

**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 their 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:** I think we're rolling.

**Nicki:** We are. Welcome back to another episode of the Healthy Rebellion Radio. This is episode 84, not 1984, just 84. We were having a heated discussion prior to pushing record about my inability to project. So I'm working on that this episode.

**Robb:** You're just a soft-spoken, kind, considerate individual.

**Nicki:** What you said was that I am a mumblar. And so you can't tell-

**Robb:** Herr Wolf.

**Nicki:** .... it kind of got to me.

**Robb:** Well, and I had a German instructor in college. Who Herr Wolf you are mumblar. Mumblers are perverts Herr Wolf. No mumbling in this class.

**Nicki:** Really?

**Robb:** Yeah.

**Nicki:** Did everybody laugh at you?

**Robb:** Every laughed at me. I laughed at me. This was a time when people actually laughed.

**Nicki:** This is true.

**Robb:** And they didn't actually freak out.

**Nicki:** And you could actually joke with people.

**Robb:** And as an instructor, you could joke with them and have a good time and actually have this indirect way of teasing people, which ironically really builds rapport because there's this shared intimacy of being exposed enough to allow and accept somebody to teach you. But now we're just prickly fucking porcupines that feel lonely and need to be medicated and all the rest of that because it's impossible to tease one another because you're being racist or horrible or whatever. Wow. That was a fast intro too.

**Nicki:** Yeah. And you're projecting far more than me. So I need to double up. I feel like I'm yelling, but.

**Robb:** I'll just dial it down.

**Nicki:** We shall make it through this episode folks.

**Robb:** Like be the last time.

**Nicki:** It just might be. Let's see. What do we have to share with you all today? Let's see, I'm going to share some upcoming events inside the Healthy Rebellion Community. We have our moderator, Jack Ruston of Rustons Boneyard is doing a cooking class. Actually, today is Wednesday, August. What is today? August 11th. And that's happening tomorrow on the 12th. And he's making, oh my gosh, the pictures for this look so good. Pork shoulder sandwiches with protein sparing rolls and the members of the Healthy Rebellion can watch live. They've already been notified of that tomorrow, or watch the recording at their leisure. And those of you who aren't members, if you join you will have access to that past cooking demo as well.

**Nicki:** It's going to be a good one. I'm excited for that. We have weekly group meditations happening on Wednesdays. That's led by our rebel, Matt Otto, get in on those. Those have been very popular and those are... He did a couple of them just to feel it out and we're now doing them weekly. And then I'm super excited to share I think I mentioned this before a couple months ago that we had some exciting stuff happening with mindset, coach Cinnamon Prime. She's going to be leading us all through a week-long workshop on success and accomplishment and working through beliefs that we have that hold us back from getting where we want to be. So that's going to be really, really great. If you haven't been exposed to Cinnamon and her work, I know many of the people who are in the Healthy Rebellion have before because she's done a couple of things with us in there.

**Nicki:** And her stuff is just amazing. And she's kicking that off on Monday, August 23rd. And again, that is a part of your Healthy Rebellion membership. And let's see, finally, our 30-day rebel reset our fall one. So the last one of 2021 is right around the corner in September. We're going to kick that one off with the seven-day carb test on September 10th. So lots of good stuff coming up inside the Healthy Rebellion Community. If you're not yet a member, you can come and join us. Just go to [join.thehealthyrebellion.com](https://join.thehealthyrebellion.com).

**Robb:** Awesome.

**Nicki:** That's it.

**Robb:** Amazing.

**Nicki:** Anything you want to share?

**Robb:** Nothing.

**Nicki:** No. Do you have a news topic?

**Robb:** Yeah, of course.

**Nicki:** Oh, you do. Okay.

**Robb:** I don't drop the ball, wife.

**Nicki:** Well, you didn't put it in the document.

**Robb:** Well, that was one oversight.

**Nicki:** So you dropped a ball.

**Robb:** Ish, ish. I actually had something though, but I covered for you later where the-

**Nicki:** I know you did the trivia. Okay.

**Robb:** Yeah, I did the trivia, and yeah.

**Nicki:** I'll give you a gold star. Gold star for you.

**Robb:** This thing is just an interesting paper. It's from a micro biotechnology clinical evidence that the pandemic from 1889 to 1891 commonly called the Russian flu might have been an earlier Coronavirus pandemic. And it's just an interesting medical detective story if nothing else. And it had some interesting insights for our modern situation. And I guess one interesting thing is that they and we, I guess all managed to get through that despite the severity of it. So perhaps there is light at the end of some tunnel, and maybe it's not an onrushing train.

