

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. 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.

Nicki: 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+.

Nicki: Hello, hello. Welcome back.

Robb: Welcome back.

Nicki: This is episode 100 of the Healthy Rebellion Radio. Hubs, 100 episodes.

Robb: Will I look as good as this episode when I am 100? Probably not.

Nicki: You never know.

Robb: You never know.

Nicki: You looked this good when we were at 50.

Robb: There you go.

Nicki: Episode 50.

Robb: Fair enough.

Nicki: It's actually more than 100 because we've had something like 39 Salty Talks or so.

Robb: Yeah.

Nicki: But a hundred of these Q&As.

Robb: They're no longer really Q&As. They're kind of sort of.

Nicki: They are, we do some Q&A, we just kind of do some other stuff too.

Robb: That works.

Nicki: Yeah. Anyway, just wanted to give a highlight from the Healthy Rebellion 30 Day Rebel Reset, which is going on right now inside the Healthy Rebellion, this is the first week. We did the seven day carb test last week. This week is the week that we focus on the pillar of food. And one of our longtime rebels, Kelly, posted in here, actually, this was just this morning and she tagged it under mindset. And I just loved everything that she wrote about this.

Nicki: So I just wanted to share, because I feel like so many people can relate to some of these things here. So she said, her goals for this reset, "Number one, reclaim my consistency.

Between a divorce, international move, new job, a ridiculously time consuming course, I must take, eye roll, my life has been a stress bomb. Which brings me to number two, daily meditation. Shit storm or not, I have a ton to be grateful for that daily quiet time reminds me." And this one is so important. I feel so often life can get crazy and out of control and people feel like, "Everything's not going my way or not going how I want." But Kelly nails it on the head. We have a ton to be grateful for.

Robb: Yeah, and I don't want to digress too much into that, but I had a lot on my plate this morning, post birthday and all that, woe is me, but definitely have some work to catch up on. And there's just a lot of stuff popping up with LMNT and the Rebellion and everything. It's good, but it's also, I was standing there and I was like, "Do I skip the meditation or do I do it?" And I thought to myself, "If I do that meditation, I'm guaranteed at least 15 minutes of my day won't suck." And so I did it.

Nicki: Just 15 minutes?

Robb: I'm guaranteed that.

Nicki: Right, right, right.

Robb: It's a 0% possibility-

Nicki: I won't be as insulted by that comment then.

Robb: Now, I'm not saying that all of the rest of my day does suck, which is what you're reading into this. But what I had was a defensible beachhead of 15 minutes of my day that was guaranteed to be pretty awesome.

Nicki: And quiet time is what most people don't get enough of that. And so that's important.

Robb: I do it mainly because I enjoy it. I enjoy that time, even though sometimes it's hard to justify carving out that chunk of time, because it's like, oh, I need to get breakfast going and then get the kids motoring towards homeschool and then maybe there's jujitsu and then there's this and then there's that. And that's all great, it's good stuff, woe is me, first world problems. But the day starts getting stacked up. When you wake up and you kind of, in your head, roll through the day and you're like, "I don't know if I'm going to have 15 minutes to practice guitar today" or to do some of these other things that I want do for personal enrichment.

Nicki: That are restorative and enjoyable. Yeah. Totally. I get it, I get it.

Robb: Okay. Back to-

Nicki: Back to Kelly's post. Number three, "M f-ing protein. When I weigh and measure, I realize how I both undereat and don't get enough protein. This was the key to my success last year. It's so simple and satisfying, but it is the lesson I keep needing to relearn."

Robb: Don't we all.

Nicki: Don't we all. And number four, movement. "My favorite part and what I let get away from me last to fall, the job will not be there forever and gives zero shits about my health. That is my responsibility and I must make it a priority every damn day, one foot in front of the other, day after day, reclaiming my consistency."

Robb: Nice.

Nicki: So just loved it. She touched on just some very important things that I think everybody can be remind and implement and that every damn day thing, it's true, whatever it is that you're wrapped up in, or we all get kind of wrapped up in and life kind of sweeps us along, those things give zero shits about our health. We have to make that our priority.

