

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 a 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. 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: Howdy rebels, howdy wife.

Nicki: Good morning, everybody, or good day.

Robb: Good day.

Nicki: Good day. Welcome back to another episode of The Healthy Rebellion Radio. How are you doing, Hubs?

Robb: Pretty good.

Nicki: You are looking nicely shorn.

Robb: Oh, I have a super hot hairstylist who takes care of me occasionally.

Nicki: That occasionally wields the clippers?

Robb: Yeah.

Nicki: And that happened yesterday. Yes?

Robb: It did. It will make me more aerodynamic for the drive to Montana.

Nicki: I don't have anything.

Robb: No pithy rejoinders?

Nicki: No rejoinder for that one. Nope.

Robb: Pithy or otherwise, cool.

Nicki: Yep. Let's see, what do we got going on today?

Robb: You know what, I will mention something really quick. I posted a piece actually a while back, talking about comorbidities with SARS-COV2 and specifically blood glucose levels. I had a guy pop up on Twitter. I don't spend much time on social media, actually very, very little, but the guy is in this terrain hypothesis. I won't call it terrain theory because theory suggests that there's more to it than there really is, but this terrain hypothesis company basically said, "Prove to me that there is any virus and that it's singularly causes any disease." It's laying out this Procrustean bed. You have this person that lays out stuff in this way where they've already defined the terms in their own way. And then you're supposed to Cowtown to that. And I got pretty frisky with the guy.

Robb: One of the things I forget how it came out, but I basically said oh, the proof is in my pants, come look for it. And some stuff like that. But I'm debating on doing a piece around this. I dug into the terrain theory material and some of it is spot on in that it's kind of obvious, but it's obvious in a way that really hasn't been well incorporated into kind of mainstream health. Our basic health we'll have determinants on the way that disease processes occur, particularly infectious disease individual variations like genetics, epigenetics, gut health, like all of that stuff matters without a doubt. And I think that we have undervalued the importance of those things. Like there was just a piece that virtually nobody in this story appears to have died from the COVID process who didn't have some other comorbidity with it. Like clearly there's probably exceptions to that. We talked about this in the healthy rebellion the other day, where there's a number of physicians in there and when they do their initial intake with folks they're like-

Nicki: Do you have any preexisting conditions? And they're like, no, I'm healthy,

Robb: No, am healthy. And they're like, well, are you on any medications? Yes. For blood pressure diabetes and all this other stuff.

Nicki: So in the average person's mind because diabetes and high blood pressure are so common, they don't consider that themselves to have a health problem. That's just sort of normal and what happens as you get older. And so I think that's also part of what we're seeing, where all these people are saying, oh he was perfectly healthy and then he died. But a lot of people consider having hypertension and diabetes to be healthy.

Robb: And all kinds of controversial stuff. And I'm just over like the backlash and the anger. And why do we still have that open. I'm debating on whether or not to tackle this stuff. I did a big piece on early in the Corona spin up around 5G and whatnot. I'm torn on this because when I'm thinking about it, what's involved with my last comment to this guy was, hey man, best of luck. I'm going to block you now because I'm done. I don't usually block people too often, but we're done. I would really recommend just doing junior college microbiology class, because you will answer 80% of the questions that you're putting on me. And also I invited the guy to come on the podcast. I'm like, come on the podcast let's have a free-flowing discussion around this and you lay out your case and I'll lay out my case but this back and forth on Twitter with 140 characters or whatever, it was bullshit.

Robb: Like I won't play that game anymore. The guy refused to do it. And it's interesting, and here's a funny thing in part of the reason why I wanted to share it is, I have railed against cancer culture and people wanting to curate, truth and all that type of stuff. And God damned it. I didn't want, it's like shut up down this whole like terrain theory deal that viruses don't exist. And I mean, it runs the gamut and he was bringing up some stuff around like electron microscopy of viral particles and whatnot. And there's a bunch of nuance and detail in that. When proteins and other things exist in living organic systems, it's part of cellular matrix, there's water around it and whatnot. And so it's confirmation structure is different because it's evolved to be in a cell with an aqueous environment around it, or maybe as part of the lipid bi-layer or something.

Robb: So basic chemistry is designed to exist here. And then when we do an electron microscopy, it's in a vacuum, it's been desiccated. And then it gets bombarded with radiation that Canon does potentially damage some of the molecules. So it's a completely different process. And it's been ages since I tinkered with any of this, and I'm probably forgetting some details on it, but this is one of these situations. This guy seemed bright, he's got some sort of a consulting practice around technology companies

and stuff like clearly kind of an autodidact and whatnot, but there is also kind of a reality that is complex enough that if you don't put in just some basics, if there aren't some fundamentals in place, then you could look at some of this stuff and start drawing some conclusions.

