

# Paleo Solution - 251

[0:00:00]

Robb: Howdy folks, Robb Wolf here, another edition of the Paleosolution podcast. Listeners can't be wrong. Hope you all are doing well. I'm very excited for our guest today. She is a very dear friend, someone that I've worked with for a long time. Amy Kubal's worked with her. She has an amazing story, Ursula Grobler, a world caliber rowing machine, a machine of rowing. Ursula, how are you doing?

Ursula: I'm doing great Robb. And I will be proud to say I was one of your first six listeners.

Robb: Nice. Thank you. I don't know what that says about your taste in podcast but clearly nothing good. Hey Ursula, give folks your background. You have a fascinating background. You've been on the international scene of rowing for quite a number of years now. Tell folks about your background.

Ursula: Well Robert, I grew up in South Africa so if you can't tell by the accent already that something's a miss. So from South Africa and then I moved to the States in 2002 to Seattle in particular, your old home. And to come as an aupair after I finished studying Information Design at the University of Pretoria. And after that, just got rolling into a job and just being a normal person working nine to five.

But then a weird change of events happened. You know my company downsized and they let me go which was really hard as a young aspiring career person. But I don't know. It's funny how life turns out because that's just really made me realize life is short and I had this dream, I've always wanted to be an Olympic athlete.

When I was younger at school, I was always in sports, track and field, swimming, netball, made provincial teams, competed for South Africa and all African games in triathlon. But when you grow up you kind of think that going to the Olympics is like being an astronaut one day. I mean it's not possible once you hit the real world.

But then when this happened when I kind of lost this job and my brother also committed suicide which was a tough one but all of these events just accumulated into me realizing I don't care. I got to do this. I got to have no regrets. I've started rowing here in Seattle because there's just so much water and people are rowing. But rowing for fun and rowing what they call in the master's category which is like the old people.

Robb: Yeah, old people like me. Easy there, easy.

Ursula: Yes. So I mean I was competing in these – for fun but then I started rowing on rowing machine and I did a 6k and one of the coaches was like wow, it's pretty good. And then started working with another coach in Seattle and because now I didn't have a job and I've nothing else to do during the day like I just committed to rowing full time and actually called this coach up and said I want to go to the Olympics.

And he says to me okay how long have you been rowing? And I was like maybe a year. And then he says to me so what is your score on the Concept 2, that C2 machine especially with the 2K which is our measure. And at that time it wasn't really good. I think seven minutes 20. And then he says to me and how old are you? And here's the catch so I was like 27. And so he says to me I don't know about the Olympics but why don't you just come down and we'll just teach you how to row.

But I just progressed really quickly and then like I said in three years time, I broke world record on the Concept 2 rowing machine and now I'm still aiming to get to the Olympics. I missed London unfortunately.

Robb: Wasn't that by like one hundredth of a second?

Ursula: Yeah. It was really, really hard. It's really hard. And then got me to really dig deep and think how much I really want this dream and this isn't going to come easy. So I then decided no, I'm not done yet and I don't know so maybe with eating paleo just to throw that in that. And my body feels strong and I'm able to compete with the young and still give it everything. So Rio 2016 hopefully here I come.

**[0:05:06]**

Robb: That's fantastic. So give folks some background. We met in 2009 or 2010? It was late 2009 if I recall.

Ursula: Yeah, take off in '09 because you were coming to Seattle, you did a talk here and I was really stoked to come and see you. I've read so much about your work and obviously I started paleo in 2006. So definitely I've walked my yards and so I was excited to meet you which I did in 2009. And then in 2010, kind of right after the world record you came back to Seattle and then you did another talk and I met you there.

And then throughout 2010, we kind of stayed in contact and I worked with you asking you some questions about my training and stuff because it was a little tough for me to figure out how to be a paleo athlete and also in my sport because most of the paleo athletes and like Loren Cordain's books seem to be endurance athletes like triathlon and stuff. And here I needed sprint work but long distance sprint work like 400 meters on the track kind of stuff or you know this 2K on the Erg. So I was struggling with how to manage my carbs and in race so that's the work we did together.

Robb: And the 2000 meter is your primary event that's correct?

Ursula: Yeah. So all rowing competes 2000 meters, 2K and so that's why I think that rowing machine they have the 2K which is the big one to kind of assimilate what you're going to do on the water.

Robb: To me, that distance is a little bit like the 800 meter track and field event. It is just the worst thing in the world. You know like 500 meters, you can really honker in and hammer that and you don't feel bad really until it's done like everything hasn't caught up with you until it's done. A thousand meters can be pretty nasty but a little bit similar. You can pace a little bit then do a big burst at the end.

But the 2000 meter, you've just about have to go as fast as you can but for six minutes straight. And it is appalling. I've done a couple of benchmark attempts on the 2000 meter and I'm like I don't care what that gives my athleticism. I'm never, ever, ever doing that again. Like it is just the worst event for me.

It's funny because I do Brazilian jiu jitsu and some mix martial arts type stuff. The time indexing is somewhat similar. It's five to ten minute rounds and you have to do multiple, multiple repeats of these rounds, building skill and technicality and figuring out how to fuel for that has been really tough for me because I find that I'm little bit insulin resistant which I had two diabetic parents who died from diabetes complications and so it's not surprising that carbs are not the easiest thing for me to deal with. But then at the same time I've picked a sport that is just a glycolytic hell.

So how do you fuel so that you actually feel good and have some good cognition throughout your long training time. But then you get down to doing training and how do you have the energy to do that. So you broke the world record on the indoor Erg and then you have a pretty good bout of over training, what happened with that?

Ursula: Well Robb, as you just said I have the same problem a little bit with the insulin resistance mark. I don't run too cogs. I definitely would prefer to eat like just fat and protein. And that is the mistake I made kind of when I started Paleo, trying to be a paleo athlete and as I was going along with how my body felt.

And so in 2010, I was eating just a lot of almond butter, Trader Joes almond butter, a lot of that and then a little bit of fruit, candy and high protein. And so I think it worked fine enough up until a point I mean it definitely got me that world record but then after that like the honeymoon period I guess was over and the hard yards of training every day started to turn into something else which by the end of 2010 I had developed pretty severe over training which I didn't know at the time what that was. But the symptoms that I've got was just always being tired but you think that's part of training.

**[0:10:02]**

But the big clincher was I got shingles which I never even really heard of. And so when I found these marks on my body and was in hospital and the doc said to me of shingles. I was like how is this possible?

Robb: Right, right. Which clearly is a sign of compromise state and probably adrenal function has been taken totally offline like we got in and started

doing a ton of blood work with you. And it probably worth mentioning that if you have been doing 20K event, the way that you're refueling previously might have been okay for that because it's so much less intensity, so much more developing a really fat fueled engine in that case with some targeted carbs. We could have probably found a way to make your giant tanker of almond butter probably work in that situation.

