

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 a 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 gets your britches in a bunch, well, there's always Disney+.

Nicki: I don't think we've ever started the show quite like that.

Robb: With animal noises? What's happening, wife?

Nicki: Good morning.

Robb: Good morning.

Nicki: Bright and early here in New Braunfels, Texas.

Robb: It's early. It's not quite bright yet.

Nicki: It's not bright. It's dark and early.

Robb: It's a very amazing moon, though. It's that bottom-only crescent-

Nicki: Crescent, nice.

Robb: ... with Venus right above it. It's actually spectacular.

Nicki: And you saw that because you took the recycling out this morning.

Robb: Indeed, I did.

Nicki: Thank you.

Robb: I ran the scorpion gauntlet barefoot down to the recycling area.

Nicki: Awesome.

Robb: Yeah. What's new with you?

Nicki: Oh, goodness. Well, we're recording this one a bit early. We're going to go spend some time in Reno, see my dad and some friends, do some jujitsu, all that good stuff.

Robb: We will clearly quarantine for 14 days upon arrival.

Nicki: Of course, and upon return.

Robb: And upon return, yeah.

Nicki: Yes.

Robb: What else? What else? How's that new blue belt breaking in for you?

Nicki: Oh, it's kind of stuff. New belts are stiff, apparently.

Robb: I was speaking more broadly and meta.

Nicki: I know, I know. I know. I'm very literal.

Robb: And, of course, you are the Literal Lucy.

Nicki: Yep. What else do you want to share?

Robb: Two weeks of no social media on the phones.

Nicki: This is true.

Robb: I got to say life is not bad. Life is not bad. Although I have no doubt that the world is probably going to burn down and change and all kinds of drastic horrible shit's going to happen, but I feel like I'm pretty well-prepared for that and I don't need to have a 24/7 newsfeed reminding me that the end times are nigh.

Nicki: Of all the terrible shit?

Robb: Yeah. It's like, okay, everybody's crazy. Nobody can get along. Maybe some of that's internal to the failings of humanity, and some of that may be goaded along by algorithms of our AI overlords, and I don't really give two shits one way or the other at this point.

Nicki: Yeah, I definitely feel like a lot of just ... You see something, you watch a video, and you have lingering thoughts or it just occupies a lot of your mental space, and I feel like, for the last couple of weeks, we've just had a lot more peace, just been much more present.

Robb: Well, and some of the other work we're doing, definitely more creative because you have more CPU cycles to put, one time, and then, two, I think when you're not in that low-grade fight or flight kind of scenario just from consuming all this shit that you actually have some room for creativity and stuff like that. I will throw something out there, not a Salty Talk, this is not the news topic du jour, but there was something that popped up that I just think is reflective of some things that people should be concerned about. Yelp is now going to allow people to post if they believe that a business is racist. I posted something about this on Facebook, and I actually called out a few of the folks in the paleo ancestral health space who've been pretty hardcore social justice warring. That's certainly their right and privilege to be able to do that, but as fudged up as our world is and the challenges we have and all that type of stuff, I just continually don't get the sense that people understand the danger of weaponizing things like Yelp.

Robb: Again, just very brief on this, but I think it is important. The difference in spelling between rapist and racist is one letter. The difference as far as social stigma, I'm not entirely sure that there is that much difference. It is a scarlet letter and I guess rightfully so if the accusation is true. But the difference in practicality is that if you call someone a rapist, you have to have proof. If you don't have proof, you will get sued, you will go to jail potentially. Whereas racist is just this weaponized term that is now going to apparently enter one of the more important ways of delineating a good versus bad business, and it can be at the whim of someone who-

Nicki: And someone can just say that and just ... The way I'm understand what you're saying is people will be able to just say, "Okay, this particular Jack in the Box is racist." It's-

Robb: Or the manager is racist or whatever, yeah.

Nicki: Or the manager is, and so then that business would have some sort of emblem or icon attached to it in their Yelp profile. But that business doesn't get a chance to defend itself at all.

Robb: There's kind of a-

Nicki: So if I have a restaurant-

Robb: Here's the deal. There is a route-

Nicki: ... and I have a competitor that I dislike, I can get my employees or my minions to go and slap that label on their business and make them look bad so that I look good.

Robb: Yeah, and this has already been done. This is one of the dangers of things like Yelp. If you have a competitor, if you have someone you don't like, if you just had either shitty service or good service and you were just feeling like being a dick that day, then, "Well, there was a fly in my soup or there was a" ... Yelp and things like that have already been problematic. But sticking this additional layer of, "Oh, those guys are racists." There was a time in this country, which I know was a horrible, horrible place and nobody should ever have a moment's thought about it being good or anything beneficial coming out of it, and hopefully the sarcasm is dripping out of there ... It's got challenges, it has a mixed history, but I wouldn't say that it's the worst fucking place in the world as some people would say.

