

Robb: What's up there, wife?

Nicki: Let's start this over, hubs.

Robb: Well, we haven't even actually started, so I don't know if we can actually start over. What's new?

Nicki: Let's see, finally getting some sunshine here in Reno, which is fabulous.

Robb: Not bad. Good for my mental health.

Nicki: Yeah, good for all of our mental healths.

Robb: You can hide all the ligature that I would use to dangle myself a little bit, do a little neck stretching.

Nicki: That's not funny.

Robb: What else? Anything else?

Nicki: Gosh, a lot but I don't know if we want to go into it right now.

Robb: Don't want to crack into it now, okay. Okay.

Nicki: Yeah, yeah.

Robb: Maybe we should just start podcasting then.

Nicki: Okay.

Robb: Okay.

Nicki: Let's see. Our first question this week is from Dan on the ancestral case for salt supplementation. He says, you've recently been talking a lot about salt and electrolyte supplementation and I'd like to look at things in an ancestral context. Did pre agricultural people supplement with salt somehow? I do know that the Hopi Indians in Northern Arizona had a ceremonial salt trail into the Grand Canyon and I assume they were able to retrieve salt from geologic deposits but the amount of salt that feels optimal for me seems like it would be hard to attain in prehistoric times in many parts of the world. Are there other examples of this besides the Hopi?

Robb: Really good question and clearly, I like to frame things from an ancestral health perspective and this has been one of the challenging things to weave into the orthodox paleo-ite information that came out of Loren Cordain early on, which suggested that a very low sodium intake was what a true paleo diet would be represented by but what's interesting is consistently, when we had people eat that way, they felt horrible and it wasn't just for a brief period of time. If you started pushing the athletic activities out at

all, then people really really suffered and then if you default back to the American Council of Sports Medicine guidelines, in general, for population at large, if somebody is exercising a lot, if it's hot, if it's humid, the ACSM guidelines, like the orthodox missionary style people, are recommending between 7 and 10 grams of sodium a day, which is close to 14 to 20 teaspoons of table salt a day. I mean it's a remarkable amount. This is where it's been hard to kind of square the ancestral health perspective with the clinical outcome, like what actually makes people look, feel, and perform better.

Robb: I started doing some digging and I guess in some ways you could make the case that this is trying to create a certain confirmation bias around what we're up to. I mean we're selling Element. We help people with ketogenic diets. They need to supplement salt. You could make the case that it's self serving for us to construct a narrative around the fact that people need more sodium and it may in fact be true that people need more sodium, so I mean yeah, whatever with that but I started noodling on this and I did some poking around on the whole body sodium content of mammals at large, which is what I was able to track down and I found it with mountain goats and cattle and humans and what was interesting is, in general, mammals tend to have about four grams of sodium per kilogram of overall body weight, so this is distributed through the whole critter.

Robb: Some of it is going to be disproportionately distributed and a higher concentration of sodium tends to be in the plasma and the extracellular areas, whereas inside cells, we tend to have a higher concentration of potassium and this is part of the whole biological process that's life itself of creating a gradient of sodium being in higher concentrations outside of cells, potassium being in higher concentrations inside cells, and the normalization of that gradient is how we drive the electron transport system and it's kind of nerve impulses, it's the way that life works. We have more sodium outside of cells than in cells. The way that animals are typically slaughtered and processed in westernized societies, the animals are killed and then bled.

Robb: A major reservoir of the sodium is removed, right immediately at death and so when you look at the nutrition information on meat in general, it's about one gram of sodium per kilogram of meat. We've got a spread there of one gram of sodium per kilogram of meat in processed finished food whereas we've got about four grams of sodium per kilogram of critter, that includes the hair and the skin and the nails and the bones and all that type of stuff, so I have been unable to track down information on what the sodium content of muscle meat and organs would be if all the stuff was allowed to equilibrate but it's got to at least be double what we're seeing and so that's definitely going to be a source of sodium. Another piece to this story, and this is really controversial, particularly within kind of the more mainstream dietetics world, which is, what's the answer for all health ails? What do you need to do? Drink more water.

Nicki: Drink more water.

