

Nicki: It is time to make your health an act of rebellion. We're tackling personalized nutrition, metabolic flexibility, resilient aging, and answering your diet and lifestyle questions. This is the only show with the bold aim to help 1 million people liberate themselves from the sick care system. You're listening to the Healthy Rebellion Radio. The contents of this show are for entertainment and educational purposes only. Nothing in this podcast should be considered medical advice. Please consult your licensed and credentialed functional medicine practitioner before embarking on any health dietary or fitness change. Warning, when Robb gets passionate, he's been known to use the occasional expletive. If foul language is not your thing, if it gets your britches in a bunch, well, there's always Disney+.

Robb: Welcome back friends, neighbors, loved ones, and people with digestive issues of all kinds.

Nicki: What made you say that?

Robb: Because it looked like you were trying to suppress a belch or something right before [inaudible 00:00:57].

Nicki: No, I just, you know how you get a little tickle in your throat and I was just like doing my pre-recording throat clearing, but thanks for bringing that up.

Robb: You're Dolores Umbridge.

Nicki: For those of you who don't know who Dolores Umbridge is, she is one of the most...

Robb: Hateable characters in all...

Nicki: Hateable but fabulous characters in all of the Harry Potter series and the...

Robb: I would say in all of the literature.

Nicki: That's a big...

Robb: It's big one, but she's-

Nicki: That's a big claim but she's...

Robb: So onerous.

Nicki: Yes.

Robb: So horrible.

Nicki: And the throat clearing thing that Robb was referring to, the audiobook narrator who narrates it, at least for the United States, I know there's a different

narrator that does the UK version, maybe other parts of Europe, but Jim Dale does a fabulous job with her and she does clear her throat a lot. Yeah, thanks for that tangent, Hubbs.

Robb: Sure.

Nicki: Let's see. What are we kicking off with today? I don't really have anything upfront pressing news. We spent a wonderful week with my dad. He came to visit and that was really nice. The girls got to spend some quality time with grandpa, played-

Robb: He was here for their piano recital.

Nicki: Piano recital-

Robb: Which was cool, the girls did quite well.

Nicki: And Zoey's birthday. Played lots of Monopoly, lots of life lessons in Monopoly, lots of frustrations when you have a hotel and you can't pay your \$900 bill. And the girls, they learned a few things, so it was good. And it rained a ton while he was here, so it was just perfect Monopoly weather. But anyway, what do you have for us for a news topic?

Robb: Just a little quickie from the [inaudible 00:02:48].

Nicki: Our favorite Boriqua Gato.

Robb: What is the title? Kitten Corner: Testable predictions. We learned in kindergarten that in science you make testable predictions, test them and then we see how well your hypothesis lined up with the data that you gathered. And this guy Stinson Norwood, COVID pandemic, early 2020 to date and it's comparing age standardized mortality rate. And in this particular instance it has Norway, Sweden, and South Korea with Sweden being the least of any of three compared. And then this guy James Surowiecki, so Stinson Norwood and other people were making the case early on that Sweden, which had very little in the way of lockdowns, very little in the way of mask mandates, very elective in vaccine rollout and whatnot, could make the case they didn't lose their ever-loving minds in dealing with COVID, but everybody kept waiting, or I wouldn't say everybody, but many made the case that this was just early, that the other shoe would fall, that they would end up being the worst example of anything.

And this guy, James Surowiecki, made the case, "When Sweden's death rate gets close to Norway's, let alone South Korea as you can say, you were right." And this was back in September of 2020. So we were right. And this just seems to keep coming up again and again and again. But I am so struck by... there are literally two worlds existing here and there's no interface at the membrane between them. I stay signed up on the MedPage Today updates, even there it's kind of interesting because it was a PhD immunology researcher that was making

the case that we were relaxing certain elements of vaccine requirements too early. It was basically making the case, we don't need more boosters, get a single one, call it good. And he was just making the case. Now, we can't really say that.

