

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 1 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 expletives. If our language is not your thing, if it gets your britches in a bunch, well, there's always Disney+. And we're back.

Robb: Were we ever really gone?

Nicki: I don't know.

Robb: It's a good question.

Nicki: Mm-hmm (affirmative). It is.

Robb: What's new, wife?

Nicki: Goodness. I don't know. I feel like there's a lot going on.

Robb: This is our first podcast of the new year?

Nicki: No.

Robb: No? Okay.

Nicki: You really were gone. Where have you been?

Robb: Where's the missing 72 hours, man?

Nicki: You've been missing three weeks.

Robb: Gosh. I guess so.

Nicki: Okay. Let's see here. Oh, you know what? I don't know if you wanted to share this, but...

Robb: Yeah, we can.

Nicki: You took the girls to Landa Park here in New Braunfels, this weekend.

Robb: Yeah.

Nicki: And had a-

Robb: Gorgeous day, a zillion people out enjoying the day. Landa Park is a really beautiful part of New Braunfels. The Comal river runs through it. It comes up out of the ground. They're spring-fed. It's beautiful-

Nicki: Trails. There's a little train. You can do a train ride all around the park and three or four different play structure for all ages of kids. And it's definitely a favorite playground for our kids.

Robb: Yeah. So I was hanging out there, lots of people, out and about, some masked, most not, but I would say like 95% of people not wearing masks. So you can assess that as it were. I think outdoors is ridiculous to wear a mask unless you really are concerned about it, but transmission there seems to be-

Nicki: High risk, but yeah.

Robb: Very low risk of transmission outdoors, particularly when it's a sunny day, which it was, and all the rest of that stuff. So a woman was there. She had a stroller, little guy that turned out to be three months old and then three other kids under the age of six, I would say-

Nicki: And this woman, you said was-

Robb: She said she was 50. She's a local teacher and she just said, "Do you mind if I share the bench with you?" And I said, "I've got this thing warmed up for you. So have a seat." And so we're just chatting about how many folks were out and everything, and probably just... I mean, completely typical in the park chit-chat for a good five minutes. And then she looked at me and she said, "Do you mind if I offload some stuff on you?" And I just looked at her, I'm like, "No, please do." And I was like, this is... She seemed totally sincere. Didn't strike me as odd.

Robb: She was actually correcting her kids on the playground when they were absolute gremlins, and so I'm like, "There's actually some parenting skills here," and stuff like that. And she's like, "These are not my kids. These are my grandkids. But the first batch of three kids came from a daughter, the single kid, who was the little guy in the stroller, three months old, came from another daughter. And I'm not going to go into huge details about how that came about but some stuff that brought the state basically involved in intervening in the lives of these kids."

Robb: And then, this woman who was their grandmother, had to basically fight to get them out of foster care and take them on herself. And apparently for a year, maybe two years, they've had the three kids and it was only just in the last month or so that she got the three-month-old. And what was interesting is, this wasn't a woe is me, this wasn't weird. It didn't feel like an oversharing, but when we wrapped things up, she's like, "I just needed to talk to somebody about this." And I'm like, "I am honored that you chose to share that with me."

Robb: And I absolutely was. And there was just a lot of shit unpacked on that, but one of the things that she said... So the little guy, when she first got him... I think he has to be six weeks old to enter daycare. And so, because she generally works, when she was just getting ready to put him in daycare, he wasn't old enough, so she applied for it. But because he's in the CPS system, it takes a certain amount of time for all that stuff to happen. She put in a request in October and it wasn't until January that it was okayed. So she's had to take huge amount of time off.

Robb: And I was like, "Is it just that inefficient there?" And she's like, "It's government stuff," like it's not a well-oiled machine, but she said, "You would not believe the amount of child abandonment that is happening right now, and abandonment from mainly these younger, millennial parents."

Nicki: Younger parents that are just saying they can't deal and so they're dropping them off with parents, if they have parents and then... Yeah.

Robb: With grandparents, yeah. And that oftentimes happens and not infrequently. It's just kids are being taken to a public setting where there are people around and just left, and just abandoned. And this is another one of the features of our COVID life that is not really getting talked about. And I know it feels like I'm just so goddamn angry right now, because it's just the self-righteousness and the, "You wear your mask, and you do this, and you do that, and you're going to get your vaccination," and it's like, "Fuck, okay. Thank you, sir. May I have another?" It's just like, "Okay." But when is this going to end? And when are we really going to start talking about the costs of this?

Robb: There's a woman, who's a professional. I take it that her husband is a professional, but they had raised their kids and their kids were out of the house, and now their grandkids are back in the house. And by all appearances-

Nicki: They're raising four kids under six.

Robb: ... they're raising four kids under six now. And God bless them for doing that. I don't know if I've got it in me. I told her that with our girls, we had them old enough that they're not going to get that. I'm going to be too goddamn old to-

Nicki: You're going to be. Yeah, you'll be 49 here, this weekend.

