

**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.

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**Nicki:** Hello. Welcome back to another episode of The Healthy Rebellion Radio. How you doing, hubs?

**Robb:** Wow, aren't you just taken the bull by the short hairs.

**Nicki:** There's a little sun in the sky, it's a good day, world's burning down around us, markets are crashing. Max Payne going on around the world, but...

**Robb:** Cats and dogs are sleeping together.

**Nicki:** We've got to be thankful for the little things like the sun in the sky in Northwest Montana.

**Robb:** Indeed. We've had very little of it.

**Nicki:** Yes. So, let's see. This is episode 110. Couple of upcoming events inside The Health Rebellion community, our book club. As I mentioned I believe last episode, we're reading The Book of Joy by the Dalai Lama and Desmond Tutu, and that begins on May 30th. So if you want to join us, make sure you grab a copy of the book and join The Health Rebellion if you're not already a member. And then, we have our seven day breath work challenge. We did this last year. Ash is going to lead us through that again. That's coming up on June 6th through the 12th, inside the Health Rebellion as well. So good-

**Robb:** Cool.

**Nicki:** Stuff, lots of live chats, and other things interspersed in there too. So, always a good time. And I wanted to share a couple of things that rebels shared this week. This first one is Tim, a couple of quotes because I just feel like they're timely and good and it's beneficial to hear stuff like this when sometimes it seems the world is not as we otherwise would want it, and or if we're working towards something personally, like in a reset, and we're trying to make a personal change, behavior change. And sometimes, that feels like you're treading water. It is hard. But anyway, Tim shared this post. He said, "A friend shared this with me today." And it's a quote from Epictetus, Discourses 2.18.1-5.

**Nicki:** "Every habit and capability is confirmed and grows in its corresponding actions. Walking by walking, and running by running. Therefore, if you want to do something, make a habit of it. If you don't want to do that, don't, but make a habit of something else instead. The same principle is at work in our state of mind. When you get angry, you've not only experienced that evil, but you've also reinforced a bad habit, adding fuel to the fire." And then he said, "Get after it." Really great. I know lots of people have read

numerous books on habits and behaviors and whatnot. But the simple thing of doing the thing again and again can have pretty profound change.

**Robb:** I've been tinkering with guitar since right before-

**Nicki:** January.

**Robb:** Christmas?

**Nicki:** Yeah.

**Robb:** You bought me a guitar 10 years ago, and we schlepped it from spot to spot and I managed to make our screen go dark. Hopefully, I didn't turn the computer off. But I was having a little bit of an existential crisis of realizing I'm turning 50. And although people call 50 "middle-aged," me making it to a hundred is, in all reality, highly unlikely. It's possible I'll fight for that as long as it's all good quality, but I realized if I'm going to play the goddamn guitar, it's time to shit or get off the pot. And thinking in jujitsu terms, 2, 4, 6 years of effort can really turn into something pretty remarkable. And so almost every day, not every day, because sometimes the days just get away from us, but I go in and carve out some time, and I have been sitting down and doing that enough that I've got a little bit of an overuse injury in my elbow and shoulders.

**Nicki:** I know!

**Robb:** I could pluck around a little bit on a guitar before I had a lesson or two ages ago, but I can actually do something now.

**Nicki:** You've made some good progress, yeah.

**Robb:** Yeah, I can actually do something now. So, carving out that moment of time where and when I can. And also, just not being perfectionist about it. We get a day where taking care of the kids, feeding ourselves, that is still elective, but it's barely elective. It's like once everything that must be done is done, and then I have a choice between sitting down and picking navel fuzz or other activities and I practice that. So...

**Nicki:** Nice. And I think the piece too about the same thing works also with our state of mind. The anger piece, you're reinforcing that emotion. I think I've noticed that a lot since meditating when the girls have been... So, we got a new puppy. We didn't mention this.

**Robb:** Oh, we didn't mention that. How did we forget that.

**Nicki:** We got a new puppy. Zoe turned 10 the previous week, and she's been wanting a dog that she could train. And so, we ended up getting a little lab. And we got it on Mother's Day. So, we got it on Sunday. So, what are we on? Day four or five here with this pup. And so, everybody's tired and the girls have been bickering nonstop. And it's Zoe's dog primarily, her dog to train, but Sagan's been helping and obviously wants to take part. Zoe's concerned that if people help too much, then the dog won't bond to her. So, she feels like she needs to do it all. Thankfully, I feel like I have a little bit of a tool set to calmly talk through this, in calm terms instead of snapping, because they can go after it.