Robb: And so, I don't know, I'm just kinda throwing that out to the general masses is this worth tackling, would it be better to maybe get like a round table of people and try to drag some of these terrain theory specialists in. What are you wanting to cover? How do you want to talk about it? And then so we can have some back and forth and screen sharing and the whole nine yards, because it is as annoying as this guy was. And is it did admittedly dangerous, that information can be dangerous, but keep referencing the dark horse podcast. Brett and Heather were talking about Kary Mullis, who was the developer of PCR who got a Nobel prize for it a brilliant man early in the HIV/AIDS epidemic.

Robb: He was suspicious that HIV, the virus cause AIDS, the clinical manifestation of that disease process. He eventually changed his mind, but he was a very vocal opponent to do this idea. But also being, being a scientist, like over the course of time, like data started accumulating and it's a very different thing dealing with viral infections, as far as like the whole Koch's postulate and stuff. It doesn't work exactly the same way that you do with like a bacterial infection, but you can tick enough of the boxes reasonably. So I don't know, I'm just kinda throwing that out there, I do think that there would be an opportunity here. I think to help people better understand, what is it about terrain theory. That's actually on point like, yes, being healthier is better, but part of what these people are doing.

Robb: And I think I've mentioned this. I don't know if you and I talking or what, but this reminds me of the breadth of Tarion deal. Like the really extreme vegans who say, if you're just spiritual enough, you don't have to eat anything and you will take in sunlight and you'll live. And that seems like a remarkably freakish thing to say. When you consider all of the millions of people that have starved to death under various circumstances, apparently they were just deficient in adequate fiber and spirituality. Otherwise, they could have just converted sunlight directly like it is so humoristic, it's kind of stunning. In similar to this. Yes, your health, your genetics, all kinds of factors go into your relative propensity for a given disease state. But fuck man, if small cop pox comes knocking on your door,

Robb: Small cocks comes knocking on your door, small cock comes knocking on your door. I don't know. Maybe you answer, I don't know, but... Good fucking luck, like good fucking luck, you know? And so, I don't know. So I think this stuff needs to be addressed. I don't think it needs to be suppressed-

Nicki: Or censored.

Robb: Or censored. I don't think that that solves anything. I think that that just causes these folks to burrow in like a tick. And so, I don't know, I'm just kinda throwing... I was noodling on it and there's absolutely no way to monetize this. It would be a fuck load of work. And I'm just like, I feel like I've, I've given at the office for things like that, but this is a big deal, and it's an ongoing thing. And so I'm just kind of throwing this out there. And maybe we could crowdsource this in some way so that all the work isn't on me to do this, and we get something that's free for everybody.

Robb: And we try to make it really rigorous, but also open to people, presenting their different views and accessible. And like you lay out your case, lay out your citations and then let's

have some back and forth on this. I love the ability for somebody to present a topic and then somebody else presents their topic. And then both of those people get to basically cross examine one another and then they can go back. Maybe there's a break. And then people can reformulate what their positions are and then represent on the cross examination. And they're still part of the problem with this, like if this was done on some topics of computer science, it would kind of come down to whoever the best presenter was. Because I'm so ignorant of VPNs and like all of this stuff. I'm just ignorant of the basic nomenclature.

Robb: I wouldn't know a good presentation on the true surf falsehoods of computer science one way or the other. So it also could just be a complete exercise in futility. Because to some degree you literally need to lay out a course in molecular biology, genetics, virology surface D treatment of it. So why is it that electron microscopy is a super cool technique, but it doesn't give you the full accounting of say like the three-dimensional structure of a protein or a virus particle. That's an important thing to understand in this story. So I don't know, I'm just throwing it out there. That was much longer than what I intended, but that's what was on my mind today.

Nicki: Yeah. I think it's something we can talk about internally and also inside the healthy rebellion, just see if take a poll and see if our folks think that would be valuable and what the best way to tackle that would be. So it's not like we had a guy two weeks worth of work for you or more because it also needs to be done in a way to your point where the foundation is laid in a way that people can actually understand the distinctions of what both parties are saying. Because if you don't have a science background to your point the best presenter or the most compelling-

Robb: Well, and you can have a science background, but you can get far enough late when you start getting into genetics. I'm in deep water, really fast. I understand some very basic concepts, but like the specifics of this gene does this versus that gene does that. And the interactions like I'm in deep water immediately, metabolism and organic chemistry. I feel pretty comfortable in most situations, but you can get in deep water rather quickly with any of this stuff, which is both the challenge and the opportunity of our time, I guess.