**Nicki:** Oh, we are on a roll today. Yeah, I was thinking a good news topic. Not that this one isn't good, but I was thinking.

**Robb:** Well, Robb, if you're news topic, didn't suck balls, then an alternative that doesn't suck balls would be.

**Nicki:** Well, you were sharing last night when we were sitting out on the porch about that was it in MedPage the Vinay Prasad piece?

**Robb:** Oh, yeah.

**Nicki:** And I didn't read it, but you were sharing that he had said that so much of what is happening, if we didn't have social media, which we've talked a lot about social media and I think everybody's aware that it's toxic and there's lots of inherent problems despite some great benefits and early on there were many, many benefits, but it seems like the platform, actually, we were talking about...

**Robb:** So he made two really salient peak points. And Vinay Prasad has been interesting in that he's very Orthodox mainstream on like, "Hey vaccines, are going to save lives. The risk-reward deal is pretty clear." which I don't entirely agree with, but he makes his case, but he has been really outspoken on the censorship and the divisiveness. And he's actually one of the people that one of just a few days ago he did a piece. It was basically like, "We will end up in civil war if we keep this shit going." Which I'm now at a point that I'm like "Is that really what the goal is?" Are the powers that we just because it feels like agitating for a fight like as a kid, I didn't get in many fights, but there were a couple of kids that would annoy the piss out of me.

**Robb:** And I was crafty enough that I could get them annoyed enough to take the first swing at me. And then I was justified in doing what I felt like I needed to do. And this whole thing feels like a baited trap, waiting for people to push back against censorship and being marginalized as second-class citizens. And then, "Oh, well, you guys are extremists. And so now we're really going to jump on you with both feet." If that is the game plan, that is fucking nuts because the potential for that to go sideways is so remarkably huge. And that's off the main-

**Nicki:** Yeah. And his point was-

**Robb:** But the main point is-

**Nicki:** .... that social media is dividing us like nothing else has ever before.

**Robb:** And he made a first point which was that trying to police facts via social media is a fool's errand. It's never going to work, the only situation in which there could be some control over that is a completely authoritarian state. And the funny thing is that he made this very robust and concise case around this, just basically that it is fucking dumb to think that you are going to be able to police thinking and good information and bad information at all, to say nothing of, if you could the results are going to be horrible. And a goddamn MD-PhD commented after the saying and was basically like, "Well, anybody that's disseminating false information should be this and that and the other." And Vinay made the point, he's like, it becomes immediately oblique what is and is not accepted doctoring.

**Nicki:** And who has the authority or the magic wand to say, "I bless your information as truth and your information."

**Robb:** Is false. But yes. But even, yeah, there is absolutely the question. So currently we have pimple face tech geeks that are apparently making decisions around what is and is not factual. And Vinay pointed out, he recently released, so I'll put this one in the show notes for today too because what the hell we might as well just go big on this because it is actually interesting. And I think actually germane to things. And so he made this just concise case that the policing of thought and what constitutes valid versus invalid information is a disastrous process.

**Robb:** And it's only empowering the social media giants. And so that was his first part of the thesis. The second part of this thesis is that shit needs to go. And it's funny we had a delivery yesterday and the Federal Express guy just said, he's like, and it was just out of nowhere, but he's like, "I really wish social media would just go away. I just wish it would disappear." And I'm like, "I agree with you." And honestly, if we looked at so much of what was going on right now, and there was no Facebook, and no Twitter, and no Instagram, and it was just blogs like what we had-

**Nicki:** Blogs like what we had back in 2006, or whenever it was just blogs and people found their way to-

**Robb:** And you broke up Google such that there wasn't a monopoly on search. And like what they did with the telephone companies and legitimately did that, the likelihood of us going to war with China, or Russia, or with ourselves and the power for bad actors to do bad things would be shockingly curtailed. And it's a brilliant point that he made. Is that your goddamn dog? Come on, Dutch, join the party. Folks, Dutch has entered the office.

