

**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 one million people liberate themselves from the sick care system. You're listening to The Healthy Rebellion Radio. The contents of this show are for entertainment and educational purposes only. Nothing in this podcast should be considered medical advice. Please consult your licensed and credentialed functional medicine practitioner before embarking any health, dietary, or fitness change. Warning, when Robb gets passionate, he's been known to use the occasional expletive. If foul language is not your thing, if it gets your britches in a bunch, well, there's always Disney+.

**Robb:** Welcome back, wife and all.

**Nicki:** We are live. Welcome to The Healthy Rebellion Radio.

**Robb:** I was thinking about doing a Ricardo Montalbán Fantasy Island intro.

**Nicki:** I don't know what that means.

**Robb:** I am Mr. Robb, your host. Welcome to Fantasy Healthy Rebellion.

**Nicki:** Yeah. I think that dates you a little bit.

**Robb:** Yeah, the lack of hair on the top of my head and the gray in my beard doesn't date me at all.

**Nicki:** Yeah, I don't think I watched that much as a child.

**Robb:** That was probably too low brow for you.

**Nicki:** So when you said his name, I didn't know who you were referring to.

**Robb:** Well, you probably know his sidekick, Hervé Villechaize, either.

**Nicki:** I wouldn't have known that name either, nope.

**Robb:** That's fine. I'll take it all with me to my grave. That's okay.

**Nicki:** What do we have, a seven year age gap? Six and a half year age gap?

**Robb:** Six and some change.

**Nicki:** Six and some change?

**Robb:** Yeah. Which when you add that to the tendency for women to outlive men by a good six years, you'll have a good run without me.

**Nicki:** Well, I was just meaning there are lots of things that you grew up with that I don't share, we don't have common ground.

**Robb:** This is kind of a weird thing, and maybe this is where cultural change started accelerating a lot. I feel like I understood far more about my parents' culture. And maybe it was watching Bugs Bunny and Looney Tunes and all the post-World War II stuff. All these things that were made kind of for their generation were still getting

repurposed a lot when I was a kid. And so there was just a lot of shared cultural history there. And now, it's like some people Tik Tok all day long and don't know that there's a world outside that.

**Nicki:** Yeah, I definitely think just the sheer number of options of things that people can consume, there is definitely less of a shared medium.

**Robb:** Which is awesome on the one hand, if you're really into sci-fi, like I am, and jiu-jitsu, then you can definitely scratch those itches. But then, if you don't find nerds completely in the substrata that you're tunneling in, and that's it. And how did we get on that.

**Nicki:** I don't know how we got on this.

**Robb:** Is it my Ricardo Montalbán deal?

**Nicki:** You had to start off with Ricardo.

**Robb:** Sorry. Yeah.

**Nicki:** You should have started off with Roberto.

**Robb:** Next time. Next time.

**Nicki:** Well, this intro, this rambling intro, is probably a side effect of our sleep deprivation and just sheer exhaustion from our last seven days. We drove to Reno, Nevada to visit my dad and do some jiu-jitsu. And we took both the girls and of course also our dog. And that was, what's the proper term, a shit show?

**Robb:** A show of shit?

**Nicki:** A show of shit? Yeah. That was something else.

**Robb:** Do you want to elaborate on that at all?

**Nicki:** He's just not a good traveler.

**Robb:** By he, you're talking about the dog, not me.

**Nicki:** Yeah. And normally, like when we moved from Texas, we drove the truck and he can kind of sit in the back. This time we took the car. And he has plenty of space in the back when we put the third row down to lay down, but he can't sit up, he's too big. So he was in this half... He'd get super stressed out and he was in this half-crouched, trying to hold himself up almost like in a partial pushup position for the whole time.

**Robb:** One 10-hour block and another six-hour block.

**Nicki:** Six and a half-hour block. And his legs were shaking uncontrollably and he was super sore, like DOMs, he had delayed onset muscle soreness.

**Robb:** Well, it actually wasn't delayed.

**Nicki:** It wasn't even delayed, his muscles were giving out. Anyway, it was awful. But he rehabilitated nicely at my dad's. And then we drugged him on the way home.