Nicki: Okay. Well, I wanted to share one other highlight that was recently posted inside the health rebellion from one of our rebels Timothy as we've mentioned, the precision health reports before it's available for folks in the rebellion and he posted, according to my precision health reports, follow-up my LPR score dropped nine points from 29 to 20, between the start of last fall's reset. And the end of this one. So that's basically from September of 2020 until now, February 2021 March, he says LDL size is up. Total cholesterol is down fasting, glucose, stayed rock solid at 71 and all that I'll take it, which is pretty cool.

Robb: Which is pretty legit. And this is a good example of I'm not a biohacker, I hate the term, but I do think doing some smart lab work to establish benchmarks when you're getting ready to tinker with something, do something before, do something afterwards, there's something before and afterwards, though, it was really important in doing standard blood work. Usually just leaves people more confused than not. And this is where something like the precision health reports, we make no money off of this. We just think that they're the bee's knees. This is largely the same methodology that was used at the Reno risk assessment program. And so I really, really recommend it to establish a baseline and also to see what happens when people do different diet and lifestyle changes.

Nicki: And I'll just add that there is a discount for members of the healthy rebellion. So if you're on the fence of joining the healthy rebellion and you're interested in blood work, it would be worth your while to sign up. I didn't plan that one out, but I just thought it would be worth a mention. Let's move on to our news topic today. What do you got for us?

Robb: Since I was at chatty Kathy earlier I'll be quick on this. The title of the paper is randomized crossover trial of a modified ketogenic diet in Alzheimer's disease. This was implemented in folks with medium stage severity of Alzheimer's. So they've been diagnosed and they were placed on and off crossed over with this ketogenic diet. They were tracked as to where they actually achieving measure, you know measurable ketone levels. And the short story is that quality of life, one adherent to it's quite good. So like frequently people will say, oh this is too hard to do. Particularly in people with neurological conditions, they only had one person drop out of the 20 person arm. And that was actually for a different reason versus basic compliance. So compliance was good. It was well tolerated and it appeared to significantly improve quality of life in these folks.

Robb: And again, it makes the case. What if we did doesn't have to be Quito, but what if we just did some type of metabolically diet and lifestyle changes earlier? Because we have talked about this who we did. Oh gosh, maybe we didn't. But we talked about the report from the Manhattan Institute talking about how social security and Medicare in the United State is poised to absolutely bankrupt it like not even when people talk about it was pretty eyeopening when people talk about like national defense. Yes. We probably away in squander a lot of money. There, it is a rounding error compared to social security and Medicare. It is jaw-dropping. I had no idea it was that small of a fraction, but the main driver of the costs of Medicare are diabetes-related issues.

Robb: This is not even factoring in the tsunami that is coming of neurodegenerative disease because diabetes cardiovascular disease, all of these things can be managed that the can be kicked down the road, dealing with it. But neurodegenerative disease is either 24 seven nursing care or like absolutely horrific solutions. And you just extrapolate forward on this stuff. We need to get our ducks in a row with it at some point on this, and it will be fixed one way or another, whether we decide to soft land it or hard land it. But it's small in size. It was just shortened duration, but there was definitely an effect here. So we should be looking at metabolic therapeutics much more closely. And again, that was longer than expected.

Nicki: You are a chatty Cathy this week. Our t-shirt winner for this week goes to Narcan 830. He says, I find this podcast to be very useful and enjoyable. I love how you keep it real and focused on specifics. There's no bullshit when it comes to Robb. I will look forward to the day when I can officially join the health rebellion. The last four years I have dramatically turned my life around and plan to keep optimizing my N of one. Thank you both for all the great work you've done. You're truly a blessing. So, that is awesome. Narcan 830, thank you for your review. 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 sweet. And the healthy rebellion radio is sponsored by our salty AAF electrolyte company element.

Nicki: And we are gearing up for our new flavor launch, which will release the end of this month. And we had a couple of threads inside the healthy rebellion of people trying to guess the flavor, nobody got it right, but I will say-

Robb: Nobody did?

Nicki: Nobody did. Nope. There were lots of good guesses and flavors that we have on our roadmap and things that we want to play with. But I'll just say that this particular flavor, which we'll be able to announce in a couple of weeks is summary perfect for summary of it. And if you haven't tried element, you can now try all of our flavors just for the cost of shipping, all of our existing flavors, the new flavor won't be included in this yet. But you can get a sample pack that includes one stick pack of citrus salt, raspberry salt, orange salt, chocolate salt, mango chili, lemon habanero, and the raw unflavored.

