

**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 1 million people liberate themselves from the sick care system. You're listening to The Healthy Rebellion Radio. The contents of this show are for entertainment and educational purposes only.

**Nicki:** 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 Plus.

**Robb:** Welcome back, wife. Welcome back, rebels.

**Nicki:** Hello. Hello. Another episode of The Healthy Rebellion Radio is in progress.

**Robb:** Nicki was just threatening that she needs to blink twice for help before this one.

**Nicki:** Yes, I was.

**Robb:** Here's your chance.

**Nicki:** I'm blinking folks. I'm blinking.

**Robb:** What type of abuse were you dealing with today?

**Nicki:** All the types.

**Robb:** Okay. Well, as long I'm being non-discriminatory about how I abuse you.

**Nicki:** No, you're not. You're not. No.

**Robb:** Yeah. I'm just layering on all the abuses.

**Nicki:** He was saying that my old factory senses were inaccurate.

**Robb:** I think I was a bit more harsh than that.

**Nicki:** Yes. Yes. But alas, we will move on into this episode. It's freezing here.

**Robb:** It's literally freezing here. It's minus nine degrees today.

**Nicki:** That's super cold. Super cold. This episode comes out on New Year's Eve, so happy new year's everyone. Happy anniversary house.

**Robb:** Oh, thanks. You remembered this year.

**Nicki:** I remembered. I know.

**Robb:** Aw, that's cute.

**Nicki:** I'm usually the one that forgets.

**Robb:** Yeah. You've forgotten most all of them.

**Nicki:** Well, because you get into the general hustle, bustle of the holidays in New Year's and it just ... I don't know. I've forgotten many a time. Robb has surprised me with flowers and I'm like, "Thanks. What are these for?" But I didn't forget this year.

**Robb:** Well, not yet.

**Nicki:** Not yet.

**Robb:** Not yet.

**Nicki:** Not yet. Because it is early that we are recording this on.

**Robb:** Oh, I am all twitterpated though that you even remember days ahead. It's kind of amazing.

**Nicki:** Huh. Let's see. It's sort of in flux, but we are planning on making a couple of changes to the podcast this year. Instead of it being kind of so formulaic with five questions every week and-

**Robb:** What Nicki is trying to say is we're going to record naked.

**Nicki:** ... No.

**Robb:** But audio only.

**Nicki:** We are going to move to audio only, and we'll talk about that a little bit too.

**Robb:** For the most part. Yeah.

**Nicki:** Salty Talks will be video, especially because usually I have a guest or if you're walking through slides or something, we'll definitely do video for those. But as far as the actual regular kind of Q&A episodes, sometimes we'll do the full five questions, sometimes we might only do two or three depending on the question and how long we want to dig into it and also depending on what other topics we want to kind of talk about at the beginning of the episode. We're kind of making some changes, trimming some things and hopefully it'll be enjoyable for you all.

**Robb:** We're trying to make more fun for both us and you all.

**Nicki:** And you all. Yeah. And sometimes you just need to change things up, so that's what we'll be doing. Housekeeping items with regards to The Healthy Rebellion community. This coming Monday, January 3rd starts our cold shower challenge inside the rebellion led by our rebel Ash Higgs. If you want to get in on that action, just join The Healthy Rebellion. It's a week long cold shower challenge, lots of great info packed into that course.

**Nicki:** Again, that's something you can join inside the rebellion. Our winter 2022 rebel reset also begins in a couple weeks. We'll do that kickoff call on January 14th, which is a Friday. And that following week we do the seven day carb test, which is optional for those who want to participate in that and learn more about how their bodies respond to particular carbohydrates. And then the 30 day reset officially begins on Monday, January 24th. If you're not yet a member of The Healthy Rebellion and you want to participate in those two items, just go to [join.thehealthyrebellion.com](http://join.thehealthyrebellion.com).

**Robb:** Cool.

**Nicki:** And then did you want to talk a little bit about kind of your thoughts on what you want to do around social media? We mentioned that we're not going to do video for the podcast anymore, which means we're not going to have our video clips dripped out to social.

**Robb:** Yeah, that's been kind of the main drivers. We drip a few little hooks for the podcast episode. And I guess we kind of alluded to some of this in a previous podcast about just not really being entirely sure what we're doing here. With regards to is playing along with the narrative or the ... Not really the narrative, but the-

**Nicki:** The machine.

**Robb:** ... the machine.

**Nicki:** As Paul Kingsnorth likes to call it in his amazing three part series. Yeah, the machine. And also, one of the reasons for doing the clips, right, is to have a little one minute, 60 second snippet out there on Instagram or Facebook that somebody might listen to and be like, "Gee, I want to go listen to this full conversation." And we've got a year of data on this since we've been doing this.