Robb: There was however a time and place in which if you were accused of something, it was on the accuser to prove your guilt, and it has now shifted to we get to prove our innocence. When you look at the places around the world where you have to prove your innocence at the insistence of whether a minority or a majority of people around you insisting that you are guilty, those places are pretty fucked up, and those are nowhere that you really want to live, and that is what we are creating for ourselves. And, again, not a Salty Talk, but it was-

Nicki: It goes beyond ... When people can just make that claim, again, to your point, without any proof, what if somebody walked into a restaurant and there were other customers in there wearing t-shirts of a political party that you don't care or that you associate with racism, and so then you say the establishment is racist because it has racist customers, and it has nothing to do with the management or the service or the quality of the food provided or whatever the business is? It becomes this thing where everyone's going to get that label at some point.

Robb: Well, and, again, this becomes a thing. If everybody's a racist, then nobody's a racist, and then in this effort to be woke and be anti-racist, then you actually make it impossible to do anything about it because it's literally kind of like the little boy who cried wolf or whatever or the sky is falling. It's like if you can't compartmentalize this stuff and really have some standards for, well, what does racism entail and what are we going to do about that and if somebody just shows up in a restaurant in a t-shirt of the political party you don't like, even though you may not like it, is it really your right and privilege to go to the owner of the restaurant and say, "You need to throw those people

out because I don't like them?" I goddamn sure guarantee that there are people that would want to do that.

Robb: Then, if as a restaurateur who is battling COVID and battling just the continual challenge of keeping a brick and mortar service-based open which operates on tiny margins, whether they agree with the political slogan of ... And, again, this is assuming that it's not overtly horrible or in fact racist, it's just Trump or Biden, as neutral as it could be, but here's my political affiliation. Those people are just trying to survive. I don't think it's a long stretch to imagine that owner having their feet held to the fire. There was just a story of a police chief that has been forced to step down by their city council and whatnot because the police chief's wife said that she was going to vote for Trump and there was enough-

Nicki: Because of his support for law enforcement.

Robb: Because of his support for law enforcement. And, again, I don't know how I fucking turned this into a Salty Talk, but I did. I guess it's because I am really concerned about this stuff, and I get that folks are just super on edge and they're super fired up. Again, I'm not even entirely sure how these two stories made their way into my ... I think it was actually just looking on the news feature of my phone, like I have been looking at that just to get a little bit of a sample of what's going on. And those two things kind of leapt out at me. I guess-

Nicki: No, I think our friend who is a restaurant owner sent you the Yelp piece.

Robb: Oh, that's right, that's right. That's true, that's true.

Nicki: We still get texted and signaled different articles.

Robb: Well, and here's just a little interesting thing on that. We're not going to mention who the friend is, but the friend owns a successful restaurant, big urban area. The urban area opened up some interesting options for if a business is Black-owned that there could be some benefits there and-

Nicki: Well, they wouldn't have to pay ... What was it? Was it Uber or some of these delivery places? This was during COVID.

Robb: Were going to waive the-

Nicki: They were going to waive the delivery fee if you purchased-

Robb: And there was some things above and beyond that.

Nicki: ... things from a Black-owned restaurant.

Robb: Yeah, but good stuff, great, great.

Nicki: Yep, yep.

Robb: This friend is co-owners of a restaurant. There's three owners. One of the owners happens to be a Black man, who is also the full-time chef-

Nicki: Chef, mm-hmm (affirmative).

Robb: ... in the restaurant. So they applied for this program, they were granted it, and then they got this groundswell of woke people, and I-

Nicki: Saying, "These people shouldn't qualify for this. It's owned by white people," so that they shouldn't be able to qualify for this special price.

Robb: So they invited these folks in who were saying, "This is not a Black-owned business," and they said, "You know the dude in the back?" "Yeah, of course, we know the dude in the back. We eat here all the time." "He's an owner." The people looked at them stupefied and first said, "No, that can't be." They said, "What, you can't imagine a Black man who is also a working chef being an owner of a restaurant?" This is where the fucking racism from the woke left, really, it's just so endemic. And, again, this is probably going to cut my own goddamn head off, and it's not a Salty Talk, but goddamn it, people need to wake the fuck up with what's going on in their over the top stuff. So there was a bunch of, "Oh, gosh, we're sorry. I can't believe" ... And it's like, well, yeah, fuck you. Yes, there's all kind-

Nicki: Lots of assumptions.

Robb: Yeah, just assumptions, and you tend to see it from a very specific direction. Again, my only point to bringing this up, this isn't going to sell a book for me, this isn't going to get anybody to sign up on the Rebellion, this is probably going to marginalize me in a million different ways, but goddamn it, if we don't fix this stuff, we're going to be in a fucking Civil War. If the woke left thinks that that's a good idea, then fucking let's just get after it and get that song and dance done and then see what you really think about that, see if you think this place is really as horrible as you think it is before it descends into what Yugoslavia was as it came apart at the seams, and you're going to wish to be able to rewind the clock. I feel like we're still in this little narrow sliver of opportunity that we could do something about this.

Nicki: So I feel like the majority of people, us included, are in the center seeing this extreme fringe on the left and the extreme fringe on the right, and you feel stuck, right?

