

Nicki: It's time to make your health an act of rebellion. We're tackling personalized nutrition, metabolic flexibility, resilient aging, and answering your diet and lifestyle questions. This is the only show with the bold aim to help one million people liberate themselves from the sick care system. You're listening to The Healthy Rebellion Radio.

Nicki: The contents of this show are for entertainment and educational purposes only. Nothing in this podcast should be considered medical advice. Please consult your licensed and credentialed functional medicine practitioner before embarking on any health dietary or fitness change.

Nicki: Warning, when Robb gets passionate, he's been known to use the occasional expletive. If foul language is not your thing, if it gets your britches in a bunch, well, there's always Disney+.

Nicki: Welcome back you all to The Healthy Rebellion Radio.

Robb: Look at you.

Nicki: Top of the morning.

Robb: Top of the morning, wife.

Nicki: Top of the morning. It is...

Robb: It is kind of top of the morning.

Nicki: It is kind of top of the morning.

Robb: It is toppish.

Nicki: It is the morning. The wee hours. The kids are still asleep.

Robb: For now. The dog is giving himself pleasure.

Nicki: He's cleaning himself.

Robb: He's cleaning himself.

Nicki: Yes. Let's see here. What do we have? Any announcements for today? Oh, actually the day this episode releases will be the kickoff call for the 30-day Rebel Reset inside The Healthy Rebellion community.

Robb: Awesome.

Nicki: We're recording this one a little bit early. If you haven't joined yet, you still can. The kickoff call is the overview call, gives some details going into the seven-day carb test which will be starting on Monday, the 14th, and that will run for a week and that is followed by the 30-day Reset. Even after that, folks that would like to participate-

Robb: But wait, there's more.

Nicki: And Dr. Ruscio is going to be hosting a 30-day gut reset inside The Healthy Rebellion community. That one will require that folks purchase 30-day supply of probiotics. But

otherwise, participation in the general reset is free for members. If you haven't joined yet, join.

Robb: How much better of a deal can you find anywhere on the interwebs?

Nicki: I don't know. We haven't hit Black Friday yet. Those deals get real good.

Robb: Oh, man. Wow. Intriguing.

Nicki: What else, hubs?

Robb: I've got nothing.

Nicki: You got nothing? It's September.

Robb: Doc Parsley has been coming down and doing jiu-jitsu with us.

Nicki: He has. Yup.

Robb: And that's been good. He is a large, strong man.

Nicki: Yes, he is.

Robb: He's done a lot of jiu-jitsu fractured over the decades. He is not without his skills and it's fallen upon me to be his main training partner. It's a near death experience just about every time but it's awesome seeing him regularly.

Nicki: No, you're having fun. It's good. Let's move along then to our news topic.

Robb: Sure. I have a link to a piece that Chris Masterjohn just did, COVID-19: Are We Already Reaching Herd Immunity? This was forwarded to me from a group of folks that I'm on, I guess it used to be called, the Paleo diet research group and I'm not entirely sure what it's called now but those are the folks-

Nicki: You haven't renamed yourself yet.

Robb: From whom it came and Chris is referencing two recent preprints talking about the potential that we're heading into a herd immunity situation and there're lots of drama and controversy around this. Is that surprising that there's controversy around these types of things.

Nicki: Drama and controversy around everything.

Robb: But it's a really interesting idea. Now, generally, herd immunity is talked about with regards to vaccines. The drama is what numbers do we need to be reaching to reach herd immunity. I'm sure folks are familiar with this, but in case they're not, the notion here is that in general if you have an infectious agent and if sufficient number of people become unable to get infected or themselves get infected and then also transmit the infection to other people and this deals with the R-naught number and once it drops below one, then good things happen because the infection-

Nicki: They can transmit it to more people so then-

Robb: You can't really transmit it to more people.

Nicki: Kind of goes away.

Robb: Kind of goes away. In very severe situations, a very dangerous infectious agents. It doesn't mean everybody is scot-free, like people who are at particular risk for the condition they need to pay particular attention. Chris is just a super, super smart guy and I really like how he lays this out.

Robb: It's interesting because when Dr. Fauci was being interviewed in, I believe, it was like a congressional setting. Some folks were asking him some very pointed questions. One of the questions was, what is the fastest that a vaccine has ever been developed? He hemmed and hawed and hemmed and hawed and they held his feet to the fire and he said it was like a year and a half. It turned out that it was... Was it for Zika? Or what?

Nicki: Gosh, I feel like it was four years for measles and then yeah, it was Zika-

Robb: It was Zika.

Nicki: And then by the time they were getting ready to release it and then-

Robb: It had flamed out.

Nicki: It had flamed out and he was super disappointed. You could see his face fall.

Robb: You could see his face fall.

Nicki: His face fall. Because they were never able to release the vaccine because herd immunity had been reached, or whether or not it was herd immunity, it just that the virus had stopped-

Robb: Had flamed out basically, yeah.

Nicki: Being an issue.

Robb: It's interesting. You could see disappointment on the man's face that biology had done and our immune systems had done what they were supposed to do which is protect us from these things. But anyway, that was a situation in which herd immunity had been reached in infectious agent. Different scenario is a mosquito-borne virus and whatnot. Very different than something that is caught from sneezing and coughing and airborne molecules and all that type of stuff.

