

Paleo Solution - 309

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Robb Wolf: Hey folks. Robb Wolf here with another edition of the PaleoSolution podcast, very excited for today's guest. Beverly Meyer is a certified clinical nutritionist. She is the founder of On Diet and Health as well as the Primal Diet - Modern Health podcast. Beverly, how are you doing?

Beverly Meyer: I'm doing great Robb. So happy to be here.

Robb Wolf: We've run across each other I think at every single ancestral health symposium and Paleo FX event as well as a number of other shindigs. So we've had some in real life interactions and that will be great to talk to you on the podcast. You have a really eclectic and varied background and it spans a duration that may exceed -- just your study of nutrition may exceed the lifespan of perhaps 50% of the listeners on this podcast. I'm getting into that camp as well now, but talk to folks about your background, like you range from Finance all the way into Functional Medicine, Clinical Nutrition. Talk to folks about that.

Beverly Meyer: That's a polite way of saying, you're really old. [laughs] I'm 64, but yeah, I've been in practice in San Antonio since 1985 and I've been a patient in Alternative Medicine since the '70s. I mean, it's really been a long journey for me, and as a child, I had a lot of bowel problems. I had my appendix taken out when I was little. I had facial ticks and body odors and all these things that I now know were some of the symptoms of celiac, but of course, nobody paid much attention to those things back then, but my brain works really well. So my body is kind of always been lagging a little bit behind, but the brain is good. So my background at Finance, Archeology, Physics, Math and Economics and then I got off into Alternative Healthcare, so that's kind of a deluded pathway.

I had several big businesses that I ran through the '70s and into the '80s, but I wasn't well anyway and it was just too much and I got really sick and that's when everything went, the marriage, the businesses, all that stuff. I began studying the International Association for Certified Clinical Nutrition, which are as far as I know, they are the granddaddy of nutritional training and certifications. You have to have a Bachelors in Science or some kind of a medical degree now, but at that time, I was already in practice, so I was able to grandfather in, so yeah.

I've been wheat free since the late '70s, early '80s I think, but everybody has their defining moment and I think the defining moment for me was in practice and this lovely, lovely woman came to see me who weighed about 80 pounds. I just took one look on her and I said, have you ever been diagnosed of celiac and she said no. I had just heard about the specific carbohydrate diet. So this was before your book or anybody's book. This was -- when was PaleoSolution published?

Robb Wolf: 2010 and then Loren's book was 2001.

Beverly Meyer: Right. Well, this was back in the 90s. So I had come across the specific carbohydrate diet and I dove into that and I said I'm going to teach you this diet, but I don't know it myself so I'm going to do it with you and which is kind of my philosophy as a practitioner anyway. Lo and behold, she and I both had such amazing results from getting the gluten out and the grains out and the non-digestible carbohydrates. I mean, it just nails the obvious stuff for me, like sweet potatoes and plantains, but even the not so obvious stuff like okra, which I'd figured out as a child bothered me, but it's right there as one of the illegal foods on the SCD diet.

So that's when I had my awakening that wow, this gluten thing is really serious. I took the dairy out because the classic form of SCD is very dairy heavy. Anyway, so that's kind of how I got into the -- I'm going to start teaching my clients to be not just gluten free, not just grain free, but take it the next step and see how you do without dairy and all that and then I made a DVD because I got tired of telling every client the same thing over and over.

Robb Wolf: Here, watch this.

Beverly Meyer: So I still have my great DVD now, The Diet For Human Beings. So that's what I called it before the Paleo word existed is The Diet For Human Beings. That kind of brings you up to date and except for a little more health issues there.

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Robb Wolf: That's fantastic. Beverly, it's interesting that historically, celiac disease presented just like the gal that you mentioned, underweight, malnourished, emaciated, but that has really changed in the last say 30 years. Frequently and more often than not, celiac disease seems to present with obesity now. Do you have any sense of what's happening with that story?

Beverly Meyer: Well, it's like I said, for example, the facial ticks I had as a little girl and having my appendix out and body odors and there are so many other --

I'm just about to write a blog post called, A Hundred Hidden Symptoms of Celiac, and it is literally all over the board, just literally anything you can think of can have a connection to this gluten antibodies.