Nicki: To try each flavor you just pay shipping, which comes to just \$5, if you live in the United States. Again, that URL is drinkmnt.com/robb, drinkL-M-N-T.com/R-O-B-B. Alrighty. You ready for questions?

Robb: I'm ready to do it. Let's do it.

Nicki: Okay. Our first one is about iron comes in from Tom. He says I have Crohn's disease and I'm a shift worker. I've had success with paleo in the past, but found it hard to stick with while being tired at work. And then being the only one in my household with dietary issues, my wife, after not feeling well for years, always complaining about being tired and getting sinus infections decided recently to do paleo with me. Things were going great, but then we just received blood work where everything was in normal range, except she had high iron 257 micrograms. Is this something to be concerned about? If so, how can she counteract this? So we can both stay on track. Side note she feels better than normal, but still suffers from some fatigue. We also have two toddlers at home.

Robb: Two toddlers enough to make you feel exhausted no matter what, but the iron is really, really high. And I'm kind of surprised that she wasn't checked for familial hemochromatosis and usually women of childbearing age, it's difficult to get them into a high iron situation. Familial hemochromatosis could do it, I doubt that ... Well, any mentioned that she felt a little bit better there's actually a number of different symptoms of the high iron insulin. Resistance is one due to the kind of oxidative stress of all this iron, but fatigue is a major one. And in particular like post-exercise fatigue really extreme muscle soreness and whatnot. So like as a baseline before you did anything, I would definitely get checked for the familial hemochromatosis.

Nicki: Okay. And hopefully-

Robb: Because that is high, her levels are really high. Yeah.

Nicki: Our next question is from Jill. She has a question about her fingers, swelling and water intake. She says, I'm not on a ketogenic diet, but I eat high protein, lots of vegetables, no carbs, other than fruit and no processed or packaged foods. I use salt, everything, but the bagel seasoning and other similar seasonings in my food, I don't watch my sodium intake. And I use seasonings liberally. I drink about 200 ounces of water a day and work out about an hour, a day, lifting weights and cardio. In the last month, I have noticed my fingers swell and I feel it in my face as well. It's nothing major, but it's uncomfortable. And I also wake up with swelling. I do drink coffee tea and some zero sugar sparkling water. I do take magnesium and other multi-type supplements. Am I drinking too much water? Do I need to have less salt? I got the free sample of your element drink. And I had one this morning and it seems worse than ever any advice.

Robb: This one's really perplexing to me. Like one, 200 ounces of water a day is a lot like it's a lot. I don't even on my jujitsu days. I don't know if I do near that much.

Nicki: I don't think I ever get over a hundred ounces a day ever.

Robb: What's perplexing here is if people over consume water, they will end up in a hypo nature remix state, and then you will start actually shedding. You will end up with a tendency to swell, like your hands will swell, your feet will swell. I used to get this all the time when I would go hiking and like your hands swing. And now that I'm actually on point with sodium, like that never happens. But then she mentioned that it seemed to get worse with the addition of element and some sodium. But-

Nicki: I wonder if she would cut that water intake in half-

Robb: As a baseline. All the element out, don't just do everything else that you're doing and reduce the water intake because that it's weird and kind of counter-intuitive. But if we don't get the hydration figured out in hydration needs to be couched in terms of water plus electrolytes. If we don't get that right, interestingly that's where people can end up with de-mic and swelling. And interestingly to potassium tends to kind of be the primary driver of that. Clearly sodium is a piece to this, but it's tends to be the overabundance of potassium potentially the consumption of water that ends up being the real driver in this thing. So it is at a minimum, I would reduce water intake, pull the element out for awhile and just try to get to a spot where you're not swelling. And then we could get back in and start tinkering this stuff.

Nicki: Yeah. I'm just trying to wrap my mind around the 200 ounces of water. I mean, she's working out an hour a day, lifting weights and cardio, like try to limit it just to thirst, like clearly like to drink that much water you have she must be like filling up multiple jugs and tracking it...

Robb: Well and she said she drinks coffee, tea, and some zero sugar sparkling water on top of that?

Nicki: So she's drinking all day long.

Robb: Yeah. If the 200 ounces are included in the coffee and tea and whatnot, then we're okay. Maybe we're, but I'm kind of reading this as water and coffee and tea. One, I would never do anything, but spend time peeing, like you'd might as well hook up a catheter in me to get anything done. So anyway, Jill, like let's cut your fluid intake and just pull the element. Yep. Use that as a baseline circle back with us, if you can and let us know how that goes.