Robb: You do feel stuck. That was that early-

Nicki: What do you do? You don't identify with either of the big narratives that are out there, and so you're like, "I feel trapped."

Robb: That was from The Social Dilemma, the extreme center.

Nicki: Yeah, the extreme center, yeah.

Robb: Which was hilarious in a lot of ways.

Nicki: Yeah.

Robb: Yeah, I mean, early in COVID, there was that beautiful piece, The Politically Disenfranchised.

Nicki: Yeah, that was a great read.

Robb: It was a really beautiful read and-

Nicki: Politically Homeless.

Robb: The Politically Homeless, yeah, yeah. The Politically Homeless, yeah. I don't know. And, again, I should just be kind of happy-go-lucky and, "Look at my nails," or, "Look at my hair," "I have a new line of seasonings," or whatever the fuck the soup du jour is. I've been really good at seeing shit coming down the pipe on a lot of stuff. I told Greg Glassman 10 years in advance almost to the day of when he would have 10,000 affiliates. I've done a lot of stuff like that, and I'm not Nostra-fucking-damus, but I've been pretty good at this stuff. It's like a janky old train on a janky old rail that's heading down a steep embankment, and the train's not functioning, the rail's not functioning, and nobody really gives a shit there. If we didn't have children, I probably wouldn't give a shit either. I would probably be the one that's like, "Fuck it, let's just accelerate this whole process. People think it's bad right now, let's see what bad really looks like." But we do have kids, so I am not that person. I am not doing those things.

Nicki: Again, though, I feel like the people that thinks it's so bad are the super extreme sides of thing. So I don't know. I think there's more to save than not.

Robb: I think there's far more to save than not. Just to circle this back around, people may give a shrug and like, "Oh, you're overreacting," or whatever. But weaponizing things like the ability to mark someone as a racist with no oversight, this is basically supplanting legal process. "Well, our legal system is broken and everything." Okay, okay, everything can always be improved, but I can find a lot of places where it's good.

Nicki: A lot worse, yeah.

Robb: A lot worse. I don't know how to have a conversation around that. It's like we can always be working towards improvement, but if we only focus on the failure points without an eye towards improvement, if the goal that the person is bringing to the table is burning things down either knowingly or unknowingly, and I would say that Yelp weaponizing their platform to be able to label anybody anywhere a racist, that is moving it towards burning it all down, whether they think so or not. I don't know. We're just going to be broadly the recipients of just how bad the-

Nicki: It's a good thing that you're only seeing these articles that people are sending you.

Robb: Very intermittently, yeah, yeah. So imagine if I was seeing this stuff all day, all the time, which was kind of-

Nicki: Yeah, where we were before.

Robb: ... where the stuff was before. But yeah. Okay.

Nicki: Okay, moving on from our lengthy-

Robb: Very much moving on.

Nicki: ... salty intro this episode.

Robb: Yep, yep.

Nicki: What's our news topic?

Robb: The real news topic du jour, well, funny enough, it kind of feeds into this. Iatrogenics: Why Intervention Often Leads to Worse Outcomes. This is an article that's talking about some work from Nassim Taleb and from the article, "Iatrogenics is when a treatment

causes more harm than benefit, as iatros means healer in Greek, the word means caused by the healer or brought by the healer. Healer in this case need not mean doctor but anyone intervening to solve a problem. For example, it could be a thought leader, a CEO, a government, or a coalition of the willing. Nassim Taleb calls these people interventionalists."

Nicki: Interventionistas.

Robb: Interventionistas. "Often, these people come armed with solutions to solve the first-order consequences of a decision but create worse second and subsequent order consequences. Luckily for them, at least, they're never around to see the train wreck they often created." So, ironically, this does feed into my-

Nicki: Your earlier rant?

Robb: ... accidental Salty Talk. I really had this more in mind for some of the COVID-related stuff, just broadly, and I would encourage people to just think through this notion of iatrogenic-induced injury or harm and the possibility that, again and again and again, our interventions to try to improve or fix things oftentimes make things worse. Excuse me. There's a phenomenal documentary film called Poverty Inc. that talks about the mega-business that has grown up around collecting money to then collect stuff or buy stuff and send it. Like when Haiti was hit by a hurricane, did those folks need a lot of help? Yes. But a lot of the help that was provided actually ended up gutting their local economy, and it's never recovered.

Robb: There were shoemakers, there were people who raised chickens and sold eggs, and because a big mega-church out of Georgia sent them a bunch of eggs for a year, everybody quit producing eggs. Then when the mega-church ceased sending eggs, there was no longer the infrastructure to do that. So this is just some of that the path to hell is paved on good intentions and just really encouraging people, when they think they're doing something smart, like, again, you think it may be smart to go burn down a public building because you're upset over some social issue, maybe that's a good idea, maybe it's not. Maybe it is going to have knock-on effects that are completely ... Oh, man, I'm having a coughing fit here.

Nicki: You have a tickle in your throat?