But that 2K event was just so intense, so glycogen demanding, so many intense repeats to be able to build the engine for that that we got you into a pretty good over training state. So where did you go from there? We had a consult with a pretty well known sports nutritionist doctor who ended up I think ultimately hating me and probably not a super big fan of you. How did all that come about? Give some folks some back story on that. I just about lost my mind working with that gal.

Ursula:

Yeah, I know. I hear you. But to just backtrack a little, in 2010, the confusing thing was just as you said so rowing is a little bit like swimming, training. You do these long distance rows but then you compete for only seven minutes. So in swimming you swim for hours and hours in the pool to put out a 50 seconds sprint. And it's kind of the same in rowing like you row this 20K rows for two hours long steady state so that you can sprint for seven minutes.

The confusing thing was why the shingles and over training sprung up on me is this long distance rows, I was killing it. Like my coach said you probably lacked – the world record holder on a 20K row. So it looked as if training was going well. And so that's why there was no red flag, like immediately that things were going wrong. And then when you start doing sprint work and this pieces and then not being able to cope as you said with the high glycemic load.

But anyways, so let's go back to the doc. Yeah, after 2010 at the world championship in New Zealand, we were set to win our event which is the Lightweight Women's Double Scull. And then we came in, we didn't even make the A final. I think we were third in the B final. So it was real shock for us. I was really disappointed and I felt as if everything had failed me. I felt that paleo had failed me because I couldn't fuel myself – felt as if rowing had failed me and this decision I've made. That's why I started working with this doc doing blood work.

But ultimately we just ended up happening with that and we're working with you is that there's something about paleo that is not just about just fueling yourself but mentally I just feel like a better person. I like eating this way. No, I'm not gluten intolerant, no I'm not lactose, I don't have any allergies. I have the stomach of a dog, I can eat anything.

But it's not about that for me. It's about I don't know I like the lifestyle. I like the sustainability, I like what it means for our environment and eating local and all of these things. And so with Emily, the doc that I was working with, she just wanted me to eat cookies and pasta and rice and I just didn't want to. I was like no, I know I didn't get it right this first time but I'm still going to keep tinkering with this. I can do this.

And I started working with Amy Kubal then, and that was pretty cool because Amy helped me a lot to get out of this over training and there's some very cool things that she suggest that I try and change which ultimately worked well.

**[0:14:59]**

Robb: Tell folks what the difference was when you started working with Amy Kubal. What did we have to fiddle with. And I remember it was a little bit challenging to maybe enact some of these changes too.

Ursula: Yeah. So the big thing that Amy brought about for me was she changed a lot of what I was eating. As I said a lot of like nuts and dried fruit and fruit as my carbs primarily. A little bit of sweet potato here and there. But Amy took out a lot of the fruit and she put in a lot of pumpkin and more sweet potatoes and then timing. I never thought about this Robb. I know post workout eat for 30 minutes, that I have done but there was other things like when to eat before training, to do a little carb drink during training which I've never done before.

In my sport and this is the reason why I came to paleo in the beginning is I compete in a weight restricted sport. I have to make weight which I thought was interesting. I asked Greg Everett with these weight lifters because they also have to weigh in two hours before competing just like us. And I just wanted to see what the similarities were with him and with us.

I was just afraid to eat. And so working with Amy, she taught me that I have to eat to get out of this and to have the energy to train otherwise it's like a going nowhere cycle. You don't eat, you don't perform, yes you may make weight but you don't get the results so what's the point.

Robb:

Right. And it's so hard because I would say this is something that I just battle constantly. We have this messaging around the paleo diet that for me it's mainly geared towards people who have health problems, they need to lose weight, they have an autoimmune disease. And so it tends to be a little bit on the lower glycemic load, lower carb side, maybe a little bit higher fat because of the satiety and stuff like that and it works really, really well.

But then when we get a high level athlete like you, the main material that's available and particularly back then I mean we weren't really – I worked with athletes on a very individual basis. We had worked with Glen Cordoza and he got to the IFC, World MMA championship and won that. I was doing some really targeted stuff with some folks but my gig isn't mainly like a sports coach. I mainly focus the bulk of my effort on trying to help people not die from their you know westernized lifestyle. But I do a decent job when I'm working with folks.

But again when someone like you, they look out into the interwebs and particularly at that time and they're looking for information and mainly what you saw was kind of a moderate to high protein, higher fat, lowish on the carb side. And that's what there was. And the funny thing is that this is probably the number one mistake that people do and even though the messaging around athletics and kind of how to tweak paleo for that is tiny.

Whenever we do a piece on how an athlete should eat, then we get a bunch of people who are overweight and sick and pre-diabetic and they're doing tons of sweet potato, they're doing a bunch of white potato. They go for a walk and they think that they need to refill their glycogen stores after the walk and it's just like oh my god. So it's kind of a damn if you do, damn if you don't kind of scenario.

But definitely that's where the basic paleo concept needs to be modified when we look at those mid workout you know like maltodextrin plus

some whey protein and stuff like that to keep your energy levels good to blunt cortisol release so that we don't you know try to stave off that over training syndrome as much as possible.

Ursula: Yeah, also with Amy and the coach then that I changed to so the training had to really take a different effect. Over training and Robb it took me like two years to get out of that. So I really don't encourage anyone to like think sometimes over reaching all the time is a good thing. Once you get there it's shit because it was two solid years where your adrenals are shut.

**[0:20:00]**

I'd line up at the start of my race Robb, and I'd be terrified. I'd be so scared and I'm so emotional all the time because you're just – you're not your adrenals are not there, so the coach then that I worked with John Parker, he really had to nurture me through that and then Amy also. So there was other little supplement things that Amy also introduced which were pretty cool.

She put me on a high dosage of phosphatidylserine and that helped a lot I think to just get the adrenals right. And now today, I still have some anxiety problems that I'm working on that are some aftermaths of that. So that get in the way of my training sometimes. I mean the repercussions are long lasting.

Robb: They definitely are. I mean after I did my book tour and we had run the gym for years and you know all the rigor with cross-fit and stuff like that, I was pretty beat up and then literally the date that Zoe it was born, I had some blood work scheduled down at the clinic down at Especially Health.

Nikki's in the early stages of labor and I looked her I'm like can I go do this blood work? And she's like you're fine, go do it. And I went and did it, got back and everything was cool. The timing was fine but what I got back was appalling. My blood lipids didn't look good. My blood lipids before that were always spectacular. I mean spot on perfect, it looked like I had some from a functional medicine standpoint, my thyroid wasn't looking really good. We did an ASI test and I kind of flipped circadian rhythm.



I was flat in the morning, really tired and wired and in the evening couldn't sleep well. And now it's two and a half years later, I feel pretty damn good now. Like I feel better than probably what I would have felt in eight or ten years. But I haven't been traveling, I cut my caffeine way back. I'm really careful in my training both my strength and conditioning and when I go into roll to generally leave a little bit in the tank.