Robb: Nobody and nothing else will. Yep.

Nicki: Yep. Okay. Let's see. We've got a couple of news topics to chit chat about. This first one. Go ahead and click on it because I want to read some sections from it. This is a British-

Robb: You're going to have a loud video playing here in a second.

Nicki: I hope not. It didn't play for me when I was reading it earlier. This is from GBnews.uk. Face masks make people look more attractive, this new study says. And they had 43 female participants were asked to rate the attractiveness of the man in each state on a scale from one to 10. And so they had men in either partially covered by a cloth mask, a surgical mask, a book and not covered at all. And it turns out that the surgical mask won out. And so the studies authors are saying the results run counter pre pandemic research, where it was thought masks made people think about disease and that the person should be avoided. But the current research shows that the pandemic has changed our psychology in how we perceive the wearers of masks. When we see someone wearing a mask, we no longer think, "That person has a disease. I need to stay away." I'm going to scroll up a little bit.

Nicki: This relates to evolutionary psychology and why we select the partners we do. Disease and evidence of disease can play a big role in mate selection. Previously, any cues to disease would be a big turnoff. Now we can observe a shift in our psychology, such that face masks are no longer acting as a contamination cue. Blah, blah, blah, blah, blah. And scroll down a little bit more.

Nicki: Okay. Yeah, I think that's the gist of it. She also added, or Dr. Lewis also added, that the increased attractiveness of a person in this study's case, men, when wearing a surgical mask could be attributed to the association we make between healthcare workers and blue masks. So seeing somebody in a mask makes us feel reassured, and we have a more positive outlook on the wearer.

Robb: And just because this is audio only, there's a clothing company, Ivy Rose, that has all kinds of wacky stuff in it. And one of the ads they just had was masks for kids in fun animal faces so the kids can have fun animal faces, which I think is great around Halloween and probably not wonderful as a new normal. But I don't know. What do you think, wife?

Nicki: Okay. It makes sense. In the past we might have been selecting for a mate that didn't have some sort of overt disease. But is two years really enough to shift our psychology on the selection of a mate?

Robb: Well its kind of funny. So this is like GB News. It's some sort of schlock news site and the suggested reading, it's a mix. Eat your oatmeal every day. If you need to kill time on your computer, this is a cool way to do it. But then the new face mask that's sweeping America, is it time for a long haul mask? Like this special Israeli mask?

Nicki: Of course, these are other articles that overlay. They're trying to get you to keep clicking and stay on their site. But let's talk about evolutionarily, when you're choosing a mate, what are the things you look for? You look for signs of health, obviously. You want somebody who looks strong, muscular. I feel like facial features like jawline, eyes, smile, teeth, all of these things that are covered by a mask play a huge role, a huge factor in someone's attractiveness. And of course, personality and sense of humor and intelligence and all of those things too. But if you're looking at just physical attributes, most of what, I don't know, I guess you could have a really strong, fit, I can do, man looking like strapping guy with a mask on.

Robb: If your traps go up to your ears and you have the right clothing on, then yeah, you can be quite impressive. Think about Bain in the Batman film where he's got a metal mask on basically. He's still pretty impressive. He's kind of shirtless too, or some sort of BDSM type outfit on. But there are these whimsical little commentaries that it's like there's this many muscles to smile and that many more muscles to frown, I forget what the number is. And I don't know if they're true at all, but the information conveyed from the nose down with smiles and frowns. And also, it's the integration. It's both the body language and eyes and the facial features that conveys so much information.

Nicki: It's the whole thing. And then like this just totally popped into my head, but we're listening to Harry Potter, The Golet of Fire, the audio book, and one of the characters, what is his name? The dark wizard with the school.

Robb: I think Kaskarov or something.

Nicki: Kaskarov. She describes him as smiling, but the smile does not reach his eyes.

Robb: Right, which tell you so much.

