

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 1 million people liberate themselves from the sick care system. You're listening to the Healthy Rebellion Radio.

Nicki: 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.

Nicki: Warning when Robb gets passionate, he's been known to use the occasional expletive. If foul language is not your thing, if it gets your britches in a bunch, well, there's always Disney+. Good morning.

Robb: You're looking lovely today.

Nicki: Thank you.

Robb: I mean you look lovely every day but today just look glowing.

Nicki: Maybe because the sun is shining right through the window onto my face.

Robb: I'm trying not to do... What kind of-

Nicki: You're being so kind for the wee hours of-

Robb: Maybe I'm trying to get lucky later today or something. But was it when I didn't drop the blinds and like we're basically having our corneas scorched out?

Nicki: Yeah. And then I wanted to drop them mid recording and that I would have involved pausing and getting up and dropping them.

Robb: Ain't nobody got time for that.

Nicki: Robb is a... He likes to do things one and done. He's not a do over kind of a guy.

Robb: Some of my proteges got into the podcasting gig early. And when I discovered that they were spending three to five hours to get a one hour podcast done because they kept do over, do over, do over. I think that was pretty damn silly.

Nicki: You were on one of those shows, right? And you had to do it over.

Robb: Yes. It was something else. It's like folks just have a conversation and spit it out. Sometimes it's on point and sometimes it's not.

Nicki: Yeah, let's see here. What do we got? What do we have to share with folks?

Robb: We're wrapping up week three of the summer strength program.

Nicki: That's right.

Robb: With Rebel-

Nicki: With Rebel Strong, with Basis Health and Performance in Chico, California and people are loving it, we're loving it.

Robb: That's going awesome. Yeah.

Nicki: It's nuts. That's pretty fun. What else is in the news? Excuse me. I've got my morning voice.

Robb: Your Debra Winger smoker voice going on. Got to switch you over to filter it at some point.

Nicki: I know.

Robb: Of course, I say that. Now, I'm choking.

Nicki: Okay, double sip of coffee. Now, we're ready.

Robb: Yeah. So Sacred Cow did not make the New York Times.

Nicki: He did not sadly. But there are some really heavy hitting books on that list. I mean, the Mary Trump book I think sold 300,000 copies in its first week.

Robb: In its first week. And just for a frame of reference. 99% of books never sell 20,000 copies in their life cycle.

Nicki: In their life. Yeah.

Robb: Yeah. We did pretty well, all things considered but just to remind folks, Amazon and virtually all of the main-

Nicki: Oh, that's an announcement because this show is coming out Friday, which is July 31st. It looks like Amazon is saying it'll have books in stock August 3rd, and be shipping.

Robb: Cool.

Nicki: That whole snafu should be-

Robb: Dealt with.

Nicki: Nearly remedied.

Robb: But the long and short of that is that the day prior to actual launch week, everybody was pretty much sold out already.

Nicki: Yeah, so we had a bunch of momentum going into launch because there were no books in stock where people could buy them. It fell completely flat, which is a big disappointment.

Robb: Really kind of a bummer. Yeah.

Nicki: I mean, we weren't going to be selling 300,000 copies like the Trump book.

Robb: Typically, that is-

Nicki: But getting on the list is usually... It's a doable thing with the reach that Robb and Diana have, so...

Robb: Well, and we had a lot of people.

Nicki: And a lot of supporters. Yeah.

Robb: Really rallied around this. We will be getting a pretty frisky media ping here in a month, month and a half. And so let people know more about that.

Nicki: When we get a little closer.

Robb: When we get a little bit closer. So maybe we can do a second rally.

Nicki: Rally, maybe will be some-

Robb: Can't squeak on there. And again, this book is in the hardback non-fiction list. Had we been in the diet book category, we would have easily made it in there.

Nicki: Yeah. We're in a harder category.

Robb: We're in a very, very challenging category. And it looks like had the launch gone the way that previous launches have gone, we would have probably made it. We would not have been number one but we would have made it in there, which is good for a lot of reasons.

Nicki: I think c'est la vie is what they say.

Robb: Who's they?

Nicki: The French people.

Robb: I think you're culturally appropriating that.

Nicki: All right, let's move on to our news topic du jour. That's also French.