Robb: Yes.

Nicki: 50 in a year. So by the time our kids are...

Robb: You tack 20 years on that and it's, "Sorry kids. You either get your shit together or you're out of luck on that." And so I don't know. It just struck me. One, is that there are some amazing salt of the earth people out there that are willing to endure some pretty remarkable inconvenience and impact in their lives to just do the right thing. And I think that that is incredible. And then also just this other thing that I think, someday when some balanced shit in the sky is done with this, and we look at the tally of everything that's going on, and I know that there's a lot of cases, and there's people dying, and there's all this fucking chaos and everything, there's also so much pain and suffering happening on the back end of this.

Nicki: Oh yeah. I hardly ever go on Twitter, but I do get Twitter notifications into my email and I clicked on one and went down a rabbit hole and there was a tweet, and I'm not going to get it exactly correct, but basically, the woman was saying, "It's all fine and dandy for folks who have not had their income jeopardized at all because of lockdowns," say, they're insulated from lockdowns to be encouraging them. But she and her husband had to intervene with their 26 year old son who was in such a terrible place.

Nicki: He lost his job, a job that took him years to find, and it's in the industry that he loves and he loved it. He's massively socially isolated and the business that he was working for, it looks like they're going to go under. And so, her point was a lot of people making these recommendations, a lot of keyboard warriors advocating for lockdowns, really aren't taking into account the fact that there are a lot of people that they have to work in person. And then just the inner personal nature of some jobs, like it feeds them. And we talked about this when-

Robb: And this is why people do it, because they're good.

Nicki: Yeah. And so, just being home and getting some sort of a stimulus check every five months, A, it's woefully inadequate, and B, it's not allowing people to do... They have no

purpose. And I just really fear that the mental health of the world right now is in such a terrible place. It's heartbreaking.

Robb: So I don't know. Again, not a salty talk. I've got another one of those-

Nicki: It's not a salty talk but I do think that it's important to... This type of stuff is not getting talked about in any mainstream media, right? So it's important that people, especially for folks who are more on the... All these mandates are for public health and public health... Vaccines should be mandated because public health and lockdowns... And it's like, "What about the public health? What about mental health? What about all of the psychological, and social, and physical harm that's being done?" We have a member of the Healthy Rebellion, actually, Victoria, who shared that she has a woman that she's working with and she hasn't left her house since before New Year's, because she's afraid of the virus. And she had-

Robb: She won't go in her backyard.

Nicki: And she has not stepped foot out of her front door.

Robb: So this is a pretty good terror campaign. 911 didn't get people to stop going out into their backyard. And I know this shit is so divisive, but it's like it is been so ramped up like, "Is it reasonable anywhere that somebody should not go out in their backyard by themselves?" It wasn't necessary to convey so much terror and so much despair that it is as if there was a nuclear fallout in our backyard, but... Yeah. I don't know. So anyway, I wanted to share that to honor this woman. It's fucking amazing what she's doing.

Nicki: Mm-hmm (affirmative).

Robb: I was prepared for a moment of my cynical kind of libertarian, not impressed with government stuff, but when she replied, she was like, "The people working in these offices just are crushed," because they're already maxed out on any given day and it's increased by two, three, four fold, and their hours have not, but the throughput has. And so these people, they are crushed on a daily basis and are dealing with fucking child abandonment and again, abandoned by the parents because the parents feel so...

Nicki: Unable to cope.

Robb: ... unable to cope and can't deal, and all the rest of it, that seems like a good option, and it struck me.

Nicki: Mm-hmm (affirmative).

Robb: So...

Nicki: So let's... Gosh... move the topic to inside the Health Rebellion because we just started the 7-day carb test this week and we've had a lot of... Really cool. Yeah. It's been hopping in there. Lots of great takeaways from folks doing the 7-day carb test. We've had people test all manner of things, oats, sweet potatoes, rice, honey-

Robb: Are you going to mention Denise in here also?

Nicki: I am. Yeah. First so, I wanted to mention... So you all know the drill, if you read Wired to Eat, or if you've followed any of the stuff that Robb talked about with regards to carb tolerance. So folks are testing 50 grams of effective carbohydrate, and then they're

testing their blood glucose, an hour after and two hours after, to see how they respond, and ideally, at that two hour mark, their blood glucose has dropped below 115 milligrams per deciliter.

