

Nicki: It's 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 one million people liberate themselves from the sick care system. You're listening to The Healthy Rebellion Radio.

Nicki: 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: Are we live?

Nicki: We are live. Welcome back to another episode of The Healthy Rebellion Radio. This is episode 87. Hi hubs.

Robb: That's very magnanimous.

Nicki: Hello. Hello.

Robb: Hello.

Nicki: Gosh, what do we want to kick the show off with today? It's not so smoky. I mean, like we mentioned last time, fall is upon us, and it's absolutely gorgeous, and then we've had... July was a fairly smoky month, not as bad as much of Nevada and California and Idaho, but then we had this reprieve from the smoke, and then it's-

Robb: We had a cold front come in, so when the-

Nicki: Yeah, it's sort of that.

Robb: ... air comes down from the Arctic north, then it clears things out. And if it's coming out of the south, it seems to get some of that jet stream stuff and blow over. But fortunately, it hasn't been terrible. There was a small fire here at the south, south end of the Flathead Valley, and it definitely smoked stuff up pretty good. But we've been, knock on wood, so far pretty lucky.

Nicki: Yep. Yep. Let's see here. I'm trying to think of any other things I wanted to mention before we jump in.

Robb: We had a fairly lazy Labor Day weekend.

Nicki: Yes.

Robb: Our weekends between... And it's been awesome. People visiting and doing stuff has been great, and just trying to get squared away for winter because there's just some stuff that you can't punt till there's snow and ice on the ground. So our weekends have been pretty hoppin' too. We just kind of hunkered in and did-

Nicki: I know, it was lovely.

Robb: ... not a whole lot of anything, and it was nice.

Nicki: It was the Saturday of Labor Day weekend. We were like, "Gosh, this seems like the longest day ever," because it was-

Robb: We didn't actually do that much.

Nicki: ... fairly lazy, and it was fabulous. So hopefully y'all had a relaxing, enjoyable long weekend as well. We did watch... Squatchy recommended in our last Healthy Rebellion chat, we were talking about Zoe and her love of all things wolf and Husky, and Squatchy had recommended a movie called The Journey of Natty Gann, which is on Disney+. And we watched it, and it was actually quite, quite good. It takes place during The Great Depression, and her father... This is a young gal. I'm guessing she's maybe 12, 15, somewhere in-

Robb: In real life, she was 14 at the filming of that.

Nicki: Okay.

Robb: Yeah.

Nicki: Okay. So anyway, her father finally gets a job. They're in Chicago, and he finally gets a job in a lumber yard in Seattle, in Washington State. And so he has to leave without saying goodbye, and so it was the story of her making her way as a hobo and hitching rides out West to try to find her father, and she befriends a wolf. And anyway, it was a really good show in and of itself. And then we had talked about with the girls... They don't go into a lot about The Great Depression. I mean, you see all these people-

Robb: Soup kitchens and-

Nicki: Soup kitchens-

Robb: ... work lines, and-

Nicki: ... work lines, and all that. But we had kind of prefaced it talking about what happened during The Great Depression and whatnot. And then it was on a walk. We were walking Dutch the day after, and Zoe goes, "Mom, if the banks didn't give people their money during The Great Depression, how come people still put their money in banks now?"

Robb: And trust the banks.

Nicki: "... and trust the banks?" So it prompted a lot of really-

Robb: ... good discussions around modern monetary theory and all kinds of good stuff. I don't know if our kids are... Clearly we're loons trying to talk to our kids about basic finances and also macro economic stuff and things that really, for little people like us, we have very little control over, but something that we've talked about again and again in The Healthy Rebellion is just understanding that a situation could happen, like if you live in Louisiana and being aware that weeks long power outages could occur, just knowing that's a possibility removes the shock value of when something happens.

Robb: Doesn't mean it's still not hard, but when big events happen, if folks are completely caught off guard, then they could be paralyzed for days, weeks, months just from the shock. And so part of what we try to do with our homeschooling is talk to the kids about cracks in our civilizational structure. And even though everything has motored along

pretty well for quite some time, we've seen earthquakes and terrorist attacks and different things. This pandemic-

Nicki: Pandemics.

Robb: ... really upset some things like supply chains and food issues. We just saw something that both General Motors and Toyota are basically shutting down manufacturing of cars in general. I didn't read-

Nicki: Oh, I didn't see that.