Robb: Massive tickle in my throat. Sorry, folks. That the knock-on consequences could be pretty gnarly, and this goes from basic medical interventions ... There's just now some research coming in looking at the excess death over the course of this year versus last year. It looks like COVID legitimately has produced excess death relative to what we would've had in a normal run of things between car accidents and stuff like that. But what is down markedly are hospital-related iatrogenic-caused illnesses and problems. So that's what I had for today. I'm also eyes watering, tickle in my throat. I was right on the edge of getting a cold last weekend, and it's pretty well wrapped up, but this things tend to finish off with a little dry throat.

Nicki: You've had a little throat tickle. Okay. Well, we'll include a link to that in the show notes.

Robb: And we really are down to six listeners still.

Nicki: Okay. But one of our listeners just won a t-shirt for writing a review for us and for our show. This week, it goes to kelly_mamabear, "Going against the norm in a good way. It is refreshing to hear these real conversations about real life situations. I love how open

and real they are. Feels like I'm having a conversation with my friends while mixing in knowledge and education. I feel like this is hitting on so much real life circumstances. Everybody needs to listen."

Robb: That's cool.

Nicki: Kelly_mamabear, thank you for your review. Please send us an email to hello@robbwolf.com and include your t-shirt size and your mailing address, and we'll send you a Healthy Rebellion Radio t-shirt.

Robb: What more could you ask for?

Nicki: And today's episode of The Healthy Rebellion Radio is sponsored by White Oak Pastures, a six-generation, 154-year-old farm in Bluffton, Georgia. White Oak Pastures is a standout in the regenerative agriculture space. Their beef specifically was shown by a third-party life cycle assessment to be carbon negative. And at White Oak Pastures, they rotate 10 livestock species on open pastures to mimic the predator-prey relationships in nature, which positively impacts the land. They maintain high animal welfare standards and regenerate old mono-crop farmland while rebuilding their rural community. All of their meats are raised, slaughtered, and butchered right on the farm.

Nicki: As I mentioned last time, with the holidays coming up, they do have gift certificates. So if you have a meat-loving person on your holiday list, this is the perfect gift for them. They also have some great gift and stocking stuffer items as well, wildflower honey, tallow products, like tallow lip balm, tallow moisturizer, tallow candles, grass-fed leather totes, and other leather goods. So, again, this is a great ... Both for yourself, if you're looking for a source of regenerative-raised meats, they do ship nationwide, so this would be a great option for you, and then also for anybody on your holiday gift-giving list who is in this paleo, keto, regenerative ag space or is fond of this type of thing, would be a phenomenal gift. Go to-

Robb: I'm looking forward to mine, wife.

Nicki: We'll see what Santa brings you.

Robb: Thank you.

Nicki: Go to whiteoakpastures.com/robbwolf to shop special bundles made for The Healthy Rebellion Radio listeners. You can use code `rebel10` for 10% off your regenerative, grass-fed, and pasture-based meats. If you decide to purchase the gift certificates, the discount code won't apply, but you can pass along the `rebel10` code so your recipient can save when they make their purchase. Again, that's whiteoakpastures.com/robbwolf, and the code is `rebel10`.

Nicki: Our first question today comes in from Tyler on eating for kidney disease. He says, "Hey, Robb. Years ago, you wrote a multi-part post about kidney health and mentioned a former client at NorCal Strength & Conditioning who was recommended dialysis. One of your coaches instructed him to eat super low carb and about the same protein, around 10% for both macros, and the rest of his diet consisting of fat. The end result, at least in your article, was that he recovered a great deal of his kidney function. Now that I've told you about your own article, LOL, here are my questions. One, is that still a protocol you'd recommend for someone with stage four kidney disease, and, two, if so, what can you even eat on an 80% fat diet?"

Nicki: "This info is for my mother-in-law. She's almost 70 and has kidney disease, presumably brought on by Henoch-Schonlein purpura. She lives in Japan, so she has access to great quality seafood, but coconut products are uncommon. I've been trying to get her to quit eating bread, rice, and soy products as a start. She still eats some dairy. Are there any foods within a typical paleo diet that she should avoid, for example, fruit? She has been prescribed some type of steroid and is of normal weight and does not take any blood pressure medicine that I know of. Not expecting any type of miraculous full recovery, just wanting to help her get the most she can out of life. Thanks for any direction you might be able to guide me towards. P.S., the wife and I are huge fans of LMNT, and you were right, do not accidentally or purposefully inhale the lemon habanero dust."

Robb: That'll learn you, it only takes one.

Nicki: Yes.

Robb: Just as a little point of clarification here, it's kind of funny what folks do remember. There's actually three different things, maybe four, that I've published in the past on this whole kidney topic. Two of them was just basically the overarching pathophysiology of chronic kidney disease and how ketogenic diets may be favorable. Then the other one was a case study that actually happened in Reno. It was not one of our coaches that recommended this. It was doctors, just as a point of clarification, and we had just gotten to Reno. I mean, we literally just got there, and we did a talk for Natural Grocers opening, or was it Whole-

Nicki: Natural Grocers.

