

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: Do you have a podcast?

Nicki: I do.

Robb: Howdy, folks. Welcome back.

Nicki: If you can tell, if you've watched the Wonka musical, then you'll know where that came from. The girls have been singing it all around the house and lots of tunes about chocolate. Do you have the hots for chocs?

Anyway, hi, folks. Let's see-

Robb: We've all moved up a weight class as a consequence.

Nicki: Let's see, what's new, hubs? We're recording this on Friday morning, February 9th.

Robb: Because we can't get our shit together the rest of the week.

Nicki: It's been tricky. Yeah, we're getting stuff done, but this particular show tends to...

Robb: It's the redheaded stepchild of podcasting. It gets shuffled to the periphery.

Nicki: But we love you all and so we continue to make an effort.

Anything new that you want to share?

Robb: Actually just, I took the girls to the Wonka movie in the theater and really thoroughly enjoyed it, and then we watched it at home and we don't have a spectacular sound system. It's so weird, we have these modern TVs, which are quite lovely by all accounts compared to the giant...

Nicki: We had a mirror growing up, yeah.

Robb: ... tubed TVs growing up. But there's some weird feature to them that the volume just sucks, like pretty uniformly. And there's actually been some articles written about it and it basically forces one into purchasing kind of a significant sound system, which I've just never bothered doing. Somebody else did a piece talking about why it's now necessary to have your closed captioning or subtitles on all the time because the sound quality and all these other characteristics of modern films, you just can't understand what the fuck is being said for the most part. And the musical experience was far less-

Nicki: Well, they went to the movies when I was at my beekeeping class. I didn't see it in the theater, and so then they were really excited about it.

Robb: I thought it was great, and I'm kind of a sucker for musicals.

Nicki: Yeah, so then we wanted to watch it together. They wanted to pull me in and include me, and so we watched it and I thought it was good, but it wasn't like, it didn't grab me.

Robb: It was definitely much more compelling getting it in the theater, just because of the sound.

Nicki: But then, of course, we've been listening to the soundtrack while driving in the car and whatnot, and then it sounds fabulous there.

Robb: So maybe I do need to figure out a decent home sound system solution.

Nicki: I will say that the subtitle thing while you're watching something, I guess it can be helpful if there's a lot of thick accents in whatever show you're watching, but it distracts.

Robb: Well, you're looking at that instead of-

Nicki: That you're staring at the words instead of just fully experiencing the show. So it's definitely a distracting thing. Anyway.

Robb: Do we need to have an intervention here? Is this a cry for help?

Nicki: No.

Robb: Are you displeased with our marriage? Is there more going on here?

Nicki: I don't know, babe.

Robb: Okay. I'm just digging. I was hoping, really. I was hoping.

Nicki: You're digging. Yeah. Yeah.

What do you have for a news topic today?

Robb: Just kind of an interesting paper. Recent advances in the exploration discovery of SARS-CoV-2 inhibitory peptides from edible animal proteins.

Nicki: Oh, no.

Robb: And so it's basically... And it looks at some wacky things like venom, but also some proteins and small peptide, short proteins derived from fish and some other sources that seem to have inhibitory characteristics around SARS-CoV-2.

Nicki: That's actually good. When you read it, the reason why I said oh, no is because I thought this was going to be one of these sort of slanted research papers to get people to stop eating animal proteins because-

Robb: No, no, this one is...

Nicki: It's the inverse of that.

Robb: ... it's exactly the opposite, which was kind of shocking that it was even done. And a lot of the carnivore scene was rallying around this, and clearly they hadn't even bothered to read even the abstract because there's fish, there's venom, there was one other thing, but-

Nicki: Well, the snake diet guy might start advocating for venom.

Robb: The guy I think drinks his own urine, so I just wouldn't put any... And funny enough, vegans do too. So this is like the horseshoe theory of politics where the extreme right and the extreme left end up being basically mirror images of each other. And it's probably true within dietary circles too. You have snake diet and then raw vegans, and they're just a match made in heaven for each other. If we could put both groups off on a desert island and leave them there, the world would be a better place. Okay.

Nicki: All right. Is that all you wanted to say about that?