Nicki: Yep. Our next question is from Eric and he says, what's the de elaeo to sunscreen or not to sunscreen. That is the evidence-based question. He says, just kidding about the evidence-based part. I know that grinds your dear Robin, Nikki boring ego stroking stuff. I've been a longtime listener since the way, way back, paleo solution days. I probably listened to every episode since the low one hundreds of the paleo solution podcast. And I'm still catching up to the end of that one while also rotating in the healthy rebellion radio. I like that you've returned to the Q and A format. I miss that, not that the interviews were bad. PS, I work in technology for a living and would be interested in helping you

Nicki: Try to figure out the life color stuff. That would be cool. The meaty bits, I am a mole moly person. I have quite a few dark liver spots. My maternal grandmother was covered in them. By the time she reached her eighties, there was no skin cancer anywhere in the family that's been reported or recorded. I go to the dermatologist to get a yearly body scan and mole check. I try to have good sun hygiene. I live outside of Atlanta, Georgia, and I attempt to get outside and walk shirtless or in shorts any day there's sun. I tried to do this after lunch or in the afternoon for anywhere from 20 to 40 minutes. My street is

woody and often partially shaded. So this isn't as if I'm sitting around tanning for 40 minutes, I've never gotten a sunburn from this practice. And I don't think I've even gotten pink. This doesn't result in much of a tan by the end of the season.

Nicki: And you often talk about full spectrum exposure and minimum effective dosing. So this is my practice in an attempt to keep my D levels up. I also supplement with around 4,000 irons Carlson's D drops daily, although less than the summer, if I've been better about exposure, my blood serum levels are usually normal. As far as OB sick dying Americans go, but it's probably low normal for us Paleo folk. When I usually get my yearly checkup around January in the dead of winter, it's around 30 nanograms per milliliter, usually end up getting one sunburn a year from stupidity. I misjudged my exposure, went out playing like on a friend's boat. And by the time of year that this happens, it's usually late in the season and it's not a horrific purple death burn, but it's usually enough to result in meaningful peeling.

Nicki: I know this is bad and I promise not to do it again this year. When getting my yearly mole check, the dermatologist asked about sun exposure and basically said that I should pretty much always be slathered in SPF 30 to 50, no matter what. She even went so far as to mention recent studies that showed that sunscreen didn't impair vitamin D conversion and took the time to mention that D was easy to supplement. Now I'm certainly an armchair functional medicine doctor at best after all after hundreds, if not thousands of hours of Rob Wolf and Chris Kresser podcasts and tens of thousands of words of blogs read over the year in my expert scientific opinion, we barely know about how the human body works. Sure we can send up some D in the lab and guzzle it down and affect our serum D. But do we really truly understand what the complete picture of sun on skin exposure is from soup to nuts is D guzzling get your mind out of the gutter rub and avoiding literal sun on skin exposure-

Robb: Thought that was motorboating, but different story-

Nicki: Avoiding literal sun on-

New Speaker: Are you turning red?

New Speaker: -skin exposure, really the healthiest choice? For fuck's sake, we just discovered new muscles, tendons ligaments in 2020. So I've heard. So I'm supposed to believe that just become some likely industry funded studies showed that some poor slob who slathered up with sunscreen, increased their CMD from pitiful as to marginally. We're supposed to assume that this is the way. Anyway I wanted to get your opinion on this particular issue, as I know it comes up from time to time, and I know that things do change here. And again especially given the recent studies regarding serum D levels and risk of serious COVID complement complications, all the more reason to be considering whole picture systemic things. Thanks, Eric. That was-

Robb: Epic. Honestly, Eric laid this out, I think better than I can. Recently Vignette Preside, who's been this kind of hero within the COVID scene. He's a great doctor. And he's been one of the people that's kind of pushed back at what I would consider to be the over the top stuff. He's like, no, we don't need two masks, particularly now it near the end of the pandemic. He's like if we needed two masks, we would wear two masks in surgical theater. It's a whole host of things there. But one of the things that he pointed out, which we've talked about almost from day one is that there is no zero risk profile in anything that we do. If you decide to stay in the house to avoid falling down, getting in a car accident, getting stung by a bee and a whole host of other things, then there's a risk profile associated with being trapped inside your vitamin D levels may be low.

Robb: It may be very difficult to exercise. You may end up hanging yourself due to social isolation. And so in this world where we try to have zero risk or there's this notion that we have zero, we could achieve zero risk.

Nicki: We could make a perfectly safe world...