Nicki: The whole face is necessary. And then as another aside, on the flip side, who are these women that participated in this study? Because you could also imagine a similar study being done where the women were more clued into some of the early research that masks don't work. And so maybe viewing a man in a mask makes me think, oh gosh, that guy either is not that smart, not up on the science, he's afraid. Do I want a fearful mate, of this particular pathogen? So I don't know. It's just one of these news pieces that kind of struck a chord.

Robb: In tiny, tiny number and super subjective and all that stuff. But here's maybe one thing to consider in closing on this particular piece is prior to about two, two and a half years ago, if one walked into a convenience store, restaurant or bank wearing a mask, you would probably get shot and or arrested because you are trying to hide your identity. And how we had such a profound shift that now this is do it all for the greater good and that there's some sort of like hidden boon in this that like, "Oh, I never knew how attractive someone could be if I could only see their eyes."

Nicki: What happens if you're so attracted by the person in the mask, you can't take it off, let's go in the bedroom, but leave your mask on. Take everything else off, leave your mask on.

Robb: That was suggested too, in fact. So I don't know.

Nicki: I don't know either.

Robb: Maybe we should probably create some categories and this might be likely signs of the end is nigh, something like that. And then would you call the next one a wee ray of hope.

Nicki: I think most of our audience has followed Vinay Prasad to some degree. We've certainly talked about him a bunch on the podcast. This is a thread that-

Robb: Twitter thread.

Nicki: A Twitter thread. And obviously, we'll link to this in the show notes, but the whole thing is just brilliant. And so I think I'll read maybe not all of it, but a good chunk of it. And he says the quotes around I'm done with COVID. So quote, "I'm done with COVID," unquote is short for quote, "Continuing draconian restrictions at this moment is inflicting far more damage on vulnerable populations, especially kids than benefit. And I will no longer participate in your inability to consider trade offs."

Nicki: And then he goes and says, "Vaccines have been widely available for anyone five and up, an unvaccinated teenager has risks lower than a vaccinated adult. Across this country, people are opening up and returning to normal life while some liberal elite Zoom based pockets refuse to. School closures are poison. They were never proportionate to the risks kids faced. They were always in manifestation of adult anxiety. Same goes for kids masking, which has zero randomized controlled trials. It's a stain on science. Moreover, the US went beyond the WHO down to two years old. So we're masking two year olds, which was just absurd. Asymptomatic testing, prolonged quarantines, these fuel anxiety and lead to social societal disruption with negative externalities, whether they will do anything to bend the pandemic spread is unproven and unlikely. This virus is not going away and we will all eventually be infected multiple times in our lives. Even St. Anthony of Fauci said as much, but a powerful contingent of zero COVID devotees believe that it might. And I worry, they are taking up deer hunting." Blah, blah, blah. Yeah. Anyway.

Robb: And deer hunting is because in theory, there are some reservoirs similar to how influenza can have some animal vectors, including swine and fowl, there's a thought that there may be a deer reservoir for COVID, and this is being suggested as one of the possible vectors for-

Nicki: Should we get rid of all wild animals?

Robb: And this also plays into climate change to some degree because deer omit methane

Nicki: So do muskies, and we've talked about that before.

Robb: Yeah. We've danced that dance before. Yeah, it's ridiculous. But there are people that were one day hunters are evil, horrible people, and now there are calls for why doesn't somebody go out and eradicate these deer because they are a potential reservoir of COVID.

Nicki: I wonder what the knock on effects of eradicating a species of animal would be.

Robb: Well, we survived passenger pigeons.

Nicki: Which country was it early on that exterminated a bunch of, was it ferrets or mink? There was, like early 2020, I feel there was a population of-

Robb: Well they didn't exterminate. They cold many of them because they thought that they were a possible vector.

Nicki: Let me see.

Robb: He has a nice one. What can we do? We can focus on elderly and vulnerable people. We can administer boosters to them. They're still substantially unboosted. The data that these further lower hospitalizations at these ages is good.

Nicki: But not in young men.

Robb: But not in young men.