Robb: It's always the fucking ... Oh, drink more water. Just drink more water, that's going to fix everything and I did a piece on that and it's largely bullshit and it may in fact be counterproductive for what we see with regards to electrolyte status because the big

problem that occurs when people are eating lower carb in general is that they start getting this downward spiral of diaeresis and a loss of sodium and then a loss of potassium and these things-

Nicki: If you're drinking more water, they're-

Robb: If they drink more water, it makes it even worse. Yeah and I'll try to remember to get this paper put in the show notes but it looks at athletes that are exercising and they brought these people up to a level where they would expect cramping to start to begin, like a level of exertion and heat and all that stuff and they supplemented one group with a sodium and electrolyte mix, really weak one, but still, it was there, versus giving other folks just water and the people that were given water, the cramping was much much worse. Much more severe, almost uniform across the board within this group of people that were just given water, versus the group of folks that were given electrolytes. Within this ancestral health story, I think people are generally drinking too much water. That's another piece of this and I'm drinking coffee, I've had a couple of cups of coffee already. I'll probably have more. You could-

Nicki: Primarily decaf.

Robb: Primarily decaf at this point. I do a little bit of caff in the morning but the point being that if I wanted to emulate an ancestral health approach more truly, I wouldn't be drinking three or four 16 ounce cups of fluid that is largely devoid of electrolyte. I think that a lot of the need to replenish electrolytes is actually an out growth of over consuming fluids in general, water also, and then this one gets out there a little bit far a field but there's an argument that if people are, not necessarily just specifically ketogenic but if they're more fat fueled, more metabolically flexible, depending on the size of the individual and the activity level and whatnot, producing metabolic water, which is the byproduct of fat metabolism, could account for 100 to 200 milliliters of water per day.

Robb: If we're generating water endogenously, we're not diluting it the way that we are just supplementing from outside and that may be more of the background environment that we see, which is lower general fluid intake, some amount of water that we experience physiologically being the consequence of metabolism and then finally, there may have been a bit more sodium in the diet than what we've historically thought. There are salt deposits all over the world, lots of people and the theory is that humans spread coastally and then worked their way inland and typically when they worked their way inland, they followed waterways and there's oftentimes salt deposits. That starts getting into a lot of just so story type bullshit, that is really hard to support but there are some other mechanisms going on there that kind of paints the reason why ... or maybe supportive notion around the way that ancestral diets could be validated by current sodium intakes that we're recommending and then also again, at the end of the day, if people are eating kind of a lower carb paleo type diet or just paleo diet in general and they're experiencing fatigue and lethargy, if they have sleep disturbances-

Nicki: If they have cramps.

Robb: If they have some leg cramps and HPA axis dysregulation and stuff like that and all of that is resolved by adding a couple of grams of sodium per day, then whether this actually fits the ancestral health model or not is kind of meaningless. That's where these things really valuable and again, I don't want to just turn ... I don't want to get in and look at this in such a way that I'm just creating confirmation bias to support recommending salt and selling Element, but at the same time, I do think that there's a strong case to be made both from the ancestral health perspective but also from just the clinical outcome perspective and fuck, that was a long answer but there's a lot of nuance to this stuff and it's a very good question and a lot of the problems that we see with health and just all the stuff, using that ancestral health model is really really valuable and it's really where the discussion should begin but it's also definitely not where the process should stop, just because pre-agricultural people did what we assume to be X, Y, or Z, doesn't mean that we do that because one, some things may have changed in the intervening time and two, our assumptions may be wrong and that's the really dangerous thing.

Robb: We're always operating with incomplete knowledge and so our kind of idealized version of what we think ancestral health meant, may be completely off the mark and so it's maybe informative, maybe not, and so that's where I think we work our way forward with more of the clinical outcome side, which is, how do you look? How do you feel? How do you perform? Are biomarkers of health and disease going in favorable directions? Then we've got a pretty close package and probably, if there is a paradox there, it's probably because our assumptions about the ancestral state are wrong. That's what I would put forward. I would actual put a lot more weight on the clinical outcome side than at the end of the day, then the kind of building the whole story around the ancestral health side.

Nicki: Okay. Our next question is from Bethany on resistance starch on keto. Bethany says, hi there, I am about two and a half weeks into a ketogenic diet following the Keto Masterclass and feeling pretty good. I've been trying to figure out how to add in some resistance starch for overall gut health without pushing carb levels too high. I think I would try tapioca starch first. I live in Asia and that's what's most readily available. According to nutrition facts online, a one ounce serving of tapioca starch has six grams of carbs. Would this number contribute at all to my overall carb count for the day or does this factor out because of the fact that most of it is resistant to digestion? I hope my question makes sense. Thanks for your time.