**Nicki:** I'm like, "Everybody's tired. We've got this new, little being who has joined our family, and we need to be able to sort this out. And if you can't, revert it back to the whole if you can't say something nice, don't say it at all thing." But anyway, just this state of mind thing. I kind of find myself, when I'm trying to bring down the tensions or the

schnark that's going on, just feeling kind of relaxed and zen as I'm trying to talk them through. I don't know that it's working, but I feel better. I don't feel like I'm getting worked up, which feels good on my end. They're young still, so it's not instantaneous success with them. But at least, I feel a difference in me.

**Robb:** Well, and it's not escalating things.

**Nicki:** Right.

**Robb:** So, yeah.

**Nicki:** Right. Okay, another quote I wanted to share from Hannah. She shared a quote from the Rebel Reset workbook. "Eat like you love yourself, move like you love yourself, speak like you love yourself, and act like you love yourself." And she says, "This is a perfect quote from the workbook for my birthday. I focused on how everything I'm doing is making me feel great, and that kept me from eating or drinking anything today that would interfere with my health and happiness." And then she says, "Also, this mint strawberry electrolyte mocktail with sparkling water is yummy." That was another good one. I think that is all I have for Healthy Rebellion community news. You have anything else, hubs?

**Robb:** Not with that. Quick piece on our-

**Nicki:** News topic?

**Robb:** News topics from The New York Times, On the Phone, Alone. We look at the mental health crisis in... This thing was open access for me before, but it's... I think if you just-

**Nicki:** Go back to our document.

**Robb:** Open it in the email browser that it came in, I was able to read this whole thing. It's nothing stunningly new, but it's talking about the device time and the effect on adolescence in particular, and just how many challenges you can throw at an adolescence. I think under the best of circumstances, when you're just trying to find yourself and you're transitioning from a child to an adult and all the weirdness with that, and the-

**Nicki:** The hormonal changes.

**Robb:** Yeah. And it actually is a pretty good article in that it digs into the photo period disruption and the constant assailment of your just sense of peace, that there is no sense of peace when kids are on these devices. It's the social media piece, it's the constant contact with friends and even family just texting and everything. There's a fun element to that and it's kind of fascinating clearly in the beginning stages, but it's really exacting a remarkable toll. And we are reaching a spot where... We left Zoe home the other day and we left one of our phones there so that she could call us if something happened.

**Nicki:** She was home with the puppy while Sagan had jujitsu and Rob and I went to the gym. So, she was home puppy sitting.

**Robb:** Yeah, but we're nosing up onto that topic. I think we're both pretty steadfast that there's not going to be a specific iPhone in our kids' future. There might be one of these watches where you can program in couple of names and numbers. I don't know, but it's

going to be pretty minimalistic because I... It's interesting because it is so remarkably disruptive when you see the effect of even one kid among a group of kids that has a phone. It is a moth to flame.

**Nicki:** Moth to flame. It really is.

**Robb:** And it changes the whole dynamic. Whereas, if the kids don't have some sort of device, they will go concoct all manner of cool things to do. And if there is a device around, then there's nothing in the world remotely as interesting as that goddamned device, even if there's only one to be shared among 15 people. So...

**Nicki:** Yeah, I did pull out a quote from that article. "If you're not getting some outdoor relief time and enough sleep, and you can almost stop at not enough sleep, any human being is challenged," Matt said. "When you get the pubescent brain involved in that equation, you are talking about somebody being really, really challenged to feel contented and peaceful and happy with the world around them." So just ties in stuff that we've always talked about, like the need to be outside in nature, sleep, circadian rhythm, all of those things that are best attained without a device.

