

**Nicki:** It's time to make your health an act of rebellion. We're tackling personalized nutrition, metabolic flexibility, resilient aging, and answering your diet and lifestyle questions. This is the only show with the bold aim to help one million people liberate themselves from the sick care system. You're listening to the Healthy Rebellion Radio. The contents of this show are for entertainment and educational purposes only. Nothing in this podcast should be considered medical advice. Please consult your licensed and credentialed functional medicine practitioner before embarking on any health, dietary or fitness change. 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 folks.

**Nicki:** Hello. Hello.

**Robb:** It is chilly in Montana.

**Nicki:** It is. It is quite chilly in Montana. I'm still partially bundled from our early morning session.

**Robb:** Not that type of section, unfortunately.

**Nicki:** Wouldn't be that bundled for that.

**Robb:** Those days are long gone.

**Nicki:** Wow. We're starting this one off in quite the direction. This is episode 133 folks of the Healthier Rebellion Radio. Thank you for joining us. Again, what I was referring to-

**Robb:** Or apologies for joining, it could go either way.

**Nicki:** Yeah, apologies. What I was referring to is that I have started participating with Robb in his early morning, freezing cold garage zone two cardio sessions. And I got enticed, I'll say, into doing this because he started re-watching Stranger Things. And we only made it through season one, I think when it first came out.

**Robb:** All of season one, and then two or three episodes of season two. And then I think we started moving-

**Nicki:** Back when it first came out and then we just stopped watching it for whatever reason. And so they're now on season four. So he started re-watching it from the beginning. And we don't really have a lot of time to watch TV, especially shows that are not kid appropriate. And so we don't have a TV in our bedroom and we don't want a TV in our bedroom. And we're in bed fairly early reading or just-

**Robb:** Drooling on ourselves to completely knackered.

**Nicki:** Yeah, we're not late night owls. So anyway, so this was a good opportunity and I just forgot how good of a show it really is. So we're really enjoying that. I'm like, I don't remember this. I don't remember this morning. This morning Robb's like, "Babe, we're getting old". And it's-

**Robb:** No, what I said, this is the upside of age related memory loss. Everything is new. And back in the day when I had my paleo solution seminar, one of my one liners when I talked about-

**Nicki:** Getting old and having dementia-

**Robb:** In that-

**Nicki:** Wow, she's hot. Wow, she's hot.

**Robb:** Well, what I said was, what would be really cool, because when you first meet, I'm still very much in love with you, but when somebody's brand new, they're brand new. And I had my patent line, which was if I could selectively tailor my neurodegenerative process such that each time I turned away and then I saw Nicki again as like, Ooh, she's hot. Ooh, she's hot. But more than likely my neurodegenerative decline will look more like depends. And institutionalization. So yeah.

**Nicki:** Those who attended Robb's CrossFit Nutrition seminars back in the day will remember that line 'cause that was an oft repeated. It made its way into almost all of those, I think. But anyway, it's a fabulous show. If you haven't seen it, if you grew up in the eighties, it's just a great acting, great show. I don't know. I'm pretty tickled. So anyway, it's four days in now. I've doing zone two cardio with Robb in the morning and it's freezing cold. I refuse to do the bike. If I get on the bike, it's like one minute at a shot. I don't like how it feels on my hips. And how-

**Robb:** And funny enough, when I do the Concept2 rower, it irritates my back. So we have our mean-

**Nicki:** Then I jump rope a little bit and then I do step ups for my third and just rotate around.

**Robb:** And you're using a Garmin watch currently and I'm using the Morpheus heart rate monitor.

**Nicki:** Yep. Yep. So anyway, it goes by a blink of an eye because it's such a good show. But that's all about that. What else today hubs?

**Robb:** I have nothing.

**Nicki:** You have nothing.

**Robb:** Literally nothing. I mean there's chaos and pandemonium in the Twitter verse and everything. It's interesting. I don't want to... I always say this, I don't want to divert too far, but it is fascinating what's going on there with Elon Musk seemingly. And it's so interesting, seemingly trying to create a platform where free speech is a thing. That there's a legitimate town square where everybody has a voice and really no topic is off limits, so long as it's not inciting violence. And some of these long held strictures around decorum and whatnot. And there's a fascinating cross section of people that are absolutely epileptic over this process and are convinced that this will be the... There was actually a CNN piece, the Bagato had this where free speech will be the undoing of free speech. And this was said on CNN and then their fact checkers checked it and they weren't really too sure what to do with it.