And it was fascinating the number of people that were taking this guy to task, that were themselves MDs and PhDs, and actually I guess you could say he had been red pill'd. They were like, "What the fuck are you even talking about?" What planet are you on to suggest that these things are efficacious really at all for anybody under any circumstances to say anything of the multiple boosted track and whatnot. But yet the powers that be still have this agenda. I guess I'm enough not a narcissist that I'll see this shit from MedPage and whatnot and because I've really stepped away from just the day-to-day grind of following some of this stuff, I'm like, I don't know, maybe I'm wrong, maybe I don't know what I'm talking about. And then you get in and really start digging in again, it's like Aseem's recent thing on Rogan and all that.

Nicki: Which we should mention that. And I'll also put a link to that in the show notes. Aseem Malhotra, I think is-

Robb: Malhotra.

Nicki: ... last name. Robb wants to call it Malhotra and he's a cardiologist. And so I kept saying it's not Aseem Malhotra, is Malhotra. Anyway, we've been jousting with that one, but definitely put a link to that one in the show notes. It's one of the best Joe Rogan episodes I've heard in a long time, funny enough, because Joe does very little talking, so there's not like the random tangent left field directionality that happens. Aseem is an extremely articulate, well-spoken individual.

Robb: Non-sensational.

Nicki: Non-sensational. And he just, starting with statins because that's where he started with his career digging into...

Robb: He was an intervention-

Nicki: Over prescription of statins and what that was doing to folks and then leading into COVID and all of the COVID interventions. So anyway, fabulous, fabulous episode. Highly recommend. Lots of people have been sharing that with us and recommending it and we finally gave it a listen and definitely second their push for listening.

Robb: Yeah, and I could have, should have probably picked that for one of the news topics. But he's interesting. I've been on the same low-carb practitioner's email list that Aseem is on for quite some time and so always have appreciated his thoughts and insights, but he's interesting in that he was still a junior interventional cardiologist. He was like adjunct professor at that point, so he wasn't fully done. He had earned all of his wings. He was still in training, but

started asking some questions around the efficacy of statins. Numbers needed to treat the real story around side effects and the reality that within the side effect pool, when they start the intervention, they're able to exclude the first chunk of people that have the most severe side effects and then those people are not included later. And so all kinds of chicanery with that, which is interesting that so many people within say low-carb paleo type circles are very board with this notion that there's been something very hinky with the statin story.

Bunch of name brand people sign off on that. And then what was interesting is that Aseem started off fully on board with vaccines. I would say similar to me. I have historically looked at vaccines broadly as this miracle, and I know a lot of people don't buy into that. But surgery, penicillin, antibiotics and vaccines I think transformed the 20th century and there is risk reward with all of that stuff and we can never forget that. But he went into the COVID thing expecting this to be a real boon, miracle drug and then started detecting signal that was contrary to that claim and has just motored forward on what the real data is. And he is now of the opinion that there is no risk reward story amenable to the use of the mRNA vaccines for anyone under any circumstances, which was-

Nicki: Not even elderly people.

Robb: Not even elderly people who are sick and obese and everything else. He is of the opinion that the complications risk reward story is not ethical for them to be used at all, which is even more aggressive than where I was at. But I also, like I said, I stepped off.

Nicki: And that we've pulled other vaccines for-

Robb: Far less issues.

Nicki: ... far less side effects.

Robb: Literally, two or three orders of magnitude lower or less frequent issues.

Nicki: And we still have states in the United States that are mandating this for kids to attend school and university and all of that. So anyway.

Robb: Didn't intend this to be a diversion into that.

Nicki: No, but I think it's important, and again, he's just so measured and it's worth a listen whether your interest is in the statin piece or the COVID piece or both. It's a great episode and I am thankful that Rogan had him on because I think this needs to get out there. We are so beholden to these corporate interests and big pharma and Robb was just telling me, I didn't read the article, but you mentioned that Amazon is now going to have Amazon pharmacy, and I was like, [inaudible 00:11:28], awesome. On the one hand how convenient, you want your drugs delivered right to your door under one account umbrella. But

I'm like, at what point do we have an antitrust situation here? We just played Monopoly, at what point is there a legitimate situation where these corporate interests have become so powerful and they are able to fund different facets of the government such that there's not really a voice of the people, the citizens are not represented by their elected leaders because they're being bought out by powerful corporate interests?