**Robb:** He got a little doggie druggage, yeah.

**Nicki:** Yep. So the way back was much better, thankfully. But never again.

**Robb:** Now we have both Dutch and Montana Murph in here, and Murphy is meowing, so if you hear something that sounds like a squeaky little cat meow, it's real.

**Nicki:** That is him.

**Robb:** And it's him.

**Nicki:** Okay. I guess we can move on to the actual meat and potatoes of the show. Let's see, inside the Healthy Rebellion Community, we are still in our 30-day reset. We're wrapping up the Movement week. And next week we will dig into Community, which is the fourth pillar that we tackle inside these resets. All is going well. Lots of ahas. Lots of people needing to add a new notch to their belts. Some people getting new tight pants.

**Robb:** And in a good way, not in the expanding it way.

**Nicki:** Nevermind, I went somewhere completely different with where you were going.

**Robb:** Oh, the belt notching.

**Nicki:** The belt notching.

**Robb:** Well, maybe they're belt notching that way too, I don't know.

**Nicki:** Uh, yeah.

**Robb:** Lean out a little bit, feel a little frisky and randy, I don't know.

**Nicki:** I don't know why my head went there. But anyway. So yeah, all good stuff inside the Rebellion. And yeah, what do you have for us for our news topic this week?

**Robb:** Something a little sacred cow-esque. This is from mises.org. Ludwig von Mises was a early market kind of libertarian thinker, I guess, or he's popular within libertarian circles. But this is a piece, it's called How Fiat Money Made Beef More Expensive. And it's funny, I went on John Stossel's show eight years ago, nine years ago?

**Nicki:** Yeah, it was probably 2012.

**Robb:** Yeah, right around there. And it was related to some food-related stuff, also some health-related stuff. But, when we first got rolling, I made the case that fiat currency, which is basically this, if you're not geeked out on this stuff, it's this idea of... Well, for some people, it's kind of like water for a fish, they've just lived their whole life in a fiat currency system. But it's basically this situation which the government can just kind of spin up "money" as they wish by decree. And that usually ends poorly. All of history has shown that. There's a great book called This Time is Rome, 500 Year of Financial Folly, and it details where governments and nations typically start with some sort of what we might call sound currency that's somehow asset-backed, like it's gold-backed or something, and then usually wars and expanding different programs start stressing that. But the point that I made to John Stossel was that our junk food industry is a consequence of fiat currency. And he kind of looked at me sideways. He's very kind of

market and libertarian oriented, but he's like, "I don't see how you make that case," and I didn't have time to make the case.

**Robb:** And I wouldn't say I forgot about it, but it's just been one of these things that has kind of rattled around in my head. I alluded to this in Sacred Cow, but this is a very nicely written piece. And it really makes the case that for a variety of reasons, this just printing money out of thin air has tended to take things that are really valuable, like meat, and make it more expensive, and then things that arguably are less valuable and more commoditized, like grains that ultimately end up in junk food, have generally become cheaper, and that there are consequences associated with that. And so as always, when I get a chance to throw in a little economics, thermodynamics with our evolutionary talk, I like doing that because I feel like those are the kind of linchpins of understanding, at least at a surface level, the way the world works. So we've got links to that in the show notes.

**Nicki:** Excellent. Scroll down, hubs, scroll down. Okay, we've got our tee shirt winner this week, it's going to go to Jules Vasquez, the Grass-Fed Wagyu Beef of all Podcasts. That's quite a title.

**Robb:** That's very nice, that's very nice.

**Nicki:** Robb and Nicki, thank you. Just thank you. Your transparency, analytic variety, translation of scientific jargon, inclusivity of all backgrounds, and wellness integrity, I can go on and on, is truly something special. I genuinely appreciate your open disgust towards joining the popular kids just because it's what's trending now. Rather, you look at the facts, listen to the people, and speak on personal experience. It's so refreshing to know that people are still capable of thinking for themselves. I wish more people like you had a platform that encourages that. Thank you for all you do and keep up the quality work.