Nicki: Suzy, she had a post. She's like, "Sourdough you broke my heart today." So she tested at one hour. It was 165, and the two hour mark was 141. So significantly higher than that 115 that folks are shooting for. She said, "I had maybe a small headache and eyes felt tired, but I haven't had any other symptoms, and I'm still not hungry, no jitters, buzzer crash, and so far stomach and digestion feels fine." So again, we ask for the subjective measures, so how are people feeling, et cetera? And she goes, "But just my blood sugar doesn't want me to be happy." So it's been interesting. A lot of folks... They've tried foods that they really like, carbs that they'd like to include in their diet just to see how they respond. Some people are like, "Oh, I can actually tolerate this thing that I enjoy on occasion," or like Suzy, "I cannot."

Robb: Well, and likewise with Suzy, a lot of folks are bummed by this, but we purposefully set this up so that the carb is held as guilty as possible. And oh, reducing the portion size is clearly something that could be done, eating it with some protein, some fat, some veggies, taking a walk before or afterwards, all of these things are good mitigating strategies. And even though we are generally big fans and proponents of lower carb diets, what we're really trying to use this 7-day carb test is a legit way to just be objective about where those carbs fit in your physiological response. And so, we're going to get to test them in as prickish mode as we can, and then we've got some latitude to operate from there, if you choose to. And a lot of people are finding, "Oh, I could put some in here, put some in there, by doing some of these mitigating strategies." And then...

Nicki: And then Denise who joined just before our April reset, last year. This was really fascinating. She did the carb test back then, didn't do well with the carbs that she tested and then she's been predominantly carnivore since then-

Robb: But has leaned out a lot.

Nicki: Leaned out a lot, feels great, looks great, and the last fall reset, she decided not to do the carb test. She knows they're not her friend. She stuck with carnivore. This time around, she wanted to do it again and test some of the same carbs that she had tested last April and her responses are significantly better. So she's tolerating them much better.

Robb: This is the goal, or at least, improving metabolic flexibility, improving our response to a given amount of food, particularly carbohydrates, and it was cool. I think some takeaways are that there's probably a lot of different ways to affect that. What was cool for me is that carnivore doesn't mean that it's a cul-de-sac that you never get back out of. I think for some people with GI issues and different things like that, really immunogenic responses to food, that may be where you end up sticking for the most part. But what was cool is that it was a seemingly an easy enough intervention that she could stick with it over the long haul, looks better, feels better, performs better, and now is circling back around and kicking the tires on, "How much latitude can I have with this?" And she's probably going to find that she's got a fair amount of latitude. It's super cool.

Robb: Will this work exactly the same for everybody? Probably not. Hasn't worked for me this way, but I'm really proud of doing this because we want to empower people. Just because I eat a particular way, it works for me, I don't... I hope most people don't have

to do the stuff that I have to do to be able to navigate this current existence. I'm one of the tougher nuts to crack and being willing to be flexible and be honest, and also to not get so wrapped up in the data tracking and trying to cheat our numbers, just being honest, and taking it where it is, and figuring out what we can do with it. So pretty cool.

Nicki: Mm-hmm (affirmative). Yeah. I also wanted to read... Denise also posted something that was just a comment that our whole team was talking about in Slack because it made us feel super good. But she posted, "I would just like to say it's super exciting to see the Healthy Rebellion growing. So fun to see the new rebels interacting, and I feel like I'm getting to know so many new people already, even in the chats and the reset. I know Robb and Nicki want to put a cap on the number of people eventually, and I totally agree, but damn, we are an awesome group." And that was awesome, and even more awesome was Sarah's comment.

Nicki: She goes, "I couldn't agree more. I was just bragging to two different people how awesome and special this group is. You all truly embody the way I hope the whole nation and world can function one day, and I feel so blessed to be learning from all of you in this group. Have a great week." And that was pretty damn cool. So I just wanted to share those two things, because if any of you are on the fence and you're even considering joining the Healthy Rebellion, and you'd like to participate in the reset, this one, there's still time to join, but you have to join before Monday, January 25th, at midnight, and you can do that by going to join.thehealthyrebellion.com. And we hope to see you in there.

Robb: And pretty soon here, we're probably going to put enrollment cap on the whole kit and caboodle.

Nicki: Mm-hmm (affirmative).

Robb: So we're not totally sure where that line is going to get drawn, but...

Nicki: Then we'll just let peopel in as... If-

Robb: It's still fun and people are still friendly and I'm disinclined to let it get to a point where we break that, so... Yeah.

Nicki: Yeah. No. It's pretty special in there.

Robb: Yep.

Nicki: Okay. Hubby, what do you have for our news topic?

Robb: Oh, this is kind of a cool paper reaction of human monoclonal antibodies to SARS-CoV-2 proteins with tissue antigens implications for autoimmune diseases. And it looks really quantitatively at where the COVID infection could induce autoimmune disease, and folks, it's jaw-dropping. The cross-reactivity ranges from the gut to the testes, to your brain. I mean, there's virtually no tissue left unturned in this whole story with the potential for autoimmune cross-reactivity, with molecular mimicry from proteins that are being produced in the virus itself. And so, it talks about some of the risks and hazards around that. And then, interestingly, it makes the point that the vaccine is no free lunch in that regard. And it points out known autoimmune complications with other vaccines, like the influenza vaccine, precipitating things like narcolepsy and whatnot.