**Nicki:** Sorry. I could hear him-

**Robb:** Thumping his tail against.

**Nicki:** .... scratching at the door and knew that that would either continue incessantly during the remainder of this show, or I can let him in and he can lay down here in the background and, yeah.

**Robb:** Okay. So I will have a link to that. I think it's a very good reasonable piece. And again, I just have to reiterate this thing, this person who at least claims to be an MD-PhD and I have no reason to doubt them, he read this goddamn thing and then immediately just

said, "Well, anybody saying the wrong thing should be drawn and quartered." And it's just people are dumb, or they're so wrapped up in some other-

**Nicki:** They're wrapped up in this tribal, in their belief.

**Robb:** They're so wrapped up in the tribalism, yeah.

**Nicki:** Their belief system about this particular topic that they cannot see that this same scenario can apply to any number of different situations and scenarios in which they might be on the opposite side of the censorship debate. And then, where are we?

**Robb:** We're fucked. And that's what I think we're trying to avoid. And do we, maybe we just make the whole show around this and we just fucking scuttled the questions because I'm not, let's just do that. Let's talk a little bit more about.

**Nicki:** The only, since were just riffing here, the only negative to that would be our five clips that we do on social would be all about this sociopolitical stuff and potentially.

**Robb:** Okay. We'll get canceled around that.

**Nicki:** Canceled?

**Robb:** Yeah, canceled. We'll get canceled around that. Okay. Fine. I was just going to throw something out there really quick, Bret and Heather really taken a beating right now on social. And what was my point to that? I think that they have the right of things. One, I think that their risk assessment and general assessment of the lay of the land is accurate. Maybe we're both wrong, but the case that they are absolutely making is that we should be able to have the discussion such that if we are wrong, then we're exposed as wrong and we move forward from there. And the flip side of this is that they should shut the fuck up and be silenced. And we don't even have the discussion about some of the nuanced points they're making.

**Robb:** And it still, I meet people who are reasonably successful and seemingly pretty smart. And they seem to consistently side on the this shit should be censored stuff that somebody somewhere, some strong person should be making the decisions around what is acceptable and what's unacceptable, what's truth, and what's falsehood. And that God, how much history do you have to ignore to really warm up and be okay with that? This is why I banned both of the brothers because they were both and this was two years ago, but they had a hard-on for shutting down the people that they felt like were unbelievable or disseminating misinformation. And I think it's just laziness.

**Robb:** There's some of these folks that are so lazy and just want to parrot the party line of here's the orthodoxy of medicine. And I'll just regurgitate the orthodoxy of medicine. And because I'm jacked that gives me credibility, but I never need to have an original thought or formulate a complex position on anything. I'll just regurgitate the same bullshit that's been fed to me and not be creative at all. And I see that again and again, and maybe I'm full of shit myself and I've totally gone totally off the rails. Nikki's like, "Cut, cut."

**Nicki:** No, I'm sure folks can sense that you're feeling a little riled up these days.

**Robb:** I guess I am. And in some ways the funny thing is I care less, and less, and less, and that's the ironic thing where I'm like, "If it all fucking burns down. Okay. It all burns down." You can only push and try and have idiots, the platform defame go after your

businesses, threatened to go after your family and all the rest of that toll. You're like, "Okay, we're good. You guys have a party there and I'll be out in the boonies. And I have interlocking grids of fire and backup generators it'll all be good, at least for a while." So did I really say that out loud? Yes, I did.

**Nicki:** Moving on. Let's see here...

**Robb:** This way to the cafeteria.

**Nicki:** Yes, yes, yes. That was such a good line of a movie if you guys have not seen. So I Married an Axe Murderer with Mike Myers. It's fabulous. It's very old. It was one of my favorite movies in high school there.