**Robb:** Many people did have platforms, but they're gone now.

**Nicki:** This is true, this is true.

**Robb:** No, it's very kind, Jules, thank you.

**Nicki:** Thank you, Jules, for your review. Send us an email to [hello@robbwolf.com](mailto:hello@robbwolf.com) with your tee shirt size and your mailing address, and we'll send you a Healthy Rebellion Radio tee shirt. And just because you mentioned that piece, I do have to share, we always end up kind of touching on the censorship and whatnot to some degree, but Chris Kresser shared with us that he had posted to Instagram that paper on, what was it arginine, I arginine?

**Robb:** Yeah, I can pull that up and put it in the show notes.

**Nicki:** We'll put that in the show notes too. And it was peer reviewed, double blind-

**Robb:** It is an actual gold standard, clinical, randomized controlled trial in humans. And it showed the efficacy of about three grams of the amino acid arginine in dramatically mitigating morbidity and mortality in humans within the context of COVID, most likely due to the nitric oxide modulating effects of arginine. And I did a short post on this in The Healthy Rebellion where I related this piece, and I tongue-in-cheek said, "Maybe this is the case for boners not boosters," because Viagra works via the nitric oxide. And there is a clinical study looking at the nitric oxide modulating effects of sildenafil, which

is Viagra, and it shows huge benefit for COVID because COVID appears in large part to be this vascularly-mediated problem. Now back to what you were saying.

**Nicki:** So this excellent, gold standard study, Kresser posted to Instagram, and Instagram removes it for being COVID misinformation.

**Robb:** And there you have it gato.

**Nicki:** And there you have it. I don't know. We talk about this quite a bit, but sometimes it feels like there's just no winning against these huge companies. And there's clearly an agenda. This is valid scientific research. It's not low quality research. It's a great study.

**Robb:** It's not anecdotal. It's not a case report. It's not in mice.

**Nicki:** But it shows that there's an alternative than taking the vaccine.

**Robb:** Well, and let's throw vaccine or not vaccine aside. People who are getting the vaccine are getting sick and dying still from COVID.

**Nicki:** From COVID.

**Robb:** And this is a treatment that crosses all lines. It's efficacious either way.

**Nicki:** Well, it just makes no sense that nobody's willing to look at any early treatment options. Name the early treatment option, and it's forbidden, it's verboten. You cannot talk about it. You cannot publish about it. It won't get circulated on any social media platforms. And a thinking person has to start getting suspicious about that. There's something that just doesn't sniff right. And I know we don't want to go into that. It just made me think about it when you mentioned that other people's platforms were being taken down and that popped into my head because Kresser, he was just beside himself.

**Robb:** Flabbergasted.

**Nicki:** Flabbergasted.

**Robb:** And Kresser is a much more measured person than I am. He's much smarter than I am and he's much more reasonable. And for him to get something taken down, and again, gold standard quality material, and I guess that that's something that you could get in and try to, "Hey, can you give this a second look?" But it's very troubling. It's very problematic.

**Nicki:** Who do you appeal to, though? There's nobody to appeal to at Facebook or Instagram for these types of things.

**Robb:** Right.

**Nicki:** It's just it's misinformation, it's removed. You're a bad person. Done, move on.

**Robb:** So I'll just throw this out there. I still enjoy the work that I'm doing. I still feel like we are helping people. Although it probably is down to about six people literally at this point. But given the other state of affairs, it's oftentimes I feel a little bit goofy talking about general weight loss or the trials and tribulations of people. And the stuff that we usually end up talking about that doesn't get us censored seems trite at this point. But I'm not really sure what else to do. Because we could make every single show about COVID and

ensorship, and even Brett and Heather ended up getting ground into the gears of that monster. And so I don't know, but just voicing it did its-

**Nicki:** And also just voicing that it just feels like we're up against this... Brett and Heather used the term the David and Goliath metaphor. But I feel like there's enough people that want truth, that want the ability to have discussions about controversial things, that want these types of discussions and debates and conversations to happen in the public forum, that don't want people censored who have a different study to bring to the table, let's get it all on the table, let's talk about it. But I feel like that ability is narrowing. And at what point does that door close completely? I don't know. We're both feeling a little...