Robb: Was it Natural Grocers had just opened and so we gave a talk and there was a woman there whose father was going to get a kidney transplant from her husband. Ironically, they were tissue matches, and when she described what was going on, I was like, "Hey, why don't you talk to a couple of our doctors." So our docs talked to his nephrologist, and we got him on a very low carb, moderate to low protein ketogenic diet, and to my knowledge, the guy is still okay. I don't know how much recovery he had, but he had enough recovery that he didn't necessitate a kidney transplant then, so that's kind of one thing.

Robb: What exactly one can eat to facilitate this, it's going to vary depending on how folks want to put this together. I put in a link to an article, [Low Carbohydrate Diet May Reverse Kidney Failure in People with Diabetes](#). "Researchers have for the first time determined that the ketogenic diet, a specialized high fat, low carbohydrate diet, may reverse impaired kidney function in people with type 1 and type 2 diabetes." So, depending on what type of injury is occurring in this Henoch-Schonlein purpura, the elevated blood glucose can and oftentimes is a factor in that, but it's not the only piece to it. It's well-established in the literature that this can be helpful. Exactly how to go about doing that, that's where a good dietician or nutritionist can help someone put all this stuff together. So, yes, in my opinion, this is a completely viable option. Then we get to the practical applications of this stuff. It's his mother or his mother-in-law?

Nicki: Mother-in-law.

Robb: Mother-in-law. Folks at the age of 70 can be flexible and adaptable and changeable. They oftentimes, however, are not. They have established a lifelong habit of doing what they do, and to really get the change necessary to potentially benefit here is going to be most likely stunningly different than the way this woman has historically eaten. This is one of these situations where ... And it can be kind of heartbreaking, happened with me

and my mom, where I had to just decide to have the best relationship with her that I could versus trying to shoehorn this dietary change upon her that she didn't want to enact. She would do little bits and pieces of it, but she would never do, in my mind, enough to actually be truly healthy. Who knows why. That's just the way it is. I would poke around and see if she's willing to do this.

Robb: But I'll say this. Half measures on this aren't really going to do all that much, and half measures are still going to be probably very dramatically different than what she's used to experiencing on a day to day basis. So if she's really excited about the prospect of completely rejiggering her diet for the potential ... And, again, you can always couch it in, "Do it for three months and we'll recheck your kidneys and see how it goes." If she's excited for that, great, give it a shot. If she's not, I would drop it. Just personally, we've seen this conflict emerge among family members and even between friends where we as the informed person feel like we know what's best for them, and maybe if we're being super clinical and dispassionate, maybe we do know what's best, as far as maybe this will improve their health. But maybe just psychologically and socially and spiritually where the person is, it's just not worth it to them, and that's okay. So I would just be careful how you handle this.

Nicki: Oh, it's the same. My grandfather had prostate cancer, and I remember you sharing a bunch of research and information about going on ... He was eating quite a bit of carbs at that point and-

Robb: And he said, "Thank you." He's a very awesome, generous man.

Nicki: He said, "Thank you," but he was not up for it, and his wife was a great baker and was making him pie every other day. He, at 80 years old, was not game for changing his diet dramatically.

Robb: And I'm glad that I had matured enough by that point that I completely let that ... I offered it, he graciously declined it, and then that was it.

Nicki: That was it, yep.

Robb: Yeah, yeah. And could still continue to have a great relationship with these people. They're picking their path, and that's okay, yeah. So I don't know, what's the person's name again?

Nicki: Tyler.

Robb: Tyler. So, Tyler, yes, this stuff can work. It doesn't work for every single situation, but it's pretty goddamn impressive. If your mother-in-law is interested-

Nicki: So she's doing it, though. He's asking any foods to avoid, so fruit, obviously, is-

Robb: I'm not getting the sense that she's actually still doing it or even has begun doing it.

Nicki: Gotcha. Gotcha.

Robb: That is not my sense here at all.

Nicki: Okay.

Robb: Yeah. I mean, clearly, if she's really going to do this, a little bit of fruit, but we're talking about a half a cup of-

Nicki: Cup of berries, yeah.

Robb: ... berries once or twice a day is all you get on this, until or unless you really reverse this thing, and then maybe you get a little bit more ... My sense is that she is not doing this, she's just fishing around for what can be done. If she is game for it, I would circle back around. We'll get you hooked up with a dietician or someone that can really get you dialed in on what she should be eating. We could probably get one of the keto monitoring folks to sponsor her and get her a monitoring kit so that we know that she's really in ketosis. If she wants to do this, we'll help you figure out some stuff to do. My gut sense is that she's not really going to want to do everything involved with this.

Nicki: Gotcha.

Robb: It's just rare that I experience someone that's 70, 80 years old and they're like, "Fuck, yeah, I want to upend every element of my life." Because you're already at a spot, you're like, "I don't know if I'm going to live till tomorrow anyway," so do you want to upend every element of your life in that scenario? But if you guys want help, we'll definitely do it. But I would just be careful with how you handle it.