Robb: Really good question and I think the point about how much of that six grams of resistance starch is going to manifest as a blood glucose response, is really hard to pin down. I'm blanking on the fiber that is used in a lot of the low carb and keto cookies and stuff like that, it's corn derived but Tyler was talking to me about this and there is massive variation from person to person. This is pretty well documented in literature. One person will eat that kind of resistance starch and they literally get no blood glucose response and we may see increased levels of butyrate or propionate, these short chained fats that we want to come about from this type of fiber digestion and other people get a really frisky blood glucose response because it looks like either the human enzymes or the gut associated enzymes with bacteria allow those fibers to actually be cleaved in a way and then the glucose enters the bloodstream.

Robb: It's really hard to know on that. There's another piece to this that it wasn't Erica Sonnenburg, it's her husband who runs the Sonnenburg Lab at Stanford, when the potato starch thing was super hot and heavy and people were supplementing with potato starch, I got to talk to him about that and he said that when he first heard about that, he was very nervous about basically mono cropping the gut microbiome, like you're dumping a huge amount of one item in there and then you play all of your gut microbiome to that and in fact, that's what they saw. They saw loss of diversity and a shift towards what we generally associate being kind of a pathogenic gut microbiome profile. I wouldn't ...

Robb: Personally, I wouldn't be super wrapped around the axle. Not the ax handle, we teased our good friend about that recently, so that's a whole other aside but I would focus on things like artichokes and asparagus and nuts and seeds to the degree they're tolerated. I would just try to get as much variety in this story as you can instead of trying to selectively dose one thing. That said, if you wanted to put ... If you cook some tapioca and then you chill it in the refrigerator overnight and you do maybe like a teaspoon or a tablespoon of it in addition to onions and leeks and kale and chard and just as much different fibrous vegetable material as you can ... Jicama is really good. It's got some carb but again, you do a couple slices of it and you're going to be right as rain and it has a nice varieties of different fibers in it. I would focus more on just getting variety and then if you want to throw a little tablespoon here and there of a tapioca starch and maybe if you can track down potato starch. An idea around this is to cook some tapioca, some potato, and some rice together, chill it, and then do a little bit of that because even then, you're going to get a broader-

Nicki: The actual foods, not the starch?

Robb: Ideally the foods but tapioca usually comes as-

Nicki: Little things, yeah.

Robb: -pearls and all that and so but you cook them all together and then the potato starch usually comes in a bag or you could cook potatoes but I'm noodling on this. Even that is going to be a broader profile of fermentable carbohydrates than just doing one and again, you use it as a supplement-

Nicki: Like a condiment.

Robb: As a condiment, not as a main food source. I would be more comfortable with that. That makes sense and again, that being part of an overall background of, if you tolerate fermentable carbohydrates well, then that would be part of tons of fruits and veggies and all the rest of that, which can still fit within a ketogenic diet profile.

Nicki: Kimchi and sauerkraut.

Robb: Yep, yep.

Nicki: Okay, our next question is from Steven on the optimal fructosamine range. Hi Robb, I have heard you recommend checking fructosamine to help triangulate glycation and see what's happening with blood sugar but I can't seem to find any references for an optimal fructosamine range. I recently did some blood work and had a fasting glucose of 80 milligrams per deciliter. A1C of 5.6 and a fructosamine of 250. I've been experimenting with a glucometer recently and my average blood glucose based on dozens of readings during carb testing is in the upper 90s, so I'm thinking my A1C looks artificially high due to the red blood cells living longer. I'm curious to what you think of this and what I can take away from the fructosamine value of 250. For context, I'm a 29 year old male, 160 pounds, between 10 and 12% body fat, and have been eating a mostly low carb paleo diet for the past year, recently gravitating closer to carnivore. I appreciate you and Nicki and all the work that you do.

Robb: Cool, yeah and this is ... We talked about this a ton in Wired to Eat. This is one of the ongoing challenges and we're actually doing some surveys of folks right now wanting to know where their major challenges occur with blood work as it relates to understanding their health and so we're going to be tinkering with some ways of helping people really unpack that because there was a shocking amount-

Nicki: A lot of questions.

Robb: -of confusion and a lot of fear, a lot of misplaced fear and this is one of the really common things that pops up. Folks will get an A1C and it'll be on the high side. They might do then some sort of a fasting blood test in the morning, whether they do it at home or elsewhere, and that looks a little bit on the high side and they're like, damn, this stuff is all screwed up and wrong and backwards but they're eating pretty low carb, they're active, their sleep is good, and so you're like-

Nicki: Lean.