Robb: I could say all kinds of stuff about that, but I'll stop.

Nicki: Okay. Alrighty. Healthy Rebellion Radio is sponsored by our salty AF electrolyte company, LMNT. 2024, it's a new year, and as a result, many, many people are making changes to their diet and lifestyle. Most people we run into and speak to, this is in real life, outside of our online presence, bring up that they're going keto for the first time or giving carnivore a go. What they don't often know is how important electrolytes, in particular sodium, is to making a successful transition to these ways of eating. So remember, and tell your friends or loved ones if they're embarking on a new way of eating, if you eat low-carb or keto, if you're an athlete, if you have muscle cramps, if you have an active job, work in hot or humid conditions, if you're a breastfeeding mom, if you have

POTS, if you do winter sports, skiing, snowboarding, cross country, or if you're just feeling a little tired and need a natural energy boost without caffeine, LMNT is for you.

And when you buy three boxes, you get the fourth box free with our insider bundle at [drinklmnt.com/robb](https://drinklmnt.com/robb), and there is still some chocolate medley available, so if you enjoy sipping your electrolytes hot, you get 10 boxes each of chocolate mint, chocolate chai and chocolate raspberry. Again, you can grab that at [drinklmnt.com/robb](https://drinklmnt.com/robb).

Robb: And that's 10 stick packs of each.

Nicki: What did I say?

Robb: Boxes.

Nicki: Yes, 10 sticks each.

Robb: Just to clarify.

Nicki: That's kind of a snafu.

Robb: Doesn't it chap your ass when I do that?

Nicki: No, no, you're adding clarity to my-

Robb: Oh, well chaps my ass when you do that.

Nicki: I know, but see, I'm more evolved than you so I can handle some constructive criticism.

Robb: Oh, you're XX chromosome, so you're superior in all ways.

Nicki: Okay, we've got three questions for-

Robb: Fortunately, you get to live longer than I do.

Nicki: I don't know. You've got the essential tremor, so you might've drawn the longevity card over me.

Robb: That's true. I just want to live one day less than you.

Nicki: Give me that last 24 hours of suffering.

Robb: Yes.

Nicki: Thanks, babe. You're so-

Robb: I give and I give.

Nicki: You do.

All right. This first question is from Thomas, and he's wondering if there can be too much cardio for diabetes. Hi, Robb and Nicki. Let's see here. He just mentioned that he's asked a question before on the podcast about Imodium. I'm one of the six who truly appreciate what you do and listen all the time. I'm also an LMNT believer. This question is for my mother-in-law. She has controlled diabetes with diet and exercise for years, I would say, they are paleo on the lower end of protein, but now her A1C and fasting glucose are going up. Lots of walking and biking, weather permitting on the biking, and they walk upwards of 7 to 10 miles a day. Could this be causing her body to produce more glucose for energy if protein is low, or is her time up and leading towards insulin after all these years? Would weights be a benefit? Failed to mention, she's in her low 70s and pretty small framed.

Robb: Man, there's a lot of... This is where, again, the colon show was interesting but...

Nicki: Challenging in some ways.

Robb: ... challenging in oh, so many ways, but I have so many questions here. Has she ever tinkered with berberine? Has she tinkered with metformin? Really what is her diet? It's like paleo-ish on the low side of protein like-

Nicki: That can be lots of gluten-free paleo cookies and brownies or a lot of... I mean, it could be really high carb, but just sweet potatoes and yams and cooked carrots.

Robb: Right. Right. And low protein and too much glycemic load. I guess, the main question was, is there too much activity here? And I would say almost certainly not. I would bet that the physical activity is just the little Dutch boy with fingers in the dike, like this is the thing that's keeping this from probably accelerating even more. Some vigorous full body resistance training two days a week, three days a week would be phenomenal for improving this stuff. And even things like pre or post meal, it sounds like maybe she goes for a walk or bike riding and things like that. 20 or 30 air squats, some pushups, even against the counter, setting up a thing where you can do some body rows, a little fullish body circuit that is resistance training. Resistance training relative to a aerobic exercise really turns on that non-insulin, mediated glucose transport into muscles. And it just does it orders of magnitude more powerfully. And this is where sometimes...