Nicki: Let's see. But further disrupting normal life will strain the mental health of those who are already at the breaking point, will destroy the lives of marginalized and vulnerable children and serves no purpose other than smug moralizing. And it will also cost elections. So I'm done with COVID is the honorable, equitable, altruistic, egalitarian, pro-science message that we need right now to combat the delusional thinking that ignored trade-offs for so long would have us live in a bunker forever.

Robb: I'm liking and retweeting that right now. Yep.

Nicki: Yep. So anyway.

Robb: So that's a good one.

Nicki: Yeah, definitely positive. It definitely seems like the narrative is shifting. Vinay has been a very vocal person throughout this pandemic, kind of a sane one in the mainstream more or less. I know Heather and Brett were railing against a lot of people who have been in the COVID fear porn mode up until literally like this week, last week, now that it's the safe and okay to say that they're done with COVID.

Robb: They licked their finger, the winds have changed. It's like, "Oh, maybe I can come out with my two part series about why-"

Nicki: Why I've been so moderate throughout this thing.

Robb: No, they don't even address that. They're just like, "Here's my stake or my line in the sand. I support vaccines, but I don't support mandates." It was one that I saw from a person that came out of the gates blazing hot on COVID when this individual thought that COVID would kill Z. And then when it became obvious that being metabolically healthy and adequate vitamin D was probably a pretty good hedge against this, then all messaging around this topic disappeared until it's become politically expedient to be like, "Hey, we need to start winding this stuff down and people have gone too far and whatnot." But Vinay was early in asking some thorny questions seems like a really wonderful person. When you listen to his videos, he just strikes me as like a nerdy, wonderful human being. Very sincere, very thoughtful, seemingly. I really do think a lot of that comes through, particularly when somebody's just kind of breaking down scientific analysis.

Robb: I come across as a cranky prick and that's pretty accurate. But we were still in Texas when I remember seeing some stuff where Vinay was like, "Hey, what's the deal with this?" And then he just got mauled on Twitter. And he had a little commentary around that, where he was like, "Oh, this was my first public execution," around the Twitter

sphere and whatnot. So there have been people just asking questions since early on and trying to... I get so prickly about, oh, it's balance or this or that. It doesn't need to be balanced. It's just truthful. It doesn't matter if it's fucking balanced. If you ask enough questions and are willing to go with where the data leads you and you don't censor the process of question and answering, then you get to good places. And again, this whole thing of when have the good guys been the censors?

Nicki: Throughout history.

Robb: Throughout history.

Nicki: Never.

Robb: Not really ever. I was seeing some things that in the US, during World War II, there was still a contingent in the US that thought that we shouldn't be in the war at all, which I think that an anti-war movement is always something that's kind of there. And so they came down on those folks pretty hard. And there were some other elements that were shut down pretty hard. Post World War II, when you think about McCarthyism and the fight against communism, which I think communism is an abject evil. And I would challenge anybody to give me a good run about how it's not. And it's not just that we haven't done it quite right yet. It's a broken ideological framework if you're operating at anything above a hunter gatherer size group of people where everybody is accountable to everybody else at that level, communism's the bees knees.

Robb: But the way that it was tackled in going after people in Hollywood and stuff like that, it was horrible. And it is identical to what's happening now. And at that time, it was this kind of right leaning horribleness. And it's just ironic that we have this very progressive crowd that is incredibly comfortable with censoring people, deplatforming, recommending that medical treatment be withheld from them. Where two years ago, healthcare was a right. And now it's a right but only if you're vaccinated.

Nicki: Only for the good people.

Robb: Only for the right people. So it's interesting. And Vinay Prasad deserves a high and full margarita toast for the work that he's done. It can't have been great for his career. He works in kind of a Bay Area, Silicon Valley hospital. I suspect he is not super are popular around work. Maybe he is, maybe there's some people that in bated breath are kind of like, "Thank you for doing what you're doing," and then they scurry away from him it before they get attached to him.

Nicki: That's my thought. I feel like there's probably a lot of people who appreciate what he's doing, but they're unwilling to put themselves at risk. Right? So this is where the people that are willing to risk their reputations and ask these questions and put them out there, people who have been doing it since the very fucking beginning of this whole thing, not just the people who are finding it.