Robb: Yeah, they're lean. It's like, I don't know and there are some scenarios like Doctor Sean Baker is really interesting in that he eats no carbohydrate but he has a remarkably high fasting blood glucose and a pretty elevated A1C. We tend to see profiles like that in elite level athletes. Whether or not that's pathological is up for debate. Some folks think it is, some folks think it's not but this is one of these kind of paradoxical things that occurs there but what's interesting and it should be maybe a little bit informative, it is well understood that when folks are eating a lower carbohydrate diet, red blood cells may live two or three times longer than normal. I think the normal lifespan of RBCs is about 90 days and it can dramatically extend the life cycle of these red blood cells. Now that's a whole interesting thing in and of itself when you think about health and longevity because these red blood cells come online and then they live and then they die and then we need to allocate more stem cells to produce-

Nicki: To make...

Robb: -more red blood cells. Those stem cells are a finite resource and once they're gone, they're kind of gone and this is why people may motor along pretty well and then all of

the sudden they just crater because they've literally depleted their whole stem cell pool and that's a whole other thing and you and I never got to bank our fetal chord blood or anything, so we're kind of out of luck in that regard but a way that we can triangulate in on this story is looking at fructosamine. Fructosamine is another marker of advanced glycation end products but it deals with the blood albumin, not with the red blood cell surface.

Robb: It's a way that we can kind of triangulate in on this and for the reference range and Steven, I don't know man, not to be a dick but fructosamine ranges, they're pretty easy to track down on the inter webs and they tend to be about 200 to 280 for the fructosamine ranges. His is 250, which is a little bit at the higher end of normal. There might be a little bit of something going on there but I mean the thing is though is that 5.6 A1C is inching into peri diabetic range according to the A1C reading. It is not remotely close to the peri diabetic range when we're considering the fructosamine number. This is still in kind of trying to triangulate in on this. The fasting blood glucose is not particularly high in general.

Robb: The A1C looks a little high and then the fructosamine is kind of middle. It's not super high, it's not super low. It's a little ambiguous. It doesn't ferret this stuff out all the time but those are the ranges, about 200 to 280. Steven is a little bit at the higher end of normal but all things considered, I'm not really seeing a real significant issue here but these are the things to think about, is sodium intake on point? Is sleep good? What time you going to bed? What time are you getting up? These other stress factors and is Steven, you mentioned basically low carb, paleo. He doesn't really mention his activity level. It is possible some people that are very very active can experience chronically elevated blood glucose levels, just from the activity. We saw this in the crossfit scene in general. It first got on my radar when we would see type 1 diabetics in crossfit and their blood glucose levels would go to the moon post exercise because of the stress response. Yeah.

Nicki: Okay.

Robb: Steven, not 100% unequivocal answer here but all things considered, again, when we look at this stuff, I would say that probably the A1C is in fact an artifact of red blood cells living longer most likely.

Nicki: Okay. Our next question is from Thuy on finding time for writing a book. Hi Robb, I'm a big fan. Thanks for your life's work that filters out the vast ocean of information out there for a smarter living. I'm so glad you're doing what you do, reminding me to sit back to look at the big picture of everything in life. In your last few podcasts, you mention that you were again working on publishing more books. Congrats and I can't wait. I've been trying to write my first book. It's been such a slow process. It's been four months and I'm able to get in about 6,000 words or so.

Nicki: Holy cow, it is such like a textbook but I've got to start from somewhere. The book has a mix of east meets west medicines for those undergoing cancer treatments. Needless to say, the topic is not easy and there's so much development out there every week that

it's hard to keep up. I'm a full time oncology pharmacist. My husband also has a full time job and will soon go back to school while working for the next two years. We have four kids, ages 5, 7, 9, and 10. Holy cats. So their activities are endless Mondays through Sundays on top of their normal school work, church, and of course we have to add Vietnamese school in there because all others are not enough. I started out-

Robb: We need to forward that over committed article.

Nicki: We can put it in the show notes.

Robb: Yeah.

Nicki: I started out with trying to get a few words in during my lunch hour but it seems that it takes me a good 15 to 20 minutes to get into a good writing mode, but then I have to go back to work before I get much further into the book. If my kids have a long one to two hour activity, I can get more done then while waiting for them but then I feel guilty for not paying attention to them. I also exercise daily either before work or during lunch, whichever works out for that day. The past two months, I've been exercising during lunch rather than working on my book because I feel my brain needs a break from thinking all day, then I find myself slacking off for whatever excuse because honestly, I'm just exhausted mentally and physically. So that's my background story.