Robb: You're a horrible human being, Nicki Violetti. So I have a link here to a Twitter post from the United Nations and it says the meat industry is responsible for more greenhouse gas emissions than the world's biggest oil companies. Meat production contributes to the depletion of water resources and drives deforestation. How you can hashtag act now to protect our planet?

Nicki: And then the graphic says, act now eat, less meat. Every climate action counts log yours today. So they're wanting you to login and start tracking how you're eating less meat.

Robb: And do your virtue signaling via social media or whatever. So the data the paper that was driving this originally is this FAO report, which we completely unpack in Sacred Cow. But I'll just hit a couple of high points on it. I think we were talking about this previous show or maybe this is just a spinning out in the old person, get off my lawn kind of way. What is happening is people are just stating lies emphatically with absolute conviction. And you just keep doing that.

Robb: And then eventually, people are like, "Oh, well, this must be true. It's the United Nations. Clearly, they know what they're talking about." But the first problem with this paper or with this statement, so the meat industry produces more greenhouse gas emissions in the world's biggest oil companies. Basically, what they did is they looked at a complete lifecycle analysis of animal husbandry and then when they considered transportation, they looked only at tailpipe emissions exclusively and they didn't consider all the infrastructure that goes into making the cars.

Robb: It was effectively an apples and oranges comparison and the folks that did this paper were roundly criticized for it. And they actually, did some retractionary language around. "Yeah, we probably should have done a more apples to apples comparison on this thing." That's kind of piece one. Piece two, is that we must look at biogenic greenhouse gas emissions in a different way than we do from basically transportation. From just pulling fossil fuels out of the ground and putting them into the atmosphere.

Robb: We talk about the methane cycle, the carbon cycle, writ large, and the fact that if we start demonizing biogenic sources, then we need to start demonizing shellfish and termites.

Nicki: Mussels and caribou or reindeer.

Robb: And caribou and reindeer. And it just heads into insanity. Again, we've talked about this before, I talked about it a lot on the podcast that we've been doing to kind of promote Sacred Cow. So we really have to separate those things out and there is in the background, the reality that properly raised meat may actually be a tool for mitigating greenhouse gas emissions, writ large.

Robb: So that's another piece and they mentioned that it depletes water resources. This is virtually an outright lie. I guess the first one is too but what they're doing here... Again,

sorry, we've talked about this before but it's worth diving into a little bit more here. When they consider the water resources that are in play here, they're counting the rain that falls on grassland, which in conventionally raised meat is around 94% of the water used in that process.

Robb: In pastured meat, it's 96 or 98% of the water used in that process but it's being counted as if somebody is stealing the water.

Nicki: Took a hose and-

Robb: From somewhere else.

Nicki: From an aquifer or something.

Robb: Yeah. And so we've got three different categories of water from this particular paper. Green, blue, and grey water. The green water is water that falls on the earth as rain or precipitation.

Nicki: And will do so whether cattle are there or not.

Robb: And actually, you want the cattle there in inappropriate fashion because then that fosters healthy grasslands, which actually, retention of water.

Nicki: And that's where it'll actually go into the soil.

Robb: Which we detail in the Sacred Cow film, particularly, looking at like the Chihuahuan Desert and just shocking improvement in... Well, it's being converted back into a grassland not a desert as a baseline. There are a few places in which groundwater, other more limited water resources are used for animal product production. But when you compare that to things like almonds, it's a joke.

Robb: It's a rounding error in what is used, what is pumped from below ground. So if we're really going to get in and do those types of comparisons like a remarkable amount of the kind of vegan friendly plant material looks really bad from a water resource standpoint. And then the deforestation piece is absolute bollocks. I think we mentioned this again. Say like the Brazilian rainforest is cleared, it is then grazed after the bulk clearing occurs, and then soybeans are planted.

Robb: This area is not cleared and then perpetually used for animal husbandry. The animal husbandry ironically, is used as a means of clearing it for crop propagation. It is not giving a fair assessment of what's really going on. If you stop the soybean expansion, then people won't clear the forest to start off with because it would be non-viable for using it specifically for animals. It's not a good economic trade off.