**Nicki:** And our subscriber numbers for the podcast haven't really changed in any meaningful way, so I don't think that, that's really doing much. We've been kind of listening and talking about ... Listening to different people, experts in the social media space like Tristan Harris and Daniel Schmachtenberger, and just wondering like what is our place on social media? Is that really serving our business, the Robb Wolf, The Healthy Rebellion, whatnot?

**Nicki:** And I think for The Healthy Rebellion itself, we have an Instagram page for that, and that I think it makes sense to continue to populate that and try to draw people in. And we'll still post sometimes on your Instagram. We're not going to just delete it out of the gate, but I think we're moving towards that.

**Robb:** Most likely we'll open a Substack. And I'm still back and forth on will I do nothing on the Instagram? Will all that stuff just get shot down? Here's the thing, the back and forth on this is it is a way to reach people. And this is part of the anxiety around being canceled. The irony is if you just shut it off, then it's effectively the same as being canceled. Only I broke up with you, you didn't break up with me, and that's always an easier thing to stomach on some level.

**Robb:** At a minimum, what I'm going to start doing is anything that I feel like is valuable will go on the Substack. And then I might do a quick screen grab of that, stick it on Instagram and really just provide no analysis and certainly no interaction in the comments there. And not because I don't want to interact with people, not because I don't want to help people.

**Robb:** If folks look back four years ago on my Instagram feed, I spent hours a day answering questions on the front end and then holy shit questions on the back end, because I actually ... I think about it like this. 1950s worker man going to the factory, and I have my hard hat on and my lunch pail, and I peck my wife on the cheek, and, "Oh, I'll see you later."

**Robb:** And I actually took the shit on as a job to help as many people as I could. And my kind of rubric was, if I can help enough people, then I'll figure out a way to make a living out of this stuff that we're doing. And by and large that worked up until it started not working in that it was just an absolute shitstorm on social media all the time.

**Robb:** I think before The Social Dilemma came out, but it started becoming obvious about the algorithms that were being used to pit people against one another. Good news spreads okay, but holy shit, bad news spreads so much better. And so it seemed like the only people that would interact with me were the people that there was no way in God's green earth I was ever going to have a meeting of the minds with them.

**Robb:** And back in the old CrossFit Forum days, there were people who were really trying to be trolls, but I was kind of renowned for going in and being the troll whisperer and finding some common ground. And maybe not convincing them of stuff, but this was some of the, I think, the reason why CrossFit didn't just go completely off the skid early on is there were some people like me that were in there and advocating for the more sane elements of it.

**Robb:** And then it became this thing where you can be articulating sanity, but there will be some person who finds it appalling. And if you've got a highly sophisticated algorithm that's going to ensure that my hopeful sanity gets in front of somebody who's annoyed by it, then insanity will ensue. And so I'm babbling on about this stuff now, but I just don't really know how to-

**Nicki:** We're-

**Robb:** ... thread this needle, play this game.

**Nicki:** ... going to experiment with this and just see where it goes.

**Robb:** And it could end up being a gone fishing sign goes up everywhere and people will need a private detective to find me. I just don't know. I don't think I'm at that point of my career yet. But-

**Nicki:** You have things you want to say, and social media is not really the place for it because of the toxic nature and inability to really do long form. And then we have The Healthy Rebellion where it's the primary focus is getting people healthy, and improving metabolic health, and strength and kind of having that community. But there are some things that you want to say that might not necessarily be appropriate-

**Robb:** ... In some ways it's-

**Nicki:** ... for there either.

**Robb:** ... yeah, it's fully people they're like, "Yeah. Okay, I get it," or it's just not ... Yeah. Yeah.

**Nicki:** And so I think the Substack makes sense for you to kind of scratch that itch and be able to say things that aren't appropriate or aren't the best fit for either of those platforms. So anyway, yeah, you'll ...

**Robb:** Keep your eyes open for that. I might even have some shit up around that before this thing goes up. It kind of depends.

**Nicki:** Okay. Let's see. I also wanted to ... Can you scroll back up please? Thank you. I know this is kind of a long ... This is why we're sometimes going to go to a shorter or fewer questions, because sometimes we have more that we want to talk about kind of at the front end of the episode.

**Robb:** Well, just to interject there also, it's interesting that folks are like, "Man, I love hearing more questions about protein, carbs, fat." And every once in a while we get an interesting one, but it's super repetitious and we've kind of ticked those boxes, and that's what past episodes are oftentimes for, and they're very searchable and cataloged, and we have transcripts and everything.

**Robb:** We will continue to answer questions, but we're going to be pretty ... We're not just going to grab five questions because we need to fill a five question docket. If there's not five good questions that came in the previous couple of weeks, then we're ... It's going to be a shitshow.