Robb: What the hell is my point on this? There's been a lot of discussion around this. The resource allocation is really important here. We have put so much energy, so much hope into-

Nicki: Billions of dollars.

Robb: A vaccine and we've talked about this previously but this seems to be the one and only solution that's being offered up, although I will say in acknowledgement of Dr. Fauci, he seems to be putting some material out about convalescent serum and some of these immunotherapies and stuff like that. I don't know if this is just a result of little peasant people like us being squeaky wheels about this. I don't know if it's a public relations thing and they really don't give two shits about these things. There's actually a diversification of the portfolio.

Robb: But Chris makes, in my mind, a very compelling case and also, he details if our assumptions about this stuff are true, we can test it empirically and the way that we go about doing that is we open different sectors. We already know what the caseload is, we know what the fatality rate is we, we have great numbers on this stuff. And then if there is a problem, we will see an uptick in cases and more importantly, death.

Robb: This isn't a Salty Talk, so I don't want to spin it out into complete political, angry land. But we've gone through multiple iterations of goalposts moving. Initially, it was flatten the curve and now we're in this spot where we know we need to reduce cases at all costs, and that is not empirically true. Again, circling back to this notion of herd immunity. We may have made things worse by slowing the spread in the way that we did. And we may not have. We don't fully have all the data. But people are presenting this as if it was an open and shut case and it is not. There's a lot of different moving parts on this.

Robb: Chris made the case that we should be allocating some significant resources into studying how do you open up a society in a way that minimizes the likelihood of causing problems? Like sending COVID infected nursing home patients back to nursing homes. Let's not fucking do that. Maybe that's point number one in that.

Robb: But there's effectively no real research being put into that. There's no public health message being put into that. And I think that that is dangerous, it is a disservice, and when people are doing their jihadi war dance around, wear your mask, do this, do that, we have to reduce COVID infections at all costs. There are other costs associated with this. Suicide rates are up. I don't know if you've noticed, but the economic fallout of this situation is just getting going.

Robb: In the United States, the unemployment benefits and basically the payments that have been sent out to try to keep people propped up, those stopped about five weeks ago and all of a sudden we are seeing spikes in other areas, like foreclosures, and an absolute bum-rush on food banks and things like that. The projections I've been looking at on that site.

Nicki: Early, early days.

Robb: It's super early. We're in... I don't even know a good in that. We are in the early fucking stages of this. I'm not saying that I've got all the answers. I'm not saying anybody's got all the answers. But if we get so myopic about the way that we're looking at this stuff and forget that there are knock on consequences to every decision we make. If we opened everything wide open right now, there would be some a lot of beneficial consequences, I think, and there would also be some negative consequences. What we need to be doing is having some discussions around the cost benefit story of that, and I think that far too little of that is occurring.

Robb: We've got a link to this in the show notes so that folks can read it. Again, Chris makes the case. He's not an epidemiologist, but he's very smart guy, and he understands the ins and outs of this within the group that I got this forwarded from. There was some discussion about the numbers for herd immunity might be a bit higher, but they also conceded that part of the case that Chris is making here is that New York has continued to open up relative to where it was early on. All cases, all rates of death are decreasing.

Robb: There's something going on in that story and it probably behooves us to give it a little bit more of a tire kick unless this is something that is being super politically driven for other

ends. If that's the case, then there are some evil fucking people out there in the world that are destroying folks' lives-

Nicki: For their game.

Robb: For some type of game, yeah. Do you have any other thoughts on that?

Nicki: I was going to say it's super frustrating. Clearly, the media is doing its darnedest to keep fanning the flames of fear. Just quickly looking at Apple news yesterday and it was like, "The Midwest is in for it. Cases are on the rise." Cases are on the rise, but hospital admissions are on the decline almost everywhere. But you read that headline, "Oh shit, the Midwest, they're going to get hammered now." Another quote in the article was, "We can't afford to have a third wave." The average person who reads those types of things that pop up on their phone probably still has a massive amount of fear instilled in them that the third wave is coming.

Robb: Again, we can't. Why not? What does the third wave look like? Is it overwhelming hospitals? What is the consequence?

Nicki: Clearly, this is a serious thing. Many people have lost their lives and whatnot but lots of people have gotten this and recovered. Lots and lots and lots and lots. My sister, and she's not particularly metabolically healthy, if I'm being honest. Another woman that worked with her father who is 70 and overweight and type 2 diabetic and she was sick longer than her brother, but is fine. Again, this is not a Salty Talk and everything's politicized these days. I don't want to go down too far down the rabbit hole.

Nicki: But I do think we're starved for objective reporting on all of this stuff. All the headlines, everything is a clickbait designed to make us as afraid as possible.

Robb: In fairness, it waffles between these two positions of there's absolutely nothing to see here versus it is the end of the fucking world.

Nicki: There's no objective reporting. There's no middle of the road. Let's look at this in a really nuanced way. There's no nuance in any of this reporting.

