

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.

Nicki: Please consult your licensed and credentialed functional medicine practitioner before embarking on any health dietary or fitness change. Warning! When Rob 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 is always Disney Plus. TGIF?

Robb: It's not Friday yet.

Nicki: Feels like Friday. It's Thursday.

Robb: I could use a Friday.

Nicki: It's Thursday. Feels like Friday. Yup.

Robb: Yes. Thursday but feels like Monday.

Nicki: You've had a big week. You've had a big week. Yeah, Sacred Cow is now officially released and in the wild. We had Diana here for a couple of days to kick off the launch. That was really fun.

Robb: That was super cool. Yeah. Great getting to hang out with her.

Nicki: Yup. Thank you, everybody for all of your support and we see some reviews coming in on Amazon and social shares and-

Robb: Reviews are huge, the whole thing's kind of a mess.

Nicki: We are a little flummoxed.

Robb: Yeah. We are a little flummoxed. Because of COVID most brick and mortar bookstores are closed, or marginally open. And when all these folks were in a position to make orders for the book, they were closed. So it's just been kind of a logistical nightmare. Amazon in the best of days, it's challenging to get this process right to get them to order enough of a particular item when you're doing a big release.

Robb: But during the age of COVID, that kind of got buggered, so technically Amazon is kind of sold out right now doesn't mean that your sales aren't going to count, but they're not really going to drop quite the way we would like within the context of the initial release week and everything. There are lots of other options out there. It's not quite as easy and gratifying because virtually all of us probably have like the swipe and buy deal-

Nicki: On Amazon, yeah.

Robb: ... which is just so freaking easy. Yeah.

Nicki: But if you haven't bought your book yet, and you want to purchase it this week for release week, which we would love if you are so inclined.

Robb: It would be incredible.

Nicki: You can get it from Pals, you can get it from Indie Bound, there's Bookshop.

Robb: Barnes and Noble online, yeah.

Nicki: Barnes and Noble online, there's a lot and if your local bookstore is open, you can go down there and buy it from them.

Robb: And please do provide a review. Be honest, if you like it, that's great, if you don't, let us know what you see as being the shortcomings in the book, but beyond this initial push, the reviews are really what drive the books later. And yeah, it's just critical for the long-term success of the book and just getting this message out there.

Nicki: Yup. So let's see what else hubs what other...

Robb: Exploding Kittens.

Nicki: Exploding Kittens. I saw Melissa Hartwig was playing Exploding Kittens with her son Urban. Oh shit, I hate it when I do that. Melissa Urban was playing Exploding Kittens with her son and-

Robb: Is this why you never took my name? So that when you leave me, you never have to rejigger that?

Nicki: Nobody will do slip ups like I just did. Anyway, it's super fun. I've been playing a lot of Exploding Kittens with the kids, while Rob and Diana have been doing podcasts galore and all kinds of promotion stuff.

Robb: And it's generally been good. Yesterday, Zoe got some sort of a run where she gets doubles and she's able to shut, Sagan down and she got like four of them in a row and Sagan, just like took her cards and threw them down.

Nicki: Does she take after you? That actually sounds like some people in my family too.

Robb: Sounds remarkably like me.

Nicki: Okay, well let's see here.

Robb: Trying to think of anything else but I mean we've just been head down on Sacred Cow release.

Nicki: Robb and Diana both have in conjunction but on several podcasts together and then individually as well. So we're going to publish blog posts with links to all of those episodes and share that around. So if you're interested in listening to those, we'll have those available next week.

Robb: And this is great stuff if you know someone who's concerned about meat eating for their health, for environmental reasons and whatnot, I really do feel like this is a phenomenal place to go. The film will be really handy in that regard too, because for somebody... like there's some folks that just don't read books and I mean, you're reading Sacred Cow right now yourself and it's a good read, but it's a lot of material too. So, there're the podcasters and stuff like that.

Nicki: And there is the audio book too on Audible. I don't know that, that's ready right now.

Robb: Not quite yet.

Nicki: I think that's coming out in a few weeks. So they'll be that and then the film.

Robb: Yup.

Nicki: Yup.

Robb: Okay.

Nicki: Awesome.

Robb: I don't think we can beat that Sacred Cow anymore.

Nicki: Alrighty. Let's see your news topic today, is-

Robb: Do you want to scroll that up a little bit, its interesting piece the title of it is... I can just change all my stuff around.

Nicki: I switched it over.

Robb: 'Overwhelmingly positive': Chile's food regulations are changing the country's eating habits, and it's from a website, FoodNavigator-LATAM Latinamerica.com. And it's not loading right now.

Nicki: Oh no, it's not loading?

Robb: So we'll just go from memory on this. But it's a really interesting piece where... We're seeing this, the challenges of the industrial food system and the failure of... What are you doing?

Nicki: I'm trying to close that out because I can hear it making some-

Robb: Spinning. Yeah, yeah.