I can't go to the dark place all the time while training and I've been able to get back to a spot where I feel pretty damn good, my body composition is good and my performance is pretty solid. But I really dug an enormously deep hole. And I don't think folks give credit for how long it really takes to come back when you're that type A, over achiever, and you've been used to like historically you've been able to just beat the dog piss out of yourself and you always come back, you always come back. But then one time you don't.

And when you were describing getting set up there to do a race and you know having some of this anxiety pop up, I don't know if folks understand but even if you're a little bit undertrained, you can kind of rally because you do have that adrenal capacity. You can get into that fight-or-flight mode and you've got another gear that maybe you didn't even know existed. But when you beat yourself up and you're in an over training scenario, that fight-or-flight mode has already been burned.

It's like if you have a reserved bank accounts or an extra gas tank on your car or something, it's gone. It's just not there. So you'll be better off to be a little bit undertrained by a mile than you would be with the overtraining because the overtraining not only can you not make progress like you're probably going to go backwards for a long time.

Ursula:

Yeah, we often say cash out your check before you even get money in the back. And I mean it's so hard as you race, you have trained but in the race it's just unravels in such a terrible way. You don't have a finishing sprint, you don't have a starting sprint, you're just scared and it's no fun. I mean you just want to cry at the finish of your race and then you think why am I doing this?

So it was pretty terrible and I remember the end of 2012 you know didn't make the Olympics and then after that you can still go to non-Olympic

events and these are world championships which I went to. I placed fourth there in this lightweight women single which I mean of course always wanted to win however I will admit at the end of that race I said to John my coach, wow I can feel my body again. That was so bizarre because how is it that all these time I didn't know that I don't feel it. I was excited to race and that was so powerful. I just did an amazing breakthrough for me.

**[0:25:11]**

Robb: That's phenomenal. Ursula, you mentioned early on that you compete in a weight class specific sport. I find weight class sports to be maddening. It's really fascinating, challenges a strength coach to work with somebody in a weight class sport because you have to be able to keep him within pretty tight balance, not give them an eating disorder and then have them show up on game day and be able to not just make way but then be able to perform.

Do you mind sharing some of your process with how you both maintained and then if you need to do any weight cutting like with some hyper hydration or something like that to make weight for game day?

Ursula: Yeah, Robb. It's such a big part of my training. And I will say this that weight making comes with experience. If the sport – what's that one ortho who wrote the talent code? He said you need more miling. You need your 10,000 hours and it's the same with weight making. The more you do it, the more experience you get. In the beginning you do stupid things like crashing. You start having a bit of eating disorder in the beginning because it's quite scary to think I can't eat and if I can eat then how am I going to race but I have to make weight. So you don't quite know how to manage that.

But yeah, the more you do it the more you get settled in and get experience and like I'll never do that again. And also what gets challenging with us is that you have to race maybe four times because you first got it hit, then the next day or later that afternoon you got a semi-final or a rip which means you have a second chance to try and get in to the semi-final.

Then the next day you're going to have a semi-final and then the day after, you're going to have a final. So that's three days of weight making, well you have to make weight and race and all out performance and then eat afterwards to recover but not eat too much because you have to make weight the next day.

Robb: So I don't think that that's something that folks really appreciate. So if you show up at a wrestling tournament you need to make weight before the tournament and then it's kind of you're good to go. For a jiu jitsu tournament generally, you may depending on the rules, you may have to weigh before each event but it's still only a one day deal.

For mixed martial arts, you actually weigh in the day before so you've got a 24 hour period to rehydrate and get your glycogen stores up and people will show up in weigh in at 185 pounds and then the next day they're walking around like 212 or 220. It's ridiculous stuff that they have going on.

But when I learned what the parameters were for your weight cutting, I think it is about the most brutal set-up that I've ever seen. I really can't think of another sport that has more demanding weight parameters that you have to maintain and the performance parameters to couple with that. It is really brutal.

Ursula: And everyone turns on the heat too. I mean as you go through the races, so like the heat usually it's pretty tough because you just want to get in that semi-final because you don't want to race another race which is rip. Then in the semi-final, if you don't place in top three, you don't go to the finals so that's a brutal brutal race. And of course the final is for the gold. It's not like one race that you can say oh well let's take it easy on this one.

Robb: But then the flipside of that is if you completely blow yourself out then you may not have enough even with this six, eight, ten hours or maybe even a day to recover. You just may not be back at full output again.

Ursula: Yeah. So in the beginning the mistakes that I've made were that I cut weight quite a lot for the event so you know come in maybe like two or three kilos overweight over the scale and for my event it's 57 kilos for the lightweight women double, the average. Which means that – it's

interesting you can kind of play here a little bit with your partner because you have to average 57 but no individual rower must weight over 59.

**[0:30:00]**

So in other words I mean I've had partners before where I could weigh 59 and they weighed 55. And then other partners I weigh 58 and they did 56 as it goes with your partner you guys work this out before. Anyway so we'd come in a little bit over like a little bit when I say two or three kilos is actually quite a lot. And then cut the weight through dehydration, a sweat run before the weigh in and then fuel up again and race. And then kind of run again after the race and then run again before weigh in.

But let me tell you Robb, this doesn't work. That doesn't work because by the time the final comes around, you are so tired. You ran a marathon in between racing max out pieces and I learned I have to get stricter and come in to the competitions weighing 500 grams over not two or three kilos.

Robb: And so how did you tweak your training, strength and conditioning and food so that you were really close to that striking weight? What did you do as far as trying to maintain as much muscle mass as possible, trying to be as lean as possible going into that?

Ursula: I think a lot of the drug just – it really is you've got to eat less. Remember you also gave me that hyperhydration strategy we tried that for a bit where the week before the competition was something you drink a lot and then just start cutting it out towards the end. But at the end of the day Robb, I've learned there's really no secret, there's no games, there's no like you can't quite play with little magic things like that. You really just have to kind of eat less and maintain a lower weight throughout training.

So I've now just – before were and off season I thought it was fine to relax 64 kilos, now I'm trying to hold 60, 61. I'm just really bringing it down and it also comes with part of that anxiety that I spoke about. For me it's the emotional side of eating because food isn't like a training program.

Also when I started this whole deal and also started paleo, I couldn't understand why you know I'm a pretty disciplined person. Give me a training program and I'll follow it for you from point to point. But it wasn't quite the same way, right? Like I couldn't quite follow exactly the same way because there's just so many other influences. Your friends, your mood, your...

Robb: Your travel, your sleep. I mean, yeah, yeah.

Ursula: Exactly. What you see on TV that suddenly made you think you're into this craving for this or so I just learn now that having a control of your emotional side is such a big part of giving yourself to maintain this. Because you've got to stay away from emotional eating which is much easier said than done but that's a big key for me.