Robb: So, for me, this is one of these tough things where there's some hope that the vaccine might be better for folks because we could possibly sidestep the more global autoimmune potentiality of speeding up this virus, somebody who's in the rebellion, who is an immunologist by background, not civil, but another person made the case that many people who are actually healthy-healthy are clearing the virus in the immune response. And so, they're not even getting into the antibody production of whatnot. And so that's a scenario in which you are bypassing all of the potentiality around these problems. Now, that's not going to be the case for everybody, because we haven't made it a national goal to get everybody metabolically healthy, but in your risk analysis story, one of the takeaways for me on this is just that... Again, the fundamental thing is that good metabolic health is going to improve your outcomes, regardless of whether you decide to get the vaccine, or whether it's forced upon you, or you just get the virus itself.

Robb: It also makes an interesting case that for the people who were finger-wagging around this stuff, you are finger-wagging around a process that is known to have a danger attached to it. Some people have died from the vaccine, lots and lots of people have died, not from the vaccine, but from the virus. And so, some of the moralizing and some of the up on high bullshit that is getting rained out like... I guess I just put it out there as a little bit of a reminder that there's far more that we don't know than what we do know, and that there should maybe be a little circumspection around the way that this stuff gets rolled out, and maybe honoring folks for where they are. If they've got some concerns around it, maybe that's okay. And in the same way that people have concerns around like, "Well, gee-whiz, I sure wish everybody would wear a mask."

Robb: It's like, "Well, virtually everybody is wearing a mask." And if some other people, particularly if they have autoimmune conditions in their family, have some reservations around the vaccine or otherwise, then maybe we should spend a little bit of time honoring that and discussing the pro-cons. Again, there's so little discussion of these nuances that... I wouldn't be surprised if there was a cross section of people for whom the vaccine is more dangerous than the virus. Almost certainly is within the spectrum of 7 billion humans on the planet. It'd be handy to know what goes into that. And then there's going to be a cross section of people for whom the vaccine is going to be an absolute godsend compared to getting a significant viral load. It'd be handy to know maybe something about those folks too.

Robb: And if we just continue with the shenanigans that we've been doing, we'll never get there. And even if we do get there, nobody's going to trust anything. It's just this digging in of heels, and fuck you, and I don't really care, but it's a complex paper on the front end. The methodology that they use is not in my wheelhouse, so it was hard for me to assess exactly how on-point that was, but the discussion was very accessible and I thought very balanced, so...

Nicki: Cool. Gosh, another news topic that is not here, but just popped into my head, that was shared in the Rebellion is that they're now offering joints for folks who get the vaccine, for folks, or Joints for Jabs, or something like that, so... Yeah.

Robb: I was just thinking should be like a month supply of your favorite ice cream too, and then just make sure that everybody is metabolically broken and... Yeah. But dealing with-

Nicki: Mm-hmm (affirmative). Yeah, we got lots of great incentives going out these days. Okay. Let's read our iTunes t-shirt winner for this week. It goes to PNW Mama Bear. I'm assuming that's Pacific Northwest Mama Bear, "The saltier, the better. Whenever Robb

and Nicki have a salty talk episode, near the end of it, Robb always make some sarcastic remark that quote, 'If anyone is even still listening...' and it always cracks me up. I find myself muttering, 'Yo, I'm still here. Keep it up.' The saltier, the more interesting in my book. I always look forward to the nuanced content in each episode."

Robb: Well, that's one person.

Nicki: But to the Pacific Northwest Mama Bear, thank you for your review. Send us an email to hello@robbwolf.com with your t-shirt size and your mailing address, and we will send you a Healthy Rebellion Radio t-shirt. And the Healthy Rebellion Radio is sponsored by our salty AF electrolyte company element. That's spelled L-M-N-T. And today I wanted to share another message received from a brand new element customer, and this was shared with our team. He says, "I'm not sure if this was your intention with element, but it really helps with migraines. The fact that I'm a disabled veteran is not at all important other than to give context. Among other injuries, I was diagnosed with migraines as well as a TBI, a few years after Iraq.

Nicki: I get very dehydrated and it is a daily occurrence to wake in the morning, dehydrated with a migraine, despite a large reservoir on my CPAP. After receiving my recent order, I discovered by complete accident that drinking an element before bed has eliminated my morning dehydration and migraine." And that's...

Robb: Super cool.

Nicki: ... pretty darn cool. There's been a lot of things that we hear from our customers and ways that adequate electrolytes are helping in their lives, and this is things that we didn't expect at all, so this was another really cool one. And then I also wanted to share a pro tip from one of our rebels, Alison. She posted in the Healthy Rebellion community that she poured a chocolate salt into a large mug of peppermint tea and said it was absolutely divine. So everybody who has chocolate salt on hand, go ahead and make yourself a minty chocolate salt.

