

**Nicki:** It is 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+.

**Robb:** Welcome back, folks.

**Nicki:** Hello. Hello.

**Robb:** If our voices are chittery, it's because we were out snow blowing and shoveling.

**Nicki:** Shoveling. Yes.

**Robb:** And it's pretty damn cold.

**Nicki:** It is a winter wonderland outside here in Northwestern Montana. This is officially the coldest weather I have ever been in because I've never been in minus double digit weather and just when we were just outside, it was minus 11.

**Robb:** And I just have to throw a little caveat out there. Some of the cocky Canadians, which y'all live in some very cold weather, but y'all use Celsius. So somebody was trying to shame me about posting a minus 10. I'm like, "Oh, it's a brisk out there." And they're like, "That's not brisk." And then I adjusted it for Celsius, and we were colder than they were. So watch your step, folks.

**Nicki:** Well, and we're supposed to get on Thursday.

**Robb:** Minus 30.

**Nicki:** So we're recording this, what? Today's Wednesday, December 21st and tomorrow is supposed to be a low of negative 30 degrees Fahrenheit.

**Robb:** And I had to get my car serviced, and folks were kind of scrambling because they're like, "How low does our antifreeze go to?" And they're like, "Minus 35 or minus 39." And some of the areas around here are going to be minus 35 in Fahrenheit. Again, with Celsius, you add another 12, 18 degrees depending on the situation.

**Nicki:** Anyway, it's cold. We're getting a white Christmas. It's a very white Christmas here.

**Robb:** Yeah.

**Nicki:** Yeah. We've gotten I think just in the last 24 hours, nine inches of snow.

**Robb:** More than that.

**Nicki:** More than that, yeah.

**Robb:** Yeah. Yeah.

**Nicki:** Anyway, the kids are in sledding heaven and I don't know, I don't mind it. We don't have the wind, so that helps. But I kind of like it.

**Robb:** I'm liking it so far.

**Nicki:** But it's only December. Normally here, at least the two winters that we've been here so far, the coldest month is late January, February. And so we already have more snow and it's been colder to date this year than we had all of last year. So it'll be interesting to see what our total precipitation is going forward. But I know other parts of the country are also getting...

**Robb:** Ham boned.

**Nicki:** Ham boned. We had a friend in Texas send us a thing. It was-

**Robb:** Our dear Cinnamon Prime.

**Nicki:** Coach Prime was like, "It's cold. Look at my dog. She's freezing and it's 30 degrees."

**Robb:** The sun is out.

**Nicki:** Positive 30 degrees.

**Robb:** She had this fingernail polish thick layer of frost on her windshield. And she's like, "I don't know how y'all deal with this." And well, we don't deal with that. We deal with quite more than that. You just adapt, and we adapted to the cold a lot better than we did the heat, that's for sure.

**Nicki:** Yep, yep. Okay, let's see here. What have we got in this episode? Hubs, I think we're ready for news topic.

**Robb:** So do you want to pronounce his name?

**Nicki:** Balaji.

**Robb:** Balaji. It's not Balaji?

**Nicki:** No. Everybody... No. Whenever he says it himself or people pronounce it, who know how to say it, say Balaji.

**Robb:** Who know how to say it, I love that.

**Nicki:** I know. So the news topic. Robb's linking to an episode of the Lex Fridman Podcast, episode 331 with Balaji Srinivasan. And Robb's been... It's an eight hour show, so Robb's been listening to it over the last couple of weeks, whenever he's alone in the car doing errands or whatever. And so he's been telling me about it, and he's been pronouncing it Balaji. And so then-

**Robb:** Like the Bellagio in Las Vegas.

**Nicki:** Yeah, it's not like that. So anyway, I've been ripping him quite a bit.

**Robb:** Anyway, the important part of that, so I did a little back of the envelope estimating, and there's something like 200 million hours of podcasts that were made in 2020 or

something like that. It's crazy. There's so much information, so much opportunity and in some ways obligation to stay on top of different things. This podcast is just so... So a lot of what they talked about is The Network State, which is the book that is available both as a regular print book and also for free, and Balaji...

**Nicki:** Mm-hmm. Balaji.

**Robb:** Balaji.

**Nicki:** Yeah. The emphasis is on the first A, Balaji.

**Robb:** It's very hard to do. It's very counterintuitive. They talked about government in general, the FDA science, food systems, I mean, on and on and on. And it just feels overwhelming because it is.