Robb: ... both the pieces, but because of the chips-

Nicki: Because of the chips-

Robb: ... deal.

Nicki: Okay.

Robb: And we talked to a guy that sells cars for a living, and he said that despite there being greater demand for cars than he's ever seen, this is the worst summer he's ever had selling cars-

Nicki: His sales this summer are-

Robb: ... in 30 years of selling cars.

Nicki: ... terrible. He's sold like nine cars, and normally in a July, he would sell like 30.

Robb: And there just are none. They're back ordered and everything. So anyway, not to drive this thing off the cliff, but it was an interesting movie, and it provided an opportunity to just discuss some of what was going on historically. And then to Zoe's credit, Zoe asked really, really good questions, and that was, I thought, a very insightful question. And we talked a little bit about how our grandparents' generation was still a generation which didn't really trust banks entirely. My grandmother never had much money, but she would send us out to dig up a Folgers coffee can to get some money out of her garden every once in a while. She trusted her backyard garden, and she had a big ass garden every single year, and she worked that thing until she just physically could not do it. So yeah.

Nicki: Yeah, I found a book on Amazon that I'm going to get for the kids because I think it will be good reading. I believe the title was, They Never Threw Anything Away. And basically a man, the author, interviewed... This book was written in the '90s, and he interviewed I think 20, 20 something folks that lived through The Great Depression. And so they're individual accountings of people who lived during that time, so I'm excited to read that to the girls.

Robb: Cool.

Nicki: Anyway, enough about that. What do we have coming up here in The Healthy Rebellion? Our kickoff call for this next 30 day Rebel Reset is this Friday. Actually, that would be today, the day this episode releases, Friday, September 10th. And we'll do a kickoff call talking about the overview of what's coming with the seven day carb test, followed by the 30 day reset. The seven day carb test will begin on Monday the 13th,

and that's completely optional. Some folks choose to do it because they're curious. Some folks did it a year ago and want to do it again and just kind of see if anything's changed, if their blood glucose response to any foods has improved.

Robb: Improved.

Nicki: But again, that's optional. And then the actual 30 day reset begins on Monday, September 20th. So if that's of interest to you and you're not yet a member of The Healthy Rebellion, you can join us and take part. Just go to Join.TheHealthyRebellion.com. What do you got for us for our news topic?

Robb: So it's this piece from a guy who goes by the tagline Astral Codex, which he got on our radar maybe about six months ago. Maybe not quite that long, but he had a piece, The Only Thing I Can't Stand Is Intolerance. And it was something that he wrote in 2014, I want to say. And it was interesting because it was just talking about the cancel culture of that time and intolerance. And I think the guy's a physician, might be in psychiatry, but a brilliant person and writes on-

Nicki: I didn't know. Is this the same guy that wrote that tribalism piece?

Robb: Yeah. Yeah.

Nicki: And that was the name of that?

Robb: Yeah. Yeah.

Nicki: Okay. I wasn't sure if that was what you were referring to. Okay.

Robb: And so this one is titled Too Good To Check: A Play In Three Acts, and it is an unpacking of this recent Rolling Stone piece that suggested that a doctor had said that gunshot victims were lined up outside of a hospital in Oklahoma due to overdoses from Ivermectin, the hospital being-

Nicki: And they called it horse dewormer.

Robb: Horse dewormer, and yeah.

Nicki: It was a pretty sensational headline that the Rolling Stone ran, and then every other outlet ran it too. And of course people shared it like wildfire on all of the medias that are social. And then following that, a hospital in Oklahoma issued a statement saying that the doctor that had provided that information to the Rolling Stone magazine didn't work. He was sort of a contractor and hadn't worked in their hospital in two months, and that that particular hospital had no patients that were being seen because of Ivermectin overdoses and whatnot. And so anyway, this article is actually quite good because it is asking you to check your bias in multiple places.

Robb: What's interesting, and we've probably already made a mistake relating what went on here. This guy, Astral Codex, went in and really started doing his own fact checking, which you have to kind of take that with a grain of salt. But what's really interesting here in this strong case that he makes is, whichever side of this discussion one finds themselves, there are media outlets that both support the bias and have made mistakes in this story.