Robb: Politically expedient.

Nicki: To do so right now. Yeah. Yeah, for sure.

Robb: Okay.

Nicki: Okay. Also, just funny that on that same Twitter page, I'm seeing all of this stuff about Neil Young because he wanted Joe Rogan to be pulled from Spotify.

Robb: I don't think Neil's that type of gravitas.

Nicki: Kim in the Healthy Rebellion, she posted a picture of a Google search of who is Neil young and there's like nobody searching that until yesterday. And then it's like spiked to millions of searches because a lot of people don't know who he is. Yeah. That's funny.

Robb: Yeah. I have nothing else to say on that. Nothing good.

Nicki: Nothing good. Okay. Let's see. It's time for our sponsored ad. The Healthy Rebellion Radio is sponsored by our salty AF electrolyte company, LMNT. And Robb, I was hoping that you would tell everyone your super secret recipe for snowboarding day hydration that the whole family loves.

Robb: You really want me to share this? No, I'm kidding. Nicki looked at me like, "Oh shit, I didn't expect this."

Nicki: It's your super secret recipe, but it's not like it's-

Robb: It's not that super secret. So we have a thermos, nice insulated thermos. It's a liter and a half. So this is how I brew this thing up. I do one liter of French press decaf coffee because the kids are drinking this. I pour that into the thermos. And then I put two chocolate salt LMNTs. I do four packets of Stevia. How many of those, wife?

Nicki: Four.

Robb: Nicki sucks at properly using sweetener from Stevia.

Nicki: I don't like to add additional Stevia to things typically Robb does.

Robb: Because Nikki likes things to suck.

Nicki: And so this is an ongoing like thing. How many packets, babe? Four.

Robb: And the kids are like, "This is amazing." And I ask Nick, I'm like, "How do you like this? Oh, it's really good. Yeah." It's because fucking use a proper amount of sweetener in it. So it's actually like hot cocoa, not like eating a 100% cocoa bar and being like, "Oh yeah, this tastes amazing," and you're just like, I could be eating feces and not know the difference here.

Robb: So anyway, so a liter of French press brew, decaf coffee. You can clearly do caff, if you want to do that. Two chocolate salt LMNTs, four packets of Stevia, a quarter cup of whole cream. And you could do more than that. I'm sure it would be just fine. And I shake that up and then I put another half liter of hot water into that whole thing. I break it up that way so I can really thoroughly mix stuff. If you fill your container up at the top, if you've ever had a chemistry class and you're trying to mix your volumetric flasks and you filled your volumetric flask to the top, it's hard as hell to do that. So I fill it basically a little more than two thirds of the way, mix it thoroughly, then add the hot water, put the cap on. And it's awesome.

Nicki: It is. It is Rob. Rob's pretty detailed oriented about that whole process.

Robb: Was that more than you wanted?

Nicki: No, no, it was perfect.

Robb: Okay. Giving me shit, coming and going today, man.

Nicki: But yes, hydration, even when it's cold out, even when you're in the snow is very important. You can grab your chocolate salt for your winter hydration needs or any other flavor at drinkLMNT.com/Robb. That's drink [LMNT.com/Robb](https://drinkLMNT.com/Robb). And I'll just put another plug in here for the Give A Salt program. Be sure to nominate the heroes in your life for the drink LMNT, Give A Salt program, go to drinkLMNT.com/giveasalt and we will hook them up.

Robb: And you will end up getting hooked up too. I'll just let that one drop. So literally this is like a win-win. If you know somebody who doesn't suck and they're doing and good work in the world, send them some salt.

Nicki: There you go.

Robb: Bam.

Nicki: Okay. We've got three questions today. Our first one is from Chad and he is wanting to know if DNA based diets are good science or a rip off. Chad says, "First, got to say, I absolutely love you two. Informative humor, frank discussion, what's not to love. I've been following for quite a while now and have no plans to stop. Started listening to The Paleo Solution back in 2010." And he's still here, so thanks Chad. Appreciate it. He says, "I was wondering what are your thoughts on DNA testing to figure out your ideal diet? An ad for XXX popped up, so I was checking it out and it made me wonder if such a test has any legitimacy or is it just a cash grab?"