Nicki: Yeah.

Robb: It's also because you have 600 tabs open and only using one tab, but that's a side deal. But-

Nicki: Basically, they're trying to create awareness on the part of the consumer about the products that they're buying. So they instituted this regulation, labeling change, where if for example, a box of cereal or chips or whatnot there these little black logos, which say in Spanish either, excessive sodium, excessive fat, too much sugar. If a product has multiple little black, I think their octagon shaped. I think there's five total that you could have. So a product with five octagons means that it's high in all the worst stuff. And then, if it only has one right on from the package, moms, dads, kids can see if a product is good for you, and I'm using quotes or not.

Robb: Yeah. And it was interesting, the article itself interviewed a number of moms and they were like hopping mad. There was an example of like a granola bar in it, it had five of the five problems.

Nicki: And she previously thought that was a healthy option. And she's been feeding it to her children and now that she sees that it's got five of these octagons she's a bit pissed.

Robb: Yeah.

Nicki: feels a little bit misled, but it's good, it's kind of increasing awareness for folks who don't want to read labels or who don't read labels.

Robb: Another piece to it, they had some labeling law changes that pertain to the Kellogg's Frosted Flakes, Tony the Tiger, I believe the Zucaritas-

Nicki: Zucaritas.

Robb: ... is the Spanish version, used to there was a picture of Tony the Tiger on it, now it's just a blue box and so they're decoupling.

Nicki: You can't like cartoonize the packages for children.

Robb: As a kid, I didn't even really like the cereal that much but all the cartoon stuff and it's nasty little shit you can get in-

Nicki: And the surprise toy inside yeah.

Robb: ... the toy. So they're changing that stuff and it's interesting because I've had reticence about labeling laws like this. We're teetering on the brink of a meat tax as an example,

like the European Union is really kind of kicking this around as it's in theory going to improve our health and it's going to mitigate climate change. And this is again why Sacred Cow is really important because people have no one stop chop-like, frame of context for this. But there is also kind of some interesting stuff out there like the libertarian notion around freedom is my freedom ends where your nose begins.

Robb: I can't punch you in the nose. Like if I'm doing something that injures you, then that's not cool. And there's only two countries in the world, I believe that allowed direct marketing of pharmaceuticals to the public. And I believe it's the US and New Zealand, oddly enough, and there's probably some significant problems with that. We also I know for sure, in the United States, we just have some of the most egregious food labeling practices, kind of predatory stuff. And so I'm always kind of nervous about this because it has the potential to kind of have some unintended consequences.

Robb: We try to record a podcast and then we ended up jettisoning it. We were discussing unintended consequences. And there's this great story of India, the country is developing, but it still has a lot of wild critters around and one of the wild critters that was ubiquitous is the Cobra. And clearly that's a problem they're highly venomous and pretty aggressive. So the government put out a bounty on cobra skins or heads or both, or something.

Nicki: Just to encourage the populace to kind of help-

Robb: To encourage the populace to help call these things. And that worked for a little while. And then people got savvy to this and they started raising cobras and cobras and cobras-

Nicki: Breeding them.

Robb: ... Breed even faster than rabbits. And so then the powers that be realized that they were kind of being had that people were just breeding these cobras and then bringing them in, to get the reward. Then the government shut down the program and then people were like fuck it. And they just dumped all the cobras, and then the cobra problem was even worse, it was literally like an order of magnitude worse. And I just love these stories of unintended consequences because people rush in with this idea that they have this singular solution to the world's problems.

Robb: And no thought about "Well, what questions have we not asked? What things are we not thinking about?" And so I just want to mention this thing, because it's interesting, we've had multiple reach outs from people, even at the governmental level within the developing world within Central America, South America that are interested in dramatically changing their food and health systems. They get it, they see the writing on the wall and the United States is in this really weird position.

Robb: We have the global reserve currency, and we can just kind of print money and this gets all out into crazy economics land, but we're able to do some things currently, that nobody else in the world can do. Nobody else in the world is going to be able to kind of paper over the problem of an exponentially increasing healthcare cost situation, they

must get out in front of it. And this is another example of where globalization is literally poisoning the people of the world. Again, I don't want to be in a position where anybody makes illegal the ability to do business.

Robb: But there do need to be some types of checks and balances. And I don't know what the exact right answer is in this story. One thing for sure, is encouraging food sovereignty, encouraging people to be as food independent as possible, would solve a lot of these problems instead of starting at the top down and trying to regulate us into a situation, if we just celebrated people and said, "Hey, the experts in the United States are poisoning you and your family why don't you try doing more of your traditional food, practices."

Robb: And that would address this at the base level, this would create economic infrastructure, it would create pride in the traditional cultural foods. And it's not to say that none of this westernized junk doesn't make its way in, but it's not going to be the... Currently it's a sign of affluence to be able to feed your family processed food in a box. We've had friends talk to us about that a good friend of ours from El Salvador, these places are gaining some wealth and affluence.