**Nicki:** And it's pretty high level. I started listening the other day, and I'm only 45 minutes in, and again, it's eight hours and it's a thick podcast.

**Robb:** I think normally I can listen to podcasts. You're like, "Oh, this will only be four hours because I'll listen to it on double speed." No, you won't. Like Balaji, as it is-

**Nicki:** Balaji.

**Robb:** I just... Fuck off. So Lex speaks quite slowly, thoughtfully, carefully. And my God, Balaji just goes like he is at 4x already. And it's just what's interesting about this whole, The Network State concept is, and I'll pat myself on the back a little bit, pat ourselves on the back a little bit. When we spun up the Healthy Rebellion, it was because, as you guys know by now, the story with both Facebook and Google and all the work that we have done over the years, basically disappearing from the interwebs and kind of asking, "Well, what the hell are we going to do next?" And this Web3, finding both virtual and in real world tribes that fit your sensibilities and values and all that, this is a lot of what he's talking about with this book.

And there are remarkable ways of dealing with these seemingly insurmountable problems. We have some really cool folks within the low carb space, Nina Teicholz, Gary Taubes. They've put a lot of effort into trying to revamp the FDA, like trying to get low carb science, its due within these processes. And I tip my hat to them, but I've also always been of the thought that this is just going to be a pissing into the wind contest, that this needs to be a decentralized grassroots effort where you effectively make the FDA's position null and void. And this is a lot of what they're talking about with the network state. And again, it covers so many different topics, and it is really long. But I do think that whether we're talking about appropriately tackling climate change, dealing with social justice issues, censorship.

**Nicki:** AI.

**Robb:** AI. These big existential challenges that we're facing, I think that this is a route to dealing with that. And it's a brain bender in some ways. It's kind of like, "Well, how does this work?" Would they talk about the... People will say terms like nation state, and the nation is different than a state. And the distinction is important. The language is important, which is also why this Orwellian newspeak that has come up out of woke culture trying to curtail the ability to have nuance around discussions. I mean, fuck, 1984 just laid this thing out. When you limit the ability for people to talk about things in a

nuanced way, this is mind control. It's stock control. And he talks a lot about how The Network State could be an answer to that.

**Nicki:** Well, where I'm at, he makes the comment that you can start a new company if you don't want to... You don't have to acquire or fix Google, for example, or whatever company it is that you want to compete with. You can just start your own. And same thing with a currency. You can start your own cryptocurrency.

**Robb:** You can start your own family.

**Nicki:** You can start your own family. You can start all sorts of things but your own government. And clearly I think everybody, I don't know that there's... People have different ideas about what needs fixing, but everybody I think agrees that the government is kind of broken. I mean, we were just looking at the bill last night, that's the omnibus bill that's like \$1.7 trillion that is 4,500 pages long that all the people received at two in the morning, and they're about ready to have discussions about it. And the only... Nope, unless you read, what, five pages a minute for 16 hours straight without taking a single break, you didn't read the thing before you're actually debating it and having these discussions. And so it's just ridiculous. How can there be a bill with this many things in it that are completely random, like salmon in Alaska and funding things in foreign...

**Robb:** There was more dedicated to the border security in like Lebanon, Syria, and elsewhere than it was the border security of the United States.

**Nicki:** Of the United States.

**Robb:** Which I know, hot topic, you're racist saying anything about borders and stuff like that. But there's just some irony there.

**Nicki:** It's just there's all kinds of stuff in here that it just makes no sense to have this many things packed into a single bill. And so you're either voting for all... I mean, all of these things are unique in and of themselves. It's reasonable to think that there would be many, many people that would vote yes on a third of them or a half of them, but would vehemently oppose the other third. So when you pile them all together, how do you even get...

**Robb:** Anything good?

**Nicki:** ... A real good outcome? Anyway, that was a little bit of a tangent.

**Robb:** But this is where it's such a fascinating point, and I had never heard it laid out this way that if you're not happy with a given business, you can start a new business. If you're not happy with the place you live, you can ostensibly... I know people have different resources and everything. It's so funny. I'm just constantly in this exculpatory clause. It's like, okay, I understand not everybody can move every... But by and large people can move if they want to do things. If your family of origins sucked, you can go build your own family and do your therapy and do a better job than what you had. The only thing that we effectively have no real vote in is ironically, our government. And he makes the case that this provides an opportunity to create alternate pathways through this process. I think it's episode number 331 of the Lex Fridman Podcast.