**Robb:** Set upon.

**Nicki:** Set upon and overwhelmed. You feel like you should do something but you're not sure what can be done.

**Robb:** Shoot, since we're doing this, we might as well just do it.

**Nicki:** We're going on a huge tangent.

**Robb:** Yeah. I've been warning about the response that is predictable for a whole host of things like this, this gang tackling, the censorship. It took me a while to realize that the algorithms on social media were kind of pitting us against each other and then that made a lot of sense. But there's a pretty predictable response that emerges when people are... When their agency is removed. And we've talked about this in other circumstances. If you want to stress someone the fuck out, you remove their agency, you make them feel as if they have no control or recourse in their life. And then people do crazy stuff then. And some of this crazy stuff could be horrible, but it's also predictable. And I kind of almost feel like we're being goaded that direction for a to be determined endpoint. I don't know.

**Nicki:** I'm just trying to find a story and I can't remember if it was... I think it was a kidney transplant patient in Colorado, but I could be getting that wrong, who was unvaccinated, and so they decided that that person was no longer eligible for that organ, whether it was a kidney... I think it was a kidney. But, you also have to wonder if the person is in line for an organ transplant, they might have other health issues going on which might make the vaccine not the number one choice or the number one priority in their health situation at that moment in time. But now because it's become such a political thing and because there's such an us versus them and othering that's happening for the people that, for whatever reason, health or otherwise, are choosing not to get the vaccine at this moment, so now folks are no longer eligible for organ transplants.

**Robb:** So, there we have it.

**Nicki:** There we have it.

**Robb:** I guess we'll move on.

**Nicki:** This is quite the episode.

**Robb:** It's quite the episode.

**Nicki:** Okay, let's see. We'll move on to our sponsor. Healthy Rebellion Radio is sponsored by our salty AF electrolyte company, LMNT. It's an electrolyte drink mixed with all the electrolytes you need and none of the sugar or other fillers. And today I wanted to share a review from Sandra, an LMNT customer who found that LMNT helped resolve some persistent issues that she was having with some soft tissue. She says, "Salty, but I think it works. I ordered LMNT for my husband to try but ended up using it for myself. I tried going keto and ended up with the worst keto flu ever. Thank God the drink came, and within one packet, the symptoms eased. But the unexpected thing was I have had an ongoing leg issue. I'm pretty sure it was a trigger point or some muscle, soft tissue thing deep in my calf. And after a few days of drinking LMNT, I woke up and realized it was gone. I'm pretty sure my dehydrated self finally got enough electrolyte balance for my muscles to just function properly so that all the manual rolling, massage, and stretching I'd been doing for months finally worked. My husband still hasn't really used it, but I keep drinking it."

**Nicki:** And we hear stuff like that, and we also hear spouses stealing it from the ordering spouse. So good stuff. You can get your LMNT at [drinklmnt.com/Robb](https://drinklmnt.com/Robb), that's drinkL-M-N-T.com/R-O-B-B. Remember, if you do the value bundle, you can buy three boxes and get the fourth box free. Again, that's [drinklmnt.com/Robb](https://drinklmnt.com/Robb).

**Robb:** Awesome.

**Nicki:** Okay. Question numero uno today is on protein. Gloria says, "On your last show, you talked about having one gram of protein for every pound of body weight. Other people say one gram for every kilogram of body weight. Which is it in your opinion?"

**Robb:** So, we're just providing some brackets. And I think the one gram per kilogram of body weight is kind of a low... That's the bottom floor that we would like to see, folks. We make recommendations, one gram per pound of lean body mass, one gram per pound of body weight is kind of the absolutely upper level. You can eat more if you want, but I don't really think that folks are really getting all that much above and beyond that. They're probably not getting enhanced anabolic response or probably not getting even much more in the way of satiety and may actually be eating past the satiety signals of protein. So these are just some bracketing mechanisms to provide folks some goalposts. But if you weigh 120 pounds, and it's like, "Oh, okay, I'll do three meals a day, 40 grams a meal," it just makes it easy to parse all that out. And also this is something to tinker with. Maybe you're at the gram of protein per pound of lean body mass and then maybe you want to try bumping it up and just see if it makes it easier to lean out or if you get a little performance bump or something like that.

**Robb:** But I think that the one gram per kilogram of body weight is kind of a ground floor. Other than certain circumstances, I wouldn't really recommend going below that. And then these other numbers are just a little more aggressive and just easy to remember.