**Robb:** Just let me navigate, there's no enough room on the desk.

**Nicki:** Okay, reaching for the mouse and he's keeping it. Okay. So it's time for our Healthy Rebellion Radio T-shirt review winner. This one goes to Me Marj. She says, "I can't say enough about how eye-opening and educating this podcast is. I've learned so much from listening to Robb, his wife, and all the amazing information they share and provide. I'm 61, and healthier, stronger, weigh less, and more alert and in tune than I was in my twenties. And it's really cool. I love, love, love LMNT and can't live without it now. I walk my dog a mile each morning as a warmup and then speed walk by myself for another three miles. I do a little weight lifting just to keep my muscles in check. Thank you for all you do, and making it fun to listen to, keep up the good work, Marjorie.

**Robb:** Very cool.

**Nicki:** Which is a really cool. Marjorie, thank you so much. Send us an email to [hello@robbwolf.com](mailto:hello@robbwolf.com) with your T-shirt size and your mailing address. And we'll send you a healthy rebellion radio T-shirt. And as you all know, the healthy rebellion radio is sponsored by our salty AF electrolyte company, LMNT. And it's funny because just last week or three days ago, Sagan asked me because I was wearing a shirt that says salty AF on it. And she says, "Mom, what does AF mean?" And we were at dinner, right?"

**Robb:** I said as fudge.

**Nicki:** And we're like, "As fudge." And then we went into how it's an expression and she's heard the F-word before and we've talked about it. And that it's just a popular expression today to say that they're really, really the thing like AF, fit AF. Anyway, that's a tangent, but anyway I wanted to share today. I know I've mentioned it before in the podcast. But I wanted to mention the LMNT Give a Salt Program. So we all have people in our lives who are doing extraordinary things that are the lone bright spot in a seemingly dark world. Somebody on the front lines, teacher, a mentor, a coach, somebody who always goes the extra mile in your community, and at LMNT we have a program called Give a Salt where you can nominate your hero or team of heroes. And we will send them some LMNT to help them power through and keep doing the amazing work that they're doing. So I wanted to bring that up again. If you have people in your life that you feel are deserving of some salt, you can nominate them at [drinklmnt.com/giveasalt](https://drinklmnt.com/giveasalt). That's [drinklmnt.com/giveasalt](https://drinklmnt.com/giveasalt).

**Robb:** I like it. And there've been a lot of really cool folks participating in this. So yeah, definitely take advantage of it.

**Nicki:** Okay. You ready for questions?

**Robb:** Let's do this.

**Nicki:** Okay. So our first one is from Christine on healing the gut after C. diff. She says, "Hi, I've been a follower of Robb since 2012 when I first read the Paleo Solution and loved it. My family and I have been paleo ever since. I love the citrus salt LMNT packets and wear my LMNT founder shirt all the time. And as soon as I finish up law school and have a little more in my bank account, I will sign up for the healthy rebellion. My question is about healing your gut after C. diff. My mom was diagnosed in April and it was on what the doctor called sledgehammer types of antibiotics through July. She just got the all clear from the infection. However, all of the symptoms remain. It is debilitating and she's miserable. Nothing stays in. And I doubt she's absorbing many nutrients. Medical professionals were fantastic at diagnosing and treating, but they haven't provided any guidance on how to heal her gut. What do you recommend? I've recently started her on beef organ supplements, liver, tripe, spleen, and colostrum, but I'm not sure what else to do. Any ideas would be great."

**Robb:** Man. It's tough. Bouncing back from C. diff is no joke and it can be a years-long or even just continuing to be a lifelong process afterwards. To some degree you have to just strap into the notion that there's going to probably be some change relative to what she was before. And you just keep motoring forward from that, be prepared for that. Things can get better. Things will get better, but the going back to the old normal is highly unlikely which seems to be a practical representation of our world. Two really great books, Digestive Health with REAL Food by Aglaee Jacobs and then Healthy Gut Healthy You with Dr. Ruscio. Some people report great benefit from things like carnivores. Some People just need kind of keto. I would be wide open to whatever it is that that works best.

**Robb:** I would pay super close attention to the things that do and do not work. And this is an area where carnivoreish type eating really had shined. So I would be open to that. I've seen some people really benefit from the three-pronged approach that Dr. Ruscio uses on the probiotic front. I've seen other people, myself included either have little or no effect positive or negative or it doesn't really work well for them. So I would be open to different probiotic options. And then I would tinker incessantly with that. But I also would not be surprised if it isn't the thing that kicks it all over.