I'm completely sold in my clinic now on getting people off of gluten literally like their depends on it and that means their hair dye, their shampoos, their skin care, handling their pet kibble and that flower, whatever that gets onto your fingernails. As you know, obviously, we never ate grass seed and even the grain that was there was Einkorn and then it was Emmer and then modern wheat came about and then it's been hybridized infinite numbers of times and then, of course round up and everything else. I think it's just so -- we might as well be eating moon rocks. It's so alien to us and that it just activates all of our bad genetic code. It's like letting the Tyrannosaurs Rex and the mammoth and the chimpanzees all out of the cage and at the same time and everything.

Robb Wolf:

It's been interesting. I guess like one of the contrast with the way that I tackled all this stuff versus the way that Loren did initially. He had kind of an 80/20 buy-in with stuff where 80% of your meals were cooked Paleo and then there was kind of a 20% slop there and what I found with the folks just didn't get better on. That potentially, this gluten problem was so significant and you could have a longstanding reactivity to it. So you only need an exposure every week or two weeks or three weeks and you kind of stayed in the same holding pattern. You never really got better.

So what we were doing on the one hand is we were limiting the amounts of these foods that folks really, really want to eat like bread and pastas and pastries and whatnot. But at the same time, allowing just frequent enough exposures so that they never really got better. I think that my kind of elimination diet approach to that was really a big turning point I think and that's why my approach into that path a little bit more sticky so I'm definitely in the same camp as you where I tried to moderate my tone on gluten a little bit just so I don't chase everybody off. But I just do my greasy use car salesman pitch of why do we pull that out for 30 to 60 days, re-introduce it and see how you do and then the proof is kind of in the pudding then.

But to your point, we know that every tissue in the body because of the transglutaminase activity, which is an enzyme that modifies that proteins that are manufactured in the body. This is the protein that ends up being effective when we get this celiac antibody formation. So if you've got an enzyme that affects every tissue in the body and you've got an antibody that can affect that enzyme, then gluten can influence every single tissue and cell in the body and so it gets a little bit crazy because people read

off a list of potential problems and it's like yup, yup and then you start sounding crazy because it sounds like you have cure for everything, but it kind of it. So that's funny. So you have to figure out how to sell the crazy idea without sounding like a crazy person in the process.

Beverly Meyer: One of my great tools and this was another big aha for me and as I said, I don't ask my clients to do things I haven't done myself was there is a lab, Cyrex Labs, and then they run and expanded gluten antibody profile that's gluten and glutenin, and gluteomorphin and gliadin and it's like 20, 25 different analogs or versions and as well as a test called the gluten cross-reactivity. I had a client I wanted them to run this so I run them on myself knowing of course in total confidence that I'd completely pass these tests because I'd been gluten free for 15 years like a maniac gluten free.

[0:10:18]

Robb Wolf: Right.

Beverly Meyer: And I got the test back and I flunked the gluten test and it was such a shock you know. I mean, I just broke out into a sweat looking at it, it's like, how is this possible and it took me almost 6 weeks to finally figure out what it was, was I have a pony and a donkey that live with me, Fred and Ginger. They're very cute and I was feeding some feed, which is only like maybe 10% oats so it's not a lot of oat anyway, but I was pouring that into the pony's feed bucket and it was backlit by the sun. That tiny little poof of dust that came off the feed we poured it in the bucket and I went oh my gosh, that's it. I'm inhaling that tiny, tiny bit of gluten in that dust. It took me a while to find feed that didn't have gluten in it and etc., but so that's when I realized wow, it's not just being really, really good, it's being super good.

Robb Wolf: A lot of good, yeah, yeah and then you try to do these other things like maybe have some farm animals and stuff like that. Like we have some chickens and sure enough to feed it, Nikki went and got it like organic and non-GMO and everything, but it's got wheat in it and when Nikki fills that chicken feeders and the chickens get roam a lot, but we're high dessert in our winter is like there is no forage anywhere so we definitely have to supplement the chickens during the winter. When Nikki fills that feeder, you just see this gluten dust like boiling everywhere and I'm like, oh my God, you are going to kill me. So I'm going to land warfare deal with my wife over the chickens. I want to get rid of them and just focus on sheep and goats, which we will raise during the spring and summer, slaughter them in the fall and then we'll just start a new, the next year, and just bugger the chickens entirely, but she is kind of dragging her feet on it, so it would be interesting to run me through that and see how I pop up.