Robb: And so what Rolling Stone did initially was egregious, just horrific journalism. It is why when I hear someone's a journalist, it literally gives me a rash. And I've had this for a

long time just with the low carb stuff and the paleo stuff and everything, because in ages gone by when people would want to interview me about the paleo diet, what seemed to pass as journalism was talk to me, as I'm viewed as being one end of an extreme, and then go find somebody who's vegan, who is ostensibly the other end of the extreme, stick these two opposing viewpoints together, and then somehow that's a deep analysis of this super complex topic, which it's just chapped my ass to no end and was ridiculous.

Robb: And my God, what I would do to get back to those good old days of, if it was only at that level. But the real nice takeaway that he had, and I don't agree with everything that he puts in there, but what he goes through and he talks about some kind of psychiatry level cognitive biases. And I'm blanking on the terms that he uses for them, but he details how both, let's say people on the left-hand side of this story, on the right-hand side of this story, made pretty significant errors, and then just perpetuated and doubled down and perpetuated and doubled down.

Robb: And this is kind of the state of our world right now. And I was having some discussions with both Nicki and with closer friends of mind. I'm trying to figure out what my role should be in this, because it's more information than what you can ever really stay on top of, could be a full-time job in and of itself. But a point that Malcolm Kendrick made recently, which he too was tapping out of the COVID commentary, so Bret and Heather are out. He is out-

Nicki: More or less, yeah.

Robb: ... more or less.

Nicki: And Malcolm is out because there's no good data. It's impossible to know-

Robb: That was the point that he made.

Nicki: ... what is going on because the data collection is so flawed.

Robb: Which I think is a feature, not a bug. Which again, in this modern world, people say, "Well, you're an asshole and you're a disinformation person." But I posted a piece that Eric Topol, who... I don't know how deep we want to get into this, but Topol was very early in protecting some people like Kristian Andersen in supporting that the lab leak hypothesis was balderdash, that it was ridiculous. And then Andersen was outed as having actually communicated to Dr. Fauci that, "Hey, this thing actually doesn't follow evolutionary predictions, and so it looks like it might actually be tweaked or fiddled to some degree in a lab."

Robb: And then within days of that, he had all these rather high profile pieces that said, "No, absolutely not. This thing has natural origin." So there's just all this stuff in there, but Topol was basically complaining about the shitty state of affairs with data collection. There's all this information that we can and should be getting, like is somebody vaccinated? Well, right now you're not really considered vaccinated unless you've gone 14 days post getting-

Nicki: Your second vaccination.

Robb: ... your second inoculation, but they're not asking, "Well, have you had one? Have you had two? What was the timing of one and two?" Because that's all really important stuff for just if there are vaccine consequences, if there is anything lurking in there, and we're kind of purposefully not looking at that stuff. So this was way more on this topic than

what I really expected to mention, but I really recommend reading this piece in particular and this guy.

Nicki: It turns out that Rolling's, the doctor that is quoted as having said, "We have to turn away patients. We have to turn away gunshot victims because of people overdosing on horse paste," turns out he didn't actually say it like that. He made two separate comments-

Robb: Completely separate comments on a radio show.

Nicki: ... separate from each other.

Robb: Yeah.

Nicki: So basically that he's seen some cases of Ivermectin. I don't even know if he said that specifically. And then he said that he had to find a different bed for a gunshot victim. And then somebody in the media, I'm not sure if Rolling Stone acted on this first or if someone else reported it first, put those two things together as if it was happening in a singular hospital, made the gunshot victim more than one, pluralized it, so lots of gunshot victims are unable to find-

Robb: Well, and-

Nicki: And then it just exploded from there.

Robb: It exploded, yeah. Heads of state, all kinds of blue checked media, look at these assholes taking horse paste, and all the rest of it. Maybe Ivermectin's great. Maybe it's not. But if somebody is on the side of the fence where they're at least curious about it, and then there seems to be this remarkable campaign against it, then you're going to fucking make people really curious and entrenched about it. So I don't know. It's worth a read, and it caused me to really pump the brakes on just what I'm doing. And I really do try to not just go whole hog into cognitive biases. There was a time in my career when I was very much bought in on the insulin hypothesis. And then over the course of time, the data really swayed me differently.

Robb: And the funny thing is, I will just about swear to God that the insulin hypothesis works in my body, but it doesn't seem to work anywhere else. And this is a tough thing for me to come to terms with. And somebody like Elaine Norton would probably rightfully say, "Well, it's probably providing disproportionate satiety, or there's some other something. Maybe you eat more protein when you're eating low carb and all this stuff."