Nicki: Okay. Our next question is from Ben on muscle mass. "Hey, Robb, I love the work you've done and really appreciate all that you do. FYI, Sacred Cow was a phenomenal book, very nice work. I'm writing in regards to muscle mass. You've mentioned previously on the importance of muscle mass as we age, and starting around age 30, we'll start losing it, slowing, and/or it's much harder to gain muscle mass as we age. My question is how much muscle mass should I be aiming for? For context, I'm a 30-year-old male, 6'4", 218 to 225 pounds, and 80 to 10% body fat depending on the season. The reason I ask is I enjoy competing in crossfit. However, I'm uncertain if I should focus more on trying to put on more mass or if moving forward with these numbers seems appropriate. Ultimately, I do enjoy competing, but I don't want to become decrepit when I'm older. Other info if it helps. I squat 425, deadlift 545, bench 325, and a 245 frame. I've never done full extensive blood work, but my most recent basic blood work, chem 7, testosterone, basic lipid panel all looked normal."

Robb: So really good question. I think we talked about this on a previous show, where there's kind of a U-curve in this story. We don't want to be so skinny and frail going into middle and advanced age that the inevitable loss of muscle mass is going to expose us to all these problems. It's so interesting, Ken Ford shot me some papers like our long-term vitamin D storage, a bunch of it may happen in the muscle, and so inadequate muscle may be problematic in those periods of time when we don't have sunlight and vitamin D. So it's just super interesting. It buffers our immune function, it's our power reserve, and all that type of stuff. But I think that where Ben is here, 6'4", 220-ish, lean, that's fine.

Robb: The thing is that being a professional bodybuilder does not mean that you're necessarily going to live longer. There's costs associated with the wear and tear on your body, both orthopedically and metabolically, with being that big. I'm going to do some poking around. I meant to do it before but didn't get around to it, but I suspect that there's some sort of a BMI U-curve where if it's too low, then that's a problem, if it's too high, that's a problem. You have to read between the lines a little bit because an athletic individual's going to skew that stuff. I'm sure that there's some sort of a middle ground here, but when I'm looking at these numbers, Art De Vany is a little bit shorter than Ben

and was about 10 pounds lighter most of his life, and so it seems right in that wheelhouse. I do like crossfit. I would really recommend checking out some KINSTRETCH and FRC and make sure your legit mobility is on point because-

Nicki: Your active range, not your passive range.

Robb: Your active range, not your passive range. Because an amazing way of becoming decrepit quickly is getting injured and not being able to move and, holy smokes, do you strip muscle mass off of you lickety-split on that. So can't recommend that stuff sufficiently. But, otherwise, I think Ben's crushing it.

Nicki: Cool, cool.

Robb: So, yeah, I would not want him to join our jujitsu gym, put it that way.

Nicki: His side control pressure might be good.

Robb: He would fucking smash me, yeah. Yeah.

Nicki: Okay. Our next question is from Clint. He says his LDL is up. "Hey, Robb. I recently got some blood work done for work, and I was pretty amazed at my lipid profile. My total cholesterol went from 148 to 268. LDL went from 86 to 188. Triglycerides went down, 62 to 54, and HDL increased from 60," or excuse me, "from 50 to 69. My GP wasn't too concerned because the triglycerides decreased and HDL increased, but he still wants me to monitor it. The two weeks leading up to my blood work have been mostly carnivore-esque as I've noticed some headaches from fruit and indigestion with some veggies. I sneak in some full-fat dairy by means of a little heavy whipping cream. I cook with Kerrygold butter and have a little Kerrygold cheese from time to time."

Nicki: "I'm 6'2", 186 pounds, and about 8 to 10% body fat. I do drink about 40 ounces of french press coffee per day, and I know that can muck with LDL. But I'm not sure of that big of an increase over three years. For exercise, I do some variation of cardio four to six times per week and flirt with some crossfit style workouts one to two times per week. I dropped the intensity since going more low carb carnivore as to not fry myself. Protein intake usually consists of chicken, all parts, not just a breast guy, beef, steak, burgers, eggs, Wild Planet sardines, wild-caught salmon, et cetera. I never cook with coconut oil or seed oils. Coconut never agreed with me. I'll eat some stevia-sweetened dark chocolate a couple times per week, and I've been sleeping six to eight hours per night. I've got two kids going on three."

Robb: Yikes.

Nicki: "Any insight from your experience as to why my blood work took a shit? I've been relatively low carb for years. Thanks."

Robb: It sounds like the shift was more carnivore and facilitating that, definitely. Dairy, it sounds like he maybe had a little uptick in dairy, certainly an uptick in saturated fat. It's interesting. I think I have a paper in there, Total Cholesterol and All-Cause Mortality by Sex and Age: A Prospective Cohort Study Among 12.8 Million Adults. I think we mentioned this in a past episode as well. I have both a link to the study and a picture of one of the takeaways in this. It's fascinating that all-cause mortality gets lowest for both men and a little bit different for women but right in that 220 to 240 total cholesterol level. So Clint would be a little bit higher than that. It would be really, really helpful to do

an NMR, LDL-P. The Precision Health Reports when they're spun up and ready to take people more broadly, I think that that would be really, really valuable.