Robb: And when folks head down that direction and process food is the thing that they're able to kind of show off that they're able to feed their families. I'm seeing more stuff like this piece, and I think it's really valuable. And again, some of the greatest pushback that we've seen with this globalist... It's ironic in westernized cultures, Europe and the United States in particular, the kind of white, wealthy progressive vegan centric folks are all fired up about foisting the effluent of our industrial food system on everybody in the world.

Robb: And some people in the world are recognizing that that's going to be a horrible idea and they're beginning to push back against it. In this time where social justice issues and equality issues are so important this is a piece that really gets overlooked, is the impact of this globalized food system on developing nations and the people that are just disproportionately affected by these attempted changes in their local food systems.

Nicki: Okay, and we will include a link to that article in the show notes as always, and let's see, let's announce our tee shirt review winner for this week. It goes to Gaurds Girl No B-S and I appreciate that Robb and Nicki are a rebellion powerhouse, dispelling the myths of what we think or have been taught, healthy habits could or should look like. Thank you for all you're doing to get people's attention. Guards Girl, thank you so much for your review. Send us an email to hello@rebel.com include your t-shirt size and your mailing address and we will send you a Healthy Rebellion Radio t-shirt.

Robb: Maybe I'm reading too much Ayn Rand, but I keep seeing Gualt's Girl there. Okay.

Nicki: Let's see there's another book, what's the... Oh no never mind, never mind. I was thinking the World According to Garp, never mind. Sometimes it's better just to not say what pops into your head. Okay, this episode of the Healthy Rebellion Radio is sponsored by Paleoalley, they make the most powerful pure vitamin C supplement that you can get. Paleoalley Essential C Complex is one of the only immune boosting

products on the market made from whole food sources of vitamin C that your body can effectively absorb.

Nicki: Paleo Valley Essential C Complex contains three of the most potent sources of vitamin C on the planet. The unripe acerola cherry, the amla berry and the camu camu berry. And the acerola cherry alone is 120 times more potent than an orange. If you ate 120 oranges you would probably-

Robb: Would poop like a goose.

Nicki: You might have sores in your mouth and have a lot of-

Robb: You might have sores in places we don't want to talk about.

Nicki: It might be really bad. Anyway, we're huge fans of all Paleo Valley's products, their Essential C Complex is one of our faves, their meat sticks also are a huge, huge win in our family. You'll definitely want to check those out as well. Vitamin C is an extremely fragile nutrient and it can easily lose potency if it's not processed correctly. Paleo Valley has worked with the most responsible manufacturers they could find to gently break down each of these fruits and guarantee that no vitamin C was lost in the processing.

Nicki: In fact, they actually recruited a non-biased third party tester to confirm, it contains the exact amount that they put on the label. So go check them out, grab some Paleo Valley essential C complex by going to PaleoValley.com and if you use code, THRR10 that stands for The Healthy Rebellion Radio, THRR10 for 10% off your order.

Robb: Awesome.

Nicki: Hubs, shall we jump in?

Robb: Let's get after it.

Nicki: So the questions we have today-

Robb: Let's get after it.

Nicki: ... our first one is from Kristin on ferritin supplementation. She says, "Hi, Robb and Nikki, I loved the recent episode with Dr. Gabrielle Lyon." That was definitely a popular one.

Robb: That was a goodie. Yeah.

Nicki: "She was so smart, articulate and easy to understand. One particular thing that caught my ear was when you talked about ferritin and hair growth. I've noticed lately that I've been shedding quite a bit and would like to supplement a bit. If this isn't a good idea. Please tell me. Can you suggest a good ferritin supplement? I see a lot out there, but I want to ensure that I'm getting a quality product. Anything is helpful. You guys put out

great info and I absolutely love the salty talks. They're hilarious. And it's like you're in my head. Keep doing what you do."

Robb: Okay. That's good. Couple of things here, there was a good question here. Would there be a reason not to supplement? A postmenopausal woman possibly not. And then this begs the question, why don't we go get some blood work done and just kind of see where the baseline is, it's always nice to know those things. A comprehensive iron panel that will look at ferritin saturation would be, in my opinion, a really good idea. The ferritin supplement thing is really interesting. I wasn't aware that there were ferritin supplements.

Robb: And it's very odd when you poke around the interwebs, there are some products that contain... Usually when we think about iron supplementation it's some form of an iron salt, it's like a ferrous sulfate or ferrous gluconate or ferric oxide. The ferrous is more absorbable generally. The ferric is less absorbable and tends to give people wicked constipations. So go with the ous not the ic.

Nicki: Stay clear of that.

Robb: Yeah. Ic, icky, ate the ici acid. If you've had chemistry then you've probably heard some of that stuff. So there's that. If you do need to supplement or you want to experiment and see if that addresses some of the hair issues, that's a good way to go. But this ferritin piece is really interesting. There are products out there that contain the ferritin protein along with whatever iron that they have. And this super perplexing for me because, unless there's something I'm not understanding and this would be a great one for Chris Masterjohn. It's very difficult to get an intact protein through the gut, proteins get broken down.