Robb: too bad we didn't track that one down pre-holidays.

Nicki: I know and that was a good one. All right. If you haven't tried element yet, this is the time to do it, now through January 31st. So that only gives you a little over a week left in this month. You can get a free eight count sample pack, just pay for shipping, which is just \$5, in the United States. You'll get two sticks of each of citrus salt, raspberry salt, orange salt, and the raw unflavored. Just go to drinklmnt.com/robb, and that'll take you to that page where you can grab yourself a sample pack. Again, that's D-R-I-N-K-L-M-N-T.com/R-O-B-B, because Robb have double B's in his name.

Robb: Why not?

Nicki: And again, that offers go through January 31st. Okay. Are you're ready for questions? You want to do the questions?

Robb: Let's do this. This was a long warmup. Holy smokes, that was a lot of foreplay. Yeah.

Nicki: Yes. Okay. Here we go. Vitamin D while pregnant. Lori says, "Hi Robb and Nicki. I've heard you mention in the past that you are a proponent of using tanning beds to improve vitamin D levels. I've also found this to be helpful at keeping my levels up in the winter months and have seen big improvements at fighting off the winter blues, wherever I am pregnant. So I'm curious if this is a huge no, and I need to only rely on my

supplement. The supplement alone has never been enough to keep me out of the low-end mood that I experience in the winter.

Nicki: I'm currently in my first trimester of pregnancy. I have native American heritage, so I'm fairly dark complected and do not burn easily. I live in Texas, which may be slightly better for UV exposure, but work five days a week indoors, so it is guaranteed that during the winter, my sunlight exposure plummets. Should I just suck it up and deal with the mood and only take a supplement, or would a couple days a week of a tanning bed be okay to get me through the next few months during my first and second trimester?"

Robb: So lots of exculpatory, not a doctor, not medical advice, all that type of stuff. And first and foremost, even though it's interesting, there's things like the sperti vitamin D lamps and stuff. So there is a culture out there of using UV therapy. And actually some of our friends in Europe, they're like, "Oh yeah, we use these all the time." And I've looked and looked and can't find any information on skin cancer rates and folks using stuff like that. This is some of the concern around this, but we've talked about this in the past, if we're really using this as a vitamin D tool and a mood enhancing tool, then...

Robb: Let's say, one's maximum dose in a given bed, which we've been recommending the low pressure UVA, UVB that you could, in theory, be in there for like 20 minutes, and then you stay in there only for eight to 10 minutes, or if you're a ginger, then you only stay in for two minutes. Whatever your maximum is, basically cut the maximum in half, because we're really trying not to tan. The goal, again, is to get maximum vitamin D and to get this mood enhancing response. And if you actually start getting much of a tan, you need to keep increasing the exposure, and so, we're just not shooting for that.

Robb: When you poke around on the literature around tanning bed use, it looks very scary, very negative, super high correlation with skin cancer, but then there's none of the studies ask, "How long are people using it?" It's just use or not use. And I would say, virtually, everybody using tanning beds, they're going for the tan effect. I've been doing it between two and four times a week, and, I mean, I don't really have a tan. I don't stay in there all that long. It's 10 minutes, and if I haven't been there in quite some time, I drop it back to six minutes and start ratcheting back up. So that's all the legal disclaimer, just like, "This is an experiment. We don't really know. I have been making the case that, if I didn't do this, I would run a high likelihood of wanting to hang myself with an extension cord, and so, I do think that this is good for my health."

Robb: Again, circling back to mental health, being a big factor in all this. And then when you look at pregnancy and just sun exposure, there's no prohibitions around that. I mean, outside of, "Don't get overly hot because that heat stress on the fetus," and even then, not surprisingly evolutionary biology, women are even better at dealing with heat stress than men are, because we've survived on a variable temperature planet for quite some time within our species lineage, but again, in this fucking crazy modern world. You need like a million legal disclaimers with everything, but I can't see... It makes good sense to me to do really modest exposures of UV light, not for the purpose of tanning, but just for mood enhancement and producing vitamin D and then can see no special prohibitions around a pregnant woman undertaking vitamin D exposure, be it sunlight or otherwise. Yeah.

Nicki: Okay. You get a mycotoxin question next.

Robb: Week.

Nicki: Your favorite. This one is from Sean. He says, "I've been following you guys for many years now. I've listened to all your podcast episodes, Paleo Solution up to the Healthy Rebellion Radio. I don't remember you guys talking about the role fungus Candida plays with all this metabolic disruption, with diabetes, cancer, arthritis, Alzheimer's, lupus, et cetera. Perhaps we have a Ptolemy science understanding of metabolic disorders.