Beverly Meyer: Yes. Well, it was a shock and I ran the cross-reactive foods, which says, your body may consider that coffee, millet or buckwheat or dairy or this or that are actually gluten and it's attacking them for that reason. So that I came back is a huge flunk on dairy, which was really cool to finally get the diagnosis of why dairy bothers me because I had done every possible type of dairy allergy test and I had never flunked it, but I did flunk it as a gluten cross-reactive.

But the point of the story is that then so I said alright that's it. I'm going to wear a mask and wear gloves and wear clothing that I only put on in the horses' barn until I get this figured out with the feed and I'm going to eliminate completely dairy except I'm going to eat gallons of ghee. Because I knew that ghee does not react in people. It has no protein. The immune system reacts to proteins so that was my theory and I wanted to prove it that if you have pure fat, the immune system will not attack it. So I handled the horse feed and I ate gallons of ghee and 6 months later, I run both those tests and they were perfect.

Robb Wolf: Oh nice, nice.

Beverly Meyer: So I know for a fact and the other thing that Cyrex used to do at that time was test the GAD65 antibodies, which is kind of where -- you know about the GAD. It's the enzyme involved in the synthesis of GABA and it's very affectible, that's a new word affectible by gluten and this maybe one of the vehicles by which gluten has such an impact all over the body is with the GAD enzymes and these GAD65 antibodies. So anyway, those I have also retested after handling the gluten thing and they also calmed down.

Robb Wolf: It's interesting.

Beverly Meyer: That's how I got interested then in GABA and that's the whole next phase of my life is understanding that neurotransmitter and how that works in the body.

Robb Wolf: Well, that's a great segue. In full disclosure, I am not intimately familiar with the GAD pathways and whatnot, but it definitely makes sense. There's been a decent, I wouldn't say an enormous amount, but a decent amount of airplay given to this idea that the gut produces a lot of serotonin and that the gut and the brain both use similar or the same neurotransmitters that have a significant amount of serotonins just manufactured in the gut and then it's been postulated that intestinal permeability, gut inflammation could influence serotonin. So people have

talked about that with regards to depression and anxiety and a host of things.

But as we were talking briefly before recording, you've kind of recognize GABA as kind of a red-headed stepchild in the neurotransmitter world. Dr. Parsley talks a good amount about GABA from his sleep perspective. People are usually familiar with serotonin and melatonin being related to initiation of sleep, but they forget about GABA being important in the maintenance of sleep and then GABA being important in a host of other situations. How did this misbegotten neurotransmitter get on your radar and what's the significance for folks?

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Beverly Meyer: Wow, how I found out about GABA is I got very ill about 10, 15 years ago and just literally was crazy. I mean, I was just a crazy person. I was sane enough to know that I was crazy so I...

Robb Wolf: So you have that going for you, yeah.

Beverly Meyer: But I was overworked, I was stressed out and I had a tremendous startled response, a PTSD thing going on. I knew my sympathetics were just highly aroused and PS, I went into menopause and PS, I had a bad concussion, which set off Epstein-Barr virus and that took out my adrenals. So this all happened at the same time that I went into literal adrenal failure. The doctors told me you need to be in the hospital and you're going to be on steroids the rest of your life and I said no, I'm going to go home now and figure this out and how I can bring my adrenals back from the dead. But that concussion and Epstein-Barr adrenal failure and menopause was a big stew and overworking because my clinic was such a success. So someone turned me on to this great book called, The Edge Effect, like the edge of a plate.

Robb Wolf: Yeah, yeah.

Beverly Meyer: Yeah, The Edge Effect, and I read the book and it was oh my gosh -- I'm in, I'm in. Now, I was basically house bound at that point. I mean, I could barely make it to a grocery store and interact with people and Wi-Fi and fluorescent lights at the gas station. So I mean, that's how unstable my brain was and how much I was experiencing instability in my life.

Robb Wolf: Shoot. That's the way I am right now. There's nothing bad about that. [laughs]

Beverly Meyer: Yes. So I read Dr. Braverman's book, The Edge Effect, and contacted him and ended up going to see him and having two days' worth of brain scans

and all these really cool test, move blocks around the table and just all kinds of wild stuff that people don't usually do. He said, here's a story and he actually got hold of tear in his eye. He said, you scored better on the brilliance test than almost anyone I've ever, ever seen. He said you're so smart, he said, but your body is completely wrecked and here's why you don't have any neurotransmitter called GABA in your body. He showed me the brain scans and he said, you're the poster child for lack of GABA, GABA deficiency, and he said you're probably having seizures, don't know it, and have been having them all your life.