Robb: So there's probably something else out there, because I'm probably not that physiologically unique. But I had a lived experience that really made the insulin hypothesis seem legit. That seemed to go forward for a long time. I saw lots of people benefit from just basic low carb intervention, so there wasn't really a question about that, but then the data really wasn't supporting this basic idea that insulin was the driver of obesity, and on and on and on.

Robb: So I certainly don't get everything right, but we've talked about a lot of things early in this. I think it was March 23rd in one of our first podcasts even digging into COVID when I said it's suspicious that the only solution on the table is a vaccine. It's troubling, it's suspicious. And that has never really changed. And even in some of the stuff that we looked at with Israeli data in Israel, they count someone who has had COVID equally to someone who's been vaccinated within their passport type databases and whatnot. And

they make it optional for somebody to get an additional vaccine, but they don't recommend two vaccines for someone who has had-

Nicki: COVID.

Robb: ... COVID already. I am probably going to make one last little post in that. I'm going to talk about that, and that's going to be my last thing there. But this stuff is worth digging into and thinking about our cognitive biases. And I don't really know what to do about all this stuff at this point. When you have someone like Malcolm Kendrick tap out because he's like, "The data is garbage." And his main point was that he is going to start making mistakes because-

Nicki: Mistakes because the data is not good.

Robb: ... he's leaning on faulty data.

Nicki: Yeah.

Robb: Yeah. Okay. So we did a whole show. We can just wrap this up. We don't need to take questions, and we're good.

Nicki: We will move on. We'll do... Our T-shirt winner this week goes to Sr. JG, Senior JG. Thank you for consistently being a place where conversation can be had and real insight gained.

Robb: Cool.

Nicki: I thought that was pretty cool. Sr. JG, thank you. Send us an email to hello@RobbWolf.com with your T-shirt size and your mailing address, and we'll send you a Healthy Rebellion Radio T-shirt. And if you would like a Healthy Rebellion Radio T-shirt, you can leave us a review, and if we read your review, then we'll send you a shirt. The Healthy Rebellion Radio is sponsored by our salty AF electrolyte company, LMNT. Remember our Give a Salt program.

Nicki: So if you have someone who has made a big difference in your life, who shows up every day in your community in a big way, you can nominate them for the LMNT Give a Salt program. Nominate your local hero or team of heroes, be they coaches, trainers, firefighters. I'm sure there are a lot of firefighters right now who are very deserving of our LMNT Give a Salt program, or anybody who goes above and beyond and deserves a little salty recognition. You can nominate them at DrinkLMNT.com/GiveaSalt. That's drink L-M-N-T dot com slash Give a Salt.

Robb: Is it Give a Salt?

Nicki: It is. Give a Salt.

Robb: I just wanted to make sure about that.

Nicki: Okay. Question one this week is from Mary on immunodeficiency. "Hi Robb and Nicki. I love your podcast and have been listening on and off for a few years. You are the only health-based podcast that I still listen to since everyone has gone crazy this past year, and I highly value all the work that you both are doing."

Robb: She's going to hate this show.

Nicki: "So my husband has described me as the most sickly health fanatic that he has ever met. I catch every cold, have frequent sinus, bronchitis, yeast infections, strep, skin rashes, stomach flus, bouts of fatigue, and dizziness. I have tried every diet out there to feel better. I have your books, Wired To Eat and The Paleo Solution, so I'm familiar with carb testing and using a glucose meter. If I'm active and running 10k plus or hard intervals, et cetera, and lifting weights, I know that fast acting carbs like sugar are needed, or my recovery will suffer for days."

Nicki: "I use a manual glucose monitor to track this. Intermittent fasting and keto are both a no-go for me, as I will have disrupted sleep, poor performance, and fasting blood sugar levels under four millimolars per liter. And with keto, my LDL levels go up. I know everyone is so sick of hearing about COVID, but it plays into my question. I had been low carb for years, and in the most recent year, eating closer to carnivore with fruit and local raw honey. I have also had chronic low ferritin for years, even eating steak fried in a cast iron pan once or twice a day and avoiding grains and dairy."