Robb: That'll give us some insight, but it's really interesting that the low ebb of all-cause mortality is significantly higher from correlational stuff. It's significantly higher than what we within mainstream medicine consider to be good cholesterol levels. So we have this real interesting disparity where most of medical-dom would say those numbers are way too high, and then when we look at all-cause mortality, they are what they are. We have this problem to reconcile there. As always with this stuff, reducing dairy fat seems to modify particularly LDL numbers, saturated fat to a lesser degree, but some people are particularly responsive to saturated fat. Then some people, just simply being in a ketogenic state, like if they eat a little bit of carbs, things go better. So those are the options, but it's funny, this problem never really goes away, but it's-

Nicki: Well, it sounds like once the Precision Health has their stuff available to the general public, that would be a good option, because it'll give him-

Robb: That would be a really good option, yeah.

Nicki: ... a more in-depth, a better picture than what he's got here from this panel.

Robb: There was just a paper that came out yesterday. It was some machine learning bit. It didn't come out yesterday. It arrived in my inbox yesterday. But some really interesting machine learning looking at the relationships between LDL cholesterol and diabetes risk. People with low LDL are at an exceptionally higher risk for type 2 diabetes and poor glycemic control. Now, what wasn't entirely clear was is having higher cholesterol levels protective of this? That wasn't entirely sussed out, but it's one of these things where we have this narrative where it's like, "Oh, man, the lower the LDL cholesterol, the better," and that's not necessarily the case. Even within this, some of this was being considered relative to, excuse me, the genetics of the individual. I'm going to have to pause this thing. I'm going to have a humdinger of a-

Nicki: Okay, pause.

Robb: Are we back?

Nicki: I think we're back. Are you good?

Robb: Okay. Sorry, I had another coughing spell. So, yeah, when the Precision Health Reports spin up, Clint, keep your eyes open around here. We'll talk about that. They do an assessment that predicts both cardiovascular disease risk out to 10 years and also diabetes risk. So something like that would give us a much better view into what's going on. If you want to fiddle with things, reducing dairy fat and saturated fat at large would be helpful.

Robb: It's super interesting. In the Rebellion, some folks were able to do a first run on this program, and it was interesting. Somebody came back with very low fasting blood glucose levels, and that kind of broke the algorithm initially. They had to get in and tweak it and adjust it. I think that we're going to get a lot of that over time as we start getting more bodies going through this, and we'll get some better perspective. But my gut sense, and I've talked about this, is elevated cholesterol levels in the context of a lower carb eating approach that is anti-inflammatory and all that, it just strikes me that it's very, very different than the elevated cholesterol levels that we see from overeating and insulin resistance-

Nicki: With sky-high triglycerides, sky-high blood glucose levels, et cetera.

Robb: Yeah, yeah, yeah, yeah.

Nicki: Okay. It's time for The Healthy Rebellion Radio Trivia. Our episode sponsor, White Oak Pastures, oh, goodness, guys, this is the good one, their beef sample kit is going out to one lucky winner. Again, that includes two boneless rib-eyes, two filets, three ground beef, three snack sticks, spicy herb and original, to one lucky winner selected at random who answers the following question correctly. So, Robb, we've been watching the Avatar: The Last Airbender and now we're onto Legend of Korra with the girls. It's actually really good.

Robb: A really good series. Yeah, both of them are.

Nicki: We really enjoy it, and so it's been sort of our little family show that we've been getting into. Probably every other day the question comes up from one of the girls, "Mom, Dad, would you rather be a waterbender, an earthbender, a firebender, or an airbender?" So, Robb, I'm having you declare, which bender would you rather be?

Robb: Do I get to get some iterations, like a metalbender or like a lavabender or the Sparky Boom Guy or anything like that?

Nicki: You don't get to be Sparky Sparky Boom Boom.

Robb: No? You can't handle the third eye on my forehead.

Nicki: No, you don't get to be one of those.

Robb: Oh, man. The airbender seems to have the most fun, but just being a firebender and maybe even being able to zap people with electricity, that seems pretty cool. So being a jerk, I will go with firebender.

Nicki: You will?

Robb: I will.

Nicki: Okay. Airbenders have really cool pets.

Robb: I don't need a pet. I've got a giant dog. I've already got a cool pet.

Nicki: Okay. The answer is firebender. To play, go to robwolff.com/trivia and enter your answer, and we'll randomly select one person to win the White Oak Pastures beef sample kit. The cut-off to answer this week's trivia and be eligible to win is Thursday, October 29th at midnight. That's two days before, three days before Halloween, two days before Halloween.

Robb: Two days.