Robb: It's only favorable in that direction when the animal husbandry is being used as a route to getting the soybeans in there. And again, this came from the United Nations and they beat all kinds of interesting drums and the case that I'm making is that this globalization

element is the biggest problem that we face. And there are some people that are very cranky about this and push back and say that there are other issues that should take center stage.

Robb: I'm willing to entertain that but you got to make a reasoned, logical, fact-filled case for me to change my mind on this. And the point that I'm trying to make is if animal products are vilified uniformly, if developing countries are bullied into abandoning the animal husbandry that they have-

Nicki: The traditional ways of feeding themselves.

Robb: The traditional food systems and whatnot and are forced to basically become dependent on the raw crop food system. If we get even further consolidation in the production of our food, then minorities and women, nobody is entering into this game. Nobody will become a new rancher or a new farmer because it will be completely inaccessible to people.

Robb: So this is the reason why I am... And like Diana Rodgers has been posting some great material on the fact that like African-Americans disproportionately get turned down on farm loans and things like that. That is absolute bullshit. And we absolutely need to go after that stuff, we need parody on these things. But the case that I'm making is that if animal husbandry goes away, then none of this matters.

Nicki: Which is the agenda.

Robb: Which is the agenda.

Nicki: Of people like United Nations.

Robb: It is the stated agenda. So again, and there are a few people out there making rumblings that it's a racist position to suggest that globalization is the most dangerous threat. Again, I'm open to entertaining that as a possibility but you got to make a convincing case to me because my perspective on this is that this is root cause problem. This is the thing that we must address head on.

Robb: And also, this is the thing that I am currently most passionate about. And I actually feel like I've got some chops to be able to address it. If other people want to tackle other problems. That's great. We've got all kinds of fucking problems. If we focus on only one thing, then we can't address all these issues. So different people have different aptitudes and strengths and passions, and maybe people should do what they do and then maybe I should do what I do and we can all move towards a common good. But that is not the goddamn sentiment these days.

Robb: It's ironic that we really expected a huge amount of pushback and blowback from the vegan scene and it's ironic the areas that we are getting some pretty hateful activity from and fortunately or unfortunately probably-

Nicki: This is not a Salty Talk.

Robb: -update you, guys, on that more later.

Nicki: We're not going to dig into that right now.

Robb: Yeah.

Nicki: Okay, let's jump into our iTunes review. T-shirt winner for this week comes from Niyahé Thinking cap time. Robb and Nicki a massive amount of information in both the Healthy Rebellion Radio light and "salty". They do the research and heavy lifting so I don't have to, which is good since I'm pretty lazy. Robb's perspective is always interesting even when I'm not in full agreement, he is not rigid in his views.

Nicki: Example, he is able to publicly revisit long held beliefs and course correct but he is always passionate about health and about trying to bring as much clear unbiased information as possible to his listeners. His books are great, the information is great, the Healthy Rebellion forum is great, all the podcasts are worth a listen, subscribe, people. It's an awesome review.

Robb: Indeed.

Nicki: So Niyahé, thank you for your review. Send us an email to hello@robbwolf.com. Include your T-shirt size and your best mailing address and we will send you a Healthy Rebellion Radio T-shirt. And this episode of the Healthy Rebellion Radio is sponsored by White Oak Pastures. White Oak Pastures is a six generation, 154-year-old farm in Bluffton, Georgia. They pasture raise 10 species of livestock and practice regenerative agriculture that improves the land.

Nicki: Their cattle and sheep are grass fed, their pork and poultry are pasture raised and given non-GMO feed. White Oak Pastures' meats are raised, slaughtered and butchered on the farm. In fact, they operate to onfarm USDA inspected abattoirs to process and butcher their meats and their nose to tail production uses trim fat, bones, hide etc to make dog treats leather products and tylo goods.

Nicki: In fact, we need them especially in Texas some of their leather coasters because it's humid here, folks.

Robb: Indeed it is.

Nicki: Yeah. White Oak Pastures is doing it right. And in fact, their beef specifically has been shown by a third party lifecycle assessment to be carbon negative. So directly proves this point of what the United Nations-

Robb: Which is why we cannot vilify animal product production because it may be literally the singular tool that we have to mitigate climate change.

Nicki: Yeah. So folks, check them out. They do ship nationwide. Go to whiteoakpastures.com/robbwolf , enter code rebel 10 to get 10% off your product total. This is for first time customers and that goes up to a max of \$100 discount. Again, that's whiteoakpastures.com/robbwolf and the code is rebel 10. Are you ready for today questions?