Nicki: I recently found, "Know the Cause," and Doug Kaufman's ideas on the subject... Sorry, but he has made me second guess what's really going on. I'm curious, how deep is this mycotoxin problem. I understand, and generally, tend to agree with you on the bulletproof coffee. It's great marketing, but until I get definitive understanding on the real causal problems of fungus in general, I remain neutral. Smooth talking salesmen must be scrutinized at all times. However, it's the only root cause theory that I've heard that could make sense, not the insulin resistance theory, which could be proved if we actually measure the insulin levels before, during, and after, injecting mycotoxins into mice and rats to give them diabetes, darn circular logic."

Robb: Yeah. I wasn't familiar with this guy, Doug Kaufman's work, and I dug into it, is a fair amount. And from a dietary perspective, his recommendations seem pretty on-point. It's kind of Paleoish, low carb, can't really see any downsides there. The singular cause for everything, I have problems with... I have no doubt that mycotoxins are a problem for folks. Mold exposure is definitely a problem under different circumstances. I've noticed with myself, even doing Kombucha, I just don't do that well. I think I've got some kind of broad fungal intolerances, even though I feel good, my digestion is good with *Saccharomyces boulardii*, but that's a very different kind of side branch in this whole thing. So Sean, I'm not sure what to say. I think that highly unlikely that mycotoxins are the singular cause of all the ails, Western civilization. Similarly, I really like Paul Saladino, but I don't think that...

Nicki: Seed oils.

Robb: ... seed oils are the singular cause of all this. Are they a piece of it? Is it part of greater context? Absolutely. But it's a lot of different shit. And I think one of the benefits of carving out this thing and it's like, "This is the one thing," it's like the most simplistic message you could have and simple-minded... Fuck, I want to be a dick, but I'm not even going to say that, but it's easy to sell a simplistic message. People want to hear it, they hear it. Maybe-

Nicki: Meat is bad and if you avoid it, then we save the planet.

Robb: There you go. It's super compelling. And then what's the real fucking story behind that? It's really complex. There's a lot of nuance to it. And that's one of the real gripes that I have around these one cause caravan type deals where... Then there's no room for this nuance because the person selling that doesn't have mental bandwidth for it. And it starts calling into question the singular cause deal. It's like, "Oh, there's this and there's that." And one of the things is funny in this, when you look at the toxicity of mycotoxins and aflatoxin and other fungal and just broadly microbial byproducts, are way worse than most pesticide residue, and they're not really monitored in the same way.

Robb: To some degree they are, there's some circumstances different grain products are monitored for mycotoxins because if you get a silo full of grain that gets wet and then you get mold growth, you could kill people and animals, whatnot. So, again, is it a problem? Is it a thing of concern? If somebody's having problems, is this a place to look? Yes. Is it the singular to place to look? I don't know. And then the irony is that so many of the recommendations that this guy makes, I guess, could be addressing the

mycotoxin issue, but it's also just generally addressing poor diet lifestyle, metabolic health, so... Yeah.

Nicki: Okay. Let's see here. We have a question from Chris. Oh goodness. Did I do... No, we had Lori. Okay. In the last episode it was all females so I was afraid that I made it this one, all men, but we do have Lori in there. Okay.

Robb: Okay.

Nicki: So this question is from Chris on post-workout insulin. He says, "Hi, Robb. I was wondering about the post-workout insulin spike. Did the bros have it right with spiking insulin post-workout with high GI carbs to get more muscle, or should we keep insulin on the low side so we don't get more fat? Thanks."

Robb: I'm guessing that Chris's goal is to just get more muscle but that all helps in this, but there's been a lot of gnashing of teeth, and back and forth on this, but my best understanding of this... Luis would be able to speak to this better than I can, but my sense is that, so long as there is adequate protein in the post-workout period, that gets enough anabolic signaling both from insulin and from mTOR activation and whatnot that you're good to go just as long as there's adequate protein there. And that, in fact, the addition of insulin wasn't really necessary or particularly beneficial for muscle gain. Now, that said, bodybuilders went from being big to absolutely huge when they started incorporating insulin and thyroid and a bunch of other things. So insulin is a growth factor.

Robb: I think part of what goes on is people get super hungry on it. And so they just keep eating and then they manage to some degree, their body fat levels, with things like thyroid and growth hormone medications, and so, you're just able to take everything and goose it out another layer. But my understanding is that, it's not inherently necessary. It doesn't mean that you wouldn't benefit from some amount of carbs, some people do, but there's also more and more literature on low carb recovery and muscle building and whatnot. And you can do it either way.