**Nicki:** Well, and also, we've been getting some great questions, but some of them are fairly medical and technical. And we're not sure that this is-

**Robb:** The right venue.

**Nicki:** ... this is the right venue for that, so some of those types of questions get passed over. Anyway, I had come across an article, or I was reading a Substack article and came across a comment on an article. I think it was Toby Rogers, right before Christmas. And I had shared it with a few people because it was just this heartbreaking comment about a parent talking about her special needs child and how she was struggling with everything going on with regards to the pandemic.

**Nicki:** And then it was just a few days ago that I was listening to the recent DarkHorse Podcast episode, the unmasking humanity one. And they talk about masks and just all of the damage that is being caused by the mask. You can't even quantify it. There's just a lot going on with regards to especially masking children, young children. They talk about all of the muscles that we have in our face that are meant for expression and how we communicate so much with our faces.

**Nicki:** And when you mask a face, and we've talked about this before early on in the pandemic, how we were concerned about that in particular as well. Anyway, Bret and Heather do a great job of unpacking all of that. And then they played a clip from White House press secretary, Jen Psaki, where she was asked by a reporter whether or not the White House had any plans to encourage and easing of restrictions in schools with regards to things like masks. And so they play this like two minute clip of the reporter asking the question and Jen responding.

**Nicki:** And part of her response was that, "I have a three year old son, and he doesn't mind wearing his mask at school." And Bret and Heather go into how absurd of a statement this is. He's three. Maybe he doesn't know what he's missing kind of thing. But anyway, it made me think about that comment that I had read. And I wanted to share it because I feel like reading this type of stuff and hearing it, we have to kind of get back to humanity. And we have to get back to what are these ...

**Nicki:** So much is being done, and so much of it just is up under the curtain or under the carpet and people aren't seeing it. Unless you are a parent of a child like this, or you're experiencing this directly, you don't see it and you think, "Oh, I'm just going to wear my mask and everything's fine." I think it is important to kind of highlight some of this stuff.

**Nicki:** This is a comment by a woman named Juanita. Excuse me. And she says, "I have a very special nine-year-old daughter who is brilliant, beautiful and insightful, yet struggles with everyday tasks, emotional regulation and sensory processing, and now disabling OCD and sadness. Ever since we realized how different she is, I've asked myself why. Could it have been the vaccines? I knew enough to postpone the Hep B at birth, but was talked into it when she was two weeks old. Was it having strep four times when she was a toddler, preschooler?"

**Nicki:** Was it the tick bite that she got at three and a half years old, or perhaps all three? School, even preschool has been a hard road for her, but she was doing pretty darn well when schools closed in March of 2020. Every month away she got a little wilder, with angry outbursts over strange things, but was still very happy, until this fall when she became completely overwhelmed by having to wear a mask at school. I got her an exemption, but when she used it, she was forced to distance from the other children and told me she felt like she didn't matter.

**Nicki:** She also couldn't stand being surrounded by a sea of masked faces, whose emotions she couldn't read. Then the principal canceled morning recess in the interest of longer math time. Within a week, she started painfully obsessing over loose teeth, her inability to swim, the feel of underpants and other random strange things. We thought it would pass, but it hasn't even when agreed to keep her home and started therapy.

**Nicki:** She tells me that the longer this goes on, the more she loses hope that she will get back to her normal. Our heavily democratic school system in Fairfax County, Virginia, only cares about zero COVID and magical talismans like masks, not the mental health of my special needs child. The same principal banned her from the class holiday party because we can't have children attending just the fun parts of public school. The assistant superintendent backed him up and school board members have been silent. The evil is palpable." Gosh, like ...

**Robb:** Why don't you read the last part there? I know we're trying to make this a little apolitical, but this is something that needs to be.

**Nicki:** Okay. And her last statement is, "I will vote for anyone who ends the insanity that has been our COVID response and will be thrilled to end all school facts mandates if it saves any other families from what we have experienced."

**Robb:** I've seen this thing probably eight times and it guts me every single time as just kind of a big baseline. The second thing I'll throw in there is, and this will piss some people off, but I'm just so beyond giving a shit at this point. If you fancy yourself anywhere along, let's say the kind of progressive spectrum, and you're not speaking out against some stuff like this. I mean, if you wanted to follow the science and make a hill to die on, masks are not it.

**Robb:** We've known this pretty well for a long time. We know it better and better all the time. N95 masks worn perfectly with a trained professional might reduce transmission of things like COVID and influenza about 30%. And this is not kids wearing cloth masks using them one minute as a diaper, the next minute as a snot rag. They do absolutely nothing, but yet this has become this-

**Nicki:** Badge of like ...

**Robb:** ... It's like the Jewish Star, effectively. I mean, within Nazi Germany when they would label, Jews would have to wear these arm bands and whatnot, it is just is completely polarizing us versus them.