Robb: Let's do this thing.

Nicki: Let's do this thing. Okay, we've got a question from Scott about proper mold and mycotoxin testing. Hey, Robb and Nicki, I've been struggling with mycotoxins in lime. I read Toxic by Dr. Nathan last October when my doctor diagnosed. I'm wondering, can you recommend a company that can test for ERMI and do the plate testing? I live in a one bedroom apartment, I had testing done in October but was not as informed at that time and it was a company that did the basic air quality, although even that did have some positives as well as my first GPL urine test and most recent one this month. I live in Oak Park, Illinois, which is a suburb of Chicago. Thank you in advance for your time and information, Scott.

Robb: So Scott, probably, the main thing that you would have at your disposal, which is duck duck going this or googling it, or what have you.

Nicki: Quanting it.

Robb: Quanting it. And there's a there's just a ton of different labs out there, a bunch of folks online that will mail things in if you want somebody to come into your home and potentially explore remediation options. That's a whole other layer of buy in. And so I can't really give like a specific vetting to your location but there's a lot of options which may be part of the reason why Scott is kind of jammed up on this.

Robb: And I'm honestly not a mold mycotoxin expert, there are some folks out there that really like this is the thing that they do. So I would really encourage him to maybe try to track down like a Facebook related group or something along that line.

Nicki: Has Cresar written about it at all?

Robb: Cresar has written about it a ton.

Nicki: I know they had an issue in their previous home.

Robb: Yeah. Yeah. So Cresar is a better resource than I am on that, honestly. And there are great testing options, but again, it depends on are you bringing somebody in? Oftentimes that can be pretty expensive but then when you consider the costs of not addressing this stuff properly, then that can clearly be a big deal. I wish I had a better answer than that. But it's a non-trivial thing to get in and vet all that stuff out.

Nicki: Okay. We have a question from Eric on fasted Brazilian Jiu Jitsu. Hi, Robb and Nicki? First, thanks for all that both of you do. I'm a listener since Episode One of the Paleo

Solution podcast and continue to refer my personal training clients to all of your content, new and old. Okay. Context first, I've been a time restricted eater for about a year and a half and have had great results. Monday through Saturday I run an 18:6 protocol and Sundays are 16:8.

Nicki: Whether it's 6 AM towards the end of the time restricted eating window, I feel good and perform well when I have a strength or sprint workout. Next week, I start NoGi, BJJ from 11:30 to 1 PM on Tuesdays and Thursdays. I typically ends my time restricted eating around 12:30 or so but I'm wondering how BJJ workouts will play out? Should I supplement with quality sea salt and or other electrolytes and save little or no impact on most types of fasting per Dr. Rhonda Patrick?

Nicki: Of course, I'm going to give it a whirl and see how it goes but just curious in case I end up needing something. Again, thanks and keep up the great work.

Robb: As always, it kind of depends on this. I think doing some electrolyte pre-training is really smart. Some people do great with fasted training and the one thing, the case that I would make for Jiu Jitsu is you really generally don't want to train your engine in Jiu Jitsu, you don't want to be high motor. You want to figure out how to be as efficient as possible. We've really been working on breathing only like going at a pace that we can only breathe through our nose like pulling from the James Nestor book.

Robb: And also we just re-watched the Ryron Gracie, Andre Galvao match and like Ryron would look like he was barely awake, he was so relaxed and only breathing through his nose. And that really has some great benefit for being able to hang in there over the course of a long training session and you will focus on technique over strength and power over attributes and I think that that is a huge win of going long-term on this.

Robb: But at the end of the day, I notice for myself, we tend to train around that noon hour. And I like having some little something. We are doing kind of time restricted eating, although in the summer now, it's gone out the window a little bit. We're eating later than what we will in the winter, typically but I just notice having a little snack, I just feel a little bit better. I'm a little more grounded, I have a little more focus, and I'm coaching some of the classes and so I feel like I should actually be like on point.