Nicki: My question simply put, how do you do it? I feel the need to write this book because I know it will help so many people going through cancer treatments, particularly clarifying the effectiveness and safety on herbal products and the big hot marijuana, so it's almost like a calling, leaving a mark on this earth before I die. There is a war inside me between fulfilling this calling versus taking care of my health, recently discovered I have Hashimoto's and oh boy, that's for another day, versus being a good mother, wife, sister, my brother has hypokalemic periodic paralysis, also another story for another day and a daughter. At first, I set out a goal to finish this book in two years but maybe not until five years. Worse yet, it will never be finished. I'm starting to doubt myself that I can climb this Mount Everest of mine. Any suggestions will be great. Thanks for reading this, Thuy.

Robb: Do you have any recommendations to kick off given that you've watched this process happen a time or two now?

Nicki: For you and I think this is for anybody working on anything creative where there's just so much going on and different components to weave into a story in writing a book, having blocks of time. The thought that you're trying to write for 15 or ... during a lunch break, seems probably more stressful than not because you're context shifting. Like you said, it takes a couple minutes to get into it and then by the time you maybe are in a good vein, you've got to go back to work. One suggestion and again, it sounds like with four kids and all that you guys have going on, I don't know how reasonable this is but maybe blocking off a Saturday morning chunk of time where maybe your husband can take care of the kids or if you have family in town, you can have somebody cover for you and you go and get like four hours early in the morning of writing and again, it might be

different for you. I know you prefer to write first thing when you wake up. That's where you're most creative and you have the best productivity and focus.

Robb: Yeah, my productivity if I can write from like 6 to 9 AM, 6 to 10 AM, one three hours of legit writing if you're producing good material and not schlock that gets-

Nicki: It's exhausting.

Robb: -50% edited. You're smoked. Every once in a while, you can pull in ... I'll get a six hour day, an eight hour day. This last cycle of working on both the Keto Masterclass book and Sacred Cow with Diana Rogers, actually got kind of sick. I was so exhausted and I was kind of in-

Nicki: You were a little depressed too.

Robb: I was depressed but I was not really making good decisions, I was so exhausted. Where it was like, I'm just going to keep working and you were like, no, you're going to fucking kill yourself and I mean I literally ... I was so out of sync with reality that I was just like, I'm going to keep going and going. One thing is, given your current schedule and one thing that I notice with a lot of people, they do not spend enough time outlining their book and there's a great online tool that you can download, it's either free or it's cheap.

Robb: It's called Omni Outliner and I would spend three months or six months just outlining and you outline and outline and outline and while you're outlining, you create a couple of Google Doc locations where you start putting references and you organize the references based off roughly where things are going to go in the kind of chapter by chapter format but what I find for a lot of people is without adequate outline, you're trying to keep the whole thing straight in your head and with a really remarkably good outline, so the outline that I did for the Paleo Solution, I thought I spent a lot of time on it but the outline was maybe about 12 pages long and the editing process was much longer and arguably more difficult in different ways than what Wired to Eat was but my outline for Wired to Eat was almost 40 pages long and I mean literally, bullet point outline, sub category, boom, boom, boom. In my head, I'm not ... I'm more of a Venn diagram person, so outlining things is not my natural default state but you just have to do that but then what that allows you to do is a couple of things.

Robb: One is that someone who knows nothing about a topic, you'll know that you're pretty on point with your outline when someone who knows nothing about a topic, you can show it to them, hey, read this and give me your thoughts and if the outline can make sense to the person about what you're trying to do and what the ideas are that you're getting across, then you're ready to start writing. If not, you're not ready to start writing. You need more granularity in the writing process and again, what this is going to do, it's going to make it easier. You can do almost like magazine or blog length pieces, which are easier to kind of wrap your head around and you can look at the outline. You're like, okay, I just did this. Oh yeah, I want to do this and it makes it easier. They made the point that new material pops up all the time. That really robust outline makes it easier

like, oh, there's this amazing new paper. Bam, you put a link in there and a note. It's like, okay, we need to emphasize this.