Nicki: The winner will be notified via email, and we'll announce the winners on Instagram as well. This is open to residents of the US only. Our fourth question this week is from Matthew. He wants to know if bone broth made in a pressure cooker is healthy. "Hi, Nicki and Robb, I appreciate your work and the show. Question, I have a hard time digesting bone broth. It gives me some digestive upset, and I can't really consume it, even though I know I could use the gut-healing benefits. I have issues with histamines,

so that may be a big reason, since it's typically slow-cooked, which is one of the things that creates a lot of histamines in foods and is an issue for those with histamine tolerance issues. I'm working on that issue, but it's a long healing trajectory. I've heard a little bit about using a pressure cooker, like an Instant Pot, to make bone broth, which allows it to be done more swiftly. But I can't find any information on how beneficial it is when made in a pressure cooker. Is it as good as when it's slow-cooked in terms of nutritional value? Curious if you have an information or insights on this. Many thanks, Matthew."

Robb: Yeah, so I linked here delicatebelly.com/lowhistaminebonebroth. We have it in the show notes. My understanding is the extraction of the collagen and whatnot is pretty much the same, regardless of which route you go. I didn't get a sense of whether or not the histamine content was different one way or the other. People were claiming that was lower by doing a two-hour Instant Pot or pressure cooker approach versus a 24 or 48-hour slow cooker process. But I literally could find no scientific evidence of that at all. Nobody's assayed this stuff to see if there's a difference one way or the other. I guess, looking at the way that histamines are produced, I'd have to think about it. Anyway, didn't find much.

Robb: One thing did occur to me, chicharrones, like the fried pork skins, might be an interesting way of upping your collagen intake. They are amazing, in my opinion, and one of the rare keto paleo things that has a legit crunch factor. But I guess the best I could offer is there is this in theory low histamine recipe here. There are other people out there. There's definitely a trend that suggests online that these shorter, higher temperature, higher pressure cooking methods lead to lower histamine production. I guess that they would gauge that by fewer symptoms, but I really don't know if it works.

Nicki: Yeah, it seems like there might be people that have tried it and can report that they've had fewer symptoms, so there might be some of that to dig into.

Robb: For sure.

Nicki: Hopefully.

Robb: Yeah, yep.

Nicki: Okay.

Robb: Yeah.

Nicki: Well, Matthew, if you try it, let us know.

Robb: Please do, yes.

Nicki: Okay. Let's see. We have a question from Hobie on biochemistry for beginners. He says, "Robb, I love your podcast and books. I'm listening to you and some others in the paleo keto carnivore universe. I hear a lot of biochemistry discussed. I have a medical background from military service, but biochemistry was not a subject I got a lot of info in. I was wondering if you had a recommendation on a, quote, Biochemistry for Dummies books. I appreciate any recommendations you may have."

Robb: Yeah, so looking at, as I glance off to the side, a book called Lecture Notes on Human Metabolism. It's by Michael Palmer, MD, who's a great guy up in Waterloo, up in Canada. He put together this book. I don't know if the print version of the book is

available anymore. You might be able to find it used. But he has, for free, put the electronic version of the book available online, and he has chapter notes for professors, like PowerPoint presentations, so you could self-teach each chapter going through this thing. It's an overview of both biochemistry and metabolism, and it's oriented for people who are actually heading into a pre-med track but not necessarily a medical school track, so more allied healthcare, which I find really, really valuable because it doesn't get as far out into the weeds, but it covers the really important stuff.

Robb: So it hits the big brushstrokes of metabolism, glycolysis, integrated nutrient metabolism. What I really like about this book is it also has two chapters on xenobiotics and the toxicology and metabolism of pharmaceuticals because this is something else, it's just never on folks' mind how this stuff actually does get detoxified from the system, like you could go down all kinds of rabbit holes with this detox or that detox and a lot of it's bullshit but there is actually some legitimate elements to it. So it's cool that it covers all that. Very, very accessible. And, again, I'm pretty sure the online version of the book is free, at least currently or has been for quite some time. The print book is just kind of snazzy. I love it, yeah.

Nicki: Okay.

Robb: And we have a link to that in the show notes, but, again, the title of the book is Lecture Notes on Human Metabolism. Michael Palmer is the author.

Nicki: Okay. That's a wrap for this week. Thank you, everyone, for joining us. Please check out our show sponsor, White Oak Pastures, for all your pasture-based meats and your holiday gifts for the paleo, keto, carnivore, regenerative ag supporters in your family. I said peto, huh?

Robb: You did say peto, damn. It's all like Pizzagate and stuff, so-

Nicki: Oh, no. Check them out at whiteoakpastures.com/robbwolf. Enter code rebel10 to get 10% off your product total for first-time customers up to \$100 max discount. Again, that's whiteoakpastures.com/robbwolf. Robb Wolf, anything else you want to share before we wrap up this episode?

Robb: No. I probably made enough of a disaster on the front end of this thing between my salty talking and almost dying on my own scratchy throat. I think I'm good.

Nicki: All right, guys. We will see you all next week. Have a great weekend.

Robb: Bye, everybody. Take care.

Nicki: Bye.