Robb: And it's interesting. I talked to both Tyler and Luis about this. I'm like, "Hey, do you guys ever get a little hypoglycemic, feeling a little low blood sugar?" Which seems ironic within the context of ketosis. Some people will say, "Well, eat more fat." Or what have you but once people get reasonably lean, it is not unreasonable to have a little snack here and there to fuel activity. I don't always do it but I oftentimes do it. So this is something thing for Eric that I think you would just tinker with.

Robb: But I definitely would tackle the electrolytes pre-training for sure. And also do some Gi. Don't just do NoGi. It's great. NoGi is awesome. Gi is awesome. But the thing about the NoGi is that you will be able to get away with things that you can't get away within a Gi.

Nicki: Because the Gis have more friction?

Robb: Gis have an enormous amount of friction. If you figure out how to really dial your escapes in wearing a Gi, then when you go NoGi, it's going to be like you're Superman. And that's part of the reason why a lot of people like doing NoGi because you get kind of slippery and even if you're wearing sprats and rash guards then you can kind of flail around and get out of things relatively easily and then if you ever do put on... The thing is if you learn to do things in the Gi then you will absolutely be able to do them NoGi. If you learn them NoGi there is-

Nicki: Especially, if you learn them in a Gi but you make your game not very grip dependent.

Robb: Not grip dependent. Yeah, got it. It's really the friction deal. And the one caveat that I'll throw in there with that is I do notice that my defenses when I do NoGi, I need to step things up a little bit because people do move faster, they're able to get in like darts, chokes and things like that a little more effectively. And so I do need to put a little more sense of urgency into what I'm doing.

Robb: But the NoGi game is just kind of inherently more scambly and people that are less fired up about the technicalities of Jiu Jitsu and more fired up about the physicality of Jiu Jitsu tend to migrate towards the NoGi side of that.

Nicki: So do both.

Robb: Do both. Do both. Do naked Jiu Jitsu too.

Nicki: All right, our third question is from Dr. Mandell on statins versus PCSK9 inhibitors to treat high LDLs with people who have the APOE three and e4 genotype. Dr. Mandell says, "Hey, Robb and Nicki, I shot this question off to the Peter Attia podcast also because I'd be genuinely intrigued how someone with your biochemistry background would approach this problem. I know you can't give medical advice but just wondering what ideas you'd have about treating someone like myself with an elevated LDL particle count, who has an APOE three/e4 genotype. The LDL particle count did improve with a three times a week dosing of Lipitor at 10 milligrams. However, since statins work by diminishing the output of total cholesterol by inhibiting HMG-coareductase with long term use of a statin eventually be detrimental to someone who is more prone to Alzheimer's dementia with an APOE three/e4 genotype. Would a PCSK9 inhibitor be a better choice, since it works by removing LDL particles?"

Nicki: Additionally, total cholesterol triglyceride HDL levels and inflammatory markers are excellent and are controlled with a targeted ketoish diet of less than 30 grams of carbs, six days a week. I've been doing that for eight years. I'm so grateful for all you've done. I stalled at 40 pounds lost but because of your codain insistent along with my physicians, I've lost an additional 49 pounds over the last eight years. Your books and wonderful podcasts have helped me immeasurably and helped me help others in their pursuit of better health. Keep up the great work."

Robb: That's awesome. And Dr. Mandell, when I first became aware of the PCSK9 inhibitors, I was kind of in the same camp where this looked instead of suppressing production,

which had has some potentially really nasty knock on problems, suppression of CoQ10 production, lots of muscle issues, dementia, increased diabetes complications. The notion that you could clear the lipoproteins in... What struck me it did seem like a more natural fashion like instead of just suppressing production.

Robb: So it was interesting and I have a couple of links in here how to PCSK9 inhibitors stack up to statins or for low density lipoprotein cholesterol control and they work really well. You get pretty remarkable decreases in lipoproteins and total cholesterol levels. And then I put in another paper, reduced all cause mortality with PCSK9 inhibitors in patients with advanced coronary atherosclerosis.

Robb: What's interesting is virtually all of the studies look at this from combination therapy so the Odyssey trial, I believe. And Peter Attia is going to be way better at this because he really goes pretty deep on the lipidology but the Odyssey trials... I haven't really seen much where they just look at the PCSK9 inhibitors in isolation. Usually, they're doing combination therapy. And it appears that the combination therapy reduces all cause mortality better than just the statin by itself.