**Nicki:** It seems like keeping a pretty detailed log of what she's eating and then the effects. How she feels, gas, bloating, stool, consistency, all of that. Just so you can detect any patterns and obviously if you do if she does do the carnivore thing, that's very simple, but keeping things very, very simple, not doing complex meals with multiple different greens.

**Robb:** At least straight out of the gate.

**Nicki:** in the beginning.

**Robb:** Yeah. For sure.

**Nicki:** Okay. Mary has a question on fasted exercise and how it affects the lipid panel. She says, "What effect might cardio exercise have on a lipid panel? I was curious to find out how Microalbumin would be affected by high-intensity interval training the day before at 8:30 AM and cardio the morning of 6:00 AM. My primary care physician had told me years ago that exercise would raise it. So I haven't done any strenuous exercise within 48 hours of lab testing. Since this test was done by my functional medical doctor and not

my PCP I decided to do the experiment since I wouldn't be pressured to start taking an ACE inhibitor.

**Nicki:** Again, I've been medication-free for over a year, choosing a functional medical lifestyle approach to solve the root cause. Lab tests were done at 7:45 AM. To my surprise, Microalbumin was the lowest it's ever been and wouldn't even be measured by my primary care physician. However, my lipid panel was thrown off raising triglycerides from 38 to 88 and LDL from 91 to 134. Interestingly, HDL went down from a hundred to 87. Not that worried about my results as my ratios are still good, but I'm wondering if the exercise could have caused these changes. I'm concerned that my primary care physician would want me back on a statin."

**Robb:** Man, where to go with this. So one thing, and this is one... I'm thinking like 50 things here. One, the standard lipid panel, just kind of dog shit. So I'm like get the precision health reports panel. The rest of the stuff is just casting around it. It really doesn't tell you all that much relative to what it could be hiding. So it's like folks, "Get an LDL particle count at a minimum, at least sneak that into the rest of the testing or worst case scenario an ApoB." So just that as one thing. The other thing with this, and this is where the biohacker quantified self seen makes me a little crazy is that there is a certain baked-in-the-cake variability with lab testing regardless of whatever else you've done. I don't know what the very... If we're really being somewhat scientific about this we would've taken three different samples at the same time or taken the single sample of blood that she had, parceled it out into three or six different vials, and then tested it three to six different times.

**Robb:** And then average that to really see what was going on here because if there was a 10% variation, I guess the triglycerides from 38 to 88 is a fairly robust change. The LDL though, 91 to 134. It's not really that much in the same deal with HDL going from 100 to 87. That's a rounding error actually in lab stuff. If it's a 10% variability on the HDL could have been completely an artifact of the testing and then people start freaking out and going down these different rabbit holes. All that said, when we exercise, we do liberate fats, and glucose, and triglycerides into our system because it's part of what's fueling us. So that can change things a little bit. Also, just there's a certain variability day-to-day, week-to-week, month-to-month on what our lipoproteins look like.

**Robb:** So maybe it was the exercise. Maybe it was just variability in the testing. Maybe it's a little bit of both. Maybe the triglycerides went up from 38 to 88, largely due to the influence of exercise. And then maybe the HDL went down mainly because there was a 10% variability in the test and have they tested it 10 times, it would have come back more around that hundred level. And whether it's 100 or 87, that's a super high HDL anyway, although we're looking at cholesterol, not lipoproteins again. So it's a little bit of a surrogate, but yeah, I mean and again, this is where this type of testing is just frustrating for me because it doesn't really tell us what's going on. So I beg the question, why do folks do it?

**Nicki:** Well, it's probably because it's what their doctors prescribe and what's covered by insurance.

**Robb:** Then come out of pocket and-

**Nicki:** Right. If you really want to know.

**Robb:** .... it's 100, 150 bucks to do the-



**Nicki:** We'll include a link to the precision health reports cardiometabolic panel in the show notes folks. And you can, if you're not familiar with it, you can read about it but it gives you just the whole picture like what Robb's been talking about LDLP and your risk of developing heart disease.