Robb: The only perfectly safe world is if our orbit gets up and the planet drifts into the sun and it's all done, like then risk profile mitigated and short of that, there's the knowns and the known unknown, all that Dick Cheney bullshit. But it just time and again, I think that when we, when we dig into this story, it's interesting where Eric mentioned that his maternal grandmother had these, these moles, but no history of skin cancer. It's interesting, but mold formation sometimes it's associated with higher rates of skin cancer, but not always like there's some circumstantial stuff there wrinkles are associated with lower levels of skin cancer.

Robb: And so, although I don't think anybody is super fired up about getting wrinkly. Some of the mitigating strategies around preventing wrinkles reduces sun exposure to such a degree. What we understand is if somebody gets a sunburn, they do want some degree of sun exposure at some point later because it tends to retune the kind of epigenetic features of the dermal layers. And so it minimizes or mitigate some of the risks that occurred from that burn, which ideally we didn't get, but we did. And so what do we do? It appears that the thing that you don't do is hide indoors. And maybe there's modifications in the formulations of suntan lotions and whatnot. But when you again dig into the literature on that stuff, it's so interesting because the risk mitigation just isn't there.

Robb: We just don't see this dramatic improvement in say light skin cancer risk, but we do see associations with increased other problems. And I really kind of call bullshit on the increased vitamin D levels is that in everybody is at an urban environment or the ozone levels are already higher in the air pollution levels are higher such that getting any appreciable amount of UV radiation is even more difficult. Does this work the same way in darker skinned individuals as it does lighter skinned individuals? So again, it's kind of like this fucking one side-

Nicki: And other than vitamin D, what other benefits do we get from the sun that we haven't measured that are part of this whole big picture that maybe we haven't even discovered yet.

Robb: And it's clear that vitamin D synthesis does a bunch of other interesting stuff. It increases nitric oxide production, which is amazing for improving our vascular health and whatnot. So there's a lot of other knock-on benefits here. So again, Eric clearly you sound really well steeped in this. And you articulated this kind of dynamic tension here of the risk profile of whatever decision you make on this, there is risk associated with it. And what's so annoying about all of this stuff is that people, whether it's like, just wear a mask, just do this, just do that. It's presented as if it is free of consequences itself. And that is a lie. And that is part of the reason why people like me get real prickly. It's like if we want to have a discussion around it, and I know with public health, it's tough because we're dealing with the unwashed masses, but I have this crazy idea, just, be honest with people, even if it's complex, be honest.

Nicki: Let them make their decision based off of the risks that are.

Robb: Have them ask questions and help flesh it out. But instead of treating people like children, just fucking be honest and explain that there's unknowns to this, but our best

understanding today is this. And there's lots of problems with it. Like journalism, what passes for journalism now live spite clicks. And so you need sensationalistic headlines and so nuance and whatnot is challenging. But one of the interesting stop gaps against that was people doing things on social media and now we're all getting censored. And so it kind of circles back around to this thing where we did have a route to fleshing some of this out. It wasn't necessarily through mainstream or accepted sources, but a lot of good wisdom has been some bad stuff too, for sure. But it's funny. It kind of circles back around to that terrain theory. Did we even tell him what to do? No. I think you know what to do. We know what to do.

Nicki: I think what he's doing is he's walking without a shirt on and getting reasonable exposure. And he also promised not to get burned to a appealing point next year, so he's good.

Robb: Just don't do it.

Nicki: Don't do it Eric. Okay. It's time for the healthy rebellion radio trivia or healthy rebellion radio sponsor drink element is giving a box of element recharge electrolytes to three lucky winners selected at random who answer the following question correctly. Rob, what's your over under on the number of bathroom stops we'll make on the 1900 mile drive to Montana?

Robb: So how many hours is the drive?

Nicki: It's going to be four days of driving about eight to nine hours. Eight hours a day let's say so.

Robb: It's not 32 hours. It's actually about 30 hours of driving, 29 hours of driving. So I'm going to say 30 bathroom stops. I'm going to predict like one hour.

Nicki: Every hour? That will be-

Robb: I Would say two bathroom stops per day. So we'll say eight total. And then I'll round up, I'll say 10 total just for emergencies and whatnot.

Nicki: Okay. I wonder how many of those will just be like on the side of the road, kids pulling pants down and peeing in the dirt off the side of the road.

Robb: Given that we're going to be driving through areas where it's like for the love of God, make sure your gas tank is full because there's nothing for 500 miles-

Nicki: I have a couple of those probably. Well, I already have toilet paper in the center console. All right folks that is your answer. What was your answer?

Robb: 10.

Nicki: Okay. To play, go to frobwolf.com/trivia and enter your answer. We'll randomly select three people with the correct answer to win a box of electrolytes from drink element. The cutoff to answer this week's trivia and be eligible to win this Thursday, March 18th at midnight, winners will be notified via email. And we'll also announce on Instagram. This is open to residents of the US only.