Robb: To the degree, it comes up, it's people like Chris Masterjohn. I would say we try to do some things like this. Maybe this is turning into a Salty Talk. But then part of the problem there is that outlets like Google and Facebook and Twitter ban and block people. Like this piece from Chris, I wouldn't be surprised if it ends up getting some degree of censorship applied to it because it's not from an accredited source.

Robb: We've really painted ourselves into hell of a corner here where if only accredited... World Health Organization, CDC, that's it. That's the only place that we get any type of facts from. And then interestingly, the CDC just released some numbers and of the 160,000 or whatever attributed coronavirus deaths since the beginning of the pandemic in the United States, only 9,000 of those people were only-

Nicki: Ninety four percent of them had two to three other comorbidities. Only 6%, that was the singular cause of death.

Robb: And even then, we don't know. Did they just not catch anything? This thing is being politicized. Some people are saying only 9,000 people have died from COVID which isn't really the way that you want to look at that stuff. That's not true. But there is this flip side that you need to be fairly sick for this just begin to be a really significant threat. I

still believe that the average age of death is 80 or 81 when you aggregate all the numbers. The average age of death in general is 78 on any given day that we exist and again, this is where some of the bleeding heart people, they're just like, "You just don't care. These people could have lived longer." Yes, they might have or they might not have. This is the world of giant numbers and statistics.

Nicki: And right now everything feels fine because not a lot has changed other than millions of people losing their jobs. But to your point earlier, we're at the very beginning of whatever this economic fallout is going to look like. We don't know yet. But what is the cost of that? It's not like we want old people to die in the streets because that's absolutely not the case. In order to make a decision, you have to look at the full picture.

Robb: Here's a quick thought. We've been told to stay inside and we largely did. Kids now are supposed to wear masks virtually everywhere and this varies from place to place, but I'll guarantee you the global vitamin D status of human beings has plummeted over the last six months. We know for a fact that influenza kills kids much more rapidly than COVID does. Influenza is way more dangerous for kids than COVID is. What's going to happen when we swing back around into flu season now and these kids who have been inside eating like crap, low vitamin D status? This is another one of these knock on consequences where people are-

Nicki: These unintended consequences.

Robb: Yeah. We've really beat the pants off this thing so I guess we'll go, but anyway-

Nicki: We'll link this in the show notes, folks. Give it a read and see what you think.

Robb: And if you guys think it's bullshit, tell us. Talk to us. Give us some feedback. But I think that these are the types of things that we need to ask these questions. Maybe Chris' assumption here is ridiculous. Let's have a discussion and let's actually empirically analyze the data and figure that out. Whether his numbers are exactly correct or not, he lays out a pretty good case for how we can test this. Even if some states or municipalities are like, "We're dying over here. We collectively would like to give this a shot." Let's have some parameters that we can roll this out and do it. And then we've got some different case studies. Yeah, sorry, folks.

Nicki: Okay. You done?

Robb: I'm done.

Nicki: You sure?

Robb: Done.

Nicki: Don't have anything else to say on that?

Robb: Not that.

Nicki: All right. Our T-shirt review winner this week goes to [purplerose94](#). Healthy truth.

Nicki: "Thank you, Robb and Nicki for your years of sharing knowledge. I have been a fan for 10 years now. And your unselfish desire to get a million people healthy. I'm trying as well as a health coach to spread the word of what real health is and special thanks for adding the true bits about government involvement in health and wellness and possible

future involvement that will not help the public. Keep it up, Robb. We all need to keep our heads out of the sand."

Nicki: PurpleRose 94, thank you so much for writing 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.

Robb: Cool.

Nicki: Cool.

Nicki: This episode of The Healthy Rebellion Radio is sponsored by BLUblox, the best blue light glasses for better sleep, recovery, and optimal wellness. Studies have clearly shown that blue and green light up to 550 nanometers is a potent suppressor of melatonin, which causes bad sleep and poor sleep, in turn increases your risk of obesity, insulin resistance, and cardiovascular disease. The Sleep+ lenses and BLUblox glasses are the most effective blue and green light blockers for after dark use. Proven to block 100% of the light in this range and improve sleep after just one evening's use.

Nicki: Robb, we usually put our BLUblox on as soon as the sun sets. We wear them-

Robb: That's the way we party.

Nicki: While reading in bed, while we're watching a movie with the girls. It's just part of our evening routine.

Robb: It definitely helps me to wind down. I just noticed being more calm and relaxed and I think that this is a nice middle ground. Sometimes, you want to hang out watch a show with the kids or a movie or something like that, but I think that this is a way to keep an eye on your good circadian management while also benefitting all that modern conveniences can offer. Yeah.

Nicki: BLUblox offers free shipping globally and they do prescription glasses, reading glasses, and nonprescription glasses. If you already have a pair of frames that you absolutely love, you can send them to BLUblox and they'll add their lens technology to your favorite frames. Not flames, frames. Check them out. Go to blublox.com, that's B-L-U-B-L-O-X dot com slash robb15 and use code robb15. That's Robb, with a double B, for 15% off your order. Again, that is B-L-U-B-L-O-X dot com slash R-O-B-B one, five and check them out.

Nicki: All right, hubs, you-

Robb: Get after it.