Robb: Well, I don't even think I told you this, but this last weekend I was invited to go out to one of our friends who owns a grass-fed meat operation, Montana Longhorn, and it's kind of a long story, but they ended up meeting a guy who has a Discovery Channel show kind of travel related, and this guy came out and interviewed them and also interviewed me about the regenerative ag side of things, but one of the folks there is a gal who works as a pharmacist, and historically she's been a night shift pharmacist and she was like, I did 10 years of that and it was killing me. And so she got a different job at a local compounding pharmacy. I'm like, oh, you're a compounding pharmacist now. And she's like, yeah, it really dust off some unused skills because before it was literally just slide pills into a bottle and check for contraindications and stuff like that.

I'm like, so what are your thoughts around that? And it kind of probed into the COVID thing a little bit, and she was like, these compounding pharmacies are the last bastion to be able to get something like hydroxychloroquine or ivermectin, because they're independently run, there's a much higher likelihood that if you had this kind of weird totalitarian thing or you happen to be a person who just seems to respond favorably, like I've been doing some poking around on off-label rheumatoid arthritis treatments and hydroxychloroquine happens to be a drug used for that, but it's kind of hard to find the right doses. The appropriate dose is quite low, and so you usually need to find a compounding pharmacy to be able to do it. If all of our pharmacies are closed or they're either like Costco, Walmart and Amazon-

Nicki: Amazon.

Robb: ... pharmacies, you have no fucking option-

Nicki: No.

Robb: ... for anything else.

Nicki: Especially if it's a medication that the powers that be don't want you to have access for it-

Robb: Particularly that.

Nicki: You just won't get it.

Robb: Yeah. So it's interesting, and again, this wasn't remotely kind of the direction that I thought that we were going to take the opening of the show, but

Nicki and I have been talking about that. I remember over 10 years ago there was a... God, it's got to be close to 15 years ago now, there was discussion about when is Google a monopoly? When is Amazon a monopoly. And Google, I don't know what the numbers are now. Clearly they're a monopoly in search, but they're not necessarily a monopoly in advertising. So this is kind of the way that they can squirt through the loophole. And then not to overly politicize this, but they clearly [inaudible 00:14:57] accept Twitter now at this point in some of the alternatives like Rumble and stuff like that. But the big players are clearly heavily influenced by the government and one branch of the government currently or kind of one flavor-

Nicki: One party.

Robb: One party of the government disproportionately seemingly, although I wouldn't be a bit surprised to find out that that's not as accurate as what we think. But of course, nobody wants to go in and do the important reset that keeps the capitalist engine actually kind of functioning, which is allowing things to reach an optimized point of monopoly and then break them up and start them over competing again. But there's no will to do that because they're complete. They appear to be remarkably controlled and manipulated by the government and media all colluding together. So anyway.

Nicki: Anyway, there we go. That was our...

Robb: That's the show folks, we'll catch you later.

Nicki: Yep. All righty. Well, the Healthy Rebellion Radio is sponsored by our Salty AF, electrolyte company, LMNT. Increasing electrolytes, particularly sodium, makes a huge difference in performance across a wide range of domains. We've mentioned this before on the show, but people who work in hotter humid conditions or who have physically demanding jobs, those who eat low-carb keto, athletes of all stripes, breastfeeding moms, and people with pots, getting enough sodium is critical for people with POTS, which is Postural Orthostatic Tachycardia Syndrome. In fact, folks with POTS, if they have inadequate sodium, they can end up with catastrophic events including fainting and potentially a resulting head injury.

So wanted to share a message that one of our LMNT team members received from one of our customers who wrote in who has POTS and wanted to share her experience. So she says, "I received the shipment and oh my goodness, I am completely obsessed with LMNT. Usually I drink it throughout the day and it has significantly lowered my POTS symptoms. My mind is blown. In the past I would drink either..." and she lists two other brands that I'm not going to name, "but they do not taste as good as LMNT. To add, they also never really helped my immediate issues, within a few minutes of drinking LMNT, I feel significantly better, which is really, really cool."