**Robb:** I've never met him in real life, ABDada. Very sharp guy, very interesting dude, and he has long been this advocate for a low reward way of living. Little bit of stoicism in there, he might frown at that as kind of an angle, but just being... The guy is so remarkably aware of the tricks used to rope us in and make us subjugated, effectively, by the world around us. And it's kind of funny because he's different than myself in that he's kind of like my dark alter ego. If I just quit giving a shit about humanity, I would probably be him because he's like, "Well, I'm just going to use these things to profiteer on the idiots that are willing to use it," and whatnot.

**Robb:** Very interesting take on the low reward experience. And I think that it's going to be such an interesting thing to try to navigate with our kids and the kids around our kids, because it's so easy to get this high stimulation input. And it seems very reasonable and it's certainly easy, and it also seems like it's disastrous. So I just thought that this was kind of an important piece, and I'm glad you pulled that quote out of there, because that one too... That was really the quote that stood out to me, that made me think this was worth sharing.

**Nicki:** Cool. All right, this Healthy Rebellion Radio episode is sponsored by our salty af electrolyte company, LMNT. And if you're feeling low energy, if you add a new puppy to your house or a baby and you're tired, you don't need another cup of coffee. You might just need some electrolytes, which is why I'm drinking some right now, because-

**Robb:** You are indeed. You're not lying.

**Nicki:** I am indeed tired. I will say the pup has been quite good. I know this is a diversion from our Element ad, but it all ties in. We're following some recommendations from both, a book that was referred to us in The Healthy Rebellion called... What is it? The Art of Raising a Puppy?

**Robb:** Yeah.

**Nicki:** By The Monks of New Skete, and then a podcast episode that I listened to with Tim Ferriss and a trainer, Susan Garrett, and this was several years ago. The first night, we just had him tethered by the bed. And I woke up to pee probably around 2:30 and he heard me. So then, I just took him out. Then he slept all the way until I woke up at

around six. And then the last few nights, we've had him in a crate up on a chair right by Zoe's face, so that the puppy can hear her breathing and see her, crated, and he's slept from about 10:00 PM till 5:30, the last three nights-

**Robb:** Then I grabbed him today, yeah.

**Nicki:** And you grabbed him this morning at 5:30. So anyway, really thankful that the sleep has been minimally disrupted. Definitely short on sleep, but I was fearing multiple middle-of-the-night wake ups like with an infant. So, I feel-

**Robb:** And as good as LMNT is, it can only do so much

**Nicki:** Yes, exactly. So, I am using the electrolytes for a little bit of an energy boost. LMNT has a flavor for every taste bud-

**Robb:** Bood.

**Nicki:** Bood. As you know, a citrus salt, raspberry, orange, watermelon, we like to combine them for new flavor combos. Robb likes to do frequently the raspberry and orange together. It's awesome. And dun-da-dun, the ultimate fan favorite grapefruit salt is making a limited time comeback in just two weeks. Before this month is out, you will all be getting an email and announcements on how to get your limited time grapefruit salt. In the meantime, you can go to [drinklmnt.com/robb](http://drinklmnt.com/robb) for your orders. [Drinklmnt.com/robb](http://Drinklmnt.com/robb).

**Robb:** Cool.

**Nicki:** Okay, got a couple questions for you all this week. This first one was sent as an email to both Diana Rodgers and Robb, but I thought we would feature it here. It's from CT. "Hello, Diana and Robb and teams. I was hoping one or both of you had heard about this article in the concepts it's talking about. The author references Dr. Morgan Gay who pens herself as a food futurologist, though I have no idea what her doctoral title is actually attributable to, and her ideas of air protein. What the heck is this? It says that there's a high tech fermentation to turn CO2 into chicken or whatever you want. This sounds outrageous, laughable at best to me, and as Robb always talks about, very carbon tunnel vision. Was just wondering if you guys could offer your thoughts on this one, as I'd never heard of it before, nor had I heard of this Dr. Gay woman. And her website was pretty sparse with biographical details. Love your podcast and newsletter. Robb, your substack is great. Just enough snark and humor, which is right up my alley."