**Nicki:** We'll link to it in the show notes.

**Robb:** It's linked in the show notes. It's the most important podcast I listened to all year. Might end up being the most important podcast that I've ever listened to. It's really, really valuable and very interesting. If you don't have a physics and computer science background, you're going to be a little blown out of the water.

**Nicki:** I don't, and it's definitely thick. It's definitely thick.

**Robb:** But it's worth a listen. And again, to pat ourselves on the back a little bit, I think that we instinctively saw this need for opting out of the options that were put before us. And that was the whole genesis of the Healthy Rebellion, and it's as important and relevant as it ever has been.

**Nicki:** Okay, moving on to our sponsor ad, the Healthy Rebellion Radio is sponsored by our salty AF electrolyte company, LMNT. And I wanted to share something that one of our customers shared on Instagram, share a couple things actually today. This is from Lifting Links. She said, "Dear Salty Clause, my high sodium needs have left me perplexed. I find I desire a new flavor next, something new with a hint of sweet, wouldn't that be a lovely treat? My kidneys are wasting, it's a daily battle. I long for a salt lick like thirsty cattle. Some salty chocolate, oh, what luck to spend my Christmas salty as..." And she wrote salty AF. Anyway, it was a super, super awesome little poem there. And it turns out she does have a kidney issue, a salt wasting dysfunction. So she has to consume quite a bit of electrolytes in order to...

**Robb:** Yeah. And it ends up affecting both her the sodium levels and protein metabolism. So without the adequate sodium, she ends up wasting protein.

**Nicki:** Yeah. She has renal tubular wasting. So she has to drink electrolytes all day long. Anyway, and LMNT has been a lifesaver for her because it makes it easy for her to live her life when she's away from home where she would normally make a bunch of home brew stuff. But this really allows her to stay on her game. And then I wanted to read another fun one that somebody tagged you in on Instagram. Also, Robb, it's from Laura Love. She says, "Chocolate Medley arrived today, chocolate mint in 16 ounces. Hot water with a big spoon of canned coconut milk. Oh my, who needs Swiss Miss?" Which was super awesome.

So anyway, all that to say that Chocolate Medley is still here. You can get your 30 count box, which concludes 10 chocolate caramel, 10 chocolate mint, and 10 chocolate salt. It's a limited time offer. So when they are gone, they are gone. The best way to grab those is in a value bundle because you buy three boxes and get the fourth box free. You get to mix and match, choose your flavors, all that good stuff. And you can do all of that at [DrinkLMNT.com/Robb](https://DrinkLMNT.com/Robb). That's [DrinkLMNT.com/Robb](https://DrinkLMNT.com/Robb).

**Robb:** It's too late to make it a gift.

**Nicki:** Yes, it's the 21st. And with all these winter storm-

**Robb:** New Years gift.

**Nicki:** Winter storm warnings, I think a lot of shippings of all the things are delayed. I'm waiting on something to arrive, and I'm hoping it comes by Christmas, but I'm preparing myself that it probably will not. Okay. On to questions.

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

**Nicki:** Okay. So this first one is from Adrian. He's wanting to know if his rucking is more demanding than what his watch thinks. "Hey, Robb and Nicki, been a paleo primal natural movement, insert newest label follower for over 10 years. I recently started rucking after reading Michael Easter's book, The Comfort Crisis. My question is could rucking be more metabolically demanding than my watch says? I stay consistent around 195 to 200 pounds at six feet tall. I train for Spartan races mostly, high amounts of zone two cardio as well as weight training before the season, then mostly maintenance and Spartan specific movements as it gets closer to race time. But after just a few months of rucking, my weight has been on a downward trend. Morning weigh-in was 191 pounds today, and that's with this Thanksgiving holiday only a couple of weeks ago. And I really eat as much as I want. I prioritize high protein and moderate fat, but I don't limit myself to a set number of calories. As an example, my watch says I burn 500 calories carrying 35 pounds on my back for three and a half miles with elevation change around 1400 feet over that course at a 16 minute mile pace. Heart rate at a zone two pace the whole time for my age. My hypothesis is that it's more demanding than that. Thanks for all you've done for me and my family."