So he put me on actually prescription GABA like Depakote or one of those that they give for seizures at an extremely low dose because I told them my body is so clean. I react to things because it doesn't have to work some through alcohol and pizza. The effect of a prescription will be quite strong in me and within a week, I knew I was going to make it. It was that obvious and that's when I started researching GABA and how to promote its health naturally.

As you say, GABA and serotonin are primarily made in the gut and so they kind of tag along with all of those gluten inflammation, leaky gut, Candida whatever else is going on down there as well as the fact that we -- gluten and serotonin are inhibitory neurotransmitters and their equals the other two that are excitatory neurotransmitters, are acetylcholine and dopamine. So they're like the four tires on your car and you want all four of those tires to be the same brand, the same air, the same ware. If you have a flat in one of them, your car is not going to work. That's not good.

[0:20:14]

So I called up the go-gos and the slow-slows. So we need its yin and yang, light and dark. We need equal amounts of go and slow, but in this lifetime, as we all know, everything is go. There is no slow. We're checking our phone 5 minutes before bed and all the rest of it. We're crazed as a species or at least those of us with computers and cell phones. So all of that going-going, go-go wears out your brakes, your serotonin and your GABA. So not only might you not be making enough, but you might be using it up at a very accelerated level though it's both, and then GABA, it's back to those GAD65, the GAD enzymes involved in the synthesis of GABA, which is profoundly affected by gluten antibodies. So it's all kind of stitched together like a quilt that --

And here's some of the list of symptoms associated with GABA it's like gluten. It's all over the place, so digestion right off the bat. Why we digest better when we're not stressed out, that is a GABA thing, a total GABA thing, irritable bowel, reflux, sweating, insomnia, frequent urination, pain syndromes of all kinds, fibromyalgia, muscular tension,

addiction, high blood pressure, low blood pressure, constipation, diarrhea, anxiety, OCD, addictions big time. Heroin, marijuana and alcohol actually provide natural GABA and that's why most of us that are so GABA deficient can end up getting into heroin, marijuana, alcohol, all the stuff Valium and to self-medicate and save ourselves, because GABA is all about stability.

Serotonin is all about satisfaction and that's why we've kind of labeled serotonin like depression, but it's really more satiety with food and life. It's satisfaction and therefore playfulness, whereas GABA is that stability left brain, right brain firing, left right, left right, left right. When your GABA is too low, that signal kind of chatters, like [chatter sounds]. I'm sure that sounded great on that recording. Goodluck with that, but the point is that the electrical transmissions in your brain become unstable and that's why its manifestations are things like irritable bowel and reflux and inappropriate sweating and insomnia and all that. It's that instability. Isn't it cool? I just think that it's just amazing to learn about that.

Robb Wolf:

It is and you know what's fascinating to me is the dovetailing of all the stuff really lends itself --like there are some pharmaceutical interventions clearly that are appropriate like the one that you described for yourself and this very acute phase. But then when we really peel things back, whether you have a serotonin issue or a GABA issue or what have you, we need better food, a healthy gut, appropriate exposure to or approach to stress. It's still kind of the same fixes clearly with likely some nuance in they're like possibly some specific supplementation and whatnot, but there is really not a quick easy fix that doesn't involve kind of integrating all of those issues.

Beverly Meyer:

Absolutely. It's stress management. I mean, I didn't bring my adrenals back as far as they have come with supplements. I brought it back with that slap in the face reality check of, okay, you got to get to handle on anything that's causing you stress or harm, anything, your mental decisions, your physical decisions, anything, all of those has to be resolved as quickly as possible. We evolved to be in parasympathetic relax, work, talk, sleep, make love mode 99.9% of the time and to only switch into sympathetic when something falls out of the tree next to us and growls and that's the only time we understand, oh what's that, get excited and all your blood pressure goes up. Everything goes sky high. Except we live like that now and so we're in sympathetic and the ultimate key you're absolutely right is that life rehab and yes, there are some supplements.

Passionflower is by far my favorite, passionflower tincture or an herb, but the dry herb, but in my online store and in my clinic, we just sold cases of this product because it's no tincture. Because it's in a tincture and we get it in glycerin or in alcohol. But in glycerin it doesn't taste badly like you'd have to have water to toss down the alcohol version. So you could keep it under your pillow and take it in the middle in the night. You can keep it in your water bottle holder in your car and take it on the freeway. You could take it as much as you want and learn what 15 drops feels like and what 60 drops feels like and how to play with it.