Nicki: "I'm a personal trainer and runner and was very fit. I got COVID on October 30th to be exact, and it knocked my socks off, and I have never been the same. Energy crashes, days of extreme fatigue and dizzy spells, limited running performance. I have not worked full-time since. I was referred to a post-COVID pulmonary clinic, and I am showing slight blockage in my lungs. They were testing for autoimmune, and I surprised them with under immune, low immunoglobulin, IgG. We have recently been in contact with previously unknown family, and I found out that my half aunt has primary immunodeficiency."

Nicki: "I'm on the wait list to see an immunologist, but it could be months before I get seen, and I'm at a loss at what to do now. I have given up on paleo, mostly out of despair that anything is going to help. What was working diet-wise, the near carnivore, prior to having COVID no longer works. I did the DNAfit after listening to that episode of your podcast, and it has come back recommending moderate carb and protein, no celiac, et cetera."

Nicki: "And besides my low IgG and ferritin, all my blood work is great. So I'm not sure where to go from here, what questions I should be asking the doctors, and should I redo the carb testing, as my body seems to have changed? Should I join your group for the upcoming reset? Sorry this has been so long and rambling. I would greatly appreciate any insight that you may have."

Robb: Well, we always love having folks in the reset. And I mean, shameless endorsement, but given, what, like 29 bucks a month, and the resets and the research and the supportive community and someplace that you can post something like this and not get flamed for, how many different things could you get flamed for on the interweb for just posting a question like this? So we would love to have you, but by no means is it necessary. I guess something that... She's mentioning that things aren't working, but I don't know what that means.

Robb: Are there gut issues? Is their blood sugar swings? I will say this, that at various points when my gut has been off, like if I eat something that kind of throws me off, I just generally feel bad. And we have an Imodium question that's going to pop up here in a little bit, and this is one of the weird things that I've noticed, is that if my bowels are functioning and I'm kind of rocking the Bristol stool chart, I feel pretty darn good, and I will feel a shift. I'll get kind of foggy-headed, lightheaded, and then I'll get some gut rumblings, and I'll go poo, and things are on the loose side.

Robb: And it's just an if A, then B type thing. I don't know if that's electrolyte-driven. And I'm kind of rambling at this point. I'm not really sure what she should do at this point. I always cater things to, where are you now, and then what are you trying to do? If there's a possibility of just some genetic low immunity, then I think generally good diet, smart exercise, good circadian entrainment, everything that helps support that, is going to be really smart.

Robb: And that doesn't need to be paleo. It doesn't need to be keto. It can be a lot of different things, but I think as always, where are you now, and then what do you want to do? And then usually we can build some sort of a plan or a bridge in that direction. The fact that she asked about the carb testing makes me think maybe she's having some blood glucose regulation issues or something like that. And beyond that, I'm just not sure where to go. Again, and maybe someday we do spin up a call-in show so that we can-

Nicki: Can do some back and forth.

Robb: ... do some back and forth on this, but it'd be interesting to know what are the challenges currently, other than it sounds like she's feeling rough. There's probably some breathing issues.

Nicki: Some long COVID, it sounds like.

Robb: Long COVID, probably some low energy and all that type of stuff. I'm part of a couple of different research groups where folks far smarter than myself share papers and talk about this type of thing, and the two things that have really popped up is that the features of long COVID are a pro-inflammatory state, so all these interleukins and whatnot are elevated in a deleterious way, and low energy production. The ATP production story is compromised. And so on that inflammatory side, getting adequate omega-3s, maybe two grams per day of omega-3s, primarily from fish oil, EPA, DHA, adequate zinc. And then what was the final one? It was Omega-3, zinc, and one other thing.

Nicki: Vitamin D?

Robb: Might have been vitamin D. Vitamin D. Yep. And there were other things like inositol, cysteine, and stuff like that, that help. Turmeric. There's all these different anti-inflammatory compounds that can modulate these things. But those three things, the vitamin D and omega-3s-

Nicki: Omega-3s.

Robb: ... and zinc, there's definitely good, robust science on that. And then she mentioned that keto and whatnot is not really working for her. Maybe this is a case for putting in some MCT oil, because it can produce some ketone bodies. So we're getting some carbs so that she can rely on more of that glycolytic pathway so that there's some substrate there for dealing with that, but then it's producing some amount of ketones, so maybe we're kind of goosing the energy production on both sides of that.