**Robb:** I mean, my really slappy short answer is yeah, that's probably the case. I did a little bit of a deep dive looking into the kind of calorimetry or the estimated caloric expenditure. Things like a Concept2 rower. They're pretty on point in that you know the mass of the flywheel, you know the angular momentum as it spins. And so those things are pretty on point. As you start getting out more into free living environments where, okay, you're six feet tall, but a person who is more torso than leg or more leg than torso, there's going to be a difference in energy output with that. And it can end up being non-trivial over the course of a decent length rock and whatnot. So there is a lot of variability on this stuff. I do think that at least... It's funny because, so what I was going to say is that 500 calories at least makes you aware that you've got to potentially add some more to the mix. Before I started doing my really consistent zone two work, I was maintaining body weight okay. And then when I really stepped that up with my limitations in both food sensitivities and just total gut volume, ability to digest food, and I love steak, but at some point... I'm not Shawn Baker, I just can't sit down and do two whole ribeyes in a sitting. I just can't do it.

It's hard to maintain. And when I get done with some of the work on the bike and some of the other, I usually have been doing a bike and jump rope because the rower has been kind of irritating my back a little bit. But it'll say that I've done after a 50 minute session, 600, 650 calories, and I think that that's probably pretty accurate. But it's easy to have a 10, 20, 25% variation on this stuff depending again on your efficiency of the activity and a host of other factors. So Adrian, yeah, I mean that was a really long drawn out answer to yes. I think your instinct is probably on point with this that you're probably burning more than what is being accounted for and how do we know that for sure? Because you're losing the weight.

**Nicki:** Losing weight.

**Robb:** Yeah.

**Nicki:** So if he wants to lose the weight, then fine. And if not, he needs to bump up his food intake.

**Robb:** Basal caloric intake. Yep, yep.

**Nicki:** Okay. Another question from Liz on zone two yet again. "Hey there, Robb and Nicki. I've always loved your data driven approach to offering advice, as you can often explain why

the same facts are interpreted so differently by professionals in the health and wellness space. I apologize, but since so many have asked about zone two cardio, I'm wondering if you can explain why it has carried such a stigma in recent years. I am a 44 year old perimenopausal woman, 150 pounds, five foot four, carrying a lot of muscle. And I've been told by no fewer than 10 coaches to avoid zone two at all cost due to its stress impact on aging female hormones. I'm one of those mesomorphs who puts on both fat and muscle very easily and have always loved long slow bouts of jogging. Ever since being a teenager, I've run slow half and whole marathons.

However, I've been told that if I do long cardio now it will rev up my cortisol, make me ravenous, burn muscle instead of fat, prevent me from sleeping, suppress thyroid, et cetera. In other words, all of the stuff that all health conscious middle-aged women seem to battle with. I'm honestly not sure if my body does better with strength or cardio. I tend to remain about the same size no matter what. Right now I do four strength sessions a week. I eat 150 to 200 grams of protein a day. Yes, I log it. I walk loads for work, usually 15,000 to 25,000 steps daily and seem to maintain my weight at where my Fitbit says I'm eating a 500 calorie deficit daily. I would love to get to a place where staying lean becomes easier though. Wondering if you can explain why zone two went from being maligned to trendy seemingly overnight. And if there are any caveats for ladies who are very sensitive to dwindling progesterone, et cetera."

**Robb:** Man, there's a lot in that. I'll try to tackle the hormone piece maybe separate, remind me to circle back to that. But in a word, CrossFit is where zone two, it kind of became this bad word or a subpar training modality. And we have to kind of, I guess, go back in time a little bit in pre-CrossFit, there were folks doing intervals, high intensity interval training was a thing. There were folks talking about it, but we didn't have the ubiquity of the internet. We didn't have social media, social media itself, just people doing a montage of a WOD where it's like run, thruster, pull up. It's really visually appealing, and it looks cool and people look like bad asses and all that stuff. And Greg Glassman spun a pretty good tale about the superiority of the intensity of training, and there is truth to that.

The intensity of a training stimulus is generally commensurate to the adaptation. But the thing is you can't train high intensity all the time. And what's really interesting about that is ages ago, ages, ages ago before Greg developed this... What is kind of their thing? Constantly varied functional movements, high intensity.