**Nicki:** Okay, our next question is from Kimberly. She says, "Hi. I love your show. I've been listening since the beginning. Please never stop recording. In the last couple of years since COVID hit, I've lost 20 pounds. I have a muscular body type, 54 years young, 5 foot 4 and weigh 137 pounds. I'm post-menopausal and I work out five days a week with crossfit, one day a yoga, and walk the dog two miles a day. I attribute the weight loss with eating more protein. I now eat almost 120 grams a day, where before I probably got only 50 to 70, if that. I didn't track. My protein sources are usually chicken, smoked salmon, tuna, turkey, once a week red meat. I do add pure protein bars, which are 20 grams, towards the end of the day when protein levels aren't there yet. I went to the doctor and got blood work done and my cholesterol went up. I went from the total 226

to 244, LDL of 101 to 131, HDL 105 to 101, ratio 2.1 to 2.4. Triglycerides went from 61 to 62, and this is from September of 2020 to September of 2021. I know I should probably ignore it because my ratio seems great and feel great. For some reason, it's bugging the crap out of me. How can I lose weight and eat more protein and have the numbers go up? Should I be concerned?"

**Robb:** So, something that's important to keep in mind in a situation like this is if we took this test three different times or ran this thing through... the same vial of blood, we ran it three times through their assays, a 10 to 15% variance isn't uncommon. And so we're well within what may just be testing variation from one year to the next. Maybe it went up. If it went up, it only went up a little bit. Looks like it did go up on the LDL side of things. This is also where doing something like an NMR, which is much more precise and the accuracy upfront tends to be more true, so this is again where we tend to recommend at a minimum doing an LPIR score and/or the LDL particle count. Precision Health Reports is who we recommend for all that type of stuff. But as a first whistle stop, I wouldn't be too, too worried because again, this isn't such a profound difference one year to the next that it may not be a testing error. So, maybe there's no difference there. Maybe last year's test tested a little low and maybe this one could have tested you... It could have reported five percent low and then this one reported five percent high, and then we have an even larger spread. So it's a little hard to tell with that.

**Robb:** You could certainly do a follow up. And then as always, it would be really helpful to know what that LDL particle number is to know if Kimberly has elevated LP little a and some of these other kind of known cardiovascular risk factors. And then, if she wants to do some tinkering, maybe we modify the saturated fat intake down a little bit. Maybe we look at more monounsaturated fat. Maybe she reintroduces a little bit more carbs. Some people at the lower carb side of things just entering ketosis or being near ketosis, they see a pretty good bump in their lipoproteins. So, there are things that you can do to modify that that wouldn't really change you too far off of what you're currently doing. But I also would, at least initially, ascribe this to potentially being just a testing artifact versus something that's really going on physiologically.

**Nicki:** Okay. Question three. This one's from Ruby on the effects of butyrate supplementation and tributyrin. "Hello, long time listener here. Yay. #throwbacktogravedays. And current LMNT lover. I came across a supplement that uses a combination of tributyrin and vitamin D and supposedly promotes a healthy gut, aids in healing leaky gut, helps reduce bloating, improves digestion and vitamin absorption, boosts the immune system, etc., etc., etc. What they say is that tributyrin has been used in Spain for at least three years but it just starting to come to the US. There are some studies on mice, but not a ton in humans yet. I'm just wondering if you've done research on butyrate/tributyrin and whether or not you'd suggest experimenting with something like this. I'm mostly paleo for about a decade, but my belly pooches out a ton. Granted, I've had two kids and I'm working on core function. I haven't had consistent bowel movements in months, and while my stress levels are somewhat because I'm an entrepreneur, I get seven hours of sleep a night and do my best to keep myself regulated. I tried probiotics, drink kombucha, try to get resistant starches. I hate fermented foods, unfortunately. And I'm pretty well versed in diet and health thanks in large part to you.

**Nicki:** I'm interested in trying out this supplement, but very wary of putting anything in my body that is unknown and I can't find much info from people I trust on this particular topic. So I guess my question is twofold. What do you know about butyrate and tributyrin and also how to decide what is safe to experiment with? Thanks so much for dealing with all the BS out there to provide information to all of us."