And also sprint activity can also turn that process on. But the interesting thing with that is that sprint activity or CrossFit type stuff is also sufficiently intense that you not infrequently ping the liver to release glucose because of the stressful activity. So that can be counterproductive. This is one of the features of resistance training that's just magical for blood glucose maintenance, even though this zone two activity is great.

So I know I'm kind of bouncing all over the place here, but I would really like to see legit, what is she eating? So document everything in chronometer for three days or a week, would really like to see that. Like gram of protein per pound of lean body mass, gram a protein per pound of ideal body weight. Where are the carb sources? Is sleep on point. It'd be interesting to... if she had a whoop or a Morpheus or something like that. How's her sleep? How's her recovery? Does everything look good there? And then a couple of days a week of resistance training.

And then in addition to that, maybe tinkering with something like metformin or berberine to deal... There are just situations where, for a host of reasons, we just see an upward trend in blood glucose levels in A1C and metformin can be helpful for that or things like it. And there's a cost benefit analysis with everything. Metformin is a little bit of a mitochondrial toxicant, but there may be a net win with just getting on top of the A1C and stuff like that.

So I would... Full body exercise, document food, see where all that is, and then if, Thomas, if you want to collect some of that information, then ping it back to us, then we could maybe get a little bit more granular about what I think is actually going on, even though there's oftentimes still a lot of guesswork.

Nicki: Cool. All right. This next question is from Caleb on whether junk food calories... if all the junk in junk food calories can get burned off. He says, howdy, Robert and Nicki. I am an OG supporter that came across you all while I was working for one of the first whole 30 approved products, Tessemae's All Natural. I've been to a handful of paleo effects events and my last one was a few years back where we connected at the LMNT booth and I just want to extend my appreciation for you to staying true to real food and nuanced information without turning into shithead snake oil salesman selling beauty counter or other garbage products like the majority of the old real food influencers.

Robb: Man, wonder who he's talking about.

Nicki: Number two, I recently started ultra training and found that if I use whole foods for all my fuel, I end up with a giant rock in my stomach, and occasionally, have to sprint off trail to test my below 90 degree wall sits on a tree to relieve myself. I've since gone towards Gus and a Swedish fish for my training and race fuel, and the rest of my calories come from lean red meat. Fruits, Japanese sweet potatoes, avocado oil, ghee, and trace amounts of calories from a little slice of heaven called LMNT. And then he puts plug in the parentheses.

Robb: Shameless plug.

Nicki: Shameless plug.

My digestion is great. My stool is strong. My skin is clear-ish. I always have trouble with acne. And my energy is solid. I just want to make sure I'm not

causing any long-term issues by crushing Swedish fish. It's hard to say Swedish fish, Gus and chilled peanut M&Ms during training and wondering if the fact that I'm currently a furnace for calories, if that furnace burns the bad stuff and process foods along with the calories themselves.

Robb: You just need a bit of a Germanic accent. Swedish fish.

Nicki: Swedish fish.

Robb: Yeah. Caleb, there's a lot of interesting stuff in this. It makes me think a little bit about some of Louie Simmons' old recommendations around diet for his lifters, which was to not eat particularly clean, don't eat too much protein. And Louie, erroneously, said that that was because protein was hard on the kidneys, but I think what it was is these guys by and large didn't care about body composition. If you were 5'4", he would love to see you in the super heavyweight class...

Nicki: Number go up.

Robb: ... and just get fucking huge. And well, just kind of this reality, we've seen this in... With minimally processed food, it tends to be very satiating and there also tends to be a lot like fiber, even sweet potatoes and stuff like that. There's a fair amount of fiber and if you're doing any amount of vegetables on top of that, that can be really challenging. And I think that this is totally normal, particularly with high motor athletics.

There's training day nutrition and then game day nutrition, and I think that that's completely reasonable and you seem to have a great partitioning of those things. It's always some of the challenge, and this is where some of the folks in the modern... And it's funny, he mentions this. There's so many people that were into the paleo diet, into autoimmune paleo, now they're into this healthy at any size and you should eat a standard American diet and just portion control, and it's fucking ridiculous because the danger with this is that highly processed foods are hyper palatable, easy to start displacing other things. I think that things like Gu and Swedish fish, they're okay, but they're not... I don't know that I would want to get up in the middle of the night and just go nosh on a bunch of Gu or Swedish fish. You might throw a few down, but they're not that salty, crunchy, umami combination, all that stuff.