Robb: And modestly elevated ketone bodies are anti-inflammatory too. So those would be my things to kind of noodle on in this. Think about, where are you at, where do you want to go, and then also recognize that long COVID seems to be a problem of overactive inflammation and also some problems with energy production. And with all that stuff considered, then we maybe have some options for engineering a process to get through that.

Nicki: And I know it's probably a big challenge because she's so used to being so active and lifting weights and running, but if you're not feeling that, I would do some lower level things. And this is where things like Kinstretch and FRC can keep your joints healthy, keep some stimulus to the tissue without being overly demanding, depending on obviously what you can tolerate and how fatigued you are. But I wouldn't push it on the exercise side. I would go up to that threshold, but don't do any burners. And you might not even be able to. You might not be feeling like you can. But definitely keep moving, but keep it in check.

Robb: Yep.

Nicki: Okay. Our next question this week is from Edrie. She wants to know if Alzheimer's is preventable. "Hi Robb and Nicki. I hope you guys are doing well. Thanks for all that you do. Your podcast is something I look forward to every week. I have a subject I'd love your insight on, Alzheimer's disease, specifically the prevention of it. My dad was diagnosed about five to six years ago at age 64, and we just had to move him to a memory care facility because he needs 24 hour a day care."

Nicki: "It's heartbreaking and terrifying to watch a loved one slip away, and now to see all the advanced stage residents, a glimpse of what's to come. It's too late to delay or improve my dad's disease, but I'm very interested in not spending my senior years living that way. Aside from maintaining a healthy diet, exercise, sleep, and managing stress, which are all things I prioritize, is there anything folks can do to prevent Alzheimer's? Are there any studies or research that you know of that you could point me towards? Thank you again, Edrie."

Robb: So one thing that's really easy and shows some remarkable promise in this story is actually nicotine. They've been studied in both gums and patches, and I posted a link for the show notes, and it shows benefit even when folks are in the early stages of the disease. And there's some thought that earlier application could be helpful as well. We definitely kind of see Alzheimer's... People generally refer to it as type three diabetes. There's definitely an insulin resistant feature to all this.

Robb: And so Edrie's talking about smart diet, lifestyle, all that, so really double down on all those types of things. Sleep is maybe as important as anything else in making sure that that's really good. But one thing that is out there that's really accessible and could be just used in the background and might actually improve your quality of life right now... I use nicotine mints pretty frequently, and I just feel better with them. I interestingly feel both more focused, but also more calm. It's not the caffeine stimulating effect that I get from coffee or a caffeinated tea. So that is somewhere that I would do a little bit of poking around.

Nicki: I feel like somebody in the Rebellion just shared a book title that was about Alzheimer's too. I think it's a relatively new one.

Robb: There's a lot out there. Yeah.

Nicki: Okay. I don't have it off the top of my head, but if I find it, I will include it in the show notes for the show on RobbWolf.com. Let's see. Our third question is from... I'm going to pronounce this incorrectly.

Robb: Jader (Jator).

Nicki: Jader, Jator, on ice hockey and sleep. He says, "I have hockey practice typically from 8:45 to 10:00 PM three days a week. This is a requirement, and I sleep, obviously, terrible on those nights, and it also shows objectively on my Oura Ring. I'm not in a place where I'm ready to give up hockey, but I would love your thoughts on how to mitigate the stress response as much as possible to catch a decent night of sleep."

Robb: I read this earlier and I had some thoughts on it, and then I just remembered a Huberman Lab episode, which I'm going to try to pull up here. But he just covered a piece on... hmm... Okay, I'll dig it up and put it in the show notes, but it was a recent Huberman Lab piece that actually looked at how to optimize muscular strength and hypertrophy. But part of what he talked about with that, and he's maybe talked about this elsewhere, it sounds like he probably has, but the physiological PSI, so two deep inhales through the nose, one deep exhale out of the mouth. Yeah. And really trying, deeper even than that on the inhale is what I got, and to begin doing those intermittently after a session.

Robb: This starts getting you into a parasympathetic state. So I think any type of box breathing, this physiological PSI, sounds like the Huberman Lab has dug into this stuff pretty deeply, so I would do some poking around in that. Also, one of the big challenges that people face doing exercise that late is our body temperature has to drop for us to be able to go into a deep state of sleep, really to sleep at all. And so this could be a case for a cold bath, cold shower.