**Nicki:** High intensity.

**Robb:** Large loads moved long distance-

**Nicki:** Long distances.

**Robb:** ... Quickly and all that type of stuff. He had a three part piece of the definition of health, and one of it was this like sickness, wellness fitness curve, which I think has a lot of truth to it and also has some variability to it. He had some aptitude in different training modalities, the 10 characteristics of fitness, and I'm blanking on what the third part of this thing was, maybe I covered it in that. But he also referenced this guy who was an American guy who was in Norway, and this guy talked about the three phases of training adaptation.

And in phase one the training stress is novel and everybody gets significant adaptation to it. In phase two, you start getting kind of sports specific adaptations and efficiency ultimately. And then phase three is where you ultimately get this really long term

efficiency. And it actually was... What's ironic about is this guy talked a lot about both the benefits and the drawbacks of interval training. And what he had established and others had established is you definitely need your intervals, you definitely need that for max oxygen consumption and whatnot. But this notion that you can just Tabata squat your way to elite fitness is false. You have to build an aerobic base. That aerobic base though need not be so much volume and so much intensity that it causes retrograde performance in a bunch of other things, that it deranges hormones and all of that type of stuff.

So there was this period of time where people mainly just lifted weights and did cardio and then CrossFit kind of came on the scene and changed our whole paradigm. And I think arguably for the better. But it also was not entirely honest or transparent about the needs for developmental training. Somebody who is brand new off the street, sedentary, dropping them into high intensity training is kind of a disaster. They can and will adapt with time, but if you build that person an aerobic base and a strength base first and then finish them with high intensity intervals, they do really well. And this is actually the way that everybody does legitimate athletic training. This is the way that even the best in the CrossFit games arena train. They don't do WODs year in, year out. People will push back about this. They will argue about it.

But when you really get in and look at what folks are doing, they're doing aerobic base building phases. They're doing strength mixed into that, and then they will peak using classic WODs and more of a 500 meter row, rest 30 seconds, repeat five times or something like that. I'm not sure if I'm totally answering this question, but I think in a lot of ways just the zone two cardio got a bad rap. And to some degree, when we lived more active general lives, we got more of this zone two. As kids, you just ride your bike and you're out running around doing things. And then as we become adults and get jobs, then we're sedentary most of the day and you go from basically zero to whatever it is that you're doing in your physical activity. And I guess the other piece to this is when we look at effective aging, we definitely want to maintain muscle mass.

We really want to maintain power production. These are things that we lose. And it does seem like aerobic training would be antagonistic to that. And I guess to some minor degree it will be. But the other side to this is that we want the training stimuli of mitochondrial density, the ability for our vascular system to expand and contract really effectively, which is a lot of what aerobic training does. The contractile features of the heart, the left ventricular loading, when you're doing zone two cardio, maintaining that elasticity in the efficiency of the heart. It's pretty clear that from a health and longevity standpoint, that is a phenomenal thing to build.

**Nicki:** Coupled with strength training though, right?

**Robb:** Coupled with strength training.

**Nicki:** Because you don't want to... To her point, if you're just doing cardio all the time, you are going to burn muscle and there's going to be a...

**Robb:** Well, you're going to force the adaptation entirely towards the endurance side, which isn't necessarily I think what you want from a healthy aging perspective. Circling back around to the dwindling progesterone and whatnot, this is where working with a good functional medicine doc to do some bioidentical hormone replacement will get you I think the most bang for your buck out of your training and just generally feeling good. And that's a personal decision that the folks need to make whether or not they head down that path. But I think that it's a viable thing to think about. And there's just kind of

a reality that whether male or female or one of the other 72 spectra within that, there is kind of a reality that optimized hormone status is going to give you the best results for whatever effort that you're putting in. And this is cognitive function, digestive function, on and on and on. The hormones really do drive the physiological processes that we both want and don't want. And I think that she mentioned the concerns around cortisol and whatnot. I think so long as we're not instituting too much of a caloric deficit, not doing too much fasted training, not doing too much fasting, it's when we start layering the stresses. Fasting is a stress. Caloric restriction is a stress.