Robb: I would spend a lot more time outlining, one, is what you need to do and then the way that we have done it and I don't want to be a whiny turd about this but it's been really fucking hard. When I did the first book, we were still running the gym and I basically abdicated all of my training, virtually all of my responsibilities, and Nicki ran everything for the six to nine months that it took me to do that. I had an okay outline by that point but I had worked on that and then when I got in to write, that was the first time we got an office out of the house too and it was literally like-

Nicki: That was pre kid.

Robb: That was pre kid, pre dog. We had a cat but that cat was easier to maintain, so it was a much simpler life in a lot of ways but even then, I need to be out of the house. I mean it was literally kind of like 1950s, peck you on the cheek, hard hat, lunchbox, and I went to my office and all that was in the office was a wireless router-

Nicki: A chair.

Robb: -a chair and a table to put my coffee on and that was it. That was the only shit that I had in there but I was able to get that done and when I worked on Wired to Eat, we similarly got an office out of the house and you don't have to do that but that work life separation is a pretty big deal. We're podcasting from kind of an office, right?

Nicki: Right.

Robb: And it's not the easiest thing in the world sometimes because that work life deal really becomes problematic. A couple of thoughts, really work on the outline. When you feel like the outline is in just solid solid shape, that somebody who doesn't really know the topic can read through it and understand the thought process, then you're probably ready to write and then you and your husband need to sit down and talk some turkey about what are you guys willing to give up for some period of time to be able to get this thing done? Maybe you need to go on a half shift for a period of time to be able to get this stuff knocked out and she's a pharmacist, right?

Nicki: Yeah.

Robb: She's an oncological pharmacist. Maybe you're able to do three 10 hour days or something and then maybe three days are dedicated to writing and then you've got some other days for family but you just ... If you're going to get it done, you're most likely going to have to give some stuff up somewhere. That's if you do the book yourself. There's another option within this story and I did a podcast with Tim Grahl, the guy who helped me launch my book and we talked about all these different variables about why you would write a book and how you would publish it. That's a whole other story here is, how do you want to publish this? What's your goal with that?

Robb: If you don't have an online presence, the likelihood of even getting it published may be low. You may end up getting shoehorned into some sort of a self publishing route, which isn't the worst thing in the world but that's a whole other layer to this whole story. You do all this work and then what ultimately is the goal there? So two thoughts around that. One is that because you're doing these blog length pieces because of your good outlines, start releasing it as a blog and then you can start dripping this out to the world and maybe you can start helping people immediately.

Nicki: And build a little bit of a platform.

Robb: And build some platform, build some presence. The really cool thing about that too is that you will get a bunch of feedback from people so that you can start, oh ... As authors, we always make assumptions about what the reader is going to understand and then when you start getting feedback, a lot of times you're like, I can't believe this person is not getting this but they don't and then you have to figure out a way to kind of deal with that. The one downside of that is people love pinching other folks shit and not attributing it. There's a little bit of a challenge there but there is also the reality that it sounds like you have a world caliber expertise that's going to be hard for somebody to just pinch and run off into the sunset with. Publishing this serially as part of a blog series could make a lot of sense because of the feedback and also, you'll get a sense of accomplishment. Each time you drop one of these things, it's going to be one more piece that's done and it's out there and you're getting this stuff cranked out and then the other potentiality is a ghost writer.

Nicki: I was just going to say, okay-

Robb: Is the ghost writer where somebody sits down and interviews you and about 99% of the health and fitness books that are published are ghost written, so a person ... Nicki would sit down, interview me, ask a bunch of questions, maybe look at written material I already have, then she uses a very formulaic format to then start writing the book and this is why the bulk of health and fitness books look like the same book because it's written exactly the same way and it's not to say that the information isn't good in there and if you detect a little bitterness, I definitely have that. I'm the fucking sucker that still sits down and does my own stuff because I kind of like the process and I like getting my voice out there and whatnot.

Nicki: And you have a very unique voice.

Robb: I have a unique voice that's-

Nicki: It's not really easy for other people to replicate.

Robb: Yeah and a lot of what I ... not that I am remotely like Stephen King in any way but he has mentioned that he doesn't know what he's going to write. He only discovers it as the next word is predicated from the word he just wrote. It literally is that creative process and it's an emergent process, so depending on how you're wired up, you may be really well suited to finding someone to help you kind of ghostwrite the book but again, you're

going to have to allocate resources up front on that most likely but that could dramatically curtail the amount of time that you have to invest in this and those are other things that you can do too, like if you're just sitting in the car, you can dictate to yourself ideas, then you email that to yourself. You can send that out and have it transcribed and then maybe that's 85% usable but let's say you get 2,000 words of material with that and it's 85% usable, it's still going to be way faster than sitting down and just writing it and then you had an additional thought?