It was this whole hilarious thing. But it's really interesting. The folks that were, and I'm going to do some broad brush generalizations, but that felt that people should be fired if

they weren't vaccinated, felt like they should not receive medical care if they weren't vaccinated. That you should be publicly shamed if you're not wearing a mask during the pandemic. And maybe some other demographic characteristics, seem to be the people that are really clutching their pearls over the notion that people can come and say what they want to say and have an opinion on things. And do you want me to throw that ACLU thing out that I mentioned to you the other day?

**Nicki:** I'm not remembering which one it is.

**Robb:** I'll just throw this out there. I'll just throw this out there. There was this case, and this is 15 years ago, where there was a group of legitimate white supremacists that we're trying to organize a rally in a march, and they got shut down and the ACLU, the American Civil Liberties Union defended them in their right to organize. Now, are these people probably to a person, absolute pieces of shit? Almost certainly. Maybe some of them could be redeemed and convinced that they're thinking is flawed. And the only way that you do that is maybe having some interaction with these people, which there's a story about this Black gentleman that made it his life's mission to go and engage with these white supremacists. And he ended up as deradicalize 200 of these guys or whatever, because he would sit down and buy them lunch and start having a conversation. And then they changed their minds.

But there was a time when the ACLU actually defended legitimate Nazis, let's say, it's interesting. These people are deplorable and horrible and it's easy and reasonable and probably justified to not anything that these folks are about, but still woven into the American experience and the American constitution is this right to assemble. And there was a time that entities like the ACLU would stand up for these folks as horrible and deplorable and everything else as they are. And that's gone. That's just gone. And what's interesting to me is that when things like that are gone, and Brett Weinstein has made this case that one is a magic number, zero is a magic number. When you can make it such that there is no representation of an academic setting that isn't broken due to wokeness, that there is no town square where everybody has a legitimate, unfettered voice, then totalitarianism is there and it's on your chest and it's just going to settle in deeper and deeper and deeper.

And it may never be cast off again. And it's just interesting what's going on and who finds themselves on what side of this story. And I am absolutely in, and this is a hill I would die on, is a free speech absolutist. The nuttier the idea, the worst the idea, like fuck I battle this all the time. People insist that grazing animals are the undoing of the planet. And so when people are bemoaning this stuff, it's like, I deal with this all the time. I've been dealing with this for literally two decades now.

My first public debate about this topic was at Chico State University in 2006. So I've been hammering tongs on this thing. And there are people out there that make these erroneous claims that pull up bad data. And it just falls on some of us, hopefully all of us and ideally more of us than who are currently doing this, to actually fight back. To get in and devote some of our bandwidth and some of our precious one, in of one, the only life we're going to have, to setting the record straight. And if that's too hard for people then you've already given up and whatever comes your way, you deserve at this point. So that's what the other thing-

**Nicki:** That was a nice little rant. It's funny, I saw Elon Musk tweeted something about freedom of speech, without it even America will fall to authoritarianism. Or I can't remember the exact quote, but it was something to the effect that this is the paramount fight, the paramount battle, defending freedom of speech. And the first comment was some

asshole who had OMG shut up, or STFU, and it's like, okay, maybe it was a bot or a troll, but it's like, I don't know, I have a heart. I don't love everything that Elon is or does, but I like a lot of what I'm seeing and what he's doing.

And it just strikes me as so granite, like social media is accessible and people will say all sorts of things that they would never say to a person's face, but it's just like how does somebody just... So clearly this person, assuming it's not a bot or a troll, thinks that he's just some windbag spewing him on about freedom of speech and that it really, he was wasting his time and there's nothing to fight for in this case. It's just appalling. But that is social media and well I won't go there because we're already derailing. This is another-

**Robb:** No. Go there.

**Nicki:** Go there? Well, the girls discovered this new show called Brain Child.

**Robb:** Yep. Brain Child.

**Nicki:** And they watched, and I've only peripherally seen a couple of the episodes, but they talk about how the mind works and how fast your synapses can work and how fast you can have a thought and act on a thought and whole host of things. And an episode that we didn't watch, but Zoe was telling us was about social media and how they did this experiment where they had some person made a song, some gal made a song and it was a terrible song.