**Nicki:** Right, but in the opposite way. Like , the mask is-

**Robb:** Well, they used it to identify people.

**Nicki:** Right. So you're identifying the compliant.

**Robb:** And so you're identifying if you don't, yeah, you're compliant versus not compliant.

**Nicki:** You're a good person versus a bad person if you wear your mask all the time.

**Robb:** Here's my only point with this. There's going to be blowback to this. My concern always, and the thing that I've articulated around this is the blowback may be way worse than what people think. And if you lean a little bit progressive, and you are worried about some sort of legitimate right leaning authoritarian individual coming in, you just can't create a more juicy environment than the one that we're in right now.

**Robb:** And I would say that we've had some rather left-leaning authoritarians really trying to take us to task. If Trump had tried to do what has been done over the last year, my God, how people would've lost their minds. And not really going to say anything else about that specifically, but just fucking think about that. And I assume most people who are listening to this podcast, we've probably chased everybody off who is, I don't know, not of similar mind on this stuff, which is kind of heartbreaking in and of itself, but these are kind of the talismans and the tipping points.

**Nicki:** Like this masking thing. And again, if you're interested in it, Bret and Heather do a great job of digging deep into this.

**Robb:** Vinay Prasad does a wonderful takedown on this. Well, yeah, there are credible people who speak well to this topic.

**Nicki:** But we might not know what the fallout from this is for 10, 20, 30 years. This is a period of development, which is critical. And so what happens if a child is in this all masks all the time kind of environment, and what happens when they don't see faces for ... I don't know how long this goes on, but it's been two years already. It'll be a lot of time before we really see how this has affected people.

**Robb:** What we know for sure is poor nutrition in a two year span of a child's life can be irreparable, cause irreparable damage. Two years of physical activity can cause massive problems. Yeah, we don't know yet, but we will know in the future.

**Nicki:** All right, now we have a news topic. This one we can give a hat tip to one of our Healthy Rebellion members, Nicki. She shared this, this morning actually. And the topic was pre-pandemic cognitive function and COVID 19 vaccine hesitancy a cohort study. And this was in ScienceDirect. You want to dig into that hubs?

**Robb:** Yeah. And God, I don't even know where to start on this. I'm just pulling pieces out of this. I would encourage people to read this paper. It's not that long. In the setup of the paper, there's a section, "Vaccination is central to controlling the present pandemic with success reliance on a sufficiently high uptake to achieve herd immunity." And then it links to a paper that they have on herd immunity or kind of a position piece.

**Robb:** And this is ironic. When the herd immunity drops due to the increase in non-immune individuals either by birth, immigration or loss of immunity to such an extent that the epidemic can again occur, the population has reached an epidemic threshold. It's ironic that these folks mentioned herd immunity as part of a goal here, because I haven't heard that as part of a public health goal in two years.

**Nicki:** Since the very beginning.

**Robb:** Since the very beginning.

**Nicki:** It was there in the very beginning and then it dropped off.

**Robb:** Well, and that it was mainly there as kind of this nebulous, "Well, maybe we can reach herd immunity and maybe we need 70% vaccination," but there was never anything implicitly mentioned about like-

**Nicki:** I feel like there was-

**Robb:** ... I'm saying from-

**Nicki:** ... in like February, March, early, early. But then as soon-

**Robb:** ... You think from the mainstream? From like the-

**Nicki:** ... I thought you would mention herd immunity.

**Robb:** I guess a little.

**Nicki:** But then once the vaccines it looked like it wasn't going to take them seven years to take the vaccine-

**Robb:** I feel like it was-

**Nicki:** ... and that went out the window.

**Robb:** ... 100% oriented on vaccination status though. There was never any word mentioned about naturally acquired immunity.

**Nicki:** Exactly. Once the vaccines were available, once it was looking like they were-

**Robb:** So there was a little bit of back and forth. Anyway, it was fascinating to me that this was mentioned as a goal. And it's particularly fascinating given that these vaccines from their inception have been known to be completely leaky, non-sterilizing, so it's just ironic that it's a piece of that. And I did some poking around ... This is a different paper from looking at vaccine hesitancy. This is something separate.

**Robb:** But a quote from that piece "I remain concerned about reaching the most hesitant subgroup of Americans," said Mejia. "The only way to end this pandemic for real is to get enough people vaccinated that we can reduce the speed of new variants spreading." It's kind of two pieces here, the paper that we're mainly talking about and then this other one talking about, also talking about vaccine hesitancy, which is this claim that the vaccines do anything with regards to mitigating transmission, which does not seem to be the case at all. It might mitigate severity of disease, at least for some people, but that's as-

**Nicki:** ... Well, if you were using the-

**Robb:** ... generous as you can-

**Nicki:** ... definition of a vaccine that was on the CDC six months ago, where you have like a ... It's a killed virus, and it prevents transmission and spread. And now the definition of vaccine has changed so that it's-