Nicki: I was just going to say, you mentioned that you have Hashimoto's and it sounds like you have a lot going on and I would-

Robb: The worst thing I ever did for my health was write a book.

Nicki: I wouldn't put a timeline on it. I would get yourself healthy-

Robb: No, I would because it's that-

Nicki: Not at the cost of driving yourself into the-

Robb: Make a decision about what you want to do. Don't drive yourself into a hole but there's also Parkinson's law, where a project will extend to the duration that you give it, so that's my nervousness around that.

Nicki: That's true.

Robb: But what does ... Writing books is horrible for my health. It's just been the drizzling shit. It's not particularly great for our relationship in a lot of ways too. It's very stressful, very straining, but I would actually argue the point that she needs to figure out a way of allocating the time and resources to get it done and then set a very concrete deadline because otherwise, it will just stretch on forever.

Nicki: Keep going and going and going. That's a good point but I wouldn't sacrifice sleep-

Robb: I would not sacrifice sleep and health and ...

Nicki: I would sacrifice what you're feeding yourself and physical activity.

Robb: Because when I was working on Sacred Cow really hot and heavy, I would get up, cup of coffee, get in and start writing, and I would do that until I literally just about collapsed. I would maybe do some jiu jitsu and some exercise, help with the kids, cook some food, I went to bed super early, and I got up and so I was doing everything I could to support my health and it still kicked my ass. It still was kind of a race to the finish to just get the draft in, yeah.

Nicki: Hopefully that was helpful.

Robb: But keep us posted.

Nicki: Yeah, definitely keep us posted.

Robb: Yeah, yeah.

Nicki: Yeah I was thinking if there was one other thing ...

Robb: Did you have one other thought?

Nicki: If I think of it, we'll put it in the show notes but we'll definitely put the link to the Tim Grahl podcast in the show notes and that link to that Kids Are Being Prescribed Play because-

Robb: Because kids are so fucking over scheduled.

Nicki: They're so over scheduled and I see this even ... My sister's family, they don't get home until 8 or 8:30 every night of the week because there's either gymnastics or T-ball or football or softball-

Robb: Something.

Nicki: -or something. Yeah, it's a really interesting little article, so we'll put that in the show notes.

Robb: And the takeaway with that is that it's super stressful for the kids-

Nicki: For the whole family and for the whole family, yeah.

Robb: -and for the whole family. Yeah.

Nicki: Oh, I forgot. Thuyi says, PS, hi Nicki. My husband used to work at Coffee Bean and Tea Leaf decades ago and I don't think they roast their coffee beans either. Cute story. That's awesome. Somebody watched our question about how we met.

Robb: How we met, yeah. Yeah but I bet he didn't tell her to go fuck herself basically like you did me.

Nicki: I did not say that. I did not say that. I did not say that.

Robb: You didn't say it but the implication was definitely there.

Nicki: My face might have looked like I was saying that but I didn't say it. All right, our last question this week is from Matthew on advice for a new clinician. Hello Robb and Nicki. I've recently become a newly minted nurse practitioner and I'm starting a job at an endocrinology clinic in a few weeks, where I will be managing mostly type 2 diabetes and thyroid disorders. First, thank you for your work. Eight years ago you inspired my interest in fats, carbs, exercise, and all things hormonal and it is very unlikely I would have landed here without your influence. My mom read The Paleo Solution after I

mentioned your name and effectively reversed her type 2 diabetes through diet, exercise, and a sprinkle of Metformin, which she has since discontinued.

Nicki: The clinic I'll be working in serves a population with low health and nutrition literacy that typically followed the standard American diet. As an example, one of my colleagues expressed that she would consider it a win if she could teach some of her patients that Mountain Dew is not actually considered juice. This is an extreme example but you get the picture. I've been working as a bedside nurse for six years, so I'm well aware of the shortcomings of conventional medicine and the reluctance of patients to change long held behaviors.

Nicki: One of the reasons I've been drawn to diabetes care is that diabetes 2 is so minimal to diet and lifestyle change that ideally, the pharmacological approach need only play a supplemental and transient role. My question is this, what would you consider an effective strategy for fostering health literacy and behavior change in a population such as this? Also, would you consider the ... What would you consider the lowest hanging fruit in terms of behavioral change to positively affect outcomes in diabetes. Thank you for your time, your work, and your example.