Robb: I didn't dig deep enough into the papers to... There was a 26% reduction. I don't know if that is absolute or relative risk, if it's that thing of the risk went from 5% to 6%, then it's kind of like, "Give me a break." But if it's a legitimate absolute risk reduction of 26%. But my sense in, recalling what Malcolm Kendrick has said around this, is that's not really the case. And what's ironic about this is I'm not fully in the lipid hypothesis denialist camp but I'm maybe one foot in one, one foot in the other.

Robb: They're getting 45% reductions. 50% reductions. If the person who had an LDL cholesterol of 200 it drops it to 100. And so I mean, a jaw dropping change but then you still have to sort and fiddle to see benefit from this stuff. If there is benefit there, it's not a 50% reduction, which is really intriguing to me. And, man, some of the things that are interesting with statin therapy, they don't even really have specific. Like used to they treated to a target number goal.

Robb: They don't really do that anymore because it didn't really matter and the side effects of trying to drive it to a particular number were gnarly. The benefits of statin seem to go way beyond just lipid lowering. It enhances nitric oxide release. It's an antioxidant, it seems to modify the vascular endothelial. So one could make the case that the bulk of the benefit may have almost nothing to do with the specific lipid lowering.

Robb: We're going to do some more work with Dr. William Cranwell, who is a lipidologist. And he's a pretty good fan of statins in the appropriate place. He's a big fan of appropriate diet and lifestyle, he's a fan of low carb and paleo. Again, in the appropriate place but I'm still in that cagey spot where it just doesn't add up. People will make the claim that this is a gradient-driven process that if you get an ABC stepwise increase in lipid levels, lipoprotein levels, then you're going to see a commensurate increase in atherosclerotic plaque progression.

Robb: There's some information that supports that. But then the interesting thing is the flip side when we use these PCSK9 inhibitors and things like niacin intervention to knock the lipoproteins down. We don't get a one to one risk mitigation, which is really perplexing to me. And so, I don't know if that really answers the question all that effectively. There are non-trivial side effects with the PCSK9 inhibitors, there's almost a 10% rate of anaphylactic like reactions because this is a monoclonal antibody that is injected.

Robb: And so there's a lot of injection site reactions and some problems like that. Time may vindicate this stuff and make it play out as being a really valuable tool. Almost certainly, it's going to be a valuable tool in certain situations but it's going to take somebody smarter than me to know precisely what those situations are. And again, it's just perplexing that if we're really going to wrap our arms around this idea that cardiovascular disease is purely a gradient-driven process of lipoprotein numbers, then why does not everybody with elevated lipoproteins develop cardiovascular disease?

Robb: Although, some variants of familial hypercholesterolemia, they really have a rough time, they develop a significant cardiovascular disease early in life. Not all of them do. And so what are those exceptions? What's going on there? Generally, if we shoot someone with a gun in the head it's very consistent what the results are but the results are not consistent the same way. There's a lot more stuff going on here.

Robb: So I don't know that this answer things that well. I will keep my eyes open and see when Attia does his q&a, if this one pops up because this is a good... Is a fantastic question and definitely in his wheelhouse of looking at this longevity perspective.

Nicki: Okay. It's time for the Healthy Rebellion Radio Trivia. And I'm particularly excited about this one. Our episode sponsor White Oak Pastures is giving away the best prize yet for trivia. I think. They're giving away their beef sample kit, which includes two boneless ribeyes, two filets, three pounds of ground beef, three snack sticks spicy herb and original. This is going to one lucky winner selected at random who answers the following question correctly.

Nicki: So Robb, we have three new top secret element flavors coming out in just a couple of weeks. And we're not going to spill the beans on all of them right now. But I thought we could just tease out one. So of the three, which one are you most excited about?

Robb: Cacau Console.

Nicki: He can say in Spanish.

Robb: Chocolate salt.

Nicki: Yep. Chocolate salt. Okay.

Robb: I am very excited about that. Because when we did the flavor testing, putting that in coffee was amazing. It was good.

Nicki: It's good in regular water too.

Robb: But yeah, so it's hot right now but when it's a little chillier and you don't necessarily want to go something up cold, it's pretty legit to have that and put it in like some coffee or tea.