Robb: Like, if it gets through, there's usually a problem and/or it's something like a very specific immune modulating, dairy protein or something like that and it's supposed to avoid digestion. So this is just really odd. I don't see the need for ferritin in the supplement. I looked and looked and looked and I just couldn't find anything really supporting this. But because people are concerned with low ferritin levels, it makes sense in first order logic, that well supplement with ferritin, it'll be good, but it doesn't work that way.

Robb: It's going to get broken down into amino acids, and I don't know that it's really doing you any additional favors above and beyond just simply consuming a good quality iron supplement and/or, when you consume red meat. And the individual's legitimately low in iron, having a little bit of vitamin C with it can dramatically enhance the absorption. And that could be just to the tune of eating more fruit with it or something like that. That will tend to improve the absorption. And also avoiding eating your iron rich products with dairy because the dairy can compete with that.

Robb: So it's a really interesting question and the ferritin piece. Again, if there's something I'm missing there, then hopefully somebody can set me straight on it, but it was kind of

perplexing. And I don't see the need to specifically go after a ferritin supplement. What we're trying to supplement is iron overall.

Nicki: Okay. Our next question is from Kim on elemental diets. "Hi Robb and Nikki. I have been suffering with digestive distress for a couple of decades now. I'm sure I destroyed my gut with birth control pills, migraine medicine, low fat, whole grain diet, et cetera. I've been eating a paleo diet for at least two and a half years and although I feel better in many ways, I still dread any meal because I react so badly. I've been working with an ND for about two years, we've tried lots of herbal antibiotics for SIBO.

Nicki: I've done many elimination diets, and I started seeing a functional medicine practitioner recently. She prescribed some pharmaceutical antibiotics for SIBO. I've spent hundreds on stool, breath and blood tests, not to mention all the expensive visits. An elemental diet was suggested as a next step, but I hear the shakes are expensive. Can you please talk about them a little bit to help me decide. I'm at my wits end. Reaction symptoms if it's helpful, distension, bloating, gas and abdominal pain.

Nicki: I only feel well and look normal in the morning after a bowel movement. Once I eat, it's misery for the rest of the day. Sorry to be such a downer, but it's depressing. Thank you. I love the podcast."

Robb: And I really feel for you because a lot of my digestive issues are akin to this, or historically have been akin to this. The basics on this elemental diet you're providing the body in theory the essential fatty acids, the essential amino acids, but you're not really providing any substrate that's going to make it much past the small intestine. It all gets absorbed very, very quickly and it kind of starves off in theory, the negative bacteria. Some people will also be concerned that we're starving off all bacteria.

Robb: Although the more and more I noodle on that, particularly as geeked out as people are on fasting, it's just doesn't make sense that we're just going to nuke our gut microbiome by not eating for a couple of days or not providing substrate for them for a couple of days. It really doesn't make sense. It does change things, but literally it seems like sneezing or checking the time changes your gut microbiome. So that seems like a tough one. Dr. Michael Ruscio has an elemental diet program, and I think that the supplements are pretty reasonably priced relative to others.

Robb: We don't have any financial ties to that. I just remember looking at his offerings relative to others. And I think that they're very, well-formulated, pretty reasonably priced. But the other thought is this seems like if there's an argument for a carnivore diet or carnivores-ish, this might be it.

Nicki: Something to try anyway.

Robb: Something to try, because in theory, you're probably eating some amount of meat and fish and all that stuff right now anyway. And so it wouldn't really be... Although I guess if you're doing elemental diet, you're not eating other foods. So their costs are kind-

Nicki: Sounds like it's just shakes, right?

Robb: Yeah. It's generally just shakes. They are kind of expensive, but then when you consider you're not actually eating other food, I don't know how expensive they are. I didn't really think about it that way, but it is interesting that that could be the case. This is the classic stuff that people who literally turned over every rock, the autoimmune paleo and everything, they still have problems. This is probably a good spot to go. And this was me in many regards. And I think the things that I've modified that have helped significantly, we live in a warmer sunnier environment.

Robb: Even though Reno is sunny, I just didn't get out in the sun the same amount. The east one was colder and windy.

Nicki: It was colder and really windy.

Robb: We will get periods of gray here, which this year during the gray, I got a tanning booth visit deal. It doesn't help as much as real sunlight. But I also think that getting in the water every day, like swimming helps and we've been able to do that more and more. So there's a couple of things there that have improved. And then also, I rarely eat nuts and seeds anymore, really rarely. And before that was just a staple. It was good in mono unsaturated fats. And this is actually not to divert too far out into the weeds. This is one of the conundrums I'm in.