And we've met several people with POTS in person who have shared

similar stories, like it's just critical for how they feel and throughout the day just the ability to function well. So if you're feeling low on energy, don't reach for more caffeine. You also might just need a little more sodium. And I wanted to share too, we're just a couple of weeks out from grapefruit season, literally two weeks out, so I know a lot of people are counting down the days for that. You can grab your LMNT at [drinklmnt.com/robb](http://drinklmnt.com/robb). That's [drinkL-M-N-T.com/R-O-B-B](http://drinkL-M-N-T.com/R-O-B-B). All right, we've got three questions for you all today. This first one is from Laura on liver, particularly soaking liver in milk.

"Hi Robb and Nicki, first I want to say thank you so much for your work. I was mostly vegetarian for over 20 years before reading and watching Sacred Cow. After adding red meat and more protein into my diet, I feel renewed energy in my workouts and in daily life. I'm now an avid listener to your podcast and love the refreshing tell the truth approach that you both have on diet, health, and life, encouraging people to think rather than just follow the status quo. Now for my question, beef liver, the food we know we should eat, but most people don't find palatable and therefore don't eat it often. After lots of experimentation, I finally found a way to make it that I find palatable and dare I say even enjoyable. I soak the liver in raw milk for at least an hour, then discard the soaking milk and pulverized the liver in a blender. I freeze it in small portions in silicone muffin cups.

Then when I want to eat some, I thaw the one to two ounce portions and fry it in coconut oil, chopping it up with a spoon so that it is the consistency of a very soft ground beef, add a little salt and it tastes great. But I shared this method with a friend recently and she thought I was depleting the liver of its iron by soaking it in milk first. I consulted Google but got conflicting answers to this question. What say you biochemist Robb? Am I making the liver not as good for me by soaking it in milk first. And a follow-up question, would raw milk or pasteurized milk make a difference in this scenario? Thanks, Laura." She also adds a PS., "I also bought my first box of LMNT and I'm hooked. My husband calls it my afternoon cocktail every day. Raspberry salt is my fave thus far, but I'm hoping chocolate mint comes back in the future."

Robb: So good question. Let's see here. There's several questions here and then I had some kind of peripheral thoughts, but the raw milk or pasteurized milk is not going to make a difference. Dairy in general, like casing has a tendency to bind to iron and this is where... gosh, Diane Rogers did some breakdown on this for Sacred Cow looking at say like vegetarian children maybe getting adequate protein due to say like significant dairy intake, but oftentimes ending up being iron deficient because the dairy can block iron absorption. For example, vitamin C can facilitate iron absorption and then some things end up competing with it or blocking the iron absorption.

If you were to take the liver and homogenize it with the milk, then I could see it being... made a liver milkshake, then you might run into some problems there, but you're really mainly getting milk on the exterior of the liver. There

might be a little bit of percolation through the liver with the milk, but you're probably inactivating a pretty small amount of the iron just as a thing. So raw milk or pasteurized milk is going to be about the same either way with that. Some people might make some case if there's some enzymatic activity with the raw milk, that's fine. It's just more expensive and seems to me more valuable for other stuff.

Nicki: For drinking than just-

Robb: For drinking.

Nicki: ... discarding it after-

Robb: [inaudible 00:21:12]. But man, some of the Weston A Price people can get crazy on that topic. I'm actually in the camp that I don't know that folks need to eat liver and organs. I've done long tracks of time with, I've done long tracks of time without and I haven't really noticed any huge difference there. If you like dropping them in, that's great. I don't know that it's really 100% necessary too to do so. I know that that's kind of heresy these days around nutrient density circles and all that type of stuff, but it's just where I am with that.

Gosh, one other thought. We've ground the liver and we've had this pre-made before where they will mix some of the liver with ground beef and that ends up working out really quite nicely, is an easy way to hide some of the liver in there. And then the always handsome and stunningly insightful Jack Ruston of Rustons Boneyard and oftentimes moderator of the Healthy Rebellion, he made the case that if you can find liver that is super freshly processed like they butcher the animal, pull out the liver, and if you can flash freeze it, that you are likely to have a much more tasty piece of liver because it's the mild aging process.

Nicki: Normally it was eaten...

Robb: Immediately, yeah.

Nicki: Immediately. And these days, you look at the little cartons of liver in the grocery store and who knows how long they've been sitting there.