Robb: And hopefully coming out the backend of that not with a disordered eating and all kinds of emotional problems because of the deprivation and what not. It's a no joke deal. You know let's shift a little bit. I remember that earlier in your rowing career you weren't really doing a ton of strength and conditioning outside of the rowing itself. And then you started doing some cross-fit, got some initial benefits from that but then started running into some problems with kind of the general approach there.

Could you talk to folks a little bit about how doing something was better than nothing but then eventually we had to get much more specific about your strength and conditioning side your dryland work?

Ursula: Yeah Robb. So I find it funny that most people go to cross-fit and then they learn about Paleo. It was the other way around for me because I'd already been doing paleo and then this cross-fit scene kind of came on and paleo seemed to support it. So then I was thinking because at first when I heard about cross-fit I thought oh this sounds hokey. But when paleo or when they were like saying eat this way and I liked it then I was thinking oh maybe cross-fit isn't so bad.

**[0:34:52]**

So yeah, I did a bit of cross-fit up at Lake Stevens there which was fun. And the coach that I was working with at the time too he didn't really like

any weight lifting. And still today in rowing, it's a preference thing. Some coaches will say lift, others weren't. But in my experience now with working in the South African program and then also working with you, doing strength work, it helped me a lot if more than anything in injury Robb. Maybe you don't get back stronger or whatever but the injury prevention is incredible actually.

I mean just doing the complex movements of the clean and the dead lift, I think that they really compliment in a way the rowing stroke because rowing is also quite a complex movement. And so I think the two just helped strengthen each other a lot. And yeah, I did some great work here with actually you had him on your show the other day Dave from cross-fit.

Robb: Werner, yeah.

Ursula: Dave Werner. So I worked at his gym and did some strength work there with his guys and loved it. Also in Greg Everett's movie, I loved his movie that the weightlifting, the history of American weightlifting. I just love the similarities and with my sport of rowing and in lifting and like I said just to benefit so much in helping injuries.

Robb: I have a good friend who is in the Seals currently. He was on I forget which team he was initially but he wanted to go to Green team to Seal Team 6 and what he started doing for that you know they have to do a lot of running and standard PT but the main things that he did for kind of strength and conditioning, he Olympic lifted the fanatic. Like just absolute you know lots and lots of Olympic weight lifting and then he did a lot of rowing and he also was competing in Brazilian jiu jitsu at the same time and did a really good rowing and made his goal of getting on to Team Six and all that.

But it was interesting to me that he kind of looked at the demands that he was facing and he liked what he got out of the rowing and really liked what he got out of the Olympic lifts particularly working a lot of the split variance and the power variance and what not. And he said again that he just felt like he was really kind of armor proof or injury proof when he went into that really hellish selection process.

Ursula: Yeah that's cool to hear. And there's an Australian rowing coach very famous Tim McLaren. He also said once about your athletic – I can't even say the word, athleticism, there we go. So he just said you know with rowing, you're doing one movement over and over and over. So it's pretty quick that you – you keep working the same muscles over and over but it doesn't improve your whole being as an athlete.

And so doing these other things is actually so good for your sport even though you so specialize, sometimes when you do become so specialize it doesn't actually help you. So it's good to do these other complex movements I think and weight lifting is definitely a pretty complex movement.

Robb: Right. And getting some of that hip extension, back extension, trying to undo some of the kyphosis that comes about from the rowing posture. That's a real art figuring out clearly the said principle you know specific adaptations to impose demands. We want to be specific but then the at the same time it reaches a point where the specific work ceases to get you further and then you do have to back up and this is where some of the cross-fit philosophy is very good but you have to use it in a very targeted fashion.

What are those more general things that can be brought into a training protocol that will help undo or injury proof or whatever the goal is but it ends up being general to support this specific goal. And there's a real art to that.

Ursula: Yeah. Definitely. I must say that when I started doing a little bit of the cross-fit workouts, they were just so fun and so different to what I've been doing,. And I think Robb, the best part was like our rowing workout are just so long. I mean it's like two hours minimum because to go out to the lake or the dam and then you put your boat on the water which takes long. Then you start to work and it's this long workout. And with cross-fit, sometimes the workout was done in five minutes. I was like this is great.

**[0:40:13]**

Robb: I have the rest of my life I can live now yeah.

Ursula: Yeah. I'm not in trouble because I'm taking so long to get home from training and everyone wants to go to dinner and I'm still got to stretch or cool down.

Robb: Right, right. That's awesome. So now in 2013, you moved back to South Africa. Looks like you're going to be on team South Africa and you've started working with Professor Tim Noakes talk to people about all that. Like why you moved, what was going on with that and then what Professor Noakes is doing with you.

Ursula: Yeah, so when I moved back to South Africa to go and row there, it was very cool when I came to find out that Tim Noakes was talking about paleo although he calls it a Banting diet which is kind of like a mock sister and kind of gig because it includes dairy you know raw dairy and stuff. And Tim Noakes is so well known in terms of running, I don't know if you ever seen I call it his Bible but the law of running. It's like this massive book about running, running psychology.

So in South Africa, he was our sports hero. And now that he's talking about Paleo- in South Africa I'm seeing now it's the same as when paleo first came to the States. You know when Loren Cordain, Dr. Cordain was trying to get it out and everyone was saying you're crazy, you're crazy. And it's the same with Dr. Noakes now. People in South Africa are slamming him pretty hard.

He was in the papers because some women wrote to him and said you know I'm pregnant, should I stop the Banting diet, this is my baby's health at risk. And he said no, your unborn child will thank you for the rest of its life if you keep eating this way. And then people just slammed him like you're going to kill this child.

Robb: And you know the irony with that is if the person is drinking sodas and giant mocha frappuccinos and pastries. The funny thing is that and you know granted you can make an argument that maybe paleo is extreme, maybe vegan is extreme or whatever but these folks that are usually doing that or making some effort at eating better and trying to be healthy whether it's misguided or not, let's just scientifically say maybe we're all misguided in this approach.



That rate, you know, we always get a bunch of hullabaloo about that whereas if somebody comes into an office and they're pregnant and they are eating the most appalling diet you can imagine you know just chips and cakes and soda and all these, nobody bats an eye at that. And we have really good data to indicate that that's probably a horrible thing to be doing both for mom and the baby.

But you know it's interesting nobody really raises an eyebrow with that. So that's interesting. What is professor like how have you modified your eating now? Clearly you're still taking advantage of peri workout, carbohydrates, you're doing more carbs, starchy carbs and what not, but how have you modified that or is it still pretty similar and he's working more on the sport psychology side or how is he helping you?

Ursula:

Well Dr. Noakes, I haven't worked specifically so much with him Robb. Just kind of touch base with him and said to him you know I'm following this and he's kind of cheering me on. But I'll be honest with you Robb, he's still also learning a little bit because he also is like you don't need a lot of carbs, just keep eating your high protein high fat you'll be fine. And then so I know that he also is going to have to just do a little bit of the walk to know especially as you said like you've been with your jiu jitsu and with me with our rowing, like we've tried that. We know that it's not as simple as that.