Nicki: Okay, folks, chocolate salt is the answer to this week's trivia. To play go to robbwolf.com/trivia, enter your answer and we will randomly select one person with the correct answer to win the White Oak Pastures' beef sample kit.

Robb: Can I participate in that?

Nicki: You cannot.

Robb: Dammit

Nicki: You are... What's the term they use in these types of things?

Robb: Yeah, family and dependents.

Nicki: Yeah, you're exempt. The cut off to answer this week's trivia and be eligible to win is Thursday, August 6th at midnight. Winners will be notified via email or the winner will be notified via email and we'll also announce it on Instagram as well. This is open to residents of the US only. Okay, our fourth question this week is from Wit, he wants to know what the best conventional meat cut would be.

Nicki: Wit says, "Higher quality meat, example, pastured grass fed and finished is the ideal but life is not ideal. You mentioned before on the podcast that the differences between conventional and high quality is narrower from a pure nutritional perspective than many in the Paleo sphere espouse. If you are opting for conventional meat, is it better to go for leaner cuts to minimize accumulation of contaminants that might appear in the fat or fat of fattier cuts? I've heard this noted in a few sources but it isn't cited. Is that idea less evidence based and more opinion as evidence?"

Robb: It's a really good question. There isn't a massive amount of information on the bioaccumulation of things like Atrazine. We've talked about the mold contamination and aflatoxin. They are real issues but to the degree that that's a factor, there's not a ton of information on that. I know, Dr. J, we had him on the podcast, we've talked to some other folks around like estrogen metabolism issues and say like the bioaccumulation of Atrazine.

Robb: Most of those things, you can make the case that they are more lipophilic and so they're going to stick to fat more. So that would make a case for these leaner cuts of meat probably being better. The 90 or 95% ground beef might be a very, very good option in a situation like that. The leaner roast could be a really good option. So the interesting thing also with that is if one is not specifically low carb like keto, then you get a little bit more bang for your buck going from leaner cuts because you get more protein.

Robb: And along with the protein, we get more nutrition above and beyond just the marbling. So there's a case to be made for going on the leaner side of that anyway.

Nicki: Okay. Our next question is from Jacqueline on keto and breastfeeding. "Hey, Robb and Nicki? Sorry if you've covered this before and I missed it. I have been a big ketoer for several years now, on and off." Was that your shoulder popping?

Robb: It was my shoulder that popped.

Nicki: That was loud. "I was very keto when I was pregnant with my daughter four years ago and then fell off after she was born. After having another baby this last November, I decided I wanted to go keto. Between interrupted sleep and carrying the extra baby weight. I wanted a natural energy boost. Fat loss isn't my target. And my question for you is how do you find a good carb range while breastfeeding? I have a keto mojo and my numbers tend to skyrocket. I've noticed I feel the best around 1.5 to 2.3 millimolers.

Nicki: Coincidence maybe but I can usually call it before testing. I just feel good. But this morning I woke up back in the four plus range, groggy and a bit of a headache, which is all the norm. My glucose is steady around 75 to 80. I tried eating more, eating less, cutting dairy, less fat, etc. The only way to lower my ketone level is to eat more carbs. But we're talking like 50 grams net a day and I worried that is more low carb and could cause damage to my body seeing as I'm in high ketosis. I'd imagine breastfeeding contributes to the high numbers.

Nicki: I ditched intermittent fasting for now and I'm active with three kids all day, and I CrossFit about 30 minutes a day. I guess I'm wondering if I should just accept the high ketone levels, if it's safe to add more carbs to lower that number, or if there's something I'm missing or doing wrong? I keto with a group of friends and they're all comfortable at point five to 1.5. So we can't figure out why my readings are so high. Sorry if this was long. I appreciate any advice you may have."

Robb: So is the main issue here... This is where-

Nicki: I think she's concerned about being in the four range because she gets groggy.

Robb: Because she doesn't feel well.

Nicki: And a little bit of a headache.

Robb: Yeah.

Nicki: Yeah.

Robb: More and more as all this stuff progresses like just going by what makes you feel best, and this is one of the perplexing things about some folks that have very high lipoprotein levels, is that they oftentimes report, "This the best that I've ever felt." And then we

talked to our lipidologist friends and like, "Well, they're going to die from a heart attack." And it's like, "How does that work?"