Robb: I'm going to get my blood work redone, but I've been high in the LDL particle count, of it'll go up, it'll go down. But when I eat more saturated fats then my LDL particle count goes up. Okay, what do I do about that? Well, I can either just kind of pour olive oil on everything, which is kind of high in Omega-6s or I can eat nuts, but the nuts give me GI problems. And this is where you start getting into this thing where I'm like, "Okay, if I'm going to have a fucking heart attack, then at least I'll feel good up until the point I had it." I don't know.

Robb: But I changed a lot of stuff. I don't really do green salads anymore. Like we went out to dinner to celebrate the release of Sacred Cow, and I had a couple of tomatoes, a little bit of carrots. I didn't eat the lettuce because lettuce seems to just kind of tear me up. So it's interesting. I eat less vegetable matter now than I used to. I'm doing actually a little bit more fruit and I seem okay with that. I usually don't go above about 15 to 20 grams of carbs at a meal from a particular fruit source, but knock on wood, I've been okay with that.

Robb: Digestion's been good. Blood sugar regulation's been good. So Kim, those might be some things to play with. Maybe an elemental diet is the way to go. Ruscio stuff might be a good option in that regard. When you get right down to it, a carnivore diet really is effectively an elemental diet when we get right down to that. Above and beyond that, even before doing any of those, you might just really look at what you are eating and all the plants are suspect. And so you kind of pull that stuff out and see how you do, reintroduce.

Robb: And I wish I had a better answer than that, but a lot of people are kind of ending up in that spot, particularly with these GI related problems.

Nicki: And also, I don't know if you're eating eggs, but that seems to be a big one for a lot of people too. I mean, because she says any meal makes her react, after her morning meal feels terrible.

Robb: Right. But it would be interesting to try to find is there any... Like if you just had a steak, if you just had lamb, if you just had salmon, do you feel the same way to that?

Nicki: Right. Or are you having some sort of vegetable matter or some sort of-

Robb: Every single meal we had even for breakfast, I would have a big pile of kale and stuff like that. And then my guts would just be... It sounded like hamsters were running in there. The funny thing about this, back when we lived in Chico I was asked to give a talk for the hospital system and then there was a big freak out and it got shuffled around and finally I gave it. But initially, it was a cardiologist there who really liked our work and he wanted all of his cardiology patients to hear it. And then the hospital blocked it.

Robb: And so I was only presenting to doctors. But one of the doctors was running around saying, "Well, there's that guy that only recommends eating meat." And I was just all indignant and kind of trying to prove those people wrong. I ate that many more vegetables and it kind of fucked me up, the irony there. And so yeah, those would just be some things to tinker with. Again, Kim, if you play with this stuff, I would really like to hear back, this would be a great follow-up piece to be like, "I tried this, this and this, and this is what happened." I think it would be really valuable for folks and I'm definitely interested.

Nicki: Great. Let's see, we have a question on battling all types of fatigue during COVID for essential workers. This question is from Christine. "Hey Robb and Nikki. I've been listening to your podcast for a couple of years now after I discovered having issues with wheat and dairy. I was paleo for about five years and this last year I moved over to keto. I'm a merchant mariner, so I'm on ships for two to four months and currently with no end in sight due to the pandemic. Our sleep comes in about seven hour shifts, if we are not coming in and out of port.

Nicki: I'm currently located in the Middle East/India region, which means a 100 degree days with a 100% humidity. I do not have access to making my own food and the options here are decent some days, but lately not so much since our source of food is not great. I've been adding Himalayan salt to my water as much as possible and I've been attempting to get electrolytes out to my ship. I'm lucky and have only been gone from home since April, but many people out here have been gone since December with the possibility that we will be here until September.

Nicki: Any suggestions on battling physical and mental fatigue for myself and crew members. Thanks again, I love your podcast and what you're doing with The Healthy Rebellion."

Robb: Man, that's rough. I think you're on point trying to address the electrolyte piece. And the only thing I would say with that is people woefully underestimate the amount of electrolytes they need. And this is the classic stuff out of the American Council for Sports Medicine guidelines around electrolyte supplementation and hot humid environments and physical activity. And they start the conversation at seven to 10 grams of sodium per day, and a teaspoon is about two grams of sodium.

Robb: And the Himalayan salt, maybe even a little less, because it's got some other minerals and it tends to be big granular stuff and everything. So it could account for a lot of sodium and you do want to eat meat, fruits, vegetables, to the ability that you can, which will provide the potassium and magnesium. You can't live on sodium alone, but in general, if we get the sodium right, then everything else tends to go right. And I think that that would go a long way towards helping folks. The meditation, like a twice a day meditation practice. And I know that you all are probably on a really grinding schedule, but-

Nicki: Could definitely help with sleep.