**[0:44:51]**

Robb:

Again the bugger with that and it sounds like you're similar to me, I feel really good with that like cognitively and my digestion and all that type of stuff. But man, I end up getting you know beat up and shellacked when I'm doing the jiu jitsu. And so I've really been finding, trying to figure out based off of all human intensity what's kind of the minimum carb level that I need to be able to make that work. And interestingly for me it's only like on lighter training days probably about 100-150 grams of carbs. On a really big training day, it might be as high as 300 grams of carbs.

But that's still compared to say like the most of the conventional wisdom would put my minimum carb intake like double that 300 grams. I would stick it more like six to 700 grams of carbs which I really think I would be

like diabetic and hypertensive on that whether it was sweet potatoes or bananas or whatever it was.

I'm pretty sure my mom was quite insulin resistant while I was in utero. We have some pretty good indications now that that can set up some epigenetic triggers in the kid are not really that favorable. So I've picked a sport that I think is probably very poorly suited for the way that my metabolism works.

Ursula:

[Cross-talk] I don't know why. I mean we should just go do the Iron man or something like I would be much more suited for this. Anytime in our training that we have this long runs or anything, man, no problem. But what happens in my performance seems that I just don't have the sprint. I'm not able to sprint like the middle part of our race, the grinding, I'm there, like no problem. But I don't have the sprint, the kicks. So then I know there's something in my fueling that just to go up something.

But it's not just as simple as that I've come to learn it's just saying oh well I just need to eat more carbs because now I've got the problem that my body doesn't digest everything. I mean I don't absorb it that well. There's some things you can eat and I fuel with that high carb or whatever and I've come to find out sweet potatoes and they're all high carbs but I don't know. Somehow my body doesn't use it enough.

So what I've done is I've included some others like these jelly sweets which is basically just gelatin and sugar. Eating those before racing, that has helped a lot like I don't know. It's like a little bit of this instant quick sugar boost that just started needing and then definitely the BCAA's working a lot with that, taking that before some kind of an after training to keep the muscle mass because with also, eat you're trying to be lean.

Doing that and some high glycemic fruits, the bananas, mangoes, cantaloupes, those things have helped. Yeah. I also had to start introducing a little bit of oats or rice, you know at night and stuff to also just boost those carbs.

Robb:

Right, right. And you know I've been doing a lot more white potatoes. I would say I probably actually do better with white potatoes and sweet potatoes on a digestive sides. Sweet potatoes do have a decent amount of fructose in them and they do have some other FODMAP's in them. So I

eat them but I've been migrating more towards white potatoes and then there are these purple Peruvian potatoes that are really tasty and they have those anthocyanin and I'm like blueberries and so I've been doing more of those. And I make some French fries out of those. Zoe and I would have a competition see who ends up eating the stack of the purple French fries you know the fastest.

And targeting that more around my training and my training volume is nothing compared to what yours is. Like your warm up is my whole workout even doing the jiu jitsu. It's a completely different story but that's been working pretty well for me so that's interesting that you know to kind of get that confirmation from you and again we used this kind of paleo ancestral template to make some informed decisions but then we really need to be flexible about where we need to go particularly finding that outer ridge of human performance.

Ursula: Yeah. So much. As you often say it on your show sometimes I also feel this word paleo has got to go. Like we got to find a new word for this because it has become sometimes when you mention it then people will roll their eyes it's like a religion or something to some people.

**[0:49:54]**

As you said it's just the template, it's like the lifestyle that it represents and then tinkering with it to make it work within your life. So you don't go crazy and become a social recluse because you can only eat local, sustainable, organic. So heaven forbid you go out to a restaurant and they serve you something that's not and you throw a fit there with your friends. No, I can't eat this.

Robb: Right. And I've never quite been that person but as it is, for me I do have to really ride the gluten thing very closely and just being tight with that like all I have some cheese here and there and I'll deal with the aftermath of that getting a little bit of acne. But the gluten thing is really a no-go for me. But just dealing with that is really challenging. That is something that I'll be a little bit of a pain in the ass on that side but the alternative is that if I get a gluten dose then whatever restaurant I'm at, their bathroom ends up getting destroyed. So it's really in their best interest to help me out on that as best they can.

Ursula what else? Where can folks track you down? Where can they follow your upcoming events and what not?

Ursula: Rowing is such an upscale sport. It's hard to kind of track it and stuff but I mean I guess we have these world cups that the big one. We have three world cups a year but South Africa will only go to the third one in Lucerne, Switzerland which is in July.

I guess also looking at Greg Everett's movie Weight Lifting where he also said that you train forever and you only have a couple of competitions a year to show your stuff. Rowing is kind of the same. So we train all year round just to have two big competitions a year and so the one is in July and we have our world championships next year August in France. And Robb, that's a big one because that's the Olympic qualifier.

Robb: Gotcha.

Ursula: So next year, 2000 in August, we've got a – I think in the top eight, and if we do it's a big party. If we don't, it's pack your bags and that's it.

Robb: It's an even bigger party then because it's like okay now we're really going to get down and eat and move up to 65 kilos permanently.

Ursula: Going to move on, yes.

Robb: I say that that's a win either way in my opinion. Clearly going to the Olympics would be the preferable one but I would psychologically I would skew that so that it's like hey man, I win, come in and go on this. Either way it's good.

Ursula: Robb, that's awesome. Actually that's a much better way to look at it.

Robb: I would have a giant cherry cheesecake picture of that. You'll have a flowchart on your wall and it's like Olympic glory on one side or cherry cheesecake glory on the other and it's like hey man, I win either way so I'm good.

Ursula: You know exactly. So that's our big competitions coming up and then like I said I compete in the lightweight women's double scull and the code in rowing there's always little short codes so it's LW2X. And the X meaning that we have two oars on sculling as opposed to sweeping which is one

oar like in the eights which you kind of see with the Oxford and Cambridge races they usually used these big 8's, eight men boats. And they usually only have one oar and that's sweeping. But I'm sculling, I have two oars.

Robb: Very cool. Well, Ursula it's been great catching up with you. We tried to do this about a year ago and because of my schedule and your schedule and you being on the opposite side of the planet that didn't work out so we finally made this happen, folks can track you down at [ursulagrobler.com](http://ursulagrobler.com), we'll have a link to that in the show notes. And really stoked to catch up with you and very excited to see how things go.

Ursula: Oh cool. Thank you Robb.

Robb: Oh hey, before we wrap up though, before we started rowing you said that you had some questions for me. I forgot about that.

Ursula: I did Robb.

Robb: Let's get those. Yeah.