**Robb:** Yeah. So, this is an interesting piece, the Bon Appetit piece-

**Nicki:** Yeah, he links to a Bon Appetit article and we'll link to that-

**Robb:** Pop that open here...

**Nicki:** In the show notes.

**Robb:** So one, the headline or the sub-headline, avocados might cost \$20 a pop. I think we're there already. But it's such an interesting grab bag. And I mean, pieces like this are always... Futurist stuff is always kind of interesting because you get a mix of possibly credible and then the ridiculous. I will say this. Dr. Morgan Gay gal, interesting. Her website's interesting. She does call herself a food futurologist, and she gives absolutely

no biographical background in what her doctorate is in, which... I'm one of these people that I don't put a ton of stock into-

**Nicki:** Pedigrees.

**Robb:** Pedigrees and credentials, and everything. But it's a little interesting that you just can't find where or what-

**Nicki:** What do you study-

**Robb:** It is.

**Nicki:** To be a food futurologist?

**Robb:** Well, I don't know. If you click on it, she covers everything from macroeconomics to food and stuff. It's an interesting piece, and what's interesting to me about it is it's a mix of both practical and absolute absurdity. Some of the practical is that the article actually has pieces it suggests. We're going to need grazing animals to regenerate our soil, and things like that pop up multiple places through the whole piece. And then, there's other parts where it talks about 3D printing food from stored vats of chemicals in that we're just going to micro assemble this stuff together. And I don't know, maybe at some point, there's some sort of nanotechnology that's able to do this stuff. And I mean, really at the end of the day, so long as all the right carbon, hydrogen, oxygen linkages occur, it all works out.

**Robb:** But it's just fascinating how totally divorced from reality some of this stuff is, and really an enamored with food in a vat and the air protein piece. It is funny that they really play up this angle of, "This protein can be made with CO<sub>2</sub>!" And it's like, that's the way it happens in a cow. CO<sub>2</sub> goes into the plant to build cellulose. The cellulose is degraded in part by the direct action of the digestive process of the cow. And then more importantly in that scenario, it's cellulosic fermentation that produces butyrate and other short chain fats. And there's a little bit of protein liberated out of that, and low and behold, it turns into beef and Lama and camel and all kinds of different things there.

**Robb:** So this is, again, one of these things that's so interesting. And I keep using the example of areas where if the weather is amenable and the state has shifted to a legalized marijuana status, people shift from indoor grow to outdoor grow, wherever and whenever they can, because as cheap as lights are, as cheap as... And there are these really fascinating grow lights that can be used both for marijuana and for other types of plants that only emit in the spectrum that plants use or almost exclusively. So, they're very energy efficient. They're shockingly energy efficient, because plants don't use the full spectrum of light to grow and whatnot. But even then, these folks that are literally drug dealers, that make tons of money and have a remarkable profit margin, find that it's cheaper and more thermodynamically efficient to grow their pot outside. I've kind of written about this, and we included it in part in Sacred Cow and whatnot.

**Robb:** And it's just one of the most powerful examples of where I find these folks just laughably disconnected from reality, because this notion that you're... We could with enormous effort right now and a lot of money, using organic, synthetic chemistry, basically pull carbon dioxide out of the air and turn it into carbohydrates and proteins and lipids, amino acids, and then string the amino acids together. And we could use a variety of different technologies and we could, completely from a lab, just literally grow things from air. But it's super energy intensive. If we had a ton of fusion power or

something, and we literally just had energy that we wanted to waste, I guess it would be okay.

**Robb:** One of my earlier things is kind of killing me here, but anyway, I'm blabbering on about this. I guess to get back to the original question, I think it's an interesting piece. There is at least some hat tip towards the notion that grazing animals actually play a non-negotiable role in regenerating soil and keeping soil intact. So that's cool to see, I guess, if you're going to venture out and have some sort of food futurist thing, if you just tell people, "Oh, it's going to look like a late 18th century farm with portable electric fencing that's powered by solar," and maybe you have drones that are scanning your property for when to move the cattle to the optimum grazing areas. It's not really that interesting versus-

**Nicki:** Air protein.

**Robb:** Air protein. So, yeah.

**Nicki:** Okay. Next, we have a question from Brian. "What's up with sunflower oil in my fish oil? Hi, just looking for clarity on the added sunflower oil to the fish oil. My wife has a nutrition business and we were researching fish oils, and I followed your stuff for over a decade. Fish oil being a polyunsaturated fatty acid, inflammatory added to fish oil doesn't make sense