Nicki: Yeah. Luis is pretty darn jacked and he does not do high GI carbs-

Robb: Yeah and it's N equals 1, but there's pretty good research suggesting that, if there's a benefit at small, again, relative to just, "Are you getting enough calories? Are you getting enough protein?" And again, this is the... I will admit, if you're eating pretty low carb, it's hard to eat enough calories, and you one, are not that hungry, and then two, you do reach some gastric limit of like, "If I eat another scoop of coconut butter, I'm going to poop my pants." And so, there is limitations there, but ironically, it's more just on the calorie side, not so much insulin and whatnot. Yeah.

Nicki: Cool. Already, it's time for the Healthy Rebellion Radio trivia. Our Healthy Rebellion Radio sponsored drink element is giving a box of element recharge electrolytes to three lucky winners, selected at random, who answer the following question correctly. And you're saying wife, because you read the question. The question is, Robb, what did you find on the floor in the kitchen yesterday morning?

Robb: It's January and I found a goddamn scorpion, and we just didn't get any break this year at all.

Nicki: I know. I think our last scorpion was in November.

Robb: Yeah.

Nicki: And normally... Well, we don't know normal because we've only been here two years, but the first year we were here, we didn't have any... Our last scorpion was early October, and then we didn't get another one until April. So, at least, there was like six months, five and a half months of where you could get up out of bed and go to the bathroom or walk around and not be paranoid that there's going to be a scorpion on the floor. And this year we had our last one in late November, and now it's January and we already have one. Yes.

Robb: So my answer is scorpion.

Nicki: Your answer is scorpion. Folks to play, go to robbwolf.com/trivia, enter your answer, and we'll randomly select three people with the correct answer to win a box of electrolytes from drink element. The cutoff to answer this week's trivia and be eligible to win is Thursday, January 28th, midnight and we'll notify winners via email, and also on Instagram. This is open to residents of the US only. All right, our fourth question this week is from Nate. He's wondering what is the most impactful blood test to get? "Hi Robb and Nicki, I plan on getting a blood test through my doctor. I'm guessing all blood tests are not created equal. So do I simply ask for a blood test or do I ask for a blood test that measures XYZ? And if the latter, what would your XYZ be to get measured? More info below. If it's helpful, I'm 33 years old, been on a fennel on keto for four years.

Nicki: Keto is my Holy grail for getting back to my prime condition, following your keto masterclass regimen of higher protein, adequate sodium, and not so crazy on the fat, has been the most effective and enjoyable way for me. I've been fully back on keto for two months now. I'm 5'10". I weigh 210 pounds, but I'm muscular and around 12 to 17% body fat. I thankfully seem to put on muscle fairly easily from heavy, slow, and low rep weightlifting, one to two times a week, however, I'm still working to get this tyre of fat off my hips and waist. Other than that, the rest of my body seems lean and muscular." And then he includes his ketone range and blood glucose levels and whatnot.

Robb: Yeah. And you can go so many different directions with blood work and it can become super expensive, and the annoying thing for me is that generally when people get blood work, there's more questions than answers, because the standard blood work like total cholesterol calculated HDL, LDL, it just doesn't tell you much at all, it just provides enough information to make it even more confusing. So we really recommend the Precision Health Reports folks. And I've got a link to that in the show notes. These folks take the LPIR score, take some personal history, and combine that in a way that they're able to do a really solid, predictive risk analysis for both your cardiovascular health and your diabetic potential, over the next five to 10 years.

Robb: I think that's an amazing benchmark to have and particularly do to get something like that in your thirties. I could, and it would have been nice for me to have done a comprehensive hormone panel, testosterone, dihydrotestosterone, estrogen, and estradiol, all the thyroid's... really comprehensive to do that in my twenties, because then, as one ages, you could at least make the case that if you were to do some sort of HRT or something, you know what your optimum ranges are.

Robb: If you're a male and 21 years old, and you have erections that never stop, and all that, and your testosterone is 800 then you don't need to go to 1100 or something to get similar results somewhere down the road. So I think that doing some sort of a comprehensive hormone panel would be handy to do, and the more, the better on that. Things like cortisol aren't super helpful unless you're doing a multipoint on it, but

testosterone, estrogen and all the side metabolites off of that, and then this Precision Health Report makes a ton of sense, because then you're getting a snapshot of your metabolic health and also your hormonal health, and I think that both of those could be used, going down the road, to see how you're doing. Yeah.

Nicki: Yeah. And precisionhealthreports.com is where that is, and it's pretty affordable. I will say that there is special pricing for Healthy Rebellion members, so that's just one more reason to join the Healthy Rebellion. No, we don't make any money on that, the savings just goes to the members, so... All right. Wow. We're flying through these. We did a long intro and then the questions are concise. Okay.

Robb: I've been trying to be concise on these because we fucked off on the intro questions, so...

Nicki: All right. This is our fifth question this week from Saul, calcium supplementation on a carnivore diet. "Hi Robb, I discovered your show listening to the Paul Saladino podcasts, and I am loving it. Every time I learn something new. Thanks so much what you do. You're also a libertarian and that is freaking amazing. I also love your interactions with Nicki."