**Robb:** Yeah. Butyric acid is a main constituent in butter. And it is something that has been used in a good number of the functional medicine circles when people have gut issues. So it is something that stimulates signaling to improve tight junction function in the intestinal epithelium. The tributyrin is a triglyceride that is all butyric acid with a glycerol backbone. And it is interesting, I did some poking around because she mentioned both the tributyrin and the vitamin D, and there's a paper that I linked to, tributyrin, a staple and rapidly absorbed pro-drug of butyric acid, enhances anti-proliferative effects of vitamin D in human colon cancer cells. So this is an in vitro study, it's not in humans. But vitamin D has anti-proliferative effects and it appears this tributyrin enhances that, at least in cell culture lines.

**Robb:** So, it's definitely good stuff. Butyric acid can be obtained from amino acid fermentation. Actually, it's isobutyrate that comes about from amino acid fermentation. We get butyric acid from more fiber fermentation. Some of my gut issues, I was taking a huge amount of butyrate for about six months because this was one of the things that was recommended to address any type of tight junction issues. And maybe some of the ongoing gut stuff that I've had in the past, it wasn't necessarily intestinal permeability and tight junction issues. I didn't notice any difference. It seems to vary from person to person whether or not they get a benefit in this. So I would say it's safe. I don't see it potentially causing any problems. But, I think it's also going to depend person to person whether or not it's going to address things. And crazy old carnivores, over time I've kind of eaten a little closer to that direction, doing a little bit of fruit, little bit of honey here and there, and I feel pretty good on that.

**Nicki:** She mentions that she hasn't had consistent bowel movements in months. And clearly some of that could be stress related. But I'm just curious, it says she's been mostly paleo for about a decade. It seems like it might be worthwhile to kind of keep a food log for some period of time and notice are there certain things that you eat that you notice more of a distended belly or that kind of contributes to... And I don't know exactly what she means by not having consistent bowel movements. Is that like she doesn't go for a period...

**Robb:** Is she constipated or is it more IBS?

**Nicki:** Is she constipated for days at a time or is it more loose? But there could be some particular vegetables or onions. There's things that you eat that really set you off. And there might be some stones worth turning over in that department.

**Robb:** I used to eat onions the way that people typically eat potatoes. It was my low glycemic load.

**Nicki:** When we met, we would have caramelized onions, you'd slice up onions and they were in everything.

**Robb:** And I was always gassy and bloated. But my digestion was better than what it had been previously, but I still had a lot of gas, a lot of bloating, loose stool. And it was only with these crazy carnivore folks, and also just an awareness of FODMAPs. There was a study, it just came out the other day, and it suggested that this low FODMAP diet was maybe the one diet to rule them all. It really showed remarkable efficacy for ulcerative colitis, Crohn's, IBS-type stuff. It was very far-ranging in its application. And I forgot, that could have been one that we put in the show notes. I'll try to dig that up. But I think that looking around, still, it just sounds crazy to remove vegetables and whatnot, but I think that doing a pretty strict elimination diet, pulling things back, trying to get to a clinical

endpoint where you're feeling good and then start reintroducing things one at a time and kind of see how you do with them.

**Nicki:** Yep. For sure. Okay, it's time for the Healthy Rebellion Radio trivia. Our Healthy Rebellion Radio sponsor LMNT is giving a box of LMNT electrolytes to three lucky winners selected at random who answer the following question correctly. Robb, during our journey this past weekend, we listened to book two of a series that is absolutely fabulous. I think we've mentioned it before because we began book one a few months back. It's a long series and the books are long. This particular audio book was...

**Robb:** 12 hours?

**Nicki:** 12 hours. And we've got 45 minutes to go, and it is very good.

**Robb:** Quite good.

**Nicki:** So what is the name of that series?

**Robb:** The Wingfeather Saga.

**Nicki:** The Wingfeather Saga. Yep. So that's the answer to this week's trivia. It's excellent, whether you have kids or not. I think it's appealing to all ages.