**Robb:** It gives your LPIR score, your lipoprotein insulin resistance score. And based off of that, your family history and a bunch of other factors that all get algorithmically sorted. It gives you a 8 to 10-year cardiovascular disease risk profile, and also a-

**Nicki:** Diabetes.

**Robb:** .... diabetes risk profile. So instead of guessing and I know I sound like I'm a dick. Mary is going to be like, "God, what a jerk." But it's-

**Nicki:** He woke up on the wrong side of the bed this morning, Mary, so.

**Robb:** Woke up in the nightmare that is our current world. But I've been beating this drum a long time and telling folks, "Hey, you got to do this other stuff." And the sad thing is I feel like it's just wasting money and people get anxious and they're confused. And even with this thing, then it's like, "Well, okay, we can go back and we can recheck it." But it's not really... There's so much more error here than signal I don't even really know what to do with it most of the time. So, yeah.

**Nicki:** Okay. Moving on.

**Robb:** Nicki's like shut up and move along, dude.

**Nicki:** We have a question from Clint. And he says, "Hey guys this question pertains to lactose intolerance. I developed lactose intolerance sometime in the first two years of college, when it first hit me I would use the lactase pills so that I could eat pizza and ice cream. As the years went by and I read Cordain's book and yours, I kicked out dairy altogether. I tried ice cream, a handful of times after a few years of grain and gluten-free eating, but even the lactase pill, wouldn't cut it. Fast forward to 2020 and for no other reason than curiosity, I went full carnivore.

**Nicki:** I did this for two to three months and felt great other than high intensity exercise being cut way back because I prefer glucose for high-intensity work. During my carnivore days, I brought back low-fat yogurt, cheese, and some milk and to my utter surprise, I had no dairy digestive issues. After my carnivore experiment, I reintroduced starchy veggies, fruit, and some soaked oats. Just a week off of carnivore, my lactose intolerance came right back. So my question is if you've heard of anything like this, and if you have any guess as to the mechanisms involved, healed gut allowing proper dairy absorption any thoughts would be greatly appreciated."

**Robb:** So I don't spend a ton of time on the carnivore forums and whatnot. We have a lot of people that eat carnivores or the carnivoreish within the Healthy Rebellion, but I'm not super well steeped in that stuff. The best that I can offer here is my personal experience, which is historically if I've had anything other than goat or sheep dairy, I have a tendency to get acne. And since shifting more carnivore, I can eat dairy with damn near reckless abandon and not get acne at all. And I've got a little pimple under my chin here right now, and it's because I've been eating more fruit and the dairy and but it's still fractional compared to what it's been in the past. I don't know what the deal is with that.

**Robb:** Previously was just eating low carb, keto was like broccoli, and kale, and spinach. It wasn't oats. And, but it was vegetable matter. And I don't know what the deal was with that, but carnivoreish my stools are better. My digestion is better. Things are generally better. And then things that are on the dodgy side like dairy when I'm eating more mixed diets seem to be no problem at all. And in fact, I seem to thrive on them. So it's really interesting and I'm not entirely sure what the mechanism is there. Mine is definitely a protein-related issue. And so it makes a little bit more sense. I mean, the lactose thing.

**Robb:** Maybe you still could be producing lactase at that epithelial border, but it's damaged enough by vegetable matter that you're not producing it. And then you do when your carnivore or like that. Total guess, there is in fact not a randomized controlled trial on that but it's the only thing I can think of, but this is one of those interesting pieces of just observational understanding that like okay, for whatever reason you wanted to include dairy or you can recognize that there are these differences they're based around the inclusion of vegetable matter and how it's going to play out for you.

**Nicki:** Okay. It's time for the Healthy Rebellion Radio trivia. I don't know. Our Healthy Rebellion Radio sponsor Drink LMNT is giving a box of LMNT electrolytes to three lucky winners selected at random who answered the following question correctly. So Robb, which is it heat death of the universe or expand and contract?

**Robb:** Part of me would really like the expand and contract idea because there's some possibility that this has all happened before and it will all happen again. But I'm pretty much on the heat death of the universe side of things.

**Nicki:** Okay.

**Robb:** Just going to get chilly and chillier.

**Nicki:** Awesome.

**Robb:** This is what happens when you leave the trivia to me. Yeah.

**Nicki:** When I leave the trivia to you. Yes, okay, folks. The answer to this week's trivia is heat death of the universe.