Nicki: Ready for questions today?

Robb: Yep.

Nicki: Our first one is from Frederic and he's asking why can't I gain weight? Do I have hormonal issues?

Nicki: He says, "Hi, Robb and Nikki. First of all, thank you for your work and all that you do. I read all your books and love your science-based approach. Whenever I want to do a reality check on claims made in the health and wellness space, you are my go to source.

My question is why I can't gain weight no matter how I try. I'm quite active with strength training five days a week, pretty high level calisthenics and cross country skiing on weekends and really long hikes in the mountains with my dog. I've been following Paleo since 2009, a ketogenic diet since 2012, and a few months ago switch to carnivore. I'm 39 years old, six feet, and 164 pounds with about eight to 10% body fat.

Nicki: I've always been an athlete and naturally lean but I would really like to be able to put on just a little more muscle. I've tried a lot of things including tracking macros with cronometer and the Ketogains calculator suggestions and weight shakes before workouts and caloric surplus. During progressive overload with my calisthenics routine and getting stronger but not bigger. Good sleep and pretty frisky salt intake. I recently switched to strict carnivore which works well for performance and overall well-being but no difference in body comp. Nothing works. I seem to be stuck at 164 pounds no matter what. Could there be some hormonal issues at play? Or something else? Any suggestions for the ultimate hard gainer?" Thanks, Frederick.

Robb: Any thoughts on this?

Nicki: We answered a similar question, I believe, last week and I think you told the guy that you were five inches shorter than him and the same weight.

Robb: The other guy was doing a bunch of fasting and-

Nicki: And he was doing a bunch of... My thoughts with Frederick is... Pretty high level calisthenics is not bringing true to strength training.

Robb: It can be but the... I like that.

Nicki: I'm thinking he needs to lift some heavy weights.

Robb: Yup. Squats, squat lift, press.

Nicki: Squat and lift, press, yeah.

Robb: And then definitely accessories. Weighted pushups, weighted shins. Those are great. In addition to that, I completely agree. If you get into say gymnastics bodies and you progress to the point where you're doing planche pushups, then that's a hell of a stimulus. But there's this whole crazy ramp up to get to that point and the ability to incrementally load is really challenging with just calisthenics. You can try to add another rep or you can add more volume, but really load plus volume is the way to go if you really want to stimulate some muscle masking.

Robb: There's a great question here, which is could it be a hormonal issue and Frederick, why on earth haven't you gone and got your hormones checked? We've detailed that what to look for, total and free testosterone, estradiol, sex hormone, binding globulin, the standard deal we've talked about that elsewhere. It would be nice to know what's going on with that.

Robb: And then the final part, I'm going to sound like a jerk on this one, but you just haven't eaten enough. People can gain weight. They can gain muscle weight. Some people are going to want to murder me for this, but I'm of the opinion that it is harder to gain weight and do it in a reasonably healthy fashion than it is generally to lose weight.

Robb: Now, the deck is stacked against us and we have hyperpalatable foods everywhere and all that type of stuff. But on an individual basis, if you're one of these hard gainer-ish...

Nicki: Gaining muscle, yeah.

Robb: ... type people, it just sucks. You eat and eat and eat and then you eat some more. Every time you look at food, you can still feel the gurgling remnants of the last meal that you have and you eat again. And that in many cases is what you need to do. You need to eat in such a way that you feel disgusted virtually all of the time. And you don't need to do that always and forever. You could do that mainly on your resistance training days and go back down to a more maintenance level.

Robb: But what's interesting here is, Frederick over the course of time has eaten a more and more restrictive diet. A restrictive diet lends itself well to not gaining weight. This is actually driving the boat, in my opinion, exactly the opposite direction.

Nicki: Should he go away from strict carnivore and go back to keto he can have some more...

Robb: I will go back to Paleo if he doesn't... If the goal is to gain muscle mass then I would go back to throw some fucking carbs in there and have some real variety with a diet so that you can eat more easily, eat more calories, and get into that caloric surplus.

Nicki: He didn't say how much of a caloric surplus he was eating at.

Robb: This is fairly variable. Within Ketogains scene, I've seen people like Luis who can gain muscle on 2400 calories a day. And then I've seen people that are about his size, a guy, Ken, and he was eating 5600 calories a day. He's like, "That's just where I need to be." I talked to Luis about it and he was like, "I don't know." How much do you need...

Robb: There're some fairly well-established guidelines, but you just have some folks that are way outside the norm. Frederick sounds he's a pretty active person. He might be super fidgety and just up and running around all the time. We don't actually-

Nicki: Cross country skiing is very demanding.

Robb: Super demanding, yeah.

Nicki: And long hikes. He's very active.

Robb: And we don't know what his day job is. He's like, "Oh, and I'm also a warehouseman who's on his feet 10 hours a day running everywhere." The guidelines on how much to eat are just that. They're guidelines. And if you're not gaining weight, then there's really one answer. You aren't eating enough. I would look under the hood and see what are your hormones looking like and if they're not that great, then you either figure out a way to improve them or you just accept that you're going to be lean and on the skinnier side because just hammering food into a poor hormonal environment, you're most likely to just get fat and not necessarily have the best of body composition.