Robb: Well one, I'm honored that we've had a role in someone entering the scene and I think, Matthew, you're really on point. That whole diabetic, peri diabetic world is something that is really damaging, remarkably costly, and it's something that can be fixed if we can get out in front of it early enough and I think one of the best examples that I have in this story is Doctor Mark Cucuzella who works at a VA hospital in a rural environment, low socioeconomic status, low general education of the folks he works with, but I believe he has a one sheet paper that he gives people and there's like a green list of foods, a yellow list of foods, and a red list of foods, and he'll sit down with them and he'll say, hey, what on this green list do you like for breakfast, lunch, and dinner?

Robb: And they circle the stuff and maybe Mark's got this thing available online. I'm sure he would share it with folks if he doesn't but he'll go through the green list and then he's like, okay, the yellow list, you can have a few of those and then the red list, I don't want you to have anything on it and he just explains that typically the red list is loaded with carbs and he covers things like chicken fried steak and all this stuff because it's a southern, rural kind of thing and instead of chicken ... and people complain. They're like, hey man, steak and eggs, just don't batter it and roll it and so he keeps it super simple and he's had remarkable success with people and I think one of the things is he keeps it incredibly simple. He sits down and immediately makes it about the patient. What do you ...

Robb: What on this list works for you? What do you like? And that's just genius. It's so smart and even though folks may come from modest means and background, they're not dumb and so not everybody is going to change. These behaviors are hard to change. There's deep seated kind of patterns from social interaction and just habits and whatnot but a lot of people are also like, yeah, I don't want to lose my leg the way that my dad did or something like that and so the motivation can definitely be there but it sounds like he just meets these people where they are and you know what? Also I'm kind of

blanking on the piece of this. He's just incredibly accessible. Every single patient, he gives them his cell phone number. He's like, if you're in the store and you don't know what to buy, you're in the snack aisle and you don't know what to do, you text me or you phone me and I will get you squared away.

Robb: He's super fucking accessible and I think he's using a few health coaches now to kind of help augment that thing but this is another piece of this. There have been billions of dollars dumped ... billions and billions of dollars dumped into apps trying to Facebook or Twitterize health changes and they've all failed. It just doesn't fucking work. A well run crossfit gym, a good yoga studio, or jiu jitsu facility, that talks to people about food and exercise also, that shit works because there's community and there's cohesion and there's a reason for being. Him giving his cell phone number out isn't just information, it's the relationship, it's the fact he gives a shit enough to do that and so he can talk the person off the ledge and like Tyler and Louise and they're coaches with Ketogains, this is why they're so fucking successful and it's a reasonably high touch process.

Robb: They're not just farming them off and here's this super algorithmically driven thing. They've got pieces of that because there are consistencies within these different processes but at the end of the day, they build a relationship and they're accessible and they do hard fucking work to help people change and so Matthew, it sounds like you're fully ready to do all that. You've already done all the major suffering around just all the schooling and choosing to go into an area that is both potentially very rewarding but also very frustrating, but you've got your eyes wide open on that but I think adopting a very simple approach like what Doctor Cucuzella has done and then being very accessible and I would noodle on early year as opposed to later integrating health coaches into the process so that your primarily role, in my opinion, should be the management of the onboarding and off boarding of medications and you definitely should build relationship but I think that where you can get a little bit of scale and increased reach and not go crazy in this process is leaning heavily on some type of health coach.

Nicki: Okay.

Robb: Any other thoughts, wife?

Nicki: No, that sounds good. Thanks everyone for your questions this week. As always, you can submit your questions at the contact page at robbwolf.com. What else, hubs?

Robb: This episode brought to you by LMNT, stay salty.

Nicki: Element, yep. We've got a new raspberry flavor coming.

Robb: Did you drop that it's the real flavor? I thought that that was still going to be a surprise.

Nicki: Is it a secret? Oh. I think the cat is out of the bag.

Robb: Okay.

Nicki: By the time this episode airs-

Robb: It should be ...

Nicki: -it will probably be out of the bag, hopefully.

Robb: It's better than the citrus salt one, yeah. It's no joke better than that. So yeah, I'm excited for that too.

Nicki: Yeah, so thanks everyone and we'll see you next time.

Robb: See y'all soon. Take care.