Theanine works for some people. The amino acid theanine works for some people but I find passion flower is pretty good. It is a root so some people with digestive stuff that can't handle that root tincture 100%.

Robb Wolf:

So what about vitamin K? shifting gears a little bit like you are pretty geeked out on vitamin K. there's lots and lots of discussion of vitamin D. and some great folks like Chris Masterjohn have from time immemorial you know talked about vitamins A, D and K and the importance of having a balance and just having them in general and then having a balance just kind of a naturally occurring ratio that we see in foods. Lots of discussion about vitamin D, burgeoning discussion about vitamin A. What about vitamin K? What does it do? Why are we deficient in it? And how did that get on your radar?

Beverly Meyer:

I call GABA the forgotten neurotransmitter and I call vitamin K2 the forgotten vitamin. Of course, Weston Price did the research on this and the amazing man that he was and as a summary for his life's work and basically, he said all this cultures of people on their natural diets know input from outside food that they had 10 times the amount, 10 times the amount of vitamin A, D and the mystery one he called an X factor which is K2. That it didn't matter where they lived in Alaska or in Africa or what they ate that when he bottom lined his analysis that it was 10 times the amount of A, D and the X factor that seemed to be the thing that just kept these people healthy, kept their cheekbones big and wide and strong so that we could support--they'd support all 32 teeth in their mouth instead of like all of us which who have had 2 to 8 teeth pulled and as well as braces.

Here's the easiest way to remember vitamin K is if you put a capital K on the three words I'm going to say and that is K, caries, calcium, K, caries, calcium and this is all K2 I'm talking about which make a little K2 out of K1 which we mostly get from vegetables but we have to really--it's part of that evolutionary hunter part of us. The animal organs, the animal fats, the raw egg yolks, the liver and the emu. There's a heritage species of

emu that I sell this amazing--there's an amazing emu oil on the market people can get that is a natural source of vitamin K2 and then natto which is super fermented beans that are very high in vitamin K2 so it does come in some ferments. So those are historical foods for us that we evolved to have K as a fat soluble vitamin to balance out A and D and they should always be together.

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When we take D without K which is what we've all done, it takes the calcium and deposits in the wrong place. In other words, it mostly puts calcium into your arteries and kidney stones and gallstones and your bone spurs and painful joints, all the places we don't want calcium, D does--it's like well I'm going to make sure this D gets absorbed somewhere but without K to carry it into the bones and the teeth and the appropriate places and the neurotransmitters and muscles. I don't know where to the vitamin K. So that's kind of the summary of it. We use vitamin K very quickly so yes, on a really solid paleo diet, you are getting some K2 but even then I strongly feel that we need to supplement it because we're just not eating the amount of raw organ meats and raw egg yolks and fermented seal flipper and things.

Robb Wolf: I haven't gotten my weekly dose of seal flipper. I am duly chagrined by that too. Beverly, remind folks of common dietary sources if you're kind of eating a paleo-esque diet and then can you run some approximate amounts that folks need and then maybe a recommendation on sources. Like I've seen Carlson's has what looks to me like a pretty good A, D, K combo and that's something that I've recommended to folks.

Beverly Meyer: Well there's a lot of discussion, the polite word to say for whether the MK4 form or the MK7 form of vitamin K2. Which is better? Which is more natural? Which lasts longer? Which does this and which does that? The MK7 is the one that comes from fermentation like natto and of course we in our culture don't eat natto because it's you know.

Robb Wolf: A little bit mustard I think. That's about it, yeah.

Beverly Meyer: So some supplement companies like Jarrow whatever make an MK7 and then the MK4 is the one that generally is sourced from the animals--the animal fats, the animal organs, the egg yolk, the ghee. The pastured ghee has a little. So if you think animal and you're going to some MK4 but we use it up so quickly that we just can't sustain it. So it doesn't really matter to me which you supplement it with. You don't necessarily want to overdo it although there're no reports of any overdosing on K2.

The one in my online store, there's several actually in my online store but they do balance vitamin D and vitamin K2 so that they're, according to these companies, they are balanced. So I think it is better like you said Thorne and other companies that make a D and K2 product and if you're eating your liver you're going to be getting your A. I don't eat a lot of liver but you know what I really love is from US Wellness Meats. They make that braunschweiger and liverwurst. Oh my god, it is so delicious and it's made from liver and heart and all these stuff and it sounds disgusting but it's--and I use the word baloney in the best possible way. When I eat it, I can eat it right out of the package because it tastes to me like a fresh sweet baloney. I mean that's how tasty palatable it is. So I eat a pound of one of either liverwurst or braunschweiger every week and that's where I feel like I'm getting some vitamin A.