Robb: I would definitely recommend doing some basic barbell movements and follow some linear strength progression within that story. And then you're just going to have to wrap your head around the fact that you need to eat more and in the eating more, I would probably recommend abandoning carnivores, at least for now, in favor of something that's Paleo-esque and add some carbs just so that you have greater hunger and less satiety and you actually eat more food.

Robb: We're going exactly in the opposite direction of everything that we recommend for people that are struggling on the weight loss side of the story.

Nicki: Yep. Okay. Next question is from Marsha. She has a question on BHB supplements.

Nicki: "Hi, Rob. Please explain these BHB supplements that claim to act like a keto diet."

Robb: This one was kind of funny when I read it. It's almost like a haiku and some of the really short questions are almost more difficult to unpack than the super long questions.

Robb: If I had an ass chapping element to the ketone supplements, it's that they claim that it's just like being in ketosis and it's not.

Nicki: Ketosis in under 60 minutes.

Robb: This is some of the stuff that is really, really chapped my backside about these things. But Marsha, the long and short of it is that there are likely benefits to taking these ketone supplements, whether we're talking about the beta-hydroxybutyrate salts or the ketone esters or even doing the MCT oil which gooses the body into a preferential production of ketones. But it's not the same because you're arriving at that situation via an exogenous source versus using your own body's fat and the dietary fat for this process.

Robb: There appears to be benefits for hyper and hypo oxygen scenarios, appears to be an anti-inflammatory agent. There may be a host of different benefits of using these ketone supplements but couching it that it's just like doing a ketogenic diet is really disingenuous.

Robb: Not really too sure what more to say in that regard, but like everything, should I use ketone supplements? What's your goal? What exactly are you wanting to do? If it's "just" fat loss, then get an adequate protein, medium to low carb diet and then tinker from there. We have to introduce a caloric deficit. Ideally, we do it in such a way that we aren't particularly hungry during that process.

Robb: And although there's a little bit of research that suggests that MCT oil taken early in the day with a standard mixed meal may reduce hunger later in the day and therefore reduce overall calorie intake, it's a very small sample. Does that apply to some people? Not all people. We're pretty sure that eating a nutrient dense, protein adequate diet, it really delivers the goods and then we figure out do we do better on higher carb or lower carb and just iterate from there.

Robb: But there might be very specific situations where we would want to use ketone supplements, but again, let's delineate what those are and really, look at both the literature and also some of the anecdote around whether or not people have seen benefit from this stuff. Some athletic endeavors seem to benefit, some from some ketone supplementation, and others just really don't. Sprint type activities don't really seem to benefit all that much.

Robb: Try as I might, I've tinkered with the BHB supplements and they give me the trots every single time I use them. Gut cramping and it's kind of a disaster. I can use MCT oil and I use that occasionally but... Yeah.

Nicki: The main thing is eating the standard American diet and supplementing with BHB is not going to-

Robb: Probably not going to be a win.

Nicki: Not going to be a win. Our third question this week is from Eric on infrared versus regular sauna.

Nicki: "Hi, Robb and Nicki. I'm interested in sauna training. I've heard about many great health benefits and I want to give it a try. I also run trail ultramarathons in hot locations such as Arizona and Texas. I think heat training and a sauna could be beneficial. I don't currently have access to a sauna but I've started looking online for a home use sauna. Seems like an infrared sauna can be had for a relatively low price. But a traditional sauna is far more expensive. Every time, I try to research the potential harm or benefit with IR versus traditional, I get pages and pages of sketchy looking unscientific blogs that shill a product. So does an infrared sauna work as well as traditional? Or will it microwave my brains?"

Nicki: And I get what he's saying because I've done the same poking around online and it is the scrolling pages of...

Robb: HTML of hell.

Nicki: It seems sketchy. All of the infrared stuff. It definitely has a sketchy feel to it. And they all lead to each other. There's one page then it's linking back to another product made by a different company. It's a weird internet vortex.

Robb: What have you taken from the whole thing? Because we have been kicking the tires on going one way versus the other. What's your sense on all this?

Nicki: We know lots of people that have infrared saunas and really, really like them. I personally love the heat from a regular sauna. I know the infrared ones don't get as hot.

Robb: What the infrared saunas are doing is heating you. You're absorbing the infrared radiation, which is not a bad thing. It is not barbecuing your brains and I still stand by the whole 5G deal is not causing coronavirus and is generally not going to induce you to grow a fifth arm out of your forehead, but keep going.

Nicki: I know lots of well-educated people who love their infrared saunas. Chris Kresser has one. Lots of people have them. But there's something about going into a regular, dry sauna and sweating and just the heat. I really, really like that.

Robb: Have you done much infrared sauna, though? You really haven't done much as a compare and contrast.

Nicki: It's very true, yup.

Robb: Rhonda Patrick has done a fair amount of digging around on this stuff. The reality is that far more research has been done in the Finnish sauna than in the infrared sauna. There is research on the infrared sauna. This is where it gets a little bit dodgy because you start getting into the photobiomodulation which we have friends with Texas Laser-

Nicki: Laser therapy.