Robb: ... it'll help with sleep and just it takes you out of that fight or flight mode. And just that little drop out of warp speed is incredible for making you feel better and kind of shaking off some of the fatigue. So I would really focus on being really on point with electrolytes and then trying to get some sort of meditation practice going. There's even meditations we've been recommending to folks. We ordered the book Breathe, and we're going to do a deep dive on that. I know breath work's been a topic for quite some time, but it seems to be gaining more and more traction.

Robb: So those are definitely areas that I would look out because you can do it virtually anywhere. You need no gear, you don't need an app tracker or anything. You just do it.

Nicki: Okay. It's time for The Healthy Rebellion Radio trivia this week. Our episode sponsor Paleo Valley is giving their immunity bundle, which includes Essential C Complex, Turmeric Complex and Grass Fed Beef Sticks, which are absolutely amazing, to three lucky winners selected at random who answer the following question correctly. And Robb, usually weekly in the Healthy Rebellion community we do a live chat and I believe it was last week actually. We somehow got on a tangent about early types of employment that different people had.

Nicki: And it was actually kind of surprising, there were, I think at least 10 people in that chat had done some version of working in an ice cream parlor or a frozen yogurt shop, including you.

Robb: Including me. I scooped many a scoop at Baskin Robbins in Redding California. Yes.

Nicki: Yeah. So, the trivia question was where did you scoop ice cream?

Robb: Oh where? So Baskin Robbins.

Nicki: Baskin Robbins. Yep. So that will be the response for this week's trivia.

Robb: Okay. And we are not supporting or endorsing Baskin Robbins.

Nicki: No, and actually it's kind of ironic because it's his nephew or son that wrote the whole diet for New America.

Robb: Oh yeah, yeah, John Robbin, yeah, yeah.

Nicki: The book that turned me in, back in my college days.

Robb: And I just have a great story from those days. Now, this was a long time ago, it was probably '80 carry the two. Yeah, it was a long time ago.

Nicki: In the '80S FOLKS.

Robb: In the late '80s. And I worked opening in this place a lot, particularly on the weekends. And we had a donut shop right next door, which ironically was owned by the same people that owned the ice cream shop and families would come in and they would be going to church or doing whatever they were doing. But inevitably kids would run to our door, crack it open and want to run in and get some ice cream. And the parents would say, "You kids, aren't having ice cream for breakfast. We're going next door and getting donuts."

Robb: And even at that time, I was not very nutritionally sophisticated, but I was like, "So fried bread versus like milk and"-

Nicki: With sugary icing.

Robb: Yeah, I was so perplexed and I've heard that multiple times over the course of life. It's like, "Oh a donut is okay for breakfast, but oh man eating some ice cream for breakfast we need an intervention on that." Yeah.

Nicki: Yeah. It's funny. All right. So the answer for this week's trivia is Baskin and Robbins. To play, go to rebels.com/trivia and enter your answer and we'll randomly select three people with the correct answer to win Paleovalley's immunity bundle. The cutoff to answer this week's trivia and be eligible to win is Thursday, July 23rd at midnight. Winners will be notified via email and also we'll also announce the winners on Instagram and this is open to residents of the US only. Our fourth question this week is from Gloria on valvular heart disease.

Nicki: Gloria asks, "Would fasting or low carb/keto help with valvular heart disease. I also have a AFib. I've been mostly low carb keto with intermittent fasting for years. I wonder about extended fasting for healing the heart. I'm a 73-year-old female, and I'm in good health otherwise. Thank you and I really enjoy listening to you both and respect your opinions."

Robb: Man, this is interesting. There's so many different types of valvular heart disease. Like some of them are congenital, some of them are from damage that have been sustained, like people taking aspirin when they have a strep infection and they end up with rheumatic fever. There's a lot of different things that can cause a problem. I don't see on the AFib side, electrolytes are going to affect that, but I don't know what would be good or what would be bad in that context. This is where you really do need to work with your doctor on these things.

Robb: The thoughts around extended fasting and healing the heart. I talked about this a ton in my longevity talk and that thing is available broadly. Like didn't we do-

Nicki: No, not yet.

Robb: We didn't. Not yet. Okay.

Nicki: Unless folks attended one of the conferences where you did it. So like the online metabolic summit.

Robb: So like metabolic health summit, and then Akil's thing that I did.

Nicki: A UCSF.

Robb: The UCSF. I think that that one is available for free download and the name of the title is longevity, are we trying too hard? And so Gloria mentioned that she's 73 years old. My big, big concern in extended fasting for people in general, but particularly people as they start getting older is we're focusing on your heart, which clearly we want to keep that going and keep it healthy, but there's all the rest of your body and all the muscle mass that we could potentially lose in a scenario like this. So fasting might be beneficial.

Robb: It's interesting. The heart can and does repair, but it's not a super plastic organ, not like the liver, not remotely like the liver. So I don't even know, like under the best case circumstances, I don't know what type of remodeling you're really going to get in that scenario. And then again, the trade-off is that we're potentially setting ourselves up to lose muscle mass. So at a minimum, Gloria, if you were to tinker with that type of stuff, I would do a full body strength training regimen every single day.