**Robb:** Yes, it is. It's really the answer to everything, but.

**Nicki:** No, I thought 42 was.

**Robb:** That too.

**Nicki:** Okay. To play go to [robbwolf.com/trivia](http://robbwolf.com/trivia) and enter your answer and we'll randomly select three people with the correct answer to win a box of LMNT electrolytes. Cutoff to answer this week's trivia and be eligible to win is Thursday, August 19th, midnight winners will be notified via email and we'll announce the winners on Instagram as well. This is open to residents of the US only. Our next question is from Scotty. She says, "Hi. I recently participated in a two-week blood sugar/blood fat and microbiome test with ZOE." And ZOE is a company that offers these tests. I think it's a relatively new one. "I'm a 50-year-old female. My blood sugar is amazing for my age but my blood fat is quite terrible."

**Nicki:** Meaning that fat stays in my blood for a very long time after eating. In addition, my microbiome is filled with bad bugs associated with visceral fat. This surprised me because I eat mainly paleo and avoid processed foods and take probiotics regularly. Do you have any suggestions for what to do to get the bad bugs out and the good bugs in? I regularly exercise and have been fit for most of my life. Having changed nothing my body fat composition has increased significantly in the last two years. Yes, I'm in menopause. So some of that is to be expected but I'm always looking to stay as strong and fit as possible. Thanks in advance for your thoughts."

**Robb:** So I'm not familiar with this company and I don't know what they are doing to... I really wish Scotty had shared the specifics when I hear bad bugs and bad fats, it's just so nebulous. I don't know what to make of it. And I was poking around the website on this. And what am I thinking here? On the microbiome side, this is one of my frustrations with this type of stuff is that folks who have like I still have some significant gut issues. And every time my guts been sequenced, it looks pretty damn good. I've got a little bit of too much of this and not quite enough of that, but I mean, it's really minor. And my compared to most people, my guts are pretty fucked up. I'm pretty limited in what I can eat.

**Robb:** There are lots of people that have way more goofy of profiles and eat much more broadly and suffer fewer effects. So I'm just so suspicious about what the ultimate effect is of changing this stuff. If you tweak things, you can take a probiotic of some kind or do some fermentable fiber and things improve. That's great, but it seems to be remarkably individually driven. The notion that the fat stays in the blood too long post-meal, but the blood sugar is fine is perplexing. So, Scotty, I would lift some weights and maybe find somebody who does bioidentical hormones to address the menopause deal, and then I would probably not check those ZOE stuff again, or do check it after doing those things. And just see if that stuff is modified.

**Nicki:** Or look into the precision health nutrition, the precision health blood reports as well, if that's-

**Robb:** Yeah. It's going to be remarkably different than what she's fishing around here. But I was one of the earliest people beating the drum around the importance of the microbiome, and we know it's critically important, but beyond that, we had an earlier question and I recommended Aglaee Jacob's book and Dr. Ruscio's book, and it's mainly a sorting process. You tinker one, you do this, then you do that, you do this, then you do that. There's not some hard-fast rule if you've got this profile and you follow these steps are people out there that claim that? And I think it's absolute bullshit. And there's just so much we don't know. And so much individual variation. I think we have some general trends, but the main trend is if your gut shows pathology either funky stools or a ton of gas, or neurological symptoms after eating or whatever the deal is, then we need to probably tinker with some variables. But then what you do to tinker those variables, one person may do fantastic with a bunch of fermentable fiber and the next person will be absolutely ruined by that. And that's...

**Nicki:** I also find it interesting that she seems surprised that this test came back with the results that it did with regard to her microbiome because she doesn't appear to be experiencing any GI discomfort.

**Robb:** Yeah, I think what she's trying to connect here is that she's gained fat in the past couple of years. And it's because this microbiome is more associated with obesity. And there are some interesting studies where they take the microbiome out of an obese mouse, put it a lean mouse, and the lean mouse becomes obese. They take the lean mouse's

microbiome, put it in the obese mouse. Doesn't really get lean. It improves a little bit, but not much. It's kind of a one-way street. So there is some interesting stuff around that, but again, we've seen folks that have super screwed up gut biome, and they're able to lean out just fine. They just have to find the right air-fuel mixture. And it will say like on that, that hormonal front, if hormones are off particularly in that perimenopausal state and the way that a female hormone replacement is handled is so ham-handed and ridiculous in general, it's appalling, but.