Robb Wolf: As well as the D and K with that?

Beverly Meyer: Yes, but the D of course from sun and supplementation and then the K-- Yeah, eating hard core paleo for sure but I really think you need to supplement it too because the ramifications of not getting enough K2 are that your arteries become clogged with calcium which is the cause of high blood pressure. The arteries get narrower and narrower and narrower, restricted blood flow, your heart pumping like crazy trying to get blood through these much smaller pipes and your doctor is giving you a pill for high blood pressure. It has absolutely nothing to do with the fact that it's caused by calcium lining your arteries and turning them to little pipes of stone.

[0:35:05]

Robb Wolf: Right. Let me run this by you then and see if I've got my head fully wrapped around this. We would do some liverwurst because it's delicious and also it gets a squirt away on our vitamin A and then ideal circumstance we're getting the bulk of our vitamin D from the sun and then we're getting some supplemental vitamin K as much as possible from dietary sources organs, ghee, egg yolks but then probably toping things off a little bit with vitamin K in additional supplemental form.

Beverly Meyer: Right. And I take the Emu oil. It's expensive but it's completely natural. It's literally the oil from the back of a male heritage Emu and it's just like cod liver oil. It's Emu oil except it's not liver. So it can replace your fish oil, your EPA DHA because in addition to being a good source of vitamin K2, it's very rich in EPA DHA and a host of other the whole anti-inflammatory family. So the Emu is a good choice but it only yields like 4 micrograms per capsule so it's not a lot but in combination with everything else and I take vitamin D, K2 supplement.

Robb Wolf: Okay.

Beverly Meyer: We do know you can overdose on D but apparently you cannot overdose on K2.

Robb Wolf: And then clearly folks that are on blood thinners and stuff like that they have to kind of watch the vitamin K intake, although that's primarily from the K1 form from vegetables, is that right?

Beverly Meyer: That's right.

Robb Wolf: Okay.

Beverly Meyer: That's the K1 and actually if you are on blood thinners, yes, you should do your research on this but it's possible that you even more need vitamin K2 if you're on blood thinners. But yes, medical caution, you must do your full research on that.

Robb Wolf: Great. Gosh. You know one of the--it is so interesting that this becomes a little bit of a calculus problem in modern living like you look at all this stuff and you're like how the hell am I supposed to do this? But somehow our ancestral diets didn't just provide adequate levels of this stuff but for most people what almost looks super physiological at this point but was actually just the baseline and what went into fostering good health and decent longevity and all the rest of that stuff.

But it is fascinating to me like--the question I had a little bit about getting vitamin D from sunlight. So you have people who lived in areas where it's dark and then they'll supplement with vitamin D during the dark periods and ideally them should be doing some A and K with that. But then when the sun starts coming out, they'll have a little of anxiety about continuing to use the oral supplementation of D because you get better results with all the secosteroids and whatnot that are produced with the sunlight cholesterol synthesis cascade. What are your thoughts on that like how neurotic do people need to do to get to manage like seasonality on those specific nutrients?

Beverly Meyer: It's such a great question and it's a real question that deserves a real answer. Unfortunately, the true answer or the here's what life is like answer is that most of us do not get enough sun to make adequate vitamin D. We have to supplement it. Vitamin D to me is probably the single most important blood test you need to take every year and you must know what your vitamin D levels are. I just can't stress that too much because vitamin D is that guy with that huge ring of keys on his

belts that's going up and down the halls of your genetic expression. Those vitamin D keys are opening or locking away all these good and bad guys all over the body. You just can't over emphasize D. you must test your doses and supplement accordingly.

Robb Wolf:

Beverly, I now Chris Masterjohn has talked a little bit about some genetic individuality you know like we pull some interesting data from equatorial living aboriginal folks or just less western industrialized folks who have remarkably high vitamin D levels. So we've made some extrapolations from that you know recommendations of blood vitamin D level and 60 to 70 nanograms per deciliter range. But then there's been a little bit pushback on that if you're Northern European and there's been some thought that there are maybe some polymorphisms, genetic adaptations that may led the lighter skin, Northern European folks skate at a lower level. What are your thoughts on that?