Ursula: Yeah, so there are some things that I still don't quite understand and you know just looking at some small tinkering, listening to also one of your shows with Ben Greenfield, he's actually in Seattle I believe. You had talked a lot about MCT oil and Robb, I'm wondering what really is that? How do you add that to your training? Is it of any benefit do you think to me?

**[0:55:00]**

Robb: Oh men. So MCT's are medium chained triglyceride. They're saturated fats. We tend to get them out of coconut oil, some palm oil. There's a little bit in butter. We don't really – the kind of cool thing about them is that they shuttle into our mitochondria preferentially relative to other fats. They metabolize relatively quickly, they tend to produce almost immediate elevations in ketone levels. And so there maybe some performance enhancement there. But again I really think it's for that aerobic fueled athlete.

And I would suspect that if we look at the demands of your 2K events, similar to say like MMA or Brazilian jiu jitsu, I bet that it's probably 50 to

60% fast glycolysis and the rest of it aerobic. And then a little bit of ATP creating phosphate thrown in there for these last sprint efforts. And so I could see maybe like in your volume accumulation phase, when you're doing lots and lots of volume out on the water you know like you could make some almond meal cookies with a ton of MCT oil in it to make them stick together and some honey in it and that might be a good snack.

It might give you some sustained energy when you're out on the water. But as your volume and as the intensity goes up, I would be suspicious as to whether or not that's going to give you any benefit because it's still calorically dense and it's really not filling the engine that you want for that specific event.

So I could maybe make an argument for some MCT oil and again you know like that aerobic base phase, the accumulation phase but then I would see that stuff probably going down to essentially zero and then it's like get enough protein so that your maintaining lean body mass and then as much carbs up to your tolerance as you can deal with and also maintain body weight. And then I would say some fat for flavor and getting fat soluble vitamins and that's probably about it.

Ursula: Okay. And then Robb, I wanted to ask you, so melatonin because sleep has also been very challenging to me and that talk that you did with Dr. Kirk Parsley was amazing. I love that show and listened to it so many times. That helped me a lot. But I still want to know with the melatonin, it's a hormone is that correct?

Robb: Yeah, I mean a hormone, a neurotransmitter, yeah it's one of the elements that initiates sleep. And throughout the day we accumulate essentially sleep pressure and there's all kinds of interesting things that go in that. We accumulate some pro-inflammatory cytokines in the brain and in our body. We get an accumulation of histamine and well actually histamine is kind of a sleep antagonist but it's interesting and Dr. Parsley is much better at talking about this than I am.

But you could almost make an argument that our default mode is to actually be asleep and then we have these stimuli that keep us out of sleep and that includes sound and blue and green light you know just being outside and all that type of stuff. And then as we start heading

towards sleep, the amino acid tryptophan gets converted into 5-hydroxytryptophan and then serotonin and then melatonin.

And the melatonin is a part of initiating sleep. And then there's some other things like GABA that help you to stay asleep over the long haul. And one of the things that we see in this overtraining scenario is that when the adrenals are kind of on high alert, we're actually depleting our melatonin both systemically and in the brain.

And so then what we do is we start shifting, it's almost like the pregnenolone steal where we start shifting away from testosterone and towards cortisol. But it happens in the brain and we start shifting away from serotonin and towards melatonin to be able to keep our melatonin levels up and that affects both the adrenals and the brain. But then we end up with low serotonin levels. And people with low serotonin levels we call depressed.

So smart utilization of melatonin can be really helpful say like if you've done some really hard training and you're finding it difficult to go to sleep doing like half of a milligram to a milligram of melatonin might be helpful. Even at those levels, that's quite a bit more than what we would normally produce during a night's sleep.

**[0:59:50]**

And there's different opinion out there. Some people have the opinion that you could take really big doses of melatonin and you don't get a down regulation of melatonin production and the melatonin receptors. Doc Parsley doesn't agree with that. I tend to kind of side with him given all the work that he's done with the SEALS and all the research that he's done. But you know can help you fall asleep at it can also help for a lot of people to kind of turn the adrenals off at night. And that's the benefit there.

He's coming out with a sleep cocktail probably first quarter of 2015, it has melatonin and GABA and Vitamin D and all these other co-factors that he's used with a number of the SEALS and police military and fire. And it really works pretty remarkably and when we get that I will send you some samples and see how that helps with your sleep.

Ursula:

Because you hit on so many triggers there Robb that I'm busy experiencing. So I don't have a problem falling asleep but I have a problem in staying asleep and then what happens is that something like draws me awake as if there's like an urgency. Like something is going off in my mind like oh my god you got to get up, you got to get up. And then I'm okay, I'm up, I'm up. And then it's like four o'clock in the morning and I slept five hours and I'm tired and I can't go back to sleep now.

And then it starts cycling out like some of my coaches have started asking me are you depressed Ursula? And I was like I'm not depressed but I'm pretty moody because I'm not sleeping. And maybe as having come through overtraining, maybe there's still some of my aftermath that I have to deal with. But I was pretty nervous with taking melatonin Robb because I heard it was a hormone. And then I was like is that a good thing? And then I was thinking is this going to add weight to me? That's why I was asking you these questions.

Robb:

I would really doubt that it would add weight and particularly because we know that when people sleep well they tend to not retain excess water, they tend to be leaner and so if there's an argument for using something like melatonin, I think that in a situation like that there's a pretty good argument.

It's interesting when you describe a lot of the symptomatology being anxiety. An interesting thing occurs and again I don't understand this stuff nearly as well as I would like to. I spend a lot more time doing admin stuff than I do research these days which is a serious burr under my saddle but it's just kind of the way my life is.

But the adrenals secrete a number of different hormones. The more popular ones clearly are cortisol but they also secrete epinephrine and norepinephrine and we've got kind of our fight-or-flight hormones within epi and if an individual starts – if they become depleted in their ability to release cortisol or if the receptor sites in the body become blunted to cortisol they actually become cortisol resistant, then what we do respond to is the adrenaline, the epi and the norepi.

And what cortisol does is it actually is a mellowing agent for the epi and the noriepi. So there's some thought and it makes a lot of sense and



again Dr. Parsley is the one that really put this on my radar, if you have somebody who has anxiety event and we have some suspected or some pretty clear adrenal fatigue or some adrenal insufficiency or for the people who don't believe in adrenal fatigue then we could call it a hypothalamus-pituitary axis imbalance which we can scientifically really credibly support that idea.

But these people are either resistant to cortisol or not producing enough cortisol and so when they get under stress, instead of releasing its full complement of hormones and getting both a stimulatory effect but a little bit of a mellowing effect too from the cortisol, they only get the fight-or-flight part. And so it kind of manifest as a kind of a terror. Like a night terror or just anxiety and what not.

And so I'd be surprised if you don't still have some of that stuff going on and some adaptogens like cycling a month of ashwagandha and then a month of American ginseng. And clearly because you're an Olympic athlete you need to make sure that your sourcing is really good like a Thorne, or a Biotics, or something that is IOC you know cleared to make sure that they don't have any squirrely sub ingredients in there.