**Robb:** It was purposely a terrible song.

**Nicki:** Purposely terrible. And then they had two groups of kids. One group was told they needed to just write a review or a critique of this song and it was going to be anonymous. And that was that.

**Robb:** No, one of them, they were going to read the critique to the person-

**Nicki:** To the person.

**Robb:** In real life. And one, the critique was going to be delivered via a social media platform.

**Nicki:** But they wouldn't have to... It was anonymous. It wasn't like them. Yeah. And the result, as we all can guess is that folks that knew that they were going to be reading the critique to the person, their critique was much kinder than the ones that knew that they were just going to have this anonymous post to the person. So it was just this experiment on how people interact with each other online. And I don't know, it was pretty interesting.

**Robb:** And it was kind of cool that the kids dug that up and then we got to have a little bit of Q and A with the kids about that. Well, what do you think that given that reality, what do you think it does to the world if most of the interactions that people have end up being online versus real? And they're like, "Well, people are mean and horrible". And so ended up being a valuable teaching lesson. But anyway.

**Nicki:** Anyway. Okay, news topics, what do you got for us, hubs?

**Robb:** So two related pieces of Mediterranean diet and inflammaging, which is within the hormesis paradigm, which is a new term that I've dug up. Inflammaging is the process of aging driven by inflammation. And it makes the case that the Mediterranean diet may

be beneficial largely due to the mitohormetic stress, the low grade toxic exposure from the plants in the diet, which is interesting. This nest under some of the carnivore diet discussion. And some people are like, "Well, you don't need that". Maybe you do need that. I find it very interesting that this mitohormetic stress topic is not really so theoretical anymore although this is a review paper. It's not like it's a randomized control trial, but they build a theoretical case around it. So I appreciated that. But it's worth mentioning that there are other papers, which I linked to the other one, nutritional ketosis and mitohormesis, potential implications for mitochondrial function and human health.

It makes the case, it simply being in a state of ketosis is a mitohormetic stress. So there's a certain mild stress associated with the state of ketosis, which then upregulates endogenous antioxidant systems, cellular repair. And so what's interesting, perplexing about this, there are a lot more people eating a lot fewer plants than I think maybe has happened in a long time. And so within the context of this Mediterranean diet, there's potentially the benefit of eating these mitohormetic stress inducing plants. But then there does appear to be this option of simply being in a ketogenic state, which may confer some benefit. What's interesting about that is when we're talking generally about the ketogenic diet, I don't know if it's been controlled such that we are talking about ketosis absent any plant material inputs. So within a ketogenic diet versus a Mediterranean diet, still people are usually eating some plants.

So it's like broccoli with bacon and stuff like that. And so don't know how perfectly clean that distinction or delineation is, but there's clearly something to this story, to the degree that fasting and caloric restriction seems to confer a benefit. The benefit mainly, and if folks remember from the talk that I gave longevity, we trying too hard. The first benefit that we get is just simply not overeating. That's like the big, big win, which is a non-trivial thing to do in this modern hyper palatable food environment. But then above and beyond that, if we can rig up some sort of a mitohormetic stressor, which exercise, ketosis, some amount of fasting, seem to provide those benefits and also would appear some amount of fruit and vegetable consumption as well.

**Nicki:** Nice. Okay. We will leak to both of those in the show notes. And the Healthy Rebellion Radio is sponsored by our salty AF electrolyte company, LMNT. And I'm excited to announce that the Chocolate Medley is now available for everyone. We had a two week period where it was only available to our value bundle subscribers. But now you can grab a box of Chocolate Medley as a standalone purchase, although I will add that the value bundle is still your best bang for your buck. You can mix and match any flavor, any box that you want. You buy three, get the fourth one free. But the Chocolate Medley has 10 chocolate caramel salt, 10 chocolate mint salt, and 10 chocolate salt.

