situations. So the new one will have all those modifications. But the current one just has a few tweaks for women, some suggestions on how to add HIIT. The book also recommends HIIT Cardio, The High-Intensity Interval Training tells you how to supplement that into your day for fast results.

And then some meal plans at the end of the book. I try to make it as comprehensive scientifically but is easily accessible as possible and also as easy to implement as possible without personal guidance.

Greg Everett: So then, I mean, is it geared largely towards more of an aesthetics and health sort of approach or is there information in there that would help guide a more performance oriented individual for example a competitive weightlifter?

John Kiefer: Yeah. It's actually geared more towards strength athletes, I would say, than anything else.

Greg Everett: Perfect.

John Kiefer: Yeah. That was not on purpose.

[Cross talk]

Robb Wolf: It was not on purpose?

John Kiefer: No. It was totally kinda accidental. It's just that's who I was working with when I wrote it and that was kind of the voice and the direction I took with it almost inadvertently, I mean, I literally accumulated the whole

thing over 2 weeks and write it in 2 weeks trying to like satisfy the need of everybody begging for the book. And so that's what I was entrenched in and that's essentially what the main push of the book is, really is for strength athletes.

[1:10:01]

I mean powerlifters do amazing on it. Body builders who are trying to maintain low body fat are doing amazing on it. Female powerlifters, female aesthetic athletes are doing really well on it post or off-season for the female figure competitors. What they're finding and what they're amazed about is like they're keeping their strength using Carb Nite up to the show and then after that they're able to make strength gains without necessarily like big size gains which they really like in the gym with using carb back loading.

So for whatever reason, it's more geared towards people who are looking for aesthetics coupled with exceptional performance.

Greg Everett: Perfect. Sounds good to me.

Robb Wolf: Cool.

[Laughter]

John Kiefer: Have you not read it, Greg?

Greg Everett: I have not. I basically-

John Kiefer: Seriously, you're on-

[Laughter]

Greg Everett: I just humped Robb's knees for little bits and pieces there and he likes to hold it over my head.

Robb Wolf: Well, you're better than I am at everything else so I have to keep some ace in the hole, so-

Greg Everett: All right.

John Kiefer: Ah, I see.

Greg Everett: Well we need to get this team less chubby so I'd love to take a look at it.

John Kiefer: All right. Cool.

Greg Everett: Not the supers, of course. We like them as big and plump.

John Kiefer: Right. Yeah. That's helpful in that situation. Well I heard Mark Bell's name pop up somewhere.

Robb Wolf: Oh, yeah, yeah. I was just gonna mention that Mark Bell has been a big fan of yours and really advocated both Paleo and the carb back-loading.

John Kiefer: Yeah and Carb Nite now. He's completely sold out. I don't if you've seen recent pictures of him. If you haven't I'll send them but he- gosh- I think he's down to under 260 and he looks like a body builder. He's like shredded. If you can imagine Mark Bell shredded, that's what's going on right now. It's like total freak show. And he just loves Carb Nite.

Robb Wolf: Bastard.

[Laughter]

Greg Everett: Right?

Robb Wolf: Ah, well, I'll just keep being sarcopenic me but-

[Laughter]

Well, shoot. It's been awesome having you on. I have a feeling that we will get a deluge of questions and we'll have to schedule you in another couple of months down the road. I promise it will not be 6 months. I'm not anticipating another baby for a while here so-

John Kiefer: Okay. That's good news.

Robb Wolf: Yeah, yeah.

John Kiefer: At least for my schedule, I mean, this is obviously all about me so you need to like plan your next child accordingly.

Robb Wolf: I'll do it. I'll do it. I will consult with you first. Well, folks can track you down at dangerouslyhardcore.com. You've got the BioJacked Radio show which is phenomenal. We'll put a link to both Carb Nite and Carb Back-loading in the show notes so that folks can check that out. I've read the whole Carb Back-loading twice and it is phenomenal. It's really good.

When you were talking, I wanted to just put the observation and it's obvious that you've worked with a ton of people because I saw all of like the frequently asked questions and all of the ways that people will figure out instead of just following the directions like trying to find some way to like negotiate with the universe like "Could I do this and still get that?" "No, no. It just ruins the whole thing. How can I explain this to you?" And I was just kinda tickled by that because I've- I won't say suffered through that, but I've experienced that quite often running our gym so that was cool.

John Kiefer: I'm glad you are entertained by that. So you don't have a copy of Carb Nite?

Robb Wolf: I do have a copy of Carb Nite, yeah.

John Kiefer: Oh, okay.

Robb Wolf: Yeah. Yup.

John Kiefer: Okay.

Greg Everett: It's just poor old me, the uncultured, unread, weightlifter.

John Kiefer: I see. All right. We'll-

Robb Wolf: We'll hook our brother up.

John Kiefer: I'll try to send you some cliff notes.

Greg Everett: Perfect.

John Kiefer: Will that be the most effective?

Greg Everett: The more pictures, the better.

[Laughter]

John Kiefer: Okay.

[Laughter]

Greg Everett: If you have the pop-up scratch and sniff version, then that's the one for me.

John Kiefer: Yeah. I was gonna say I won't say that the pictures that I will send to tell the story will necessarily have anything to do at all with Carb Back-Loading but I can try and out together a nice picture book for you.

Greg Everett: Awesome.

Robb Wolf: Sweet.

John Kiefer: All right.

Robb Wolf: Kiefer, it's awesome having you on. Thanks again and Greg, anything that you wanna tell folks? Do you have anything popping up on the radar here soon with books or anything?

Greg Everett: Bob Takano's book release is on schedule for December 1st so that thing will be shipping from Amazon soon and once it's released, will be available on our site as well, of course and so very much looking forward to that and if anyone's gonna be in Palm Springs next weekend, we'll see you there.

Robb Wolf: Sweet!

John Kiefer: Oh, cool. All right.

Robb Wolf: Sweet.

Greg Everett: Start of the 2013 weightlifting season.

John Kiefer: Oh, cool.

Greg Everett: Yup.

Robb Wolf: Well, we can hear bombs dropping in the background so, okay guys. Thanks again and Kiefer will talk to you soon then.

John Kiefer: Yeah. Thanks a lot for having me on the show, guys.

Robb Wolf: Okay. Take care.

John Kiefer: All right. Bye.

Robb Wolf: Bye.

[1:15:22]

End of Audio