Robb: I don't know that I would call it a cash grab. I haven't done a massive amount of these. I've done maybe five different companies. I will say that it's interesting. And I'm going to mention a few names, not really to beat up on them or not even really to necessarily endorse them, but just as examples. And so like within 23andMe, my recommended diet is high carb, low fat, nearly vegan. And I would probably die on that. And then when I've done some more targeted stuff like DNAfit, which is a UK based outfit, according, and in interesting aside though, within 23andMe, they gave me like a 300% higher likelihood than the average population to be celiac, which it seems to be spot on. DNAfit identified the celiac genes. So I think that that's all pretty low hanging fruit.

Robb: But it did recommend a low carb diet for me. It recommended no more than 15% of total calories from carbs. And I think that's pretty accurate. I don't know. I haven't seen enough people go through it and having a battery of a hundred clients that I'm working with and I've got a spectrum of people who thrive on low, medium and high carbs. And then they do their DNA analysis and man, you happen to be a medium. And that's what we arrived at. So I just don't know how good any of this stuff is. I've been super underwhelmed with the gut microbiome testing. And it was uBiome that ended up just folding up shop and just kind of bullshit. And I've just seen a lot of the gut by testing like for which is kind of peripheral to this, but I clearly still have some stuff going on with my gut.

Robb: But the interesting thing is it doesn't appear to be microbiome related or at least it's not trackable with current technology. So I don't know. And that's a whole other layer to this thing where the microbiome folks will say, "Oh, your microbiome is way more important than your genetics." And I don't know if that's 100% true, but they're definitely a factor. Like people who have celiac gene propensity, if they have the right microbiome, they may never develop celiac and may be able to consume gluten their whole life with no ill effects because the type of bacteria are able to break down the pro

endopeptidases that break down gliadin and all the other gluten type proteins. It doesn't matter what your genetics are. And then there's even other steps there, like you may be lactose intolerant. But if you come from a culture that produces lots and lots of yogurt, then you may be able to consume dairy with no problems on the lactose side.

Robb: So I don't know. There's been this hope and a dream. There's been this hope around chemotherapy and all kinds of things, we'll do your DNA test and then we'll be super targeted. And what I find now is that people are like, "Well, the DNA didn't tell us what we need to know." So the genomics didn't answer the question. Now we need to get into the proteomics, which is a whole other layer of complexity. And maybe at some point with a massive quantum super computer that can crunch massive amounts of data, you'll be able to input all this stuff and it can tell you eat whole largely unprocessed food which also it's kind of like, you're just not going to be able to get away with eating tons of processed food for extended periods of time and stay healthy.

Robb: I guess if you're in this, like if it fits your macros world and you're able to eat 1,800 calories of highly processed food, you might be able to do that, on an indefinite timeline because you're simply not overeating. And so you're mitigating some of the deleterious effects. But that seems rough and difficult. So yeah, again, I don't know that I would call these things a rip off, but I think that the claim that they're as granular as what they are is really suspect if you haven't done any dietary tinkering, how do I want to say this? I think you'd be better off just whole, minimally processed food. And God forbid, but something that looks like a classic paleo type diet where it's not necessarily high carb or low carb, it's kind of middle, it's kind of balanced protein, carbs, fat, and you just start there.

Robb: And we've removed hyper palatable foods and highly processed foods and a lot of the immunogenic foods. And then just start there and then start tinkering and fiddling based off of what your response is and what your goals are. I think that's pretty legit. But that's also kind of hard to give people a shwanky test to do that. Or maybe we should just do the testing and then recommend that regardless of where people spit out on the back end.

Nicki: It's like doing the eat right for your blood type diet, but everybody eating like an Okay?

Robb: Yes. Yeah, yeah. Which is something that I used to observe.

Nicki: Yeah. All right. Question number two from Dan, he has a question on long term keto. "Do you see any real hazard to long term keto? I've heard of thyroid and other hormonal issues being possible, loss of ability to digest carbs, developing food sensitivities, et cetera. If so, will a one day per week carb refeed help with this?"