Robb: It doesn't need to be a huge amount of volume, but you need some resistance exercise to be able to send a signal, to retain your muscle mass, and then you need to do some good re-feeding when you're done with that process. And again, I just haven't seen much in literature looking specifically at say heart damage and then subsequent improvements and recovery from fasting and that autophagy and tissue turnover and all that type of stuff. And again, depending on what type of valvular heart disease we're talking about, that's a congenital situations, probably not going to do anything for it.

Robb: But I mean, there are broad ranging benefits to eating better and a little bit of fasting, but again, the case that I've made and I could be wrong on this. But the case that I've made is that if you're eating something akin to an ancestral diet, you getting sun on your

skin and you're exercising. I'm not sure that there's much upside above and beyond that, doing much fasting. Maybe like three days, a quarter or something like that, and be ketonic for a week. Dom D'Agostino made the case that a low calorie ketogenic diet for five days would be as good as five to seven days in fasting.

Robb: So you're still calorie restricting, you're still in ketosis, but you're not getting the full muscle mass loss. It's maybe not as gnarly for people. For myself, I'm not super lean, but I'm lean enough that I could do a three day fast, but it wouldn't be comfortable. And that would kind of hammer me by the end, and I wouldn't want to do anything during that time. I would just want to sit and do nothing. And so again, it kind of depends. Everybody is so geeked out on fasting and I know with Gloria, she's got this extenuating circumstance of some valvular heart disease.

Robb: Which again, we don't know exactly what the details are. So it's kind of hard to assess all that out, but cardiovascular disease for all of us, is a potential. Cancer for all of us is a potential, neurodegenerative disease is a potential, sarcopenia and muscle loss is a guarantee. Like it is guaranteed. It is going to happen. If we fight it tooth and nail, then it's a much shallower, downward trajectory and whatnot. But that is the thing that also, as we lose muscle mass, we tend to lose metabolic health. We don't have the same immune function.

Robb: That is a reserve of our immune... Not immune cells, but we can pull proteins out of the stored muscle mass. So if you did need to fast to augment immune function, then your body has an amino acid pool to draw from the muscle. So this is some of the calculus that I'm trying to figure out. It's like, here's a maybe, here's a maybe, here's a guarantee, which one do I want to really stack the deck in favor of?

Robb: And everything that I'm doing other than trying to be a pro-body builder, put everything that I'm doing to support muscle mass, reduces my cardiovascular disease risk, reduces my neurodegenerative disease risk. It reduces my cancer risk. Even if you get cancer, if you have strength training you tend to have better outcomes. If you continue strength training, you have better outcomes. So yeah, I mean again, I don't know what the real answer is with this. Peter Attia just had an interesting podcast with a woman who's just like top of the food chain.

Robb: Talking about this stuff and the big question that we have here is the dosing and frequency on fasting. Where's the benefit? And I think even Peter acknowledged that this is probably going to be dependent on what the person's situation is. Are they already lean? Are they already eating a low inflammatory high nutrient density diet?

Nicki: Okay. Our last question this week is from Jamie on TBI, keto, protein intake and sleep. "Hello, Robb and Nikki. First up your information has kept me alive through all of my health issues, if not for the fact that it has given me hope, which is the spur that keeps me going when I start to doubt. So thank you. Back in 2006, when I was 19, I got assaulted. And as a result, I hit the back of my head on a concrete pavement, which fractured my skull and shunted my brain forward, which also caused some brain damage in my prefrontal cortex.

Nicki: I was in the hospital for 10 days with a bleed on the brain. And I can not remember the first four days or the attack itself. The effect this has had on my life has been immeasurable. I've been playing around with my diet for a long time now and I think I'm going to have to go full bore keto for reasons that I feel better when in ketosis. However, for me, based on my individual circumstances, it does have some drawback. While my sleep has tanked ever since I suffered this brain injury paradoxically, I have managed to get up to around a leanish 255 pounds.

Nicki: If I was to lose 10 to 15 pounds, I would be ripped. I would be over 260, if not for the lockdown in the UK as I put on muscle mass very easily, which surprises me when I consider how bad my sleep is. I've made peace with myself that I'm never going to do any martial arts that involves striking to the head because of my brain injury and that doesn't bother me too much. So grappling would be a better way to go. My training at the moment essentially revolves around bodybuilding, power lifting type, but at the age of 34, I want to jump into BJJ and wrestling.

Nicki: I watched a talk you gave on YouTube about a young lad who you worked with at an MMA gym, who you advised to forego high intensity cardio work. With the anaerobic demands, these grappling sports will place on my body mean that I am also going to have to forgo BJJ in light of my brain injury. Some of the concerns I have are surrounding protein intake. I love eating meat and I do say to people, I am a vegans worst nightmare. So how much protein can I eat to help maximize muscle gain while also keeping me in ketosis, so I am producing the maximum amount of ketones for my brain health?