**Nicki:** You might want to look into finding a practitioner that can order you a DUTCH test and do the interpretation because that can shed a lot of light on what's going on, hormonally for women.

**Robb:** Yep.

**Nicki:** Okay.

**Robb:** Last one.

**Nicki:** Last question for today from Megan. "Hi, I've been following your podcast for several years, including binging most of the Paleo Solution podcast episodes, absolutely love your work and podcasts. They've been vital in shifting my relationship with food back to a place of focus on health instead of weight. I have a question and I hope it makes sense. Do you think one's receptivity to certain foods is linked to the way that our particular ancestors ate? People from areas with more tropical fruits might be less sensitive to those sugars than someone of primarily Northern European heritage that thrives on very low carb, keto like myself. Would some indigenous populations in the US be more likely to tolerate corn and beans in a healthy way than someone from an area that didn't have those foods until recent history? I've been trying to do some digging on this and haven't ever found specifics on one's particular genetics playing a role and would love to hear your perspective.

**Robb:** I think that there's a bit to this, but it's not that deep and the reality is that human should be pretty flexible in whatever dietary practices they have. The one big consistency that we see is that folks going from a pre-westernized diet into a westernized diet things go sideways. There do seem to be some minor adaptations, but so much so like, oh gosh, I'm trying to think. Some of the folks that eat a lot of taro also consume clay, it's geofudgy and it's because the clay actually ends up binding to some of the cyanide that's in the taro root, and soaking, fermenting, sprouting of grains and legumes really minimizes to a huge degree the toxicity, the anti-nutrients they're still there. This is why these folks also developed using lye on corn because it would release some of the B vitamins in there or prevent the blocking of some of the B vitamins.

**Robb:** But pellagra was another disease endemic to places that consumed a lot of corn but didn't have this further technological way of dealing with it. So a lot of the foods that we've been exposed to, we have had cultural and technological ways of addressing the deficiencies, the toxicities, and whatnot. And we haven't had to develop specific morphological or genetic adaptations to what our culture and technology has been able to adapt. It's such a rapid pace that we didn't really need the same selection pressures weren't there with the genetic side. I think that across the spectrum, some folks from different parts of the world may do better or worse on carbohydrate levels. There's certainly some variation. Ironically the places that have a lot of wheat in cultivation seem to have high concentrations of celiac gene frequency, but where wheat, but this is interesting.

**Robb:** I've never thought about a correlate with this with regards to rice and some other things, but the tendency towards celiac disease is an overreaction to gliadin proteins in wheat which is just an unfortunate bystander, but the folks that have the celiac genes tend to also be better at clearing gut born pathogens because they tended to live in larger groups, urban areas within this neolithic setting. So they were getting exposed to when infectious agents much, much more consistently than their hunter-gatherer counterparts.

**Robb:** And so the celiac gene adaptation was likely a mitigating factor in living in dirty closed environments around other humans and animals that was different than their hunter-gatherer counterparts. It just happened that the downside was that one of the primary staples they were eating happened to be toxic in that circumstance like drew a short straw on that case. I remember when Kurt Harris used to be around the scene, he talked about how if all of Mesopotamia maybe had had corn and rice instead of wheat that health may have turned out much more different than what it did because of the damaging influence of wheat and gluten and all that.

**Nicki:** Interesting. All right. I think that is a wrap for this week. Folks, remember to check out and should support our show sponsor LMNT and nominate your community heroes, the people that do the most for your community. You can do that at [drinklmnt.com/giveasalt](https://drinklmnt.com/giveasalt).

**Robb:** Cool.

**Nicki:** All right, folks.

**Robb:** Thank you, wife. Thanks for dealing with my crankiness.

**Nicki:** Have a fabulous weekend, everyone, and we will be back next week.

**Robb:** Bye, everybody.

**Nicki:** Bye.