**Robb:** Yes and no, but even the influenza vaccine is not a sterilizing vaccine. We don't have to go that far down-

**Nicki:** ... Got you.

**Robb:** ... the thing. I agree with that. It would've seemed insane to do a vaccine mid-influenza pandemic because of the understanding around that stuff. You got to do it ahead of time. The main goal is that it's going to mitigate severity of symptoms. And it seems to have varying degrees of efficacy even there, but it's understood that it doesn't. But all of the messaging around all of this is that it's going to stop the pandemic, which is a lie. It is false. It is completely false at top of it. Anyway, somewhat at a peripheral, the results from this piece relative to the group. What they did with this-

**Nicki:** Twice.

**Robb:** ... Yeah, I know.

**Nicki:** Oh, okay.

**Robb:** Yeah. They're looking at, in theory, the cognitive capacity of folks in their relative vaccine.

**Nicki:** And the conclusion was basically that the people with-

**Robb:** The dummies were vaccine hesitant.

**Nicki:** ... lower cognitive capabilities were more likely to be high vaccine hesitant.

**Robb:** Right. Right. Relative to the group who indicated a willingness to have the vaccine, those who were hesitant were more likely to be young, female, from an ethnic minority background and be less well educated. The hesitant were also less likely to carry an array of existing somatic morbidities. They weren't sick, fat, overweight, diabetic, heart disease, et cetera, et cetera. This supports the present results whereby people with higher educational achievements were less likely to be vaccine hesitant.

**Nicki:** Okay, so you have young female minorities who are less educated, but they have few or less likely to carry any comorbidities. Could it be that they've-

**Robb:** They actually made an educated decision.

**Nicki:** ... accessed the situation and-

**Robb:** So-

**Nicki:** ... come to the conclusion that they are at a lower risk of having a severe outcome from COVID?

**Robb:** ... So young, female, no comorbidities. Was there another one in there?

**Nicki:** And ethnic.

**Robb:** Well, ethnicity can vary. It looks like some Asian subgroups due to some modifications in the access ports in cells can be at a higher risk. Maybe yes, maybe no there, but ... If a woman is thinking about a vaccine or not, and she's of reproductive age, even folks who are exceptionally low education understand that there are some risks associated with vaccination.

**Robb:** And so it's just ironic that ... And they paint this as ... God, I'm just playing around here. One of the questions I had originally was what is the purpose of this research at all at the beginning? And it would seem to be that-

**Nicki:** They wanted-

**Robb:** ... oh, look at the dummies.

**Nicki:** ... Look at the less educated people and the bad choice that they're making versus the good choice that the higher educated people are making.

**Robb:** Yeah.

**Nicki:** What else would be the purpose of doing this?

**Robb:** Yeah. Yeah. Which again-

**Nicki:** So it's playing into the sort of othering and tribalism that is just happening at such an astonishing-

**Robb:** ... It is so dangerous. Here's part of the conclusion, erroneous social media reports might have complicated personal decision making, leading to people with lower cognitive ability being vaccine hesitant, with individuals with lower cognition also experiencing higher rates of COVID-19. And studies conducted prior to vaccine distribution, these new findings are suggestive of a potential additional disease burden. There were so many contradictions in this piece. On the one hand, the people who were primarily vaccine hesitant were young, ethnic, female and low education, and then there was-

**Nicki:** ... Low comorbidities.

**Robb:** ... And low comorbidities. But also in the same paper, they claimed that the people who were experiencing the highest problems from COVID from a social, psychological perspective were basically the cognitively impaired here. They're saying on the one hand that this group of people who should be the least likely to have problems from COVID are in fact the people that we're seeing the greatest problems with, which cannot be the case at all.

**Robb:** We know this to be patently false. There's this age association, there is a metabolic health association. This thing's just the hottest fucking mess that I could spend a month digging into it and I don't know if it's entirely worth it, but it was ... God, I don't even know what it is.

**Nicki:** It's just, this is science.

**Robb:** It looks very sciencey.

**Nicki:** It's the science.

**Robb:** And within this study, it was conducted in the UK, the cognitive assessments were done up to 10 years in the past. And then these people are maintained in this database and then they will pull them up for different updates. And it was interesting even the way that they assessed relative cognitive function. Some of it I was kind of like, "Okay, I kind of get it." There's some math in there. There's some name as many animals as you can in one minute. But even in that situation, if your English is a second language, you're fucked.

**Nicki:** Yeah, totally.

**Robb:** You could be brilliant and you just don't have ... But you have like a fifth grade level of English comprehension, and you screwed the pooch on that one. It's just so ... I don't know. Let's just move on before we really are down to six listeners. Anyway, so we have links to this thing. I would encourage people to read this thing. We have links to it. It'll be in the show notes. It's not that long.