Nicki: Can I in effect, just eat as much protein as I want? In terms of sleep, I noticed that going keto messes up my sleep further in weird ways. I can wake up at stupid times and then not get back to sleep. And when I'm laying in bed after not eating much carbs in the day, I can hear something in my body beating away, which I'm assuming is my pulse. I'm predicting your answer will be to eat more salts, so I will uptick the amount of electrolytes I use, but is there anything else that I can do on keto that will help me get a restful night's sleep, that goes further than just adding salt?

Nicki: I do all the usual stuff of using blue blocking glasses, et cetera. So what could I do diet wise in terms of sleep and keto and oh, would sucralose be a problem on a keto diet?" This is like the five questions, correct?

Robb: Jamie snuck in like 18 questions worth of stuff. Yeah.

Nicki: Yeah.

Robb: Let's start from the bottom and kind of work back. The sucralose stuff, this is something that I think annoys a lot of pretty purest people, but I'm not that intimidated by these artificial sweeteners in the context of people otherwise eating generally whole unprocessed foods. I put a little dab of a fruit spread, like all fruit spread into Greek yogurt. And then I put some Stevia in that and mix it up and it just tastes amazing. And so I tend to lean more towards Stevia, but the carnival crowd says that Stevia is this estrogenic compound, and it's going to make my penis and balls fall off.

Robb: And so I don't know what to think about that. There are studies that suggest that there're some problems with the gut microbiome and whatnot, but it still is this kind of trade-off. Where if I want something sweet, do I just do sugar? Which I think seems to be legitimately really, really bad or... Well, honey is sugar. Or do you do something like sucralose or aspartame or Stevia? I'm just not that freaked out by these things. Maybe I should be, but currently I'm just really not. I will almost guarantee that the sleep problem is related to electrolyte and sodium intake.

Robb: And Jamie's a big dude, he probably needs to be maybe closer to that 10 milligram per day or 10 gram per day, level of sodium with the appropriate ratios of potassium and magnesium peripheral to that. The general baseline is five grams for average person. Jamie's like two and a half average size people. If he's as large and lean as he is, that's a lot of tissue to regulate. And this is just the classic thing, I experienced this, this is the classic thing that we've had reported from folks.

Robb: They go on a lower carb, ketogenic type diet. They go try to go to sleep and it's heart beating out of their chest. You're kind of wired and awake. And the fix for that is adequate sodium and electrolytes broadly. As to how much protein, if you do some poking around and look at modified Atkins and Dom D'Agostino has talked about this a lot. There's some good papers on it. It's not the classic three to four or three to one, four to one ketogenic ratio, which is pretty low protein, very high fat, which has historically been used for different neurodegenerative situations.

Robb: But what you could do in that scenario, you'll be in mild ketosis with a modified Atkins approach, which can be a gram of protein per pound of lean body mass is a good place to be. But then use some MCTs supplementally at each meal, and then you'll go from kind of a modest to a pretty decent level. And I would just kind of assess that. And if you're getting the sense that your brain is operating better on ketones. If that doesn't work, then we'll have to titrate the protein down a little bit or maybe we need to do some protein cycling.

Robb: Where maybe some days your higher protein, the harder training days and the easier days you're lower protein. So there're some things that we could do with that. On the training itself, Jamie is sounding like he's from the UK or something.

Nicki: Yeah, I think he said that.

Robb: I would poke around and see if there is a straight blast gym near you, because there are several of them in the UK. Those folks have a good sense of how to train people in a progressive fashion. And also Jamie, you're a big strong dude. So a bunch of the onus is going to be on you. You need to not go grape, you need to be relaxed and calm and not rely on attributes as you learn this stuff. But you should be able to maintain a largely aerobic pace while doing this stuff.

Robb: Now, your particular situation may not be as blood sugar dependent. The guy that I worked with Zack, whenever he would get kind of a hypoglycemic event from heart activity, he would kind of syncope, he would pass out from it. And so that's where we

had to keep him very much in kind of aerobic level activity or lifting weights, not that glycolytic middle ground. Is there anything else? I think I got all of it.

Nicki: I think that is it, yeah.

Robb: And again, would love to hear what Jamie does with this stuff and would love to-

Nicki: Yeah, circle back and follow-up and let us know what you do.

Robb: Yup.

Nicki: Okay.

Robb: Is that it?

Nicki: I think that was our episode for this week. Yeah. Thank you guys for joining us. As always, remember grab some Paleovalley Essential C Complex. You can go to paleovalley.com and use code THRR10 and get 10% off your order. Please share this episode. If you've purchased a copy of Sacred Cow, please write a review once you've read it, that's much appreciated.

Robb: We certainly appreciate that. Yeah.

Nicki: And what else, hubs?

Robb: I think that's it. We'll see you all next time.

Nicki: Have a great weekend, everyone.

Robb: Bye.

Nicki: Bye.