Robb: Good until next month, yeah. And it's like, well, good is relative. And I wouldn't be surprised if some of the off flavor that occurs there is due to the high iron content in the liver and probably some oxidative activity that's going on with some of the constituents in there. So awesome that you're doing liver, I don't know that you absolutely have to do liver. There are other ways of sneaking liver into things. If you're liking the way that the milk worked out, that's great. I don't think it has to be pasteurized milk and-

Nicki: Or raw, it doesn't have to be raw.

Robb: Yeah, it doesn't have to be raw milk.



Nicki: Great. Thanks Laura. Okay, this next question is from Sam on the number of steps per day versus zone 2 cardio. "Hey Robb and Nicki, every day I clock in between 10,000 and 18,000 steps at work. Dead serious, no exaggeration. Work is five days a week and eight to 12 hour shifts. Usually it is in 100 meter bursts and a fairly quick pace. It definitely burns sufficient calories as in the past before I committed to the paleo diet, I would maintain my weight despite having a bad diet and huge portions. Granted, I was very overweight at the time and am still however much less so since switching to paleo, I'm dropping weight like crazy. Anyway, I have heard in the past that zone 2 cardio gently burns calories and helps maintain cardiovascular health. So my question is, does my activity level and amount of steps per day qualify as zone 2?"

Robb: Sam, it does not most likely, but it doesn't mean it's not great for you. Zone 2 is at a level of activity where we're going to get some mitochondrial biogenesis. We're going to get some peripheral heart activity where the enough blood is loading through the body that we get that left ventricle really preloaded with a big bolus of blood, which helps the left ventricle to stretch and then rebound and that will cause some beneficial hypertrophy of that left ventricle in an athletic fashion. It improves angiogenesis both in the working muscles and around the heart. What you're doing is a lot of what's called zone 1 activity, which is great and it's very good. And when we look at... Peter Attia talked about this, his book *Outlive* is really quite good in this regard. When we look at just going from couch bound, no activity to doing anything, that doing anything, just going on a walk is where we arguably get the biggest bang for our buck.

It's the biggest delta going from completely sedentary to just doing anything and then all this other stuff is really good, but I could make the case that we're wanting that zone 2 cardio more for specific cardiovascular benefits, for building an aerobic base that we want to hedge as we age. And again, even doing what you're doing, you might intermittently dip into some zone 2 activity, particularly if you really put your mind to it, you're kind of really boogie along the floor for those hundred-meter pitches and whatnot. Might look a little bit goofy doing it.

Nicki: It might depend too on how... what's the interval, right? You do a hundred-meter burst. I don't know what your job is Sam, but for whatever reason, I'm channeling UPS delivery like you drive and then you, a hundred-meter bursts to the door, drop off a package, come back and I could be completely wrong. Anyway, how long of a rest in between those bursts would be the question because if there's like 22nd rest, 42nd rest, you could still be in zone 2 potentially.

Robb: Potentially if you are hustling.

Nicki: But if it's longer than... I could see you dropping down. One interesting thing if you want to track this would be to get some sort of a heart rate monitor.

Robb: Like the Morpheus, we like train with Morpheus.

Nicki: We like the Morpheus platform, but again, at work you might, I don't know, I'm almost thinking a Garmin watch might be easier depending on his job, just so that you could set it as you're at work and you can just see where's your heart rate. The Garmin watch goes like gray, blue, green, red, so gray would be below zone 2. Blue would be zone 2, I don't know actually-

Robb: Low end of zone 2.

Nicki: Low end of zone 2. Green, and you can just kind of see where does your heart rate go over that eight to 12 hour shift, but to get the benefits that you're describing from zone 2, are you saying that it needs to be more... you need to be maintaining that heart rate within 30 to 30 minutes to 60 minutes, a dedicated chunk where it's in that zone the entire time?

Robb: I'm not totally sure. I think so, there is some benefit there, but then the flip side is I don't think people are really studying this.

Nicki: Sam's life. Yeah.