**Robb:** We enjoy it.

**Nicki:** We enjoy it thoroughly.

**Robb:** But we're knuckleheads.

**Nicki:** Yes. To play, go to [robbwolf.com/trivia](http://robbwolf.com/trivia) and enter your answer. We'll randomly select three people with the correct answer to win the box of electrolytes from LMNT. The cutoff to answer these week's trivia and be eligible to win is Thursday, October 14th at midnight. Winners will be notified via email. We'll announce the winners on Instagram as well. And this is open to residents of the US only. And one of the best things about this book is the author narrator does a fabulous voices.

**Robb:** Great job with the voices.

**Nicki:** So we've got fangs that like to talk like this, they're kind of snake people. And then we've got the grandfather.

**Robb:** Arrgh matey.

**Nicki:** The pirate, the pirate grandfather. And lots of other characters in between. So it's very entertaining.

**Robb:** Pretty darn good.

**Nicki:** Okay. Question four this week is from Jen. She says, "Hello, Robb and Nicki. I'm currently working as a health coach in a small clinical study to reverse cognitive impairment with integrative therapy and lifestyle rehabilitation. Can you point us to any reliable strength, aerobic, and flexibility benchmarks for men and women over 50? Ideally, the fitness assessment could be done at home without special equipment. It could be useful for participants to develop greater awareness of their relative fitness. Some seniors feel

great about their occasional walks in comparison to their physically deteriorated, sedentary peers. But outside of my health coaching sessions, the doctor will plainly state that just walking isn't cutting it. For brain health, it could be most therapeutic for them to engage in complex, cognitively-challenging physical activity such as dance, martial arts, or sports at an appropriate level, and check to see what supplemental exercise is needed to meet cardio, muscular, and flexibility targets.

**Nicki:** Fitness assessments I found from the Mayo Clinic seemed questionable in that both men and women at age 65 had the exact same target of 10 classic pushups. Does the upper body strength differential between the two sexes really disappear by age 65? I couldn't find a specially good resource for ages 50 to 90. For instance, the Fullerton Functional Test/Senior Fitness Test has arm curls as the best assessment of upper body strength. The President's Challenge at [health.gov](http://health.gov) has assessments for students, but not elders. If people want to be physically functional and free from chronic illness at a ripe old age, shouldn't they have..." This sentence is a little bit choppy. "Shouldn't they have somewhere to look or have something to look for what needs attention at age 55, 60, 65, etc.? I'd so appreciate your thoughts."

**Robb:** It's a really good and interesting question, and it kind of speaks to the remarkably low expectations that the medical field has for us as we age. And we are really on our own in this regard. We've talked amongst ourselves... Early in crossfit, there was a lot of discussion around these types of things, like how strong do you need to be, what type of cardio do you need to be and whatnot. And Dave Warner, who co-founded the first crossfit affiliate gym with myself and Nick Nibbler up in Seattle, he came up with these athletic skills standards. So we have a link to the website [moveskill.com/athleticskilllevels](http://moveskill.com/athleticskilllevels). And what you find in there, it's by no means perfect, there's a million things you could nitpick about them and people do, but it's a pretty damn good starting place. Because it looks like at some mobility considerations, some work capacity, some general endurance, maximal strength, ability to generate force. And it's four different tiers. The fourth level is like superhuman stuff, like to be able to lift and run and jump the way that is suggested there, less than one percent of people are genetically able to probably even meet that, and it's probably going to be in their prime of life.

**Robb:** Simply maintaining level two standards for as long as is humanly possible, as much level three, I think that's somewhere that if people maintained some things in level three and probably some other stuff will play out into level two, that is some stuff that is going to be really good as we age. And some of this involves more complex movements like kettle bell swings and push press and things like that. So you could pick and choose. But there are plenty of body weight movements like pushups and pull ups and body rows and air squats and whatnot. But I like this because it's a pretty complex matrix of movements.

**Robb:** And I think that this is one of the things... I was kind of in this rut. I had a two-day a week workout that I had been doing iterations of for close to 10 years. And it was good, but I was doing a lot of exactly the same stuff. And the tweaks and modifications were not really that significant, and you begin to de-train from that. You can get overuse injuries. And so getting into the Basis Health and Performance program where they incorporate the Kinstretch and then some smart strength and conditioning work is really good and it layers in with this pretty nicely. So, I don't think you're going to find anything that really scratches the itch from unfortunately some sort of governmental outfit. I think if you looked at some masters' competitive numbers with 5K power lifting, some things like that.