**Nicki:** Sleep deprivation.

**Robb:** Exercise is stress. Sleep deprivation is stress.

**Nicki:** Life's stress.

**Robb:** Low carb diet is a stress to some degree particularly if you're not on point with adequate protein and electrolytes and whatnot. So I think that that's where folks start getting in trouble because they start layering all this stuff on. They go low carb, they start training a bunch, they take their 16 hour eating window and make it... Or eight hour eating window and make it 10 or...

**Nicki:** Six.

**Robb:** Six and then four. And they just keep layering all that stuff, and that will absolutely break you at some point. You have any other thoughts there like you guys?

**Nicki:** No, I mean, she's walking a ton. She's certainly active. She's on point with her protein, she's weighing and measuring it so she knows exactly what she's getting there. Four strength sessions a week. If she wanted to try some zone two, even just throwing in one or two...

**Robb:** For sure.

**Nicki:** ... In a week and just see how you feel. But I asked you this, I think it was a couple weeks ago, and I was like, "You know how Glassman used to always talk about the chubby aerobics instructor, the person that did all the cardio all the time and was never lean?" And you made the comment that it was just, again, often these people weren't eating adequate protein. And volume can be a thing. If you're just doing that and you're doing it multiple times, if you are truly an instructor and you're teaching multiple classes, there is a spot where it's too much and it becomes detrimental.

**Robb:** And this is some of the stuff that it's just interesting. Gary Taubes has rightfully pointed out that by and large when we look at studies where folks undertake exercise as a weight loss, adjunctive or modality, it doesn't really work that well because generally if they burn 500 extra calories, they end up eating 500 extra calories. Rarely though are these folks fed adequate protein from what my worldview would be. And although some folks like Layne Norton and some of these folks out of the really... If it fits your macros and evidence based medicine scene will insist that there is nothing magical about reducing carbohydrate load. And they've cited studies where there doesn't seem to be all that much of a benefit to reduce carbohydrate and improved appetite. And I'm so perplexed by this because just individually, I see this. In the folks that we work with, I see this, and I don't see how we're not seeing this in the research data. Although you are actually kind of interesting because you can eat higher carb and you can eat lower carb and it doesn't really seem to affect you that much. It is certainly not the way it does

to me. If I get it a little bit on a carb rollercoaster, I'm ravenously hungry and you're kind of... It doesn't really seem to affect you that much.

**Nicki:** But when I do eat more carbs, I'm still under 150 grams. Usually I'm under a hundred grams. My carbs are like, "Okay, we're having tacos and I have two corn tortillas."

**Robb:** Right.

**Nicki:** Right. Or I have a little bit of rice with something, but I'm never doing big boluses of carbs.

**Robb:** Right, right, right. So I don't know. I've been noodling on something with that. If somebody reported that they get rebound hypoglycemia and they were to be the folks tested for... Does a low carb diet provide better satiety? Would they be the ones that win that? I think that they probably would, but I don't know. So I do think that that's part of what it has historically gone on, particularly within the early two thousands when Glassman was talking about this. The dominant dietary paradigm was a high carb low fat diet.

**Nicki:** For sure.

**Robb:** And so if you were healthy, you did aerobics, maybe you did some strength training, but you certainly did aerobics and you certainly ate a high carb low fat diet, which I think is a tough way for a lot of people to make this thing work. You're going to end up hungrier. I do think that there's something a little bit magical at least about adequate protein, and then also some degree of carbohydrate restriction or capping, I think has a disproportionate benefit with regards to overall appetite. So that might be, for Liz, something to look at and it doesn't need to be keto, but you just find some level where does dialing down my carbs another 20 grams a day, do I get this kind of disproportionate benefit with regards to appetite suppression?

**Nicki:** Okay. All right. Our third and final question this week is from Ryan on healthy meat snack ideas. "Hi Robb and Nicki. I'm looking for some tips to help with healthy meat snacks. My girlfriend and I eat fairly clean and do not have any snacks on hand that can satiate me. All of our meals are cooked at the time of consumption, and I myself am not the greatest chef. So I have found it difficult to curb my hunger because most meals in our house take a minimum of 25 minutes to prepare. I find myself looking for meat, and we do not keep deli meat or store bought sliced meat on hand and generally stay away because of the salt content, aside from my LMNT drinks and highly processed forms of meat. I've thought of salami sticks, but again, generally want to stay away from those types of quick snacks that get a bad rap. We've thought of just cooking up some steak and slicing it up, but would like things to last a bit longer. Hope you can give me some good tips. Love the podcast and book."