Robb: Any other thing that they do, they feel less well, which just seems perplexing. But at 50 gram, this is where I think some of the Uber, ketoness, low carbness gets a little wacky. 50 grams of carbs a day is not a big deal. If you just generally-

Nicki: And she's very active. I mean, if she's Cross Fitting every day.

Robb: Yes, I glazed over that.

Nicki: And you're chasing three kids.

Robb: Yeah, that is not a big deal.

Nicki: Yeah.

Robb: The big concern around breastfeeding and all this stuff is that you're going to calorie restrict too much. And so adding in 50 grams or more of carbs a day is no big deal. You don't need to worry about having both high ketone levels and high carb levels because as the carbs go up, then it's going to ratchet the ketones down. So there shouldn't really be much of an issue there.

Robb: You could target the carbs more around the PERI workout period, either pre or post. I would definitely make sure that you're on point with electrolytes. We have a study that's going to happen at Vanderbilt looking at breast milk production and element consumption. And it's pretty promising. Just making sure that you have adequate sodium in particular is a huge deal.

Nicki: But I think it's worth saying, Robb, like you have said this several times and a lot of people are consistently in ketosis. Active people who eat 100 to 150 grams of carbs a day.

Robb: Yeah.

Nicki: So there's not like this magical number that you have to stay, the carb number that you have to stay in to be in ketosis.

Robb: And from one person to the next, the one person may have very high ketone levels, another person may have lower. The recent podcast I did with Trey Suntrup from Biosense, it's tough because there are certain situations in which we probably get a therapeutic effect from higher ketone levels. But there's also a reality that when our ketones trend down, it shows that we're actually in a favorable redox state.

Robb: Our physiology is working the way that we would like it. And then people will freak out and like, "Oh, my ketones are too high." There's not something that you can go and hack on this. Like if you tend to run higher levels of ketones, it probably means that your

body is not direct accessing lipids as a primary fuel source, you're still converting a significant amount of fat into beta hydroxy butyrate. And it's burning in between a carbohydrate in the fat.

Robb: And again, this is where it's almost TMI in a way. Just eat however you feel good and you have solid performance, your body composition is on point and that's really the most important stuff. And this is, to some degree, where over monitoring can be problematic. Really get in your skin, feel your best. Fuel such that you feel your best and you're pretty good to go.

Nicki: Yeah. Because especially, since fat loss is not her target. She wants to obviously sleep as well as she can. She's active, she's got three kids so I would up your carbs a little bit, Jacqueline. And then see how you feel and eat to where you are feeling in that really good spot.

Robb: Yeah. And I get it. I think also part of what she's alluding to is probably being in some amount of ketosis seems to give her maybe a little bit of an energy bump. Like she probably gets a little bit of a cognitive benefit from that.

Nicki: She says she feels the best at 1.5 to 2.3.

Robb: Yeah.

Nicki: Yeah. Let us know how you feel.

Robb: And just like blood glucose levels, there's too low and too high of ketone levels to have too. So yeah, yeah.

Nicki: Okay. That was our fifth and final question for this week. Thanks, everyone for joining us. Be sure to check out our show sponsor White Oak Pastures for all your pasture raised meats. You can check them out at whiteoakpastures.com. And again, you can use code rebel 10, if you're a first time customer, to get 10% off your total up to \$100 max discount. Any other news for this week?

Robb: Again, huge, huge thank you for all the support around Sacred Cow. I know a lot of folks just went above and beyond. It's a buzzkill that there were no books to sell. Kind of blows. But we've had really solid reviews of the book. If you have purchased the book and you read it, please write a review. That is the thing that will drive the success of the book long-term.

Robb: And as people are digging into it, some of the feedback that we're getting is people never realized that it was this complex of a topic, that these issues of environment, ethics and health were so tightly woven together. And what we're discovering is a lot of people who are coaches or practitioners or gym owners, they're realizing that they've been besieged with questions around this and they've had no good concise answer, which is the reason why we tackled it.

Robb: So again, thank you for the support and if you all can get in and write a review of the book and the podcast, that would be amazing. And we'll see you all soon.

Nicki: That's it. Yeah. Take care, everyone.

Robb: Bye, everybody.

Nicki: Bye.