And that would be... Like if you were picking things like that, that have a real potential for creeping into the rest of the diet, then I could see that being a problem. I definitely don't see a problem. There's no... I'm thinking about this. Like you're shoveling out the remnants of a trash incinerator and there's.

Nicki: The ash?

Robb: ... partially burn the cans. That's not happening here. These things are fine. Yeah, they have some colorings in them and stuff like that. I'm way less

concerned about those things than a lot of people in this space, particularly if you just don't show any overt issues with them and your digestion is great and your stool is strong and all the rest of that stuff.

So I think you're killing this and I think that just reinforces that we should build the foundation around whole minimally processed foods. And then you have to be flexible around the other parts, like really high motor activity folks, these more processed foods can really be a boon.

This is interestingly, just as an aside, this is where some people like Zach Bitter and some other people that are largely carnivore and/or keto adapted, kind of the benefit there is, in theory, these folks are burning more fat at any given work output, and so they're able to rely on the Gus and the fish and things like that less. But this is like a highly subjective individual thing, and I have no doubt that Caleb is probably tinkered with this stuff, but it might be something else that he wants to play with somewhere down the road or he may have already done it, and it sounds like he's performing great, so don't mess with something that's not broken.

Nicki: Okay. Awesome. Let's see. Our last question this week is from Jen on weight loss and maintenance. Hi Robb and Nicki. I want to start by first saying thank you for the entertaining and informative podcast as well as the delicious electrolytes. My question today is related to weight loss and how to potentially move that needle. Sorry for the long-winded story and question.

I'm a 34-year-old female, 5'7" and 175 pounds. I have a desk job, but I'm active every day. I kickbox twice a week, CrossFit once a week, swim laps once a week, practice yoga and mobility several times a week, strength train at least once a week. I aim for two to three times, and I walk between 7 and 10,000 steps every day. I have, in the past, lost weight doing chronic cardio and extreme calorie restriction, and I have reached 155 pounds, which is where I feel the best, both for confidence and energy wise. But of course, once I stop the extreme dieting and exercise, the weight comes back on. At my heaviest, I was 215 pounds, but I'm able to main 175 very easily now. But getting that last 15 to 20 pounds off and keeping them off is a major struggle.

Peter Attia has said that your waist should be half of your height or less. So at 5'7", my waist should be 33.5 inches and I'm at 37 inches and it will not budge. I eat a very clean diet following Paul Saladino's animal-based framework, beef, eggs, chicken, apples, blueberries, hard cheeses, Parmesan and old cheddar, potato, carrot, squash, sauerkrauts, mangoes, bananas, et cetera. And I follow Dr. Mindy Pelz's intermittent fasting framework. Chronometer shows that I'm eating between 140 to 160 grams of protein, 50 to 150 grams of carbs, and the remaining calories are fat. And on average, I'm eating between 1800 to 2000 calories a day and feel satiated.

Taking my activities into account, I have between a 250 and 500 daily calorie deficit, which means that I should be losing weight at a slow steady pace,



but I'm not. I'm wondering if my hormones are possibly causing a problem. I have regular blood work done and my thyroid levels are in a normal range, my fasting glucose is 4.6 and all other markers are normal.

A problem is that I live in the socialist country of Canada and my doctor won't test my hormones because of my age and the fact that I don't have any health issues and I'm not obese. Preventative healthcare does not exist here. I've tried to look at CGMs and private hormone testing and each of those will be out of pocket between 500 and \$1000, which is more than I could afford at the moment. I try not to overdo the fasting and exercise so as not to increase cortisol levels too much. I do have a stressful job. I purposely take a break in the middle of the day to go for a walk or exercise to help keep those stress levels under control. I try to get outside for at least 30 minutes a day, but not always possible due to the weather. And I get between seven and a half to eight hours of sleep a night, usually good quality sleep, but I do have the occasional restless night.