**Robb:** I would just read this thing and kind of ruminate or meditate on what are folks trying to get done with this. What is the end goal of a piece like this? It seems in some ways that there is absolutely no winning with this, other than if your goal is to drive yet another wedge into society. And you made a point before we recorded that so much of this stuff is operating from the assumption that vaccination is the appropriate decision for one and all under all circumstances. That is the operational baseline that these people are coming from. So if you're vaccine hesitant, of course you're wrong straight out of the gate according to this, which is-

**Nicki:** Because there's no other route.

**Robb:** ... just preposterous. And this has never really been the story with any other vaccination process in history. There were virtually always some degree of caveats or considerations. "Well, maybe it wouldn't be a good call for this person." And we didn't have societal shutdown to affect that process. Okay.

**Nicki:** Okay. You done?

**Robb:** I'm done. Jesus, I should have never started.

**Nicki:** All righty. The Healthy Rebellion Radio, this episode is sponsored by our salty AF electrolyte company LMNT. We do still have some mint chocolate salt left for all you lovers of mint chocolate, so you can grab some of that still. I think we only have a few more weeks though, and I think it'll probably be Gone.

**Robb:** It's like two weeks of stock left. Yeah.

**Nicki:** Yes. So be sure to get that now. I also want to remind everyone again about our LMNT Give A Salt program, where you nominate everyday heroes of yours, coaches, teachers, firefighters, first responders, anybody in your life who has made a huge difference or is making a big difference in your community and who could use a little salt.

**Robb:** Let me mention something to that effect. Every once in a while I do go on Instagram and look in the messages, because there are actually some important things that pop up in

there occasionally. And one of them was a woman who said, "Hey, I received this package from LMNT, and it's very nice, but I have no idea why." And I'm like, "Well, who are you and what do you do?" And she's like, "Oh, I'm a coach, and this and that." I'm like, "Well, somebody nominated you via the Give A Salt program."

**Robb:** And then she went back and looked at the card that came with it, and she's like, "Oh my goodness, yes, they did." But she was on another planet, because she works in this very marginalized, underserved community, and does it as a love and passion project. And somebody somewhere along the line was like, "This woman is fucking awesome," nominated her with the Give A Salt program.

**Robb:** And so she got a bunch of swag, and she got some cool stuff, and she got a card that said, "We care about you." So this is it. If there's somebody in your life that you care about, and they're awesome, and they're doing good work and they're underrecognized, fucking go to the Give A Salt program and the-

**Nicki:** You nominate them and then we'll-

**Robb:** ... [drinklmnt.com/giveasalt](https://drinklmnt.com/giveasalt) and we will send them stuff, and they will be stoked and we will good.

**Nicki:** ... Absolutely. And how many people out there are these sort of silent heroes that are just working away and doing real good in the world, but there's no visibility to them? Right? These are the people that we're looking for to brighten their day and make them a little more salty.

**Robb:** Exactly.

**Nicki:** Okay. We do actually have some questions today. We'll probably get like a flood of email saying, "I hate your new format. Go back to the questions."

**Robb:** That will be easy. We'll just shut it all down at that point.

**Nicki:** Okay. We have a question from Jonathan on CBD and testosterone. He says, "Hello, I am a 42 year old male, and to the best of my knowledge, in good health. I strength train four times a week and I'm looking to keep my testosterone levels optimal. I have no reason to believe my testosterone levels are not good, but I'm cautious about taking supplements that have known negative impacts on testosterone. I'm hearing a lot of positive claims for CBD and I believe that you've talked about personally using it. Two that are most prominent is to reduce inflammation and to reduce anxiety. I'm wondering, do you know what the effects of CBD are on testosterone and does this differ from THC?"

**Robb:** The negative effects of THC on testosterone production both in men and women are pretty well documented and it's fairly powerful. And this is one of the problems of folks that are really chronic consumers of the chronic that-

**Nicki:** The chronic.

**Robb:** ... you can end up and stick a really good beer habit with that, and hops and yeah, you have man boobs-

**Nicki:** And soy lattes.

**Robb:** ... and soy lattes. And it can be pretty powerful. CBD isn't as powerful and estrogen mimetic, but there are kind of two considerations. And I have a link to a website. It's not a scientific site, but it's kind of an industry site talking about CBD. CBD has been suggested to reduce testosterone production by inhibiting the enzyme 17 alpha-hydroxylase, which makes testosterone in Leydig cells and it has a reference for that. I'm not super sure the dosing and all that.