Robb: therapy institute. I think that there's great benefit to that. But this is where it starts becoming really important to parse out what exactly we're talking about. There is the heat stress element that can be had from either IR sauna exposure or like a Finnish

sauna type exposure. And then there's this photobiomodulation side which you need certain wavelengths and I think that that is also-

Nicki: Like the Joovv

Robb: It goes way... It just starts becoming different things. I think so long as your body temperature goes up, then there's going to be a benefit there. And again, in my best understanding of the literature at this point, there's just been a lot more done on the Finnish style sauna, the dry sauna than there has been on some of these other things.

Robb: One of the greatest benefits is this cardiac activity where if your body temperature gets high enough, then your heart rate increases to that 130 to 150-beat per minute range. You're getting a legitimate low intensity cardiac training effect without actually doing exercise. The likelihood of cardiac events within these frequent Finnish sauna users goes down linearly with increasing usage. It was a five-day a week user there but they died from something but it generally wasn't cardiovascular disease. It was a really profound effect.

Robb: I think to some degree you just have to pick what's going to work in your budget. At the end of the day, all of these things are good and what people get into pissing matches around, this thing's better than that. Something is five times more expensive than the other... Hey, Sig. No, no, sorry, guys. Our kid is invading us.

Robb: If something is significantly more expensive or just the footprint, like our friend, Mike, who runs Straight Blast Gym in Texas, he ended up getting this line of infrared lamps that are on a board and it's six inches wide and three feet tall and then he has a tent thing that he goes into and man, that thing heats him up. He gets a real good sweat on and he gets the increase heart rate and all that type of stuff. Is it going to be exactly the same as the heat shock of going into 180-degree dry sauna? Maybe not. But it's still going to have benefit. And then there is some of this photobiomodulation stuff which you don't necessarily get out of a dry sauna.

Robb: I think at the end of the day both of them are great. There is more research currently on the Finnish style dry sauna.

Nicki: I think since the prevalence of the infrared are increasing, we should start seeing some more research.

Robb: Sure. But because of the ubiquity of these saunas in Finland, it's just lent itself. Now, these are retrospective epidemiological studies, but did you go in the sauna three days a week, five days a week or seven? And maybe they're lying, but the data has been pretty consistent over time. It really lends itself well to study because you've got a very specific population that you can pull from where is who's going to fund a study of infrared sauna use. It's going to be these manufacturers and then you start having questions about are they really accurate with all that.

Nicki: Conflict of interest in scientific research. That doesn't happen, does it?

Robb: It's happened once. Only once.

Nicki: All right, folks, it's time for The Healthy Rebellion Radio trivia. Our episode sponsor BLUblox is giving their REMedy Sleep Mask to one lucky winner selected at random who answers the following question correctly. Robb, what do we have hanging over the mailboxes in our neighborhood?

Robb: We call that orb weaver spider.

Nicki: What else is hanging over our mailboxes?

Robb: The orb weaver spider egg sacs?

Nicki: Egg sacs, yeah. That's where I was going for since the spider seems to have...

Robb: Abandoned ship.

Nicki: Abandoned ship. I don't know if she died or if someone removed her but she-

Robb: So you want people to say egg sac instead of saying orb weaver.

Nicki: I do.

Robb: Oh, yeah. This is your goddamn one then. Nicki answered. Did you hear that? Nicki answered egg sac.

Nicki: Two of them and we can't wait for them to hatch.

Robb: So do you want two egg sacs? What's the answer?

Nicki: No, no, no, no. I'm sharing the details of the situation with our listeners.

Robb: Okay, BLUblox is never going to sponsor us again. This is a disaster.

Nicki: To play, go to robbwolf.com/trivia. Enter the answer, which is egg sacs, and we'll randomly select one person with the correct answer to win a REMedy Sleep Mask from BLUbloxs. The cut off to answer this week's trivia and to be eligible to win is Thursday, September 17, at midnight. Winners will be notified via email and we'll announce on Instagram as well. This is open to residents of the U.S. only.

Nicki: Ready for a question number four?

Robb: Yep.

Nicki: It's from Marie and she says, "Hey, Robb and Nikki, I was diagnosed with the BRCA gene that increases my risk of breast cancer. I am highly motivated to prevent cancer by changing my lifestyle, which includes eating keto. In my research to discover cancer fighting foods, I ran across breast surgeon, Kristi Funk's book and the title is Breasts: An Owner's Manual. I'm confused by her wanting to eliminate all animal protein and fat from one's diet. Most of the food I eat is from animals. I'm so confused. Why does one camp say animal meat is good and the other camp says it's bad? How should I eat?"

Robb: First, how you should eat is definitely up to you. I'm not in a position to recommend that one way or the other. That's something you've got to arrive at. But the reason why you're asking question is you want some advice around that stuff. Why does one camp say one thing and another camp says another one?

Nicki: Gosh, I just feel like there's... We just talked about this. But there're just experts that have opposing views and research that's funded by different camps that necessarily arrives at differing conclusions. I don't know. This is something that I've struggled with because I have a hard time believing that any scientific research is without bias based off

of the funding. Everything is funded from someone and usually that person has some motivation to see results have a certain flavor.