Robb: There's a whole different thing. When studies have been done of just kind of total work output, then there's great benefit to this. This is the person who gardens aggressively or something like that. The only time I've had steps of this number is when we're moving our house or something, or when your dad was having me help him move pavers and you're busting hump all day long and you're knackered at the end of the day, it's a lot of work output, but again, from some of that cardiovascular development side, it just has to reach a certain threshold. This is a little bit similar to you lifting weights. If you want to get stronger, a really lightweight lifted a lot of reps just isn't really going to do that. You may build some endurance with it. You may build some localized muscular endurance. It may be a really good thing for soft tissue, connective tissue because you're flushing a lot of blood through the area, but as far as building some muscle and building some strength, recruiting the [inaudible 00:29:09]-

Nicki: Right, to lift heavier.

Robb: It's just not the same stimulus, yeah.

Nicki: Okay. All right, Sam, hopefully that helps some. Let's see. [inaudible 00:29:19] and five days a week, so if you did want to add some zone 2 maybe on your off day if you wanted to do a little.

Robb: I would lift weights. Honestly, I feel like he's probably getting a lot there or maybe a day of a dedicated zone 2, if you just want to garner that cardiovascular benefit, but otherwise he didn't mention what else he does, but as much activity as is going on there, I would stick in two or three days a week of strength training

and goose things that way.

Nicki: Cool. All right. Our final question this week is from John on unresponsive gastritis and IBS. "Hi Robb and Nicki, I seem to have come to a dead end in solving my health issues and wanted to see if you might have any ideas. In March of 2020, I was given an antibiotic, Pen V, at the same time as I may have had COVID. Overnight my digestive system was wrecked. I had non-stop severe stomach burning and a churning intestinal pain. Fast-forward three years and the symptoms have not stopped, only calmed down slightly after the initial weeks when it started. After numerous investigations including scopes, blood, stool tests and scans, I've only been diagnosed with mild chemical type gastritis, no H. pylori, slightly elevated calprotectin around 100 to one 50, but no visible intestinal inflammation and a small hiatus hernia.

Standard gastritis medications like PPIs, H2 blockers and sucralfate do absolutely nothing and I was quickly spat out the other side of the medical system after they didn't know what to do with me. At various points over the years since I developed tinnitus, minor muscle twitching migraines and also a C. diff infection after starting a PPI, but that was successfully treated with Vancomycin. To keep the word count down, I'll just say that I found the functional medicine world and worked my way through a self compiled list of diets, supplements, probiotics, herbs, and alternative treatments, but have made zero progress. I've probably done most things on the usual list for gastritis and IBS. I've even tried a capsule FMT and a seven-day water fast, both of which just gave me a headache.

I tried strict carnivore a couple of times up to about three months each time, but unfortunately it wasn't quite the magic bullet that it seems to have been for others. It has made minor improvements but not enough to say it is resolving my issues. Today I'm still eating mostly carnivore as I feel the least bad on it, but I'm left with all my symptoms. I'm out of ideas. The frustrating part is that the pain seems to be completely static. I know how to make it worse, but it never improves, almost as if the set point of my nerves has moved. Can you think of anything I could look for or try?"

Robb: Man, I'll be honest, I almost passed on this because there's so much going on here that it's kind of overwhelming and this sounds a lot like me, to be completely frank. Some of the things that come to mind are low dose naltrexone, any of these kinds of interesting anti-inflammatory, nerve reset type things like CBD, CBG, some breathing techniques, maybe Wim Hof, maybe some of these different breathing techniques. That vagal nerve activation is really interesting in this stuff. Some of the transcranial therapy that's used for Parkinson's, Alzheimer's, in theory, it may also benefit the essential tremor, and so I've been looking into that, but that has some interesting... some of the side effects that people report is, oh, I also had all these GI issues and those things ended up improving with this also, so what have we got there? Low-dose naltrexone, CBDs, breath work, and then some of this transcranial magnetic stimulation.

If you look for transcranial stimulation, Parkinson's or essential tremor, then you can find these outfits that do this. They're kind of all over the country, different locations on that. I'm in kind of a similar spot, John. My health is way better than what it would've been had I continued eating a standard American diet or vegan diet or whatever, and I've kind of migrated ever closer to kind of carnivore and I will do stretches of carnivore, but I honestly just get really bored and I'm one of those weirdos. I like steak, but I also salad, even though I don't really do much in the way of salad anymore-

Nicki: You hardly have any, yeah.