The supplements I take besides LMNT are magnesium, vitamin D and CBD. My only vices are coffee and tea, which I drink black or with a small amount of honey or coconut milk. I feel like I'm doing everything right. I feel healthy and have a great partner and life, but I just can't seem to get the weight under control. Do you have any thoughts or suggestions that may help me to move the needle and keep the weight off for good or am I worrying over something that is not a big deal? I want to be as healthy and strong as I can be going into my midlife years. I appreciate any thoughts you may have.

Robb: Did Jen mention her age?

Nicki: 34.

Robb: 34. Do you have any thoughts? There's a ton of information there, and Jen, you did a great job laying out your sitch.

Nicki: The one thing that... And let's see, she gives her macros as 140 to 160 a protein, 50 to 150 of carbs and the remaining calories of fat. One thing I'm thinking about is our conversation with our coach, our old jiu-jitsu coach, Ray, about how some people, and I experienced this too, the low carb piece of it, some people tend to hold on to more of that, like that body fat versus maybe inching the carbs up a little bit and going a little lower fat. And I'm not exactly sure what the fat calorie or fat grams are here.

Robb: So she's saying, let's just say, 2000 calories. Let's say, she's doing 100 grams of carbs on average because she said...

Nicki: 50 to 150.

Robb: ... 50 to 150. So you've got 400 calories there. Let's say, 150 grams of protein splitting the 140 and 160. So you've got 600 calories there. So you've got 1000 calories from protein and carbs and 1000 calories from fat potentially,

which would be 100 grams of fat, which on the surface doesn't seem outrageous, but-

Nicki: I'm just wondering, some people do better with just shifting that macronutrient ratio a bit.

Robb: I just want... Absolutely. I completely agree. But the thing is... Fuck, the internet sometimes it's just like fat doesn't matter. We have people freaking out over maltodextrin in different products when you would need to consume 35 boxes of a product to get a teaspoon of maltodextrin because it's insulin spiking. It's just like people just, they're so major in the minors and is fat the villain that we thought it was from the 1980s and '90s? No, but there is absolutely a reality that all other things being equal, it is easier to absorb, metabolize and store fat than any other macronutrient, period. And this is where the kind of holdover from the good calories, bad calorie days and the insulin hypothesis folks is so long as insulin is low, then you're fine. And for some situations, it works, but I think you're spot on with this where-

Nicki: I don't think it has to be super drastic either. Maybe the range is 50 to 150 grams of carbs, maybe do the 150. I mean, she's doing a lot of activity. Do the 150 grams of carbs...

Robb: Pretty religiously and really make sure-

Nicki: ... and then the fat accordingly.

Robb: And if she's using chronometer, I think she mentioned that she is, the funny thing is it ends up being a, if it fits your macro steel, which those guys are oftentimes kind of assholes about food quality, but you figure out your two or three meals a day to get your protein and then your carbs and then you just add enough fat so that you are at your daily caloric limit. The thing is is that from... we will say that protein has four calories per gram, carbs have four calories per gram, fats have nine calories per gram, that's true and it's not true. There's also the thermic effect of these foods. There's the fiber that's oftentimes in carbohydrates, which makes it kind of inaccessible. The types of fat that you use, like avocado, the fat is associated with fiber, and so you're not going to absorb it the same way that you do if you just pour coconut oil in something, which is going to be super absorbable.

And there's an oxidative priority to these foods where we will store fat, dietary fat first and then oxidize carbohydrates and then protein, and it might actually add that backwards with the oxidative priority, but the fat is the easiest to store, it's the lowest oxidative priority in all the rest of that. And so what ends up happening really at the end of the day when people shift more, and I think it was Renaissance Periodization and Nicki tried using their app, but their app was really limited in the number of foods it had in it, and the way it was documenting it.

Nicki: I prefer Cronometer, the app, for tracking food, and maybe I'm just biased because I used that before, but I found the RP diet app not...

Robb: Kind onerous to work-

Nicki: ... user-friendly.