**Robb:** That's something that you would have to follow up on, but they do have a caveat here. However, CBD also inhibits the specific Cytochrome P450 enzymes in the liver, which break testosterone down. You have possibly some inhibition on the one hand, but then potentially the maintenance of testosterone being available on the other. But this is still just this really narrow snapshot of this whole thing. Sex hormone, binding globulin, overall estrogen levels, this is we're doing three times a year-

**Nicki:** Hormone panel.

**Robb:** ... hormone panel to get a deep dive on what you have going on would be good. The site did recommend cycling off of CBD on some schedule once a month. For me personally, I found no benefit from CBD for any gut issues. I wouldn't even really say I noticed it improving anxiety. But in this managing my essential tremor syndrome, it definitely has been a huge bone and I'll have some updates around the essential tremor stuff at some point soon. I've kind of made some interesting discovers on that.

**Nicki:** You've dropped it a little bit, but you haven't really like ... I don't think a lot of people know that you've had this, so when you do your writeup, that'll be helpful.

**Robb:** Yeah. And I may do a separate Salty Talk on it just so it-

**Nicki:** I think that would be very helpful.

**Robb:** ... is handled on that too.

**Nicki:** Yes. Okay. Next, we have a question from Nathan on omega-6 and omega-3 ratio when lowering saturated fat. "Hi, Robb. I first discovered your work in 2009 when podcast episodes were still single digits. My lungs had collapsed 14 plus times. I had three lung surgeries, and long story short, I put a super rare autoimmune disease into remission thanks to you. In an effort to make this message easier to process, I've tried to ask the question first then included context below if it's helpful.

**Nicki:** So my question, Dr. Cromwell recommended that I try lowering saturated fats to less than 15% of total calories. Keep total fat around 60% and retest in a couple of months, then chat with him again. Seems like a good next step. I've been mostly eating low carb paleo plus full fat grass-fed dairy, keto at times for mental performance.

**Nicki:** I've been getting lots of what I've considered high quality animal fats, but this recommendation has me scratching my head regarding where I should be getting my 60% of calories from fat from. I'm planning to increase fatty fish like salmon in my diet, but I'm a bit worried about getting omega-6 to 3 ratios all out of whack if I cut out much of the grass-fed beef, grass-fed full fat dairy, wild game, et cetera, I've been eating. Egads, what are your thoughts?"

**Robb:** Yeah. Oh man. Dr. Cromwell is the lipidologist that we primarily worked with at specialty health in developing the Reno risk assessment program and doing all the metabolic

assessment of police and firefighters and the other work that we've done there. And before-

**Nicki:** And we talked about the cardio metabolic risk assessment people via the rebellion and also on the podcast before. So people can order-

**Robb:** ... Precision health reports and-

**Nicki:** ... precision health reports. Yes.

**Robb:** ... Yeah. There was a time when I was in the camp that so long as insulin levels are low, then you can't get cardiovascular disease. And I was bought into that and that seemed reasonable. And then dammit all, Dr. Bill Cromwell makes my acquaintance. And he's a big fan of keto. He's a big fan of paleo. He's not a big fan of super high lipoproteins however, specifically LDL lipoproteins, especially if you end up with elevated Lp(a) or genetic predisposition or other circumstances.

**Robb:** And he fully recognizes that a type 2 diabetic with a given lipoprotein and cholesterol levels likely at higher risk for cardiovascular complications than a lean mass hyperresponder person. But what's being generally thrown around out there is that so long as you keep insulin low and you're all good. And I just unfortunately don't think that's the case.

**Robb:** And I know that there are some folks like Malcolm Kendrick that have this vascular injury model of cardiovascular disease, and I'm very interested in that. But there is still kind of a reality. We've discussed this in The Healthy Rebellion a good amount. Let's say that it's a story of you do need some vascular endothelial damage to have the negative consequences of this elevated lipoprotein count. Okay, I'm almost 50. How many instances of vascular endothelial damage have I had, either from inappropriate exercise or one dessert gone wrong, or firewood smoke, or diesel fumes while traveling?

**Robb:** There's just all this shit. And so I don't know that one can just absolutely dismiss all this stuff out of hand. And then we have the reality that for some people simply being in the state of ketosis, due to the enzyme systems that are involved in ketogenesis and also the production of cholesterol and lipoproteins, there is this overlap in that area. And this is part of the place that statins end up functioning is inhibiting this enzymatic process.

**Robb:** What Dr. Cromwell has recommended is maybe an 80% fat diet isn't a good idea. Maybe we need to drop it below 60%. And the saturated fat specifically seems to have, at least on some people, disproportionate tendency to elevate cholesterol and lipoproteins. And maybe the same story with dairy even to a greater degree. So then what does one do? I think you know to fill in the remaining fat-

**Nicki:** Calories.

**Robb:** ... content and calories and whatnot. I think a lot of nuts and seeds, which that ends up being problematic from the super hardcore carnivore folks. Like Paul Saladino himself is going to have a heart attack over that because it's like, "Oh my God, the omega-3, the omega-6s." And I'm just pretty unimpressed with the potential downsides there.