Robb: Doesn't need to be bone-chilling, because if you just do something that is mildly cool, even if it feels modestly warm when you first get in, so long as it's below body temperature, you will get cold eventually. This is why people get shipwrecked in the Caribbean, they will die of hypothermia even though the water temperature is 86. You were trying to heat the whole ocean, and you will lose that thing. And so the cold bath or the cold shower doesn't have to be jarringly cold.

Robb: It just needs to be colder than your body temperature, and it needs to be long enough to bring your body temperature down. And then I would look at something like Doc Parsley, Sleep Remedy. Maybe in addition to that, some small dose melatonin, like a half a milligram or something like that on top of the Sleep Remedy. I think all of those things can go quite a good distance towards improving sleep.

Nicki: And you might even try some mouth taping.

Robb: Might try some mouth taping also. So physiological PSI, mouth taping-

Nicki: Cold shower.

Robb: ... cold shower and/or bath. The bath is honestly going to work better because you cover the whole body at once. And by cold, it doesn't necessarily need to be bone-chilling so that now you've got a super elevated heart rate trying to go to bed. Just needs to be cooler than your body temperature. And you need to feel cold by the time you're done with that, and then you go curl in bed and the usual stuff, blue blockers and all that type of jive, to help you with the wind down.

Nicki: Yep. Hopefully that helps. Okay. We're ready for our Healthy Rebellion Radio trivia. Our Healthy Rebellion Radio sponsor drink, LMNT, is giving a box of LMNT electrolytes to three lucky winners selected at random who answer the following question correctly. So Robb, recently, or on our nearly daily walks with the dog, we discovered a new to us type of berry that Google and iNaturalist tell us is... Oh no, I'm screwing this up. I don't

want to say what the berry is, but I did learn that Native Americans used it to treat the common cold and that people in Russia and Eastern Europe eat it to treat high cholesterol and high blood pressure. And so the question this week is, what is the berry?

Robb: It is the coveted chokeberry, which-

Nicki: Chokeberry.

Robb: ... apparently is a big, big staple in the big, big bear called the grizzly-

Nicki: The grizzly. The grizzlies like them too.

Robb: ... that is endemic to this area.

Nicki: Yes.

Robb: So chokeberries.

Nicki: And actually, they taste okay. They're a little astringent or tangy.

Robb: They are loaded with anthocyanidin, so all that stuff-

Nicki: And antioxidants, yeah.

Robb: ... that we like about blueberries, they are off the charts, loaded with them.

Nicki: But they have a really big seed, so it's not like a blueberry.

Robb: It's about 50% seed.

Nicki: It looks like a blueberry. Yeah. It looks sort of like a blueberry, but then half of it is seed. So I don't know, I'm thinking of collecting some and then somehow-

Robb: Trying to plant them?

Nicki: ... get the seeds out-

Robb: Oh.

Nicki: ... and then making some sort of a jam thing.

Robb: Jam, jelly confection?

Nicki: Yeah. So anyway, the answer to this week's trivia is the chokeberry. To play, go to RobbWolf.com/trivia and enter your answer, and we'll randomly select three people with the correct answer to win a box of electrolytes from LMNT. The cutoff to answer this week's trivia and be eligible to win is Thursday, September 16th at midnight, and winners will be notified via email as well as on Instagram. And this is open to residents of the US only.

Nicki: Okay. Carla has a question about benign paroxysmal positional vertigo, BPPV. She says, "I have recurring BPPV, and I'm wondering if you have any suggestions in terms of diet and exercise that will help with this condition. I've asked my doctor and she says I just have to live with it. I've done the Epley maneuver several times, which gives me

temporary relief, but nothing lasting. I'm a 51-year-old female and about 30 pounds overweight. Any insight you could provide would be awesome. Thank you for all you do."

Robb: It's interesting. Digging around on this, there's some linkage to autoimmunity, there's some linkage to insulin resistance, and there's also some literature that suggests electrolyte imbalances. Inadequate sodium may be an issue here. And the Epley maneuver is interesting because some people have noticed doing handstand work actually improves it because you're flipping yourself upside down, and your body, the valves in our venous side of our circulatory system, they work the muscular contraction and whatnot to return blood from distally to closer to the body.