And right now I'm drinking a concoction that the girls are also loving. It's a raspberry hot chocolate combo. You just mix a third of a package of your raspberry salt with two-thirds chocolate salt in hot water. It's so good. Really, really good. Remember, the Chocolate Medley is only available for a limited time when it's gone, it's gone. An LMNT also has no questions asked refunds. So you can give Chocolate Medley a try risk free. You can grab yours [drinklmnt.com/robb](https://drinklmnt.com/robb). That's [drinklmnt.com/robb](https://drinklmnt.com/robb). And the holidays are coming. So if you have folks that you think might need a little extra hydration, this makes a great stocking stuffer or gift. So grab that value bundle, buy three boxes, get the fourth one free, [drinklmnt.com/robb](https://drinklmnt.com/robb).

**Robb:** Nicely done.

**Nicki:** Okay, hubs, we've got three questions today. The first one is from Marianna on post-surgery recovery. Hey Robb and Nicki, I am headed into week two of a total of four weeks of post-surgery restrictions. I had a bladder sling procedure for incontinence. The doctor ordered walking only for exercise. I specifically asked about upper body workouts and was told no go. Which makes sense because upper body almost always involves core muscles. I'm a 71 year old female who normally spends over an hour every other day lifting heavy things in the gym. Tips please on how to avoid muscle loss, particularly advice on protein consumption and collagen intake as well. Thanks.

**Robb:** So man, a couple of angles you could take on this for sure. Adequate protein intake, a gram protein per pound of lean body mass up to a gram of protein per pound of body weight or ideal body weight. There's just no two ways around a higher protein intake, even while relatively sedentary is just a dramatic hedge against muscle wasting. Being in a state of ketosis seems to both enhance this anti catabolic effect maintaining, and when we say the ketosis, we're not talking about a three to one, four to one epileptic type ketogenic diet, but more of a modified Atkins, which is higher protein, keto gains type approach, all that type of stuff. But there does seem to be some benefit with regards to wound healing recovery while in a ketogenic state. All other things being equal and making sure that you're on point with your electrolytes and all that type of stuff.

And then above and beyond that, if you're cleared to walk, man, I would walk till the soles fell off your shoes. Be as active as you can. And again, this is something you would need to pass by your doc. But even doing planks against a table or something like that so that you're engaging core musculature, but it's an ecstatic fashion and stuff like that, I'd be hard pressed to imagine that that would not be okay. But again, within your tolerance, within whatever parameters that the doctor is okay with, I would suspect that going up and down some stairs would probably be quite good.

**Nicki:** Or hill climb if he can find some sort of an incline and walk uphill.

**Robb:** But four weeks of not being able to lift is a little wild. But if you eat well, sleep well, and then just weight bear as often as you can, I think you're going to be just fine. You'll find that you're going to have some strength deficits compared to where you were before and it'll take you a little while to ramp back up. But once you start getting back into the gym, so long as you've been feeding yourself well and being as active as you can within your constraints, I think you'll be just fine.

**Nicki:** And what about your thoughts on collagen intake?

**Robb:** Collagen is great from the context of balancing that methionine glycine ratio, which Chris Masterjohn is really the expert on that, but there's a case to be made that there's a lower inflammatory potential. If we're balancing that glycine methionine ratio, we tend to get methionine from more muscle meat and chicken and eggs and all that type of stuff. And we get more glycine from gelatin, collagen type sources, skin organs, all that type of stuff.

**Nicki:** But she wouldn't count her collagen intake towards her protein grams for her day.

**Robb:** No, that's the interesting thing.

**Nicki:** Okay, just clarifying that.

**Robb:** If you're counting calories, it counts as calories, but it's not going to count in your protein allotment because we don't want it to dig in unduly into the anabolic signaling that we get from standard protein. Great catch.