Robb: Which makes us right wing extremists now clearly so... Yeah.

Nicki: Libertarian is now equal to a right-wing extremists?

Robb: Absolutely. Yeah.

Nicki: Yeah. Ron Paul did get banned from Facebook. So I guess-

Robb: He's a bastard. He should have been banned a long time ago. "Don't don't do war, have balanced budgets, treat every human being equitably and as an individual," he is a bastard.

Nicki: Yeah.

Robb: Sorry.

Nicki: Okay. That was a little tangential. All right. So a bit of context, "I'm 29 years old, 150 pounds and 5'8". I follow a carnivore diet with honey," which brings up a whole other thing that I just read about with honey, but we will not digress. "I eat 500 grams of meat a day, two ounces of liver, some way, post-workout, and I do Greek yogurt to get calcium in my diet. I also take vitamin D and boron. I read that calcium is essential to produce melatonin, and I noticed that when I don't consume Greek yogurt or any other dairy, I tend to wake up in the middle of the night, and when I do consume it, I sleep very well.

Nicki: So I was listening to your podcast last week, when you said that there was a huge difference between grass-fed and grain-fed dairy. I would like to let go of the dairy just for a test. And since here, where I live in Portugal, grass-fed dairy is way more expensive than grain-fed dairy, but I still want to have calcium in my diet. I would like to know what are your thoughts on calcium supplementation? Is there any form that is safe? Paul said that calcium citrate is not a good idea because it can cause heart and kidney malfunction. He suggested for me to do bone broth, but I'm a graduate student and every bit of time that I can save, I do so. So bone broth is inconvenient. Thank you so much."

Robb: It's interesting. I could make the case that just sodium supplementation might solve the sleep issue, and it's worth mentioning too that if the body isn't getting adequate sodium, then it starts having problems maintaining the other electrolytes, potassium, magnesium, calcium, and iron, et cetera, associated with that, which is why it's so important to be on point with sodium. So I could make the case that that's an area to experiment as well, following our general guidelines with element around.... using our home brew methodology around that.

Robb: Beyond that, things like sardines with bones still in, macro with bones still in, probably much better than bone broth. Some folks looked at the actual amount of calcium in those products, and it's not that much, actually. It's not a huge amount. So I would lean more towards that. Also, I know Paul Saladino hates chicken, but if you find a good chicken source and like... Us and our kids, if we cook the chicken well... If you were to reconstruct a whole chicken skeleton and that is one way that it happens, the chicken skeleton you would reconstruct, when we're done with it, there's hardly any of it left. We probably eat like 60% to 80% of the articular parts and all that type of stuff.

Nicki: Cartilage and stuff.

Robb: Cartilage and all that. Yeah. So just simply-

Nicki: Especially Robb servings.

Robb: Yeah, there's not much left.

Nicki: There's nothing left on the end of-

Robb: Well, and sometimes if the chicken is cooked really well, I'll eat a chicken leg and there might be a little bit of the femur left, but not much, barely anything. So yeah. So I think that those are some pretty legit ways, and if you're going to eat anyway, might as well eat the bones too. And that extends to beef ribs and pork ribs and a whole host of things, finding stuff with cartilage in it and, or just cooking the bones long enough that you can just gnaw some of the articular parts off. Yeah.

Nicki: It's good for working your facial muscles as well.

Robb: It's not that challenging. Just cook it well.

Nicki: No, I'm saying it's good because... Was this in the Breath book by James Nestor?

Robb: Oh yeah. The chewing and...

Nicki: Yeah. Something about... or maybe I read it somewhere else, but basically the more of a workout, for lack of a better word, you can say, that you can give to your jaw, by chewing on hard chewy things that require lots of chewing, it actually makes you look better as you age because you maintain that muscular structure under your skin. So instead of your skin just sagging, it actually has muscle to rest on. Sorry. That was definitely a tangent. Anyway, chewing is good for your jaw and your dentition, and it's also an anti-aging strategy.

Robb: Okay. I like it.

Nicki: There we go. That's my final position. All right. I think that's a wrap for this week. Let's see here, folks. Don't forget to join us inside the Healthy Rebellion. Also, check out our

show sponsor element, remember you just have a little bit time left till the end of this month to get your free electrolyte sample pack just for the cost of shipping. You can do that at drinklmnt.com/robb, that's drink-L-M-N-T.com/R-O-B-B. And yeah, got to join the Healthy Rebellion by January 25th at midnight, if you want to participate in this winter 2021, 30 day rebel reset.

Robb: Cool.

Nicki: Right folks. Hope you all are doing well. Have a wonderful weekend, and we will see you next week.

Robb: Bye everybody. Take care.