**Robb:** I guess Ryan, I would just ask what is the anxiety around things like salami and prosciutto and whatnot? I know that these things do get a bad rap when the food frequency questionnaire studies come in. It's like, "Oh, the processed meat is associated with this increased morbidity and mortality." I'm really stumped if that is a true signal in this whole story. Usually if this study is quote, "Well done," or maybe I'm saying it's well done because it gives the kind of result that I would expect or that I would get behind. But it usually will say that fresh meat just cooked has no negative impact on health. And then these processed meats have some degree of negative impact on health. But I'm so stumped as to what it is that's supposed to be the problem because we'll talk about

nitrates and nitrites, but ironically it's nitrates and nitrites that are supposed to be the healthy.

The things that are supposed to be beneficial for us in vegetables are nitrates and nitrites. So I'm kind of stumped on that count, on the sodium count. It's something like a good meat stick or a salami stick or something like that could be a really nice option to, if you're eating a little bit on the lower carb side or just want to make sure that you're getting adequate dietary sodium, that's a nice way to get some. So I do some of the Oberto's meat sticks, I do the Paleo Valley meat sticks, the kids really like a variety of those. We do different types of jerky, and I'm not even that concerned about some brown sugar on it and stuff like that. I try not to get the stuff that's like high fructose corn syrup, but if we're out road tripping and we're in the middle of nowhere and that's what we have and we're all hungry, I'm just not that elitist about it. Gluten free because I don't want to spend the rest of my day on the toilet, but I'm just really underwhelmed by what the actual negative consequences are of having stuff like this.

**Nicki:** And the easy thing, if for whatever reason you're just, "Okay, I don't want any deli meat or salami or beef sticks or anything like that," the easiest thing is to have, if your girlfriend does the cooking, ask her to make an extra couple of portions of meat. And I know you said sliced steak, but you want something that lasts a little bit longer. If you're hungry, you're going to eat it. So if she makes you an extra portion tonight, and tomorrow you're going to eat it. So it's not like it's lasting long. If that's an easy way, just make more and have leftovers. Sliced steak is a great option. Extra hamburger patties are a great option.

**Robb:** We've found-

**Nicki:** Shrimp.

**Robb:** ... Frozen shrimp to be one of those really clutch items, yeah.

**Nicki:** Frozen shrimp is great. In a pinch, you can throw together a quick soup, and Ryan, even though you're not the greatest chef, you can put some bone broth in a pot and some shrimp or just shrimp and butter and you can make some...

**Robb:** Dude, shrimp and butter.

**Nicki:** Amazing.

**Robb:** That's not a 20 minute ordeal.

**Nicki:** No.

**Robb:** That's a five minute ordeal.

**Nicki:** Literally shrimp.

**Robb:** Yeah, frozen shrimp.

**Nicki:** And they're done. Throw the frozen shrimp in there. They're done when they're all pink. You can do this, Ryan. But yeah, just if you want to stick to real food, just make more at dinner and then the next day that's what you grab. I don't know, hard boiled eggs are another one that are really easy. And it's not meat but it's protein and super easy, and those last a while.

**Robb:** Or sardines, can of fish.

**Nicki:** Sardines are great if you like sardines, might want to rotate those because you can burn yourself out on...

**Robb:** You can burn yourself.

**Nicki:** ... On sardines. But they are great, super healthy, packed with just little powerhouses of...

**Robb:** Goodness.

**Nicki:** Goodness. Yep. So anyway, hopefully that helps a little bit. Let's see, hubs. Anything else?

**Robb:** I don't think so.

**Nicki:** We wish you all a very merry Christmas, and we will be back next week right before New Years. So we'll chat one more time before 2022 comes to a close. Wishing you all just a wonderful week. Hopefully you stay safe, stay warm. Remember to check out our show sponsor, grab yourself some Chocolate Medley so you can have your healthy Swiss Miss in a cup, in a mug. All that goodness. You can grab that at [drinkLMNT.com/Robb](https://drinkLMNT.com/Robb). Anything else?

**Robb:** I think that's it.

**Nicki:** All right, folks. Merry Christmas. We'll see you next week.

**Robb:** Bye, everybody.