**Nicki:** Cool. Okay, our next question is from Mary-Lee on thyroid and iodine. Hi Robb and Nicki. I recently listened to a podcast with Dr. Allen Christensen and read his book *The Thyroid Reset Diet*. His premise, as I understand it, is that most autoimmune and hypothyroid conditions are due to an excess of iodine in the body and can resolve, once that iodine is depleted or used up, by going on a low iodine diet. This includes primarily removing salt unless it's clearly non iodized or kosher, egg yolks and dairy, although there are many other sources listed, including certain skincare products. My labs have indicated the need for treatment for hypo for many years as well as having autoimmune thyroid disease. However, any prescription thyroid medicine as well as thyroid support supplements leave me feeling much worse. So I've been untreated for several years. While I don't feel nearly as bad as my labs would indicate, I also don't feel great. I would like to know what you think of this idea and whether you think his eating plan would help. Thanks for all you do.

**Robb:** When we receive this, I have not read the book, didn't have a chance to read it before this, looked at some reviews and it's interesting, but I have to say, my understanding of this topic is that generally the problem that we see with excess iodine consumption is a hyperthyroid state. I just haven't, and I'm not a thyroid expert. There are some people like Guillermo Ruiz, Elle Russ, and some other people that are pretty notable in the thyroid space. They're much better versed on both the mechanistic elements and also the clinical. We're going to try this and we'll see what the results are. So the thing that I have about this is in digging around, I haven't seen a lot that suggests that excess iodine really contributes to hypothyroid. So I'm not sure on that. This is, I'm-

**Nicki:** So it's mainly for hyper-

**Robb:** Hyperthyroid.

**Nicki:** Okay. Gotcha.

**Robb:** There's definitely a case to be made for that. If there is a hypo story mixed into this, then it's outside of my knowledge set, I'm over the tip of my skis and I'm not sure and just haven't been able to dig deep on this. The one thing that I would throw out there though, most of these dietary interventions like this seems really safe. If we are reducing iodized salt in iodine dietary factors for some period of time and we're paying attention to clinical manifestations, that would be consistent with hypo or hyperthyroid, dry hair, lethargy, coldness, both sides of the spectrum, I think so long as you're paying attention to what's going on, then this seems like a reasonable protocol.

**Nicki:** So your own little N equals one. How do I feel when I modify my diet?

**Robb:** Yeah, it doesn't seem super scary to give that a shot at least. So again, in the show notes will link to Guillermo and maybe a couple other folks, if I remember, who are the knowledgeable folks in the thyroid space. There's somebody else that I'm just blanking on. Guillermo, Elle-

**Nicki:** I know that we've sent a couple of friends to Guillermo and-

**Robb:** The folks that-

**Nicki:** Oh, the pharmacist?

**Robb:** Yes.

**Nicki:** What's her name? Isabella Wentz.

**Robb:** Yes, Isabella Wentz, that's who I was thinking of. Isabella is also super well steeped in this stuff. So those are some other folks that I would maybe poke around their information, just to get... Funny enough, there was a time when folks recommended a second opinion on things and that the science wasn't settled and also that your individual situation may not fit perfectly within the parameters of any one person's recommendations. So Isabella Wentz, Elle Russ, Guillermo-

**Nicki:** And we'll put links in the show notes to these folks too. So you can go to [robbwolf.com](http://robbwolf.com) and click on the latest podcast episode and find those.

**Robb:** So I wish I could give you a better opinion on that. But the most concrete thing that I have is that I'm not directly aware of a mechanism of causation where excess thyroid tends to lead to hypothyroid.

**Nicki:** Excess iodine.

**Robb:** Sorry, excess iodine. Yep. Yep.

**Nicki:** Okay. Our final question this week is from Alex. He wants to know, do ketones make you wired? He says, I am sensitive to stimulants in the afternoon, especially caffeine, even carnitine. I'm looking for something to take in the afternoon for pick me up at work and eventually for an evening workout after work. I'm tempted to try ketones to boost my brain and energy. I'm also on the Shoemaker Protocol to recover from mold illness. I'm not opposed to making my own stack. I have an anti fatigue stack that helps me through the morning crash, but I need a 3:00 PM stack because I start to crash hard around then. I've yet to rule out taking electrolytes, Cordyceps and lion's mane.