Robb: So something you could do is use the keto gains macro calculator to just set things up. And what they've done of more recent times is you will sliding scale, they will set your total caloric load, your protein as a minimum, and then as you scoot carbohydrates up, it will automatically adjust your fat down. And so that can give you some good lane lines to play with, but I think that this is a situation where really hitting that 150 grams and then adjusting the fat grams down so that you're at that mild caloric deficit, run with that for a month, see how you're looking, feeling, performing, if that's not working quite the way you want, bump it up to 175, adjusting the fat down basically for every two grams of carbs you add, you delete one gram of fat. The math isn't exact, but it's within one calorie of each other and it kind of works in your favor because it reduces the calories even a little bit more than what you're adding on the carb side.

I think that that would be a smart way to get in and do this. And it was several months ago, might even be over a year ago, that we talked about how I do the bulk of the cooking in the house. My digestion is so compromised and I'm so limited in the number of foods that I eat and the stuff that I generally eat is so satiating that I have a hard time just eating enough food. So I've kind of instinctively gotten to this spot where everything is super easily digested, it's super calorically dense, and even though it's all whole minimally processed foods, Nicki was running around chubbier than what she wanted to be because it's super easy to overeat it.

Nicki: It's easy to overeat because the cuts of meat were...

Robb: Fattier.

Nicki: ... fattier and whatnot. And I think we mentioned this before, shrimp is your friend. I love shrimp, especially if you're trying to get your protein in and wanting to pay attention to your fat content.

Jen, that's what sticks out to me the most as something to try because clearly you look like you're dialed in, your training is dialed, your activity level, your steps, your sleep is as good as it can be. You might consider trying some meditation just for the stress component of your job.

Robb: Stressful job.

Nicki: That can always...

Robb: That's never a bad idea.

Nicki: That can help and help in a whole myriad of ways in your life.

Robb: She asked if she thought her hormones...

Nicki: The hormones, you know, she's 34.

Robb: Maybe, but I just think that with as great as kind of a paleo, Saladino-esque way of eating is and can be, it can also be a really calorically dense way of eating and I think that it can be a sneaky way of flying in an excess of calories, even if on the paper, it doesn't... Maybe I didn't make this totally clear, there's on the paper calories and then there's the reality of the calories that you absorb. And a number of these more... Again, even sweet potatoes relative to white rice, they have a lot more fiber. This goes back to the question that we had just a little bit ago about digestive distress under high exercise load because of the fiber content, basically.

Nicki: My thought is, so currently the hormone testing is sort of out of reach financially for you. Maybe take the next couple of months and try adjusting your macronutrients the way Robb kind of just outlined and just start saving for that test so that that way if this doesn't work and you really still think...

Robb: It's a great idea.

Nicki: ... there could be a hormone thing, then you've got this little chunk of money that you've been intentionally putting towards that.

Robb: 20 bucks a week.

Nicki: Yeah. And/or you've got a birthday coming up and I don't know if you've got siblings or parents, just like, hey, I'm really saving towards this thing. Would you mind?

Robb: That's a great idea.

Nicki: That's what I'd like. I'm really trying to improve my health and I am working towards this testing that I want to get and anything will help. And so that way you have something actionable that you can start trying today, but you're also...

Robb: Hedging.

Nicki: ... hedging and setting yourself up to where, in the future, you'll be able to do the testing and then you can really see if there's something here that's amiss.

Robb: And if all this stuff, if the dietary tinkering works, then you'll be in a

position to buy the new clothes you'll need because you won't fit in the stuff you currently have.

Nicki: There you go. I like that angle. Yeah. There you go.

Okay. Anything else stick out for you on this one?

Robb: Well, when I stand next to you, there's always something sticking out.

Nicki: Babe. Oh, my God. Okay. I think that is a wrap for this week. Yeah, please check out our show sponsor.

Robb: Nicki is actually blushing. I love it. So good.

Nicki: Please check out our show sponsor for all your electrolyte needs. You can grab those at [drinklmnt.com/robb](http://drinklmnt.com/robb). And folks, have a fabulous weekend. Get outside. Hopefully it's-

Robb: Your weekend I guarantee will be better than Nicki's weekend.

Nicki: Hopefully it'll be sunny where you are and hopefully we'll see you next week.

Robb: Bye everybody.

Nicki: Bye everybody.