Robb: There's more foundational research, non-application or direct application oriented research. When I had Trey Suntrup up on the Salty Talk, we were talking about this a little bit. Everything's become very translationally relevant. We want to figure out a way to monetize science, which is reasonable on the one hand, but then had we only funded things like that? That even implies that you know where you need to go, where is the next discovery is the thing that we haven't even thought about.

Nicki: Yeah, it's being funded because they want a certain outcome. How can we construct our research to get this outcome versus asking the question differently and figuring out what is the outcome.

Robb: It honestly goes a little bit even beyond that. Just research for research's sake. We don't even know what the story is, what this thing... This is some of the stuff, Marie, that we unpack this a lot in Sacred Cow in the health section of the book where there's research that really seems to be compelling on both sides of this story. You go to the great wall of vegan research and oh man, there's just this seemingly linear correlation with increasing animal product intake and every single type of disease they've known.

Nicki: It'd be interesting to know this author of this book, what is her dietary leanings? What's the research that she's citing?

Robb: Clearly, she's vegan.

Nicki: I know, but... Yeah.

Robb: Remove all animal products and animal fat. Which is to ask about the animal fat thing? If you have a rib eye steak, you have stearic acid which is a saturated fat, a tiny bit of palmitic acid which is also saturated fat. Stearic acid, by the way, can be had in dark chocolate. Palmitic acid can be had in a variety of plant-based sources. There's a tiny, little bit of EPA, not really much DHA, which you generally cannot get at all from plant-based sources unless you do something like extract lipids out of algae, as an example. And there is a monumental amount of oleic acid which is exactly the same fat as is in olive oil.

Robb: This physician is decrying fats in animal products that are identical to fats in plant products. This is where it just gets to be absolute horseshit. Now, it's becoming this mystical thing where it's protein and mTOR. Let's dig into that. That was largely the focus of my talk this year. Longevity: Are We Trying Too Hard? And the whole mTOR story is germane only as far as we extend it into general overfeeding.

Robb: Are you overeating? Is your insulin levels pegged out all the time because you're insulin resistant and in a chronically overfed state? This is where we have people from the vegan side all the way to the keto side that are so terrified of mTOR that they're recommending 40 grams of protein a day for a grown male and less than that for females which is ridiculous. That is so potentially injurious.

Robb: I'm trying to really think about how can people arrive at these different spots. There are definitely different camps and again, in the Sacred Cow, we unpacked the influence of the Seventh Day Adventist Church, which is largely a vegetarian backed group and their influence. They're the people that founded the American Dietetic Association. They fund and underwrite Johns Hopkins. A bunch of these main research institutions are heavily,

heavily vegetarian funded and vegan centric. But there's some interesting things in there.

Robb: When we look at the vegans and Seventh Day Adventists will go on and on about how Seventh Day Adventists live longer than the average American. That's true. But they don't live longer than the average Mormon and Mormons eat a mixed diet. When we start unpacking... We're talking about cancer and heart disease and these different things, but both Mormons and Seventh Day Adventists generally live healthier lifestyles than the rest of the population. They tend to not drink as much alcohol, they have tight social units. Smoking is certainly not something that is culturally condoned. There's a bunch of these things that start adding up.

Robb: But when you compare and contrast the longevity and the relative rates of different diseases of Seventh Day Adventists in European countries, they live no longer no better than the people around them because people are generally healthier across the board. And then when you look at the United States, the Mormons who eat nontrivial amounts of animal products live just as long just as well as these Seventh Day Adventists. That's one part of this thing. There's just been terrible science with a massive agenda behind all this and we unpack it pretty well in Sacred Cow.

Robb: On that BRCA1 genotype. I really think if we look critically at the drivers of that process, keeping insulin levels low is smart. Doing a little bit of time restricted eating is probably smart. Lifting weights is really, really smart. There are some systemic modifications that occur from resistance training that are really beneficial both in mitigating the potential of developing breast cancer and God forbid if someone were to develop it, maintaining that muscle mass in that debt stimulus. It's not just having the muscle. It's the signal that is sent to the body that seems to improve outcomes in that scenario.

Robb: And then there are some crazy things like getting adequate sunlight on your skin is known to reduce the rates of virtually all cancers and the severity. This is another layer to it. I know ages ago there was some research that suggested that doing a baby aspirin every other day seemed to really reduce the likelihood of breast cancer because it dramatically inhibits the angiogenic process of a tumor growing and infiltrating into the cells around it. It's been a long time since I've looked into that so I would recommend looking at what the updated information is on that because there does seem to be some potential downside of taking even the baby aspirin on the cardiovascular disease side. There may be some cost benefit there.

Robb: I guess the long and short is that, yeah, there's a bunch of conflicting research but when you really dig into the quality of the research that is damning animal products, it is terrible. It is really piss poor science. It is clearly highly politically motivated and there's all kinds of backstory like that. We should record some of the shit that we talked about that isn't quite a fit for general airing but those are some of the things. And then on a cancer risk mitigation strategy, I think something like a ketogenic type diet is probably not a bad idea. It can be a moderate protein intake. If you are really, really worried about that, the mTOR activity as it relates to cancer, then that's a thing that you can do. I would just make sure to get enough to maintain your muscle mass and overall health and-

Nicki: And then sun and lift weights.