Nicki: And our fourth question this week is from Ryan about cornstarch in medication. He says, I am on the paleo medicinal dietary protocol for lifelong autoimmune plus mental plus

gut health issues. I only take one daily medication over the counter. Here's my issue. The one that I take is two times the price of another brand of the same active ingredient. The only reason I don't choose to try the much more affordable option is cornstarch. I'm so hesitant to knowingly ingest corn starch. That's the only reason the one I take doesn't have corn starch in the ingredients while I could be saving twice as much money and stress by being able to take the med that uses corn starch. I wonder if and hope that I'm being overly paranoid. Do you think cornstarch has a non-active ingredient in a medication is reason enough not to take that med or might it be worth giving it a switch?

Robb: It's tough. Most people who end up on the paleo medicinal route are pretty sick. I think they do some good work. I think that they kind of get out over their ski tips at times too. It's kind of a mixed bag. I don't think that their approach to type one diabetes is all that sound. Some caveats here, but I do appreciate the work that they're doing in some other areas. Let's switch this up and say that this was gluten or wheat as a filler. That would be a no-go for me, like an absolute no-go. I eat some corn here and there and other than getting too much of a glycemic load, if I have too much of it I don't seem to respond negatively to it. I've gone huge long stretches of time without it, long stretches of time with it in the mix to some degree. And don't really see any difference there. If it's a double the price difference, then I would certainly tinker with it.

Nicki: Be worth just trying and seeing if you have any kind of a react, noticeable-

Robb: If you have a noticeable reaction, then you can always pump the brakes on it. But it seems very reasonable. But again, I will say that some people have really significant corn allergies. And so it's a no-go for them.

Nicki: I guess that would be a question, like do you know that you have some sort of reaction when you ingest corn like do you feel it?

Robb: Within this paleo Mendocino world they are zealots about the removal of all grains, all legumes, all dairy and even the reintroduction program is very, very stringent. And so within that framework, it's a no-go you have to think outside of that framework and decide if tinkering is worth it for you. I don't know what you're paying for this, but I mean, two X, the price of anything it's one thing if it's-

Nicki: If it's \$10 a bottle and you're going to pay 20, right. But if it's a hundred dollars a bottle then it's \$200, it's a significant yeah-

Robb: That starts mattering. So, and again, I think that if there is going to be problems, you'll know it almost immediately. So keep your receipt and maybe you can take it back.

Nicki: Okay. Final question. This week is from SJ. Hi, Robb, I'm wondering what you think of the idea of people being rewarded with tax cuts and benefits for meeting certain health markers, to motivate people, to change their eating habits and lifestyles. It's not altering anyone's freedom of choice, but encouraging people to pay more attention to their health and diet. And it's a choice I'd sure love to see higher sales tax on junk food, but that would never happen. Thanks.

Robb: I think that there's a lot of wisdom in this on the food side, it would make a ton of sense to just not subsidized sugar and the products that go into-

Nicki: All the shelf, stable, processed, packaged-

Robb: It's like let's gut subsidies as a beginning, taxing the stuff could work too, just as a direct feature. Like in Mexico, they did some direct tax on soft drinks and it reduced consumption. It gets kind of dodgy because there are lots of people that would love to slap a pretty hefty tax on red meat and butter and stuff like that. And so that just seems to kind of spin out of control. What I think would be really cool and again, this wouldn't, this is never going to happen, but like in kind of utopian kind of view the American medical association gets broken into five to 10 different competing entities. And so they have their own, each one kind of has its own schools and it picks a philosophy. And there are insurers that are attached to that. And then somewhere in this mix, you've got like a very vegan centric crowd.

Robb: You've got kind of people that just believe you can eat a standard American diet and medicate, and that will take care of things. And some were in the mixers, maybe one or two different paleo ancestral health, low carb friendly options. And the physicians, the health care providers, the insurers are all on board on this stuff. And then people can kind of migrate into these different camps. And then you will see-

Nicki: The data would be really clear.

Robb: It data would be crystal fucking clear. There's no longer an incentive to lie about this stuff because basically you create islands and these islands need to be self-sustainable.

Nicki: So then the island that is sort of representative of what our current world looks like with the standard American diet and insurance. Those people's insurance premiums would continue to increase because people are not. Their health status isn't changing. It's like it is today and progressing and getting worse. And then the people who are on the island of-

Robb: Health savings account some sort of ancestral health deal-

Nicki: Even if it wasn't healthy, let's just say it's standard third party payer insurance on all the islands. But like the claims would be less. And so the premiums would drop-

Robb: Because you have to have that because you have no way of holding people's feet to the fire on this. This is where there have to be solutions on the payer side too.