Robb: The past couple of months, if folks have been following us for a couple of years, they'll know that I had a really gnarly rheumatoid arthritis flare about two years ago and I managed to get on top of that. Well, it's been kind of acting up again and I have absolutely no dairy. I cut out nightshades. I know for a fact now those things are problems and so I started doing some other digging and I'm actually going to ramp up my fish oil. I'm going to start doing a low dose baby aspirin every other day and just doing some other anti-inflammatory things that seem to have some activity on my particular issues, which I know are still also gut related issues. I wish I had more for you. I've met people who do the fecal transplant and they're just great. They do paleo and they're great and I have no... clearly, if I was still eating a standard American diet, I'd probably be about dead, between wheat and dairy and tomatoes and everything.

Nicki: You would either be dead or you would be on 20 different medications.

Robb: Trying immunosuppressants and all that type of stuff. So I think the upside for both of us is that to some degree we've at least got a handle on this. The situation may suck, it may be not optimized, but it also could be so much worse if we weren't as savvy to what we have going on here and that some crazy people several years ago said, hey, maybe we don't want to eat any plants at all, and this carnivore thing popped up, so we'd start seeing some examples of that and could kind of kick the tires on it, but I've never just sat down and accepted my situation. I'll go months where I don't really put a ton of thought into it, but then I'm like, well, I wonder about this, I wonder about that, and we'll get in and start thinking about and looking at different things. I've done the full run of all the probiotics, prebiotics and everything, colostrum. I've kind of done it all. Sunlight helps. We don't get a ton of sunlight here, so I do my spury lamp and whatnot.

Nicki: So this transcranial thing that you haven't done it yet but you're looking into it to do for your essential tremor. I know it's beneficial for people with Parkinson's and essential tremor, but it also is good for gut situations?

Robb: Well, it seems that so much of the gut activity, the vagal nerve has, that's kind of what controls it, part of that parasympathetic response, and so this is also where I think some really good breath work, some meditation, things like that.

Again, I have a feeling that for people like John and I, it's probably not going to solve it, but it may end up just dialing the intensity down several clicks hopefully, and maybe it does solve it, but I think that you just keep tinkering and ideally you tinker one thing at a time and kind of see what the results are and make sure it doesn't make things worse. Make sure that in addressing the one issue, you don't create another issue and just keep fighting. And this is, again, it seems kind of trite to say that there are some things I think out there.

Again, the transcranial stimulation, low-dose naltrexone, CBDs, breath work, and God, there's so many different types of breath work. Maybe even the hot cold water exposure too. The contrast hydrotherapy can really reset that vagal nerve activity and get you into more of a parasympathetic state and then doing that with breath work can also get you into more of a parasympathetic state. When I think about gut pain and there's not overt... if they're not on histology and blood work, they're not just seeing inflammation in and around the gut, then it makes me think nervous system a little bit.

Nicki: That makes sense. John, hopefully something in there is something you haven't yet tried and bring some relief and keep us-

Robb: As always, keep us posted.

Nicki: Keep us posted.

Robb: Yeah.

Nicki: We'd like to know if you find anything that helps. Let's see, Hubbs, that was our final question. Any other closing thoughts for this week?

Robb: I don't think so.

Nicki: Don't think so. All right. Well, we are definitely looking forward to our seven days of upcoming sunshine here. We'll be outside soaking up as much of that UVA, UVB as we can.

Robb: This podcast is still going to be spinning down and I'm going to be outside with my shirt off, I think in the sun.

Nicki: Yeah. Sounds good. All right, everybody. Hope you have a wonderful weekend.

Robb: Hopefully you will be too.

Nicki: Happy Mother's Day to all the mothers out there and yeah, if you haven't yet stocked your electrolytes, you can do that at [drinkmnt.com/robb](http://drinkmnt.com/robb). That's [drinkL-M-N-T.com/robb](http://drinkL-M-N-T.com/robb). Remember just a couple short weeks and we will be announcing the release of grapefruit salt again. That's it, have a wonderful weekend everybody.

Robb: Bye.