Robb: Sun and lift weights, yeah.

Nicki: And laugh a lot and good community to the best that you can.

Robb: Those are the things that we know improve these situations. Even going and getting... Well, yeah.

Nicki: Sleep.

Robb: Yeah, that's as far as I want to go into that one.

Nicki: Last question this week. We've got Heather asking about workout range.

Nicki: She says, "I'm not sure if you've already addressed this somewhere in your podcast or blog. I tried searching and didn't see anything. But I was wondering if you have ever heard of someone getting super angry, rage, while working out? I want to love working out but anytime I have since my teen years, I feel extremely angry during the workout. I would love to know a way to curb that and maybe semi enjoy my workouts. I'm 37 and know that I need to take care of my body. Thanks for any insight."

Nicki: What did you... Do you want me to push play on this?

Robb: Is it going to record it? You give it a shot and see if it-

Nicki: I don't know. We'll push play and then if it doesn't work, we'll edit it out.

Nicki: I'll play it one more time.

Robb: This is from Stripes. It's a very, very old movie that had Bill Murray in it and a guy is freaking out and his drill sergeant says, "Lighten up, Francis."

Robb: I almost pulled this one out because I just don't even know what to-

Nicki: You've never heard of this.

Robb: I've never heard of this. I'm not even sure where... Heather, I'm not trying to be a dick, but this sounds almost like a need to go talk to a therapist type deal. There might be a physiological reason why activity makes you go into a red rage but-

Nicki: Can you harness the rage and lift some heavy weights?

Robb: I guess. But-

Nicki: I wonder if it dissipates-

Robb: I'm taking her at face value that she gets angry. It's like why is that going on? What's the baggage there or something? Maybe there's not. I don't know. There may be some... Actually, I waffled between just deleting this one because I'm like, "I just don't really have anything to offer," and I poked around online and dug into PubMed and it usually goes the exact opposite. People will arrive at a workout with anxiety or high emotion and then they're able to work through it. I think that that was the question that you were beginning to ask-

Nicki: It doesn't dissipate at the end.

Robb: Which is do you feel better or...

Nicki: Does the rage happen in the beginning and then by the end, are you still angry or does it get better?

Robb: I don't have a lot here. I'd maybe look around it. One, I would really ask question like, is there some deeper something?

Nicki: Is it all types of workouts? Is it only certain situations? Maybe a gym setting versus being outdoors.

Robb: Like if you have some kettle bells in your backyard.

Nicki: Did something that happen in your past? She says since her teen years. Was there some... I don't know. I'm definitely not a therapist. But it makes me think that something maybe happened when you were a teenager, when you were training and working out that it's kind of reliving every time you go into the gym. Is there a different setting? Can you switch up the setting? Either go to therapy or play with different settings and scenarios and maybe you can find one that doesn't elicit this response.

Robb: Like swinging a kettle bell on your back porch. Does that launch you into a red rage? I don't know. But this is where The Colin Show would be nice.

Nicki: This would be good for The Colin Show.

Robb: A really good one for The Colin show to be like, "Grab a kettle bell and go on the back porch and swing it and get back to us."

Robb: Heather, I don't know if we provided any value on that whatsoever. But I would potentially reach out to some sort of therapist around this and just see if there's something going on there. And then to Nicki's point, does doing cardio outside... Does going on a hike with a weighted vest slip you into red rage? Or is it being at Planet Fitness where you have a bunch of goofballs around you?

Nicki: Meatheads around you. Have you tried jiu-jitsu?

Robb: Have you tried jiu-jitsu? That could be a good place to channel some of that. Although getting angry-

Nicki: You don't want to get angry with your training partners.

Robb: Bludgeoned from the beginning.

Nicki: I guess you don't describe exactly what you mean by working out. I'm assuming it's in a gym setting with weights. But maybe finding a type of workout that you can enjoy that doesn't elicit the anger that then you can transition back into adding weights if you can't find a way to lift weights without going there.

Robb: Yeah, I've got-

Nicki: That's all I got.

Robb: That's far better than what I had. Is it a mercy killing now?

Nicki: But Heather, I'm really curious.

Robb: Yeah, I would love to circle back on that.

Nicki: Please write us back. Tinker with some of this stuff and then let us know how it goes.

Nicki: Anything else, hubs?

Robb: I don't think so. I think that's enough for today.

Nicki: I don't think so. Hopefully, people are still with us for the next one.

Robb: Yeah, we probably got ourselves in trouble with just the news topic.

Nicki: The news topic, yeah.

Nicki: Thanks everyone for joining us. Please check out our show sponsor BLUblox for your blue light blocking glasses. Go to blublox.com/robb15 and use code robb15 for 15% off your order. That's B-L-U-B-L-O-X dot com slash R-O-B-B one, five. Remember today, which is the day this episode airs is the start of our 30-day reset. The kickoff call is today. There's still time to join. If you'd like to participate, go to join.thehealthyrebellion.com and hope to see you in there.

Robb: Bye, everybody.

Nicki: Bye, guys.