Robb: So maybe six years ago, I would've been more conservative in this. I'd be like, well, some people do okay. Some people will do less well. And I still think that that's true. Clearly there are some folks that just aren't cut out to thrive on a low carb or a ketogenic diet. But in hanging out with Tyler and Luis and really figuring out how critically important protein is, I think that that's a big factor. So are folks undereating protein, is a beginning piece, which is easy to do in general. And lots of people do it in keto land. Sometimes because they're, I think mistakenly trying to keep their mTOR low and they're doing all kinds of fasting and all this stuff.

Nicki: Fat bombs and just really doing like a really fat centric ketogenic diet.

Robb: Fat centric keto, which I don't see folks thrive on that long term. The protein deficiency, I think is a big problem. But then this other piece is the sodium and electrolyte piece that I've discovered. In so many of these issues, the thyroid and hormonal issues and whatnot, when you look at possible mechanisms of what's going wrong there, lo and behold, it looks a lot like sodium deficiency. And not surprisingly, if you address sodium insufficiency, I think most of these thyroid and hormonal issues get addressed. There may be again, some subset of people that just a ketogenic or low carb diet is just simply not a good fit for whatever reason. But I think that again, five, six years ago, I would've said that pool of people is potentially larger than what it is.

Robb: And especially as people age, I think finding a maximum effective carb intake for people is not a bad idea because I do think to some degree, people lose the ability to deal with carbs as they age. Maybe in a more hunter gatherer standpoint, we don't see that. Or maybe because of cyclical food consumption, we see some mitigation with that. I just have never seen the carb refeed approach work for anybody. It just turns into pizza and donuts and ice cream. I was chatting with John Welborn and Tyler and Luis about this. And what we found was that people would barely be in ketosis, on one of these kind of programs like anabolic diet type programs. They would do their carb refeed. And even if they did it, quote, clean, with sushi rice and stuff like that, these people were typically not back into ketosis for five of the seven days.

Robb: Then they were barely back into ketosis and then they did another carb refeed, and rinse, lather, repeat. I have been tinkering with, and Tyler and Luis who have coached many, many more people more long term and consistently than I have, I've seen great efficacy with a targeted ketogenic approach where people drop in 10 to 20 grams of carbs in that peri-workout period like lifting jujitsu, endurance training. And that can end up being a nontrivial amount of carbs, particularly multiple times a week, if you're training reasonably hard. So I think that that is another thing that could help mitigate some of these effects.

Robb: But I honestly think protein and sodium are the big factors of making long term low-carb or keto work. Then there's a little bit of individual variation. But then above and beyond that, it's just maybe you need a little bit of targeted keto around training periods. It's worth mentioning that what constitutes a ketogenic diet for different folks, if people are training really legitimately hard, the person may eat 100 or 150 grams of carbs a day and still be in ketosis, but they're typically targeting it around the exercise portion.

Nicki: Okay. Our third question is from Art on essential tremor. "Hi Robb and Nicki. I heard you briefly mention essential tremor in episode 96. Me too. Supposedly this condition's aggravated by eating cooked meat because of a neurotoxin, harmine. Might there be a supplement or some other substance out there that would take the edge off harmine? Can't wait to hear you go into depth on this. I love you two. Thanks for being so real in this chaotic world."

Robb: Thank you, Art, and thank you for submitting this. And this is again why I like keeping a finger in, if not social media, just interacting with people instead of being in a bubble, because I've been researching this essential tremor for close to a year, and I had not heard any of this stuff. And I don't know how I had missed it, because it's on the same websites I've been looking at different topics was this harmine, heterocyclic amine conversation. And I had not seen anything on it. And it's very interesting. I'm going to post some links in our show notes here and Art, this is going to be something that is just going to be in development because I do think that it's a big deal here. But some of the links that looked at considered is the harmine produced differently based off of the way that food is cooked.