**Robb:** Again, maybe self-serving because we pedal electrolytes, but that electrolyte piece is critical. We've seen so many times where the afternoon slump that usually would've been a half cat espresso or something like that is better served by properly jumping on some electrolytes. So I would really look at that. And if you don't want to buy something like LMNT, there's other things out there. LMNT also has a how to make it home brew. I don't see that Cordyceps or lion's mane would really help with this energy slump. Cordyceps can help with endurance or perceived exertion while training. I think it's legit for that, but I don't see it really addressing this. Also, I would be really, Alex, I would be super clear about are you overdoing carbs? Are you overdoing the timing of the carbs and have a good protein-

**Nicki:** I was going to say that because I'm like a morning crash and then a 3:00 PM crash to me, and again, maybe this also ties into the mold illness that he is trying to recover from. So it might-

**Robb:** Certainly could.

**Nicki:** But it makes me wonder about the food. And clearly he's listening to this podcast and he's curious about ketones. So I'm assuming that his food is mostly dialed in. But it's worth looking at what are you eating? Are eating something that could be contributing to these crashes because I don't know, two crashes a day. I know that's standard for the



standard American diet population and people are going through the drive up coffees and having to get their five hour energies and all that stuff. But people who typically eat more on the ancestral side of things, yes, you can have an energy slump in the afternoon, but I don't think the double crash a day every day is a thing.

**Robb:** Right. So I agree. So I'd be curious about nutritional composition. To your point, Nikki, this may be an artifact of dealing with the mold exposure and whatnot.

**Nicki:** Yeah. That's probably.

**Robb:** And Alex, circling back around to the ketone story. I personally have had very mixed results with different ketone products like the ketone salts give me a gut ache and I can't say that I feel like cognitively charged and revived with them. I've tried the ketone esters. Kind of a similar deal. One thing that I've been tinkering with, and I really like the product is Kinetic and it's [drinkkinetic.com](http://drinkkinetic.com). And again, we have links in there. I don't have any affiliate link or any financial tie to the company, but it's a different way of delivering ketones. This is a deform of the Beta-hydroxybutyrate and is a product of fermentation of plant material, basically. And they end up with this aqueous form of the D-isomer of the ketone body. And because we've moved so many times, I have not tracked down where my blood keto monitor is.

It's somewhere in this god damn house, but I don't know where. So I haven't checked my blood levels, but I've tried the product and I've actually had a little hypoglycemic event afterwards. So it's telling me that it probably bumps my ketones up quite a bit because when ketones levels rise fairly significantly, you will get an insulin release and blood sugar can drop. What I've found is with the drink kinetic is that I can only tolerate about a half serving of it. So I'm really curious. I may need to just buy another ketone monitor and check this thing, but I suspect it's doing something pretty profound because I tend to eat more or less in that ketogenic ratio and have good energy and good cognitive function and all that type of stuff. So I'm assuming based off of past experiences that I'm in that modest level of ketosis. But this thing definitely seems to bump stuff up. But before this, I would look at composition of food, timing of food, making sure you're eating enough food, possibly a glycemic crash-

**Nicki:** Enough food is a big point. If you're under eating, you can have energy slumps also, especially if you're doing any training.

**Robb:** Yep. And then I would think about electrolytes and then I would think about the ketone product. And again, this drink kinetic is an interesting one that you might look into tinkering with. And just be aware that I talked to the CEO of the company, just picking his brain on some stuff. He has heard a few other reports of people getting a little bit of a hypoglycemic event from the product and so they end up recommending a half dose for those folks.

**Nicki:** And then lion's mane, Cordyceps, mushrooms for energy.

**Robb:** I mentioned that a little bit before. I don't really see that being a big driver for energy. Yeah,

**Nicki:** For energy, yeah. I don't think so either. Okay. I think that was our three questions for this week. I can't believe we're on the cusp of December. It is almost the final month.

**Robb:** The end is nine.

**Nicki:** The end of 2022. Let's hope that 2023 has a lot of wonderful things in store for us all.

**Robb:** We have a lot of wonderful things.

**Nicki:** All right. I have no other closing thoughts. Robb, anything from you?

**Robb:** Nope, I've got nothing.

**Nicki:** Okay. Folks, I hope you have a wonderful weekend. Enjoy your families, get outside. Thanks for tuning in. We will see you all next week.

**Robb:** Bye everybody.