[0:40:19]

Beverly Meyer:

I agree. I've read that research too and the truth is I just don't know. I do know that I did once have a client that went into some tachycardia and when we looked at her program and ran some blood, her vitamin D was elevated. It was just over 100 and we pulled her off the vitamin D and that symptom subsided. But yes, I've read research and you know I don't know. I think got to get back to the fact that it's not imbalanced with the K and A and the whole little--the trio there is they're just unstable somehow. And yes, I have seen those studies myself. I just don't know what to do about that.

Robb Wolf:

I don't either. That's probably a big part of why I asked you. It's definitely an interesting nuance though but I think. It's interesting because on the one hand it's kind of like so many people have gluten problems, so many people end up having reactivity to refined carbohydrates because they just have poor insulin signaling at this point and we can look at all kinds of historical antecedents like the Kitavans and the Okinawans who consume a much higher carbohydrate diets and they do fine on it but those folks clearly are not many of us myself include. Like I've don't just about every modality you can imagine trying to heal my gut and make myself more carb tolerant and I've got myself where I'm about 100, maybe 200 grams a day on really hard training days. On non-training days, I go less than that and I do pretty well.

But then it seems like people get really lost in the weeds on that story instead of just kind of looking at what their specific needs are like what's going to address 99% of people or 90% of people. Similarly, I think we could make a pretty good argument that people and wantonly deficient in vitamins A, D and K. some sort of--we're trying to get as much from

nutrition as possible as smart and then making sure to head your bets with a supplement, probably also smart the risk of somebody overdoing that compared to the clear problems that we see from inadequate levels. We're talking about a very small risk reward story there. You would probably be better off really focusing on making sure that those levels are good getting the levels tested and then also checking for clinical symptoms of deficiency.

Beverly Meyer:

Yes. And when you talk about getting that amount of carbohydrates in your diet, I want to know how you do that because I don't tolerate any of the starchy carbs you know plantains, turnips, sweet potatoes. I eat copious amounts of vegetables. I actually weighed the two huge bags that I can barely lift a couple of weeks ago and it was 20 pounds. Now a lot of that of course is the peel of the butternut squash or the seeds and then obviously there's a lot of water and vegetables so I'm not quite sure how that all comes down. But you know I mean it's a lot of vegetable matter and it still doesn't feel quite as if I'm getting my carbs anywhere near 75 or 100. Do you have any feedback on that?

Robb Wolf:

You know the things that I've had success with are lower starch root vegetables like parsnips, turnips. Beets I actually do pretty well with. Squash is a little bit of mix bag. Some squash I do better with than others. Like spaghetti squash seems to make me kind of bloaty. Butternut squash I do well with. And you know one of the interesting things that I've been doing a lot of and this is possibly worth digging into so we usually tell folks don't eat dried fruit because you can overdo it. But I found this Omega Trek Mix from Trader Joe's that's pumpkin seeds and almonds and a bunch of stuff and also cranberries. So I've been finding that berries, dried berries I seem to do okay with particularly when I'm doing amidst a pretty good bolus of protein and fat and so I'm getting maybe about 40 grams of carbs at a given meal, 40 to 50 grams of carbs and so I eat breakfast, lunch, dinner and so that 40 to 50 is like 100 to 150 grams on most days. And then sometimes it'll be a little more frisky after I get done with jujitsu or pretty hard training session and I might do a banana. I might go more like parsnips or a more dense carbohydrate root vegetable.

[0:45:13]

It's kind of interesting I've actually been finding as long as the fat intake is high which I'm assuming kind of slows gastric emptying and everything but I find I'm doing okay with some dried fruit mixed in all that. So I get a decent whack from dried fruit. And then also all those nuts and seeds seemed to have both digestible carbohydrate and a lot of indigestible fiber that seems to be benefiting my gut flora based off of some testing I've done with that. So that's kind of where I've hacked all that stuff.

I played with potatoes, white rice, sweet potatoes. Sweet potatoes are kind of hit and miss for me. I have to really time them at the right time like again a really hard training session or a very modest amount but you know it's kind of a mix bag on that stuff. I played around with taro and yucca and all kinds of things like that also kind of a mix bag. I just seemed to do better with these lower glycemic load varieties that seemed to have a lot of fiber and water and also some additional fat mixed into it.