**Robb:** For me, I would supplement with a little bit of fish and, or fish oil. Eat some fatty fish a couple of times a week, maybe add a little bit of fish oil to the mix. And then I would soak and sprout and maybe roast a variety of nuts and seeds and rotate those. Maybe

it's one week of almonds and one week of pecans and just kind of rotate through that stuff. And I think that, that's a very reasonable way to tackle all this.

**Robb:** Some nuts and seeds like macadamias are super low in omega-6. They effectively have little to none. Things like almonds actually have quite a lot of omega-6 relative to the total fat content. Olive oil can vary in the amount of omega-6. Some varieties of olive oil can have remarkably high levels of omega-6. This is where a couple of maybe two years ago I had to do a rolled up newspaper to the back end of some folks that were freaking out about the whole 30 salad dressings that were using a high oleic safflower oil, which is lower in omega-6s than olive oil, and on and on and on.

**Nicki:** Is the main like obviously the tyramine nuts, but the dairy seems to be-

**Robb:** Dairy is kind of the-

**Nicki:** ... the biggest offender versus he's wondering if he should cut out his grass-fed beef and wild game. Those two seem less-

**Robb:** ... I wouldn't cut those out. I would really do a long, hard look at the grass-fed dairy, because that dairy tends to be higher in saturated fat and the dairy fats just for some people seem to disproportionately elevate lipoproteins. That seems like an easy place to go as a first whistle stop to get this stuff changed. And then he does provide some context and it does look like his lipoproteins and whatnot are fairly elevated. And so this would be something to give a shot, let it run for three months, do a retest with precision health reports and see where things go.

**Nicki:** ... Great. Okay. We have one more question this week, and it's from Jared on CGM sensors in BJJ. "Hey, Robb, I'm making 2022 the year of the data, and plan on spending time monitoring, sleep, stress levels, et cetera, with a wearable. And testing key tones with finger pricks and tracking my blood glucose with a CGM for at least a month. Any advice on where to place the sensor and how to secure it while rolling. I'm on the mats four to six times per week and I plan on using the FreeStyle Libre 2, unless you have a better suggestion. Ideally, the sensor would stay stuck to me for 14 days. Thanks in advance for the insight and also for being a strong voice of nuanced reason during this COVID shitshow."

**Robb:** Honored. I don't know if this is best, but what I've done is back at the tricep, trying to get very medial right in the middle of the tricep, both with regards to orientation between the shoulder and the elbow, and also like lateral and medial. And then when I roll, I do ... It's a little bit of an ACE bandage and, or some rock tape. And then I wear a rash guard and I wear a GE. And that worked great for me. I think that some people wear these things on their bellies. That seems horrible. Just-

**Nicki:** Knee on belly with a CGM.

**Robb:** ... knee on belly and side control and all the rest of that stuff. Yeah. And if you're right-handed, I would put it on your left tricep because so much of ... In general, when people are playing their jujitsu game, if you're on cross side bottom, you're generally going to be edging towards the right and stuff like that.

**Robb:** I just feel like it's going to be in the kind of least populated area. If you're doing a bunch of take downs, tell the person don't do an arm drag on this arm please, or whatever. And maybe that would be okay, but that should work fine.

**Nicki:** Okay. Jared, excited for your year of the data. Good luck with that. And that is all our questions for this week. Thank you all for sticking with us through the years and especially this last year of COVID craziness. Two years, I guess. Let's all hope and pray that 2022 has more freedom in store for everyone around the world.

**Robb:** Yeah, let's just reiterate on that. This is what we're advocating for, more freedom for everybody. And if that puckers your backside, then maybe you are the problem, not the rest of the world.

**Nicki:** But be safe out there folks. Happy new year. Remember to check out our show sponsor LMNT. You can go to [drinklmnt.com/giveasalt](https://drinklmnt.com/giveasalt). It's [drinklmnt.com/giveasalt](https://drinklmnt.com/giveasalt). And don't forget to nominate your everyday heroes. It makes a big difference in people's lives. It makes them feel appreciated and noticed. So something special that you can do for the special people in your life. Any other new year's wishes, hubs that you'd like to share?

**Robb:** I hope Montana gets a little more snow. I'll be selfish.

**Nicki:** Yes.

**Robb:** Yeah.

**Nicki:** Well, I hope that too. We're getting very, very cold weather, but no precipitation. I know California-

**Robb:** We have a little snow, but not a ton.

**Nicki:** ... Yeah. I know California, Donner Pass has a record amount of snow since 1970. That is super like 16 feet in December. Their previous year-

**Robb:** They beat it by a couple inches.

**Nicki:** ... A couple of inches from, yeah, December of 1970. So that's exciting. Anyway, wishing you all a very healthy, happy and prosperous 2022. And we'll see you next week.

**Robb:** Bye everybody.