But doing some additional and on-going adrenal support and kind of a rotating fashion because the ashwagandha works as an adaptogen in a different way than like the cordyceps or American ginseng. And so you know, it would make a lot of sense to rotate through that stuff. And you get the Source Naturals is a really good brand.

You get the one milligram sublingual melatonin and maybe break those in half and you have a couple of them on the head board of your bed just kind of stack up there and then if you wake up you take half of one of those tablets, stick it under your tongue, let it dissolve and it should help you get back to bed.

**[1:05:13]**

And again, you have to experiment with it and see if this plays out. But I would make pretty good argument that if your sleep is better, your weight maintenance should be easier not harder.

Ursula: Yeah, I agree. I had – all bouts when I have had good sleep and then the weight is so much easier. So it kind of feeds me to get this right and at the same time it's when I'm not getting it right it just stacks up my anxiety because I'm like shit now when I get on scale tomorrow I'm going to be heavy.

Robb: Right, right. And so having some tricks in your back pocket where it's like oh, I woke up no big deal, I'll take a melatonin. I'm good to go. It's funny because this gets into like all the clock watching and stuff like that. It's like oh shit I only have seven hours to sleep and I wake up and look at the clock which is an argument for not having the clock in your room.

If you wake up and you're like man, I really need to sleep then you start sending a stress signal to your body and then it makes it almost impossible to sleep. So if you've got a little you know, paleotive in your back pocket there where you can say no big deal, I'll take a half of melatonin, I'll be good to go. Tomorrow will be a great training day, I'll have some great sleep.

And even if that doesn't happen, if you can just tell yourself that and fake it till you make it, it's probably better than spending out and being like oh man, I'm going to be crushed tomorrow. Even if you can lie to yourself in that moment, it probably be better than spending out.

Ursula: And totally what you spoke about the drug testing is so true Robb. I am tested constantly. Me and the drug people, we are best friends. They knock on my door all the time and you have to – so these are some of the things that being an Olympic athlete or Olympic hopeful, they don't always tell you, but you have to fill out this whereabouts form and you have to report where you are at all times. And if they come and knock on your door you are not where you say you are, that's a missed test. And two missed test I think and you are banned. So it's pretty hectic.

Robb: You're made of tougher stuff than I am I'll tell you that because just that part of the schedule alone to say nothing of the training and all the other self-sacrifice, I just don't think I could handle that. You are far tougher than I am.

Ursula: Once the drug people knock on the door and I was actually I said I would be there but I was staying with some friends, and they didn't know who

they were and they said oh come on in. Use the pool if you want, there's some lemonade in the fridge. I'm so glad Ursula's friends are here.

Robb: That's hilarious.

Ursula: Afterwards I said to these are not my friends. I want these people out of here as quick as possible. Yes, take my blood and go.

Robb: That's hilarious. Well, I could see probably giving them some treats so that they enjoy your company a little bit, might be beneficial in the long run. But man, what a hassle. Cool.

Ursula: Hey Robb, I have one more quick question for you. This one is going to be maybe digging into some ethics a little bit. So there's been some talk about and I haven't quite done my research so it's just hearsay but in they're now trying to grow protein. And coming from South Africa or Africa where food and food shortage is a huge problem and people are starving and all of that. And here we are especially with paleo like I'm trying to say no, no we should grow our food and eat from the land and not all of these genetically modified stuff.

But a lot of people are coming back to me and they're like genetically modified corn is feeding the people and I'm like yes but it's also making them sick. So how is this helping us to solve the problem and then now we've been talking about well now they're going to growth protein in the lab and then feed the people with that and I just don't know. It's this really the way we want to go?

Robb: That's a lot of ground to cover. I'll mainly focus on the protein and the lab deal. It's funny the tech scene, maybe 30 years ago the best, brightest, smartest people they popped up in the society tended to go into medicine. And then the reimbursement for medicine change particularly in the United States. I'll play that picture mainly in the United States.

**[1:10:07]**

The reimbursement from medicine change, the status of doctors really change or not held on as high of regard as what they once were, they don't get paid as well as they once did. And so now the best, brightest

people go into banking and finance or technology. And sometimes a very painful overlap between the two.

And it's interesting, these are literally the smartest people in the world but they in my opinion are so incredibly easily duped because they see these things like growing meat in a lab and there's this disconnect here that to run a lab, you basically have to build the infrastructure of the lab. Keep it heated and cooled, provide the nutrients for the nutrient bath to grow this tissue culture meat.

And how that ends up being in that win is absolutely beyond me. I'm not a physicist but I've done a decent amount of physics and the thermodynamics there do not make any sense whereas Mark Sisson and I have talked about this. And I've been working a lot with Savory Institute and Polyface farms about two thirds of the land mass is that humans exist on are completely inappropriate for raw crops and the standard type of things that we grow which I would make an argument that a lot of that could be re-allocated and used in a more effective way.

But their huge tracts of land, the only thing really good for are herding, grazing animals. And you have this process of sunlight, the photosynthesis gets converted into carbohydrates and lipids and some proteins gets stitched together and then animals eat that then they convert that into nutrition and it re-nutrifies soil, it sequesters carbon and builds soil depth.

I really think that we need to look at both the combination of high tech and low tech to solve these problems. And you know it's interesting Allan Savory is from Zimbabwe and he's done these amazing reversals of desertification using holistic grazing management techniques. It ends up preventing erosion, it replenishes water tables because when the rain that does come it doesn't just run off and it's gone. It actually stays there and seeps into the ground and you get a diversity of plants and animals. You can create kind of a food force around that.

Ursula: Yeah, sorry Robb. That Ted Talk that he did was amazing. And I would encourage anyone to Google that and watch it.

Robb: Yeah and you know for most of the folks listening to this particular podcast mainly what their interested in is protein, carbs, fats and abs and

I get that but there's kind of a reality that if we don't address these other issues, if we don't address the fundamental issues like how we feed ourselves and make this work in a sustainable fashion, we can talk all we want about high quality food. But that food won't be available either because of political pressures or because we've created an economic and a production system that just simply doesn't make that stuff available.

So it's quite unpopular. People don't like it a lot. But it's something that it's a drum that I'm beating more and more and it's frustrating that again these people who are the best and the brightest in our world today are so easily duped by these ideas that we're going to grow meat in the lab and that somehow that's going to be a net energetic win.

My jaw drops open and I'm like you guys have taken Physics and Thermodynamics. I was part of like a Computer Science degree like you've got to be able to think this stuff through better than this but they don't. And so we've done a lot of work with the Savory Institute and we're going to do more and more work with the Savory Institute. Some really big players like some of the big oil companies are looking at these guys because of their ability to reverse atmospheric carbon dioxide levels by basically creating highly nitrified microbiome rich top soil.