Beverly Meyer: Yeah. I do real well with butternut squash. I haven't tried parsnips and turnips in a couple of years so I'll swing back that way. I know we're out of time but I want to make a quick point about GABA that I think is really useful for people. We know about the leaky gut, right? So the gut barrier but there's also the blood brain barrier, there's the lung blood barrier, the gut barrier but also the blood brain barrier and one way to know if you have an issue with your blood brain barrier is to take a capsule of just your cheap generic drug store GABA and just a capsule of that or two.

If it causes you to relax and go yeah that GABA that's good and it's just the cheap stuff, that's a bad sign. Because you should not be able to have GABA transmit across your blood brain barrier in that form. So that's kind of weird.

When people want to try GABA make sure you get what's called Pharma GABA like pharmaceutical form of GABA which is a patented version of GABA or the passionflower which is kind of the more natural low dose way. But anyway Pharma GABA is pretty cool and then there a whole bunch of other forms of GABA that people have been in the chemistry lab playing with. There's phenyl GABA aminobutyric and beta phenyl GABA aminobutyric. It's all a little complicated. Try the passion flower, the theanine or the Pharma GABA. But if straight cheap just GABA, gamma aminobutyric acid, works for you, that's a sign of blood barrier issue and you may want to look into your heavy metal burden and MSG history that kind of thing kind of a little brain detox. So I just wanted to add that for people wanting to try GABA. If you take the cheap stuff and it doesn't work, that's actually good.

Robb Wolf: It shows that there's some decent integrity in the blood brain barrier versus getting that GABA just kind of free. So if the GABA free flows into the brain then we get a nice sedative effect and this is where like the thing butyl GABAs really can have a sedative effect on folks because it is transmissible through the blood brain barrier in a pretty rapid clip.

Beverly Meyer: Yes, but because it's manufactured to do that.

Robb Wolf: Right. I'm not necessarily saying it's the best thing to do but--

Beverly Meyer: Right. But it's okay.

Robb Wolf: We would see a similar effect.

Beverly Meyer: Yeah. Because when you're having the kind of anxiety and tachycardia and OCD and everything in a hyper-reactive state like I was and you don't want to start taking valium three times a day. You want to first play around with the Pharma GABA and the theanine, maybe some valerian, definitely the passionflower and then if you want something a little stronger the Phenibut.

I have a good article about in my website about anxiety and addiction and this whole tie in to the neurotransmitter GABA and how it can lead to so many addictions because they sit on that GABA receptor. The heroin, marijuana, alcohol sit up there on the GABA receptor. So it's how we--we get to the point that we're so desperate for help that we become addicted to heroin and alcohol because they help us.

Robb Wolf: Right. Fantastic.

Beverly Meyer: So better to do that with another kind of a product than that.

[0:50:14]

Robb Wolf: Well Beverly, I'm sure that a lot of folks would benefit from working with you and also from reading more and learning more about your work. Where can folks track you down?

Beverly Meyer: My website is just--there's so much data on my website. It's OnDietandHealth.com. There's hundreds of really good blog posts on there. I'm fortunate to be nominated again this year by Paleo Magazine for best blog and best podcast. So there's a lot of info on diet and health and my podcast, Primal Diet - Modern Health. And you can check out my DVD video, The Diet for Human Beings, for people that aren't going to read books like your parents, your girlfriend, your kids. You want to tell them about paleo more than just recipes, you want to help them understand what insulin is all about and how that's related to grains and all that so you might check that out too.

Robb Wolf: Fantastic. Well, Beverly, it's been great having you on the show. I learned a ton and I'm sure the listeners did too.

Beverly Meyer: Well thank you so much for having me. Just ask me anything about GABA and I can talk for hours so thank you for going there.

Robb Wolf: That's great. It makes job easy, wind the person up and let them go. So that's fantastic.

Well, Beverly, I look forward to seeing you at PaleoFX and then I'm probably going to be at the Ancestral Health Symposium too and I believe you're presenting at the AHS on vitamin K if I recall.

Beverly Meyer: I hope to, yes. I haven't gotten confirmation on that but I do hope to, yes.

Robb Wolf: Okay. Well I've got some pull there.

Beverly Meyer: Alright.

Robb Wolf: So we'll see how that goes that. We'll do some shuffling around and maybe jettison somebody if we need to.

Awesome, Beverly. Well take care and we'll talk to you soon.

Beverly Meyer: Thanks so much, Robb. I appreciate it.

Robb Wolf: Okay. Bye-bye.

Beverly Meyer: Bye.

[0:52:02] End of Audio