Robb: And it seems like pan searing things, basically higher temperatures seem to be potentially be more problematic with the production of at least this particular type of heterocyclic amine. Although that wasn't entirely crystal clear, depending on the research that I looked at, people can also produce this in the gut after consuming food in general. It's also worth mentioning that things like coffee and sauces, like barbecue sauce and stuff like that contain harmine. So I think this may be one of the other reasons why I personally seem to not do well with a lot of coffee and even decaf coffee. I've noticed that my tremor stuff is better if I do tea versus coffee and it may be because the coffee just is yet another vector for contributing this stuff.

Robb: But one of the pieces suggested that it didn't appear that people were consuming differential amounts of harmine based off of these people who had essential tremor syndrome. It seemed like the severity of the tremor was not tied to any specific intake level. So if they were eating a lot of meat versus not a lot of meat or meat that was grilled versus, didn't seem to be a lot of correlation there. So it was thought that there may be some endogenous production, like basically this stuff's being produced in the gut, which I have not really dug into yet. And so the other piece of this is providing means for more effective detox. And without a doubt, one of the challenges that we do face as we age is a loss of hepatic detoxification capacity. So we detox a host of things in the liver and some of those pathways can get compromised over time. And so I think some things like N-acetyl cysteine, alpha-lipoic acid, milk thistle extract, those things have proven efficacy in improving hepatic detox pathways.

Robb: There's also, and I didn't have time to thoroughly read this paper. I just kind of read the abstract. But looking at heavy metal toxicity in conjunction with this harmine. So the harmine may not be a problem unless you have heavy metal toxicity as well and lead toxicity in particular. And I grew up in an apartment that was old and I remember fiddling with like the flaking paint in my bedroom and all I used to cast lead bullets in my youth. And I worked in a lab, so I may have some heavy metal exposure. I've kind of suspected that for a while anyway, but I'm going to invest some time into looking into that. So could be that the production is an issue. Could be that production from the food side. Could be that we produce it in our gut. Could also be that we are not detoxing these heterocyclic means properly. And it could also be that this is a co-factor with heavy metal toxicity. And I don't know any of that stuff because I just started looking at this, this morning when Art's question came in. So we'll dig into it more.

Robb: I will do some sort of a big piece on how I'm trying to manage essential tremor and this will clearly be a big piece of it. And again, it's ironic because I've been digging and digging and digging and into this stuff. And I've been on some of the essential tremor websites. I've been on them and I thought I had looked at pretty much everything on there, but they had a subpage on this harmine stuff and had never seen it. So Art, thank you for reaching out. And this is again, why to the degree I get better at doing this stuff. It's because people ask good questions. The hive mind is powerful. I maybe have a little bit of a comparative advantage of getting in and then sussing through this material. But no one person clearly can know all of this material. And I didn't even think to ask about this stuff. And I've been on the websites that I found information on this, but I was looking at other things and didn't find this stuff. So thank you again.

Nicki: Indeed. All righty.

Robb: Well, that was profound.

Nicki: I tend to have a lot of profundity.

Robb: You do. Yeah.

Nicki: Let's see.

Robb: Should we palpate the profundus? That's like a post birth thing.

Nicki: Palpate the profundus?

Robb: The fundus.

Nicki: Oh, okay.

Robb: It helps to minimize is bleeding and whatnot, but that's a whole different story.

Nicki: I don't remember that.

Robb: You were pretty gorked by that point.

Nicki: Man. I remember other things, but I don't remember that part. Well, I don't know what else to say.

Robb: Probably shouldn't say anything.

Nicki: Probably shouldn't say anything. Thank you all for sticking with us for 100 episodes of the Healthy Rebellion Radio and all the episodes you stuck with us before with The Paleo Solution podcast. And wishing you all a very wonderful weekend and upcoming week. Be sure to check out our show sponsor, LMNT, and nominate your everyday heroes for our Give A Salt program. You can do that at drinkLMNT.com/giveasalt. And you can submit your questions to robbwolf.com on the contact page. And I guess if you're in the Rebellion, we'll see you in there. And if not, we'll see you next week.

Robb: Take care everybody.