**Nicki:** Some track and field events.

**Robb:** Track and field events, you start getting some benchmarks about where the outer limits are. And I know that the folks that are probably being dealt with are miles away from that. But I think that having those as these are the upper limit potentials at least, this is something that folks could be striving for, would be helpful, for sure.

**Nicki:** And I think just exposure to CARs, the controlled articular rotations, is something, at any age, but especially as you're aging, as a daily practice, even if these people are walking every day or however often they're walking, but as a daily sort of joint assessment, joint prep routine, once people learn it, it takes maybe 10 minutes of your time, would be fabulous. And I think getting that info in the hands of these folks would be very, very valuable. And the Basis folks are great with that. You can also go to... What is it? Functional Range Conditioning. Functional Anatomy Seminars is the website where they have all of the different certification seminars and whatnot. So, something to explore, for sure.

**Nicki:** And let's see here. Fifth question this week is from Ryan on itching after jiu-jitsu class. "Hi, Robb and Nicki. Big fan of your work. I have been training jiu-jitsu no-Gi for about six years and absolutely love it except for the fact that every morning after training, I experience uncontrollable itching on my body, predominantly my legs, but sometimes all over. I generally train in the evening, so the onset is about 10 to 12 hours after my session. This has been frustrating, to say the least. I read that this can be a problem for exercisers due to sweat, but that sounds iffy to me. Plus, I never had an issue with other forms of exercise, just jits. I tried probiotics and different soap/laundry detergent to no avail. The only thing that semi helps is to shower immediately after the itching begins or to sweat it out. It usually subsides after about 30 to 60 minutes. Any thoughts?"

**Nicki:** I have none. At first when I was reading the question, I thought it was going to be some sort of mat hygiene, cleanliness thing in the school, like maybe they aren't cleaning the mats well. But if it's subsiding after 30 minutes, that seems...

**Robb:** Yeah. I don't know. The only thought that I had is maybe Ryan's skin is getting kind of dry from the process and maybe some coconut oil. Shower, towel off, rub yourself down with some coconut oil.

**Nicki:** And I guess also curious is he doing no-Gi in shorts or is he wearing spats? Covering as much of your body as possible seems smart.

**Robb:** Seems smart in general. But that's about all I have. You know what I mean? Maybe there's a dietary issue in there, but it seems dubious because there's just this one thing. But sweating and rolling around like that, that stuff can kind of strip the oils out of your skin. So my only thought is maybe applying some coconut oil topically and just kind of rubbing it in and see if that helps. Because it's antimicrobial, it's antifungal. The whole moisturizing thing I think is kind of a dubious idea, but it does seem to help with dry skin.

**Nicki:** Yeah. This one threw me for a loop because I haven't heard of this before. And it does sound extremely...

**Robb:** Annoying?

**Nicki:** Annoying and frustrating. But thankfully, it's resolving after 30 to 60 minutes, it's not like a...

**Robb:** Chronic deal.

**Nicki:** Chronic, perpetual thing. Ryan, I hope you find some resolution. I don't think that we provided the... We may not have provided the-

**Robb:** If coconut oil doesn't solve it, then maybe put on a Gi and see if that helps.

**Nicki:** Actually, it would be very curious to know if you get in when you train in a Gi. Or if it's just a no-Gi thing. I don't know.

**Robb:** There you go.

**Nicki:** Lots of questions. All right, folks, thank you so much for tuning in yet again. Sorry that we had such a tangential random intro. Maybe we'll be better slept next week. Hope you all have a fabulous weekend. Please check out our show's sponsor, LMNT. You can grab your electrolytes at [drinklmnt.com/robb](https://drinklmnt.com/robb). That's [drinkL-M-N-T.com/R-O-B-B](https://drinkL-M-N-T.com/R-O-B-B). We do have a secret fall flavor coming out in the next four weeks or so.

**Robb:** Middle of November?

**Nicki:** Middle of November. So we will be letting you all know more about that as it comes. It is also a limited edition flavor much like grapefruit was. So just keep that in mind. We'll see you all next week.

**Robb:** Bye, everybody.

**Nicki:** Bye.