Nicki: You're talking about a utopia where people migrate to the island that they want to be on. So like all the people in the healthy rebellion who have skin in the game because they care about their health. I'm just saying if we could make most things equal, but people can migrate to the island that they want to be on. They'll have fewer claims their premiums would. And so you could measure apples to apples on the premium level is what I'm trying to say.

Robb: I disagree.

Nicki: You disagree?

Robb: I think you have to have the payer piece too, which is why I haven't been able to pull the press playfully on this Lake pole initiative that I want to do, because if you don't address the payer piece. Particularly in the current... Like you really can't find a more broken system than the US healthcare payer system. This third party payer system is a disaster. The way that it's set up. Frankenstein system is an artifact that kind of started at the end of world war II with some price weight wage freezes. And then it's just kind of gone wild from there. People are excited about like a single payer, like a Canadian model or

whatnot. I think you're getting out problems with that too. Again, there has to be some accountability and skin in the game, or you have problems. I think the Singapore model is really interesting in that they offer health savings accounts to everybody.

Robb: Everybody participates in them, the people who are poor have money from the government put into their accounts. If they then get a better job or their situation changes, they take that money with them. So there's not the disincentive to actually get out of these scenarios. If you die, then the money in your health savings account is inheritable to other people, even if you're at that lower socioeconomic strata, because people are paying the real cost of their healthcare, they shop around and they try to find the best value for what they... So I'm, I'm pretty insistent. Like why would we change the way that we buy a car or jeans or an iPhone? Like how much time do people spend thinking, well, do I do the iPhone this, or the galaxy that? Why don't we put some of that bandwidth into, oh my primary care physician, I've got some health care problems and my premium keeps going up. I need to get on top of this. Who's really good at dealing with diabetes and a half Asian, half white female. When you order down and find the stuff that works really well for you-

Nicki: Because you're not paying for it.

Robb: Because if you're not paying for it there is no incentive to... And again, there are people will push back and they're like, well, what about poor people marginal? There are ways to deal with that. It doesn't mean you don't have a soap, see a security net, a safety net. This is when these things, it's just so funny. It's like the kind of market-based stuff, they're like, you just want old people to die in the street. And it's like yeah that's totally why I've spent 22 years doing the shit that I'm doing. And it's not perfect, but I think that ideally we would change the epistemology of what we do within medicine. And we would have some different experiments going on and these things would be directly competing against each other-

Nicki: The version that doesn't work with the close up shop.

Robb: Yup. And I would love for different versions of this stuff to then also say, oh we're also going to have different payer systems. I would love that because if you get a system whereby people have skin in the game, they're incentivized to have good behavior it is going to be shockingly better than the other stuff. And then we answer this bullshit immediately. Never going to happen or unlikely to happen, but pieces of it do happen elsewhere. And the Singapore model is a pretty fair example. And even within Nordic countries and Canada, these single payer models are changing such that more is being put back on the individual to take care of themselves because these things are being crippled by increasing healthcare costs. Again, because we've got a fucked up food system that is making people sick.

Robb: And again, we will get on top of this one way or the other, whether we soft landed or hard landed, it will get fixed at some point in the next like 50 years. But yeah, it's a spicy meatball. And here again you can get canceled for just trying to have the discussions around things that are going to be critical to maintaining civilization as we know it. And a lot of these ideas, maybe my ideas are wrong, but maybe eight out of the 10 are wrong. And two of them are correct. And two of those correct ones may end up being like Keystone features of making a system go forward. And we're fortunately we're seeing some pushback in some of these areas like Barry Weiss and some other people that are like really vigorously pushing back against this cancel culture, but it's incredibly dangerous. And again, I don't know how we ended up there, but that's just where a lot of my mind focuses these days.

Nicki: I think that's a perfect way to end this show. That's a wrap. Thanks for listening to another episode of the Healthy Rebellion Radio. Be sure to support our show sponsor and grab your elements sample pack for just the cost of shipping. Again, that's one stick pack of our current flavor, citrus salt, raspberry salt, orange salt, chocolate salt, mango chili, and lemon habanero, and the raw unflavored. Go to drinklmt.com/robb it's drink L-M-N-T.com/R-O-B-E and hope you all are well. And by the time you're listening to this, we will be in Montana.

Robb: Or in a ditch somewhere between Texas and Montana.

Nicki: hopefully moved and more or less settled. And we'll do our next show from there.

Robb: Awesome.

Nicki: Take care everybody.

Robb: Bye everybody.