And we've lost, I don't even know the numbers on this stuff but I think like the great plains of North America used to be a dozens of meters deep and this really nutrient denched topsoil and now we're down to inches of it. So there's all kinds of collateral damage from that, all kinds of problems and not only could we feed people by changing the way that we grow food but we could also deal with a lot of ecological issues at the same time.

**[1:14:58]**

So I've really got my work cut out and a lot of job security because goofy things like soil linked and these lab grown meat are the things that people are talking about and it's kind of maddening but it's also like well I definitely in my lifetime, I'm not going to run out of work to do because I'm going to be fighting that stuff every step of the way.

Ursula: Yeah. I agree Robb. Like being I don't know, being paleo means it's a lifestyle and you look at the way your food comes from and so it's part of where does your food comes from?

Robb: Yeah. You know it's interesting I do a lot of work with the Farm-to-Consumer Legal Defense Fund also and those folks they support people who want to do raw dairy and traditionally cured meats. I would like to develop a system that is very paradigm agnostic like if you want, I would love like in my mind and what I think that we can put together, I think we can create a sustainable food system that can feed you whether you're vegan or paleo or Weston A. Price, or whatever the story maybe.

And the funny thing though is that the vegans want to create a political and suicidal environment where eating meat is either against the law or immoral or whatever and they don't want us to do this stuff. But I'm really at the spot where I would like to be able to feed all these vegans but do it in a sustainable way that's not focused so much on raw crops and some unsustainable systems.

So we need to really be able to kind of come together a little bit and say well okay I'm going to eat different than you but I'm going to make sure that the way that I eat leaves plenty for the way that you want to eat. And I just don't see very many people tackling things that way. They tackle it as a religious conversion type of process where everybody needs to agree with me, they need to do it the same way that I do and otherwise it's get off the bus. We don't want you to be a part of it. So there's a lot of work to be done.

Ursula: I think like running away from these things doesn't solve it. Okay, so we've got these feedlots, they're terrible. So now we're going to say okay I'm not going to eat meat. But that's not going to solve the problem like going into these feedlots and saying no, that's not the way we want meat but we want our animals free roaming and act normal like eating grass, not wheat and all of these other feedlot crap. And I think that's how we should tackle this. In my opinion, I don't think running away from the situation is going to solve anything.

Robb: No, it really doesn't. The number of people in westernized societies that have been vegetarian, vegan have been about the same percentage for 20 or 30 years and so I think you hit a certain saturation point with that.

So you're going to have a cross section of society that's going to eat meat and then you just have a choice of how do you stir the boat? Do you want it to be in a sustainable fashion where we're actually dealing with some ecological issues or do you want these really fossil fuel intensive, very ecologically unsound practices do you want those to be the way that we do this.

Ursula: That Temple Grandin girl who went to have the cattle when they get killed, I mean that's not a nice place to be but she went in there. I don't know if you've seen that movie of her or heard her Ted Talk. But she looked at how to calm the cattle down before they get killed. And so she didn't run away from the problem, she said let's build these avatars or whatever in a better way that the animal has a better way before dying in a way.

You know of course, these are the realities of us eating meat but I really appreciated the fact that she again she didn't run away from the situation and just said well, let it be that they just have this brutal way of dying. She said no, let's look at how that they come through. She made like a circle that the cattle walk through in a way that's very calming for them instead of shoving them all through and trying to shock them through I don't know, but it was interesting. I really think more of that type of thinking is what we need.

Robb: Yeah, and you know Polyface farms has done a lot of really fantastic work in that regard. You know I'm very optimistic, there are more people interested in and aware of that type of stuff and ever in history when I first got involved with the whole paleo concept or there were maybe like 200 people on the planet that knew about it. And now with the internet and social media and people being able to try this stuff, we have millions of people fiddling with this.

**[1:20:10]**

And so I think that there's a real opportunity to get folks aware of this other side of the story the sustainability and animal husbandry and all that.

Ursula: Cool, Robb.

Robb: Awesome having you on the show. I'm very excited to see how you progressed here over the next couple of months next year. So keep us updated and it was fantastic having you on.

Ursula: Oh thank you Robb for having me on the show and entertaining all of my questions afterwards which extended the show quite a bit. But it was really cool to hear your answers to these things that I've been thinking of when it's four o'clock in the morning and I can't sleep.

Robb: Well, hopefully now all those questions are answered now you just sleep all the way through and you don't have to wake up.

Ursula: Exactly.

Robb: Awesome Ursula. Well take care and we'll talk to you soon.

Ursula: Okay thanks, Robb.

Robb: Okay bye bye.

Ursula: Bye.

Robb: Alrighty we are good.

Ursula: Yey.

Robb: Thank you so much for coming on. That was fantastic.

Ursula: Thank you Robb and like again I'm sorry I pulled you at the end for another 20 minutes asking you my questions.

Robb: Not a problem, that was great. That was great. Those were fantastic questions and we have lots of people who are not nearly the caliber athlete that you are but they suffer a lot of the same issues so that was all fantastic stuff.



Ursula: Cool. I wanted to ask you one more question about beta-alanine but I thought that's just going to pull the show too much now. But just quickly Robb, what are your thoughts on beta-alanine?

Robb: Oh you know it's right in that whole creatine ATP, creatine phosphate, interphase, like it really seems to help sprint performance. And so I would throw it in the same way I would creatine and it definitely, they're similar to creatine. There's some fantastic literature that shows that it really does work like it really is beneficial.

Ursula: Okay. Cool. Cool. Okay thank you, Robb.

Robb: My pleasure. It was great chatting with you. I'll talk to you soon.

Ursula: Robb, do you have an idea when this will go out?

Robb: You know it would probably go up this next Tuesday but I need to check with Squatchy and make sure that we didn't have one already done that is like a book release or something because a lot of these shows we're doing the release to coincide with their book coming out and stuff like that. But I don't think that, I think we were going to do an archive show for the week of Christmas. So I think this one will go up next Tuesday.

Ursula: Oh cool. Okay. I'll listen out and see.

Robb: It seem that this Tuesday because now I've got three in queue so you know I'm honestly not sure. I'll do an email with both of you and Squatchy on it because he takes care of all that stuff. After I'm done with them I really have no idea what's going on with them. So I will do an email with you and Squatchy and then we'll figure out when it goes up and then we can push that around.

Ursula: Okay cool. Sound awesome. Cool. Alright thanks, Robb. Have a good Christmas with the family and the kids and your little ones first Christmas.

Robb: It's Sagan's first Christmas. Yeah, super fun. She's amazing. She's a ton of fun.

Ursula: It's awesome, awesome.

Robb: Awesome so well take care and travel safe and I look forward to see and how things go.

Ursula: Okay thanks, Robb.

Robb: Okay take care. Bye.

Ursula: Bye.

**[1:23:48] End of Audio**