Robb: When you get flipped upside down, they don't really work so well, so there's some other compensatory mechanisms that get trained to get comfortable with being upside down. And it's more like some physical therapy journals and stuff like that that talk about inversion being a potential benefit here. Again, there definitely seems to be at least some suggestion around possible insulin resistance.

Robb: And Carla mentioned that she's overweight, so this is one of those scenarios where I might recommend making sure that you're at that five grams of sodium per day level. But if Carla is overweight and/or hypertensive, then maybe that's not the best route to go down. So there's a couple of different things to play with on that, looking at metabolic health, playing around with that Epley maneuver type stuff even more, and maybe the electrolyte side. But there's a lot of moving parts on that, so it can be tough to pin down.

Nicki: And just paying attention to your blood sugar. The more you can regulate your blood glucose levels-

Robb: For sure.

Nicki: ... I think the more that will help too. And we are starting our reset here today, or September 20th, if you don't want to do the seven day carb test, so if you'd like to join us on that, we would love to have you. And our last question this week is from Tom on Imodium. Tom says, "I've heard you talk about low dose Imodium to help with loose stools. I take one half of a pill each morning, which is a quarter of a dose. Are there any long-term side effects to this? I recently switched to carnivore due to unresolved issues with keto. I did the keto masterclass last year and saw great improvements, so thanks for that and the content you put out on the regular. From Tom, a full-time RVer."

Robb: Nice. Tom, when you read the package insert around Imodium, it says, if you have any type of symptoms of loose stools longer than a week, to discontinue use and go see your doctor. But that generally is trying to cover the idea that folks may have some sort of an infection. That's my sense out of this. What has been lost in all of that is that for years, chronic use of Imodium has been recommended for a variety of IBS related issues. So it is in the literature. It's been used for IBS type problems.

Robb: Personally, I've been using it for like six years, at least if maybe not a little bit longer than that. Which one person doing it doesn't really mean all that much, but I think you find the minimum effective dose, you play to getting improved clinical outcomes and just feeling better, which the first question that we had, I think it was the first one, I mentioned that if I poo well, then I tend to feel generally good. And if I have some GI problems, then I get some kind of neurological problems there.

Robb: So the long and short is, I don't really see any type of long-term issues when you dig into the literature on this. Imodium has become really difficult to find in the form that we used to be able to buy a 200 count bottle for like six bucks, but Imodium is a type of opiate, but it generally can't go through the gut and be physiologically active and give people an opiate type high. People will do some kitchen chemistry to try to tweak that, and really high dose Imodium can cause people to have respiratory distress or to quit breathing, so you get absolutely no high out of it. You just die.

Robb: And I think they had like six people do this over the course of the past couple years, and so the FDA, like it does with a lot of things, just jumped on this with both feet, and now you can only buy a blister pack of like six caplets, and that itself is like eight or \$10, so the price has gone up a hundred fold because of all this. And again, I'm rambling, but the long and short is, if you really dig around on the literature with this, doesn't seem to be any issues with long-term use.

Robb: I assume that he's probably done some investigating, like does he potentially have a gut parasite or any other like really, like C. diff or something like that that could be causing the underlying problems. I think it's worthwhile to go check on those things just to make sure we're not covering up an underlying problem. But again, using myself as an example, I've done the screening for parasites, ova and parasite screens.

Robb: I've done innumerable gut microbiome tests, and everything looks pretty good. I got a little bit out of range on this, and you might want a little bit more there, but not really anything that would warrant this response that if I eat a giant green salad, that I am running to the bathroom afterwards. So that stuff, at a minimum, I ruled out I don't have C. diff, I don't have any of these other really gnarly things. And so what I've found is just using the Imodium to deal with whatever those symptoms are, that seems to be a net win.

Nicki: Cool.

Robb: Cool.

Nicki: Any other words before we wrap up this show?

Robb: I had a lot of words on the front, so I'll keep them skinny on the back.

Nicki: Keep the words skinny on the back. Okay.

Robb: Yeah.

Nicki: Well, thanks everybody for joining us. Remember to check out our show sponsor, LMNT. You can grab some salty goodness at DrinkLMNT.com slash R-O-B-B. That's Drink L-M-N-T dot com slash Robb. And remember to nominate your salty heroes for the LMNT Give a Salt program at Drink L-M-N-T dot com slash Give a Salt.

Robb: Cool.

Nicki: We will see you next week.

Robb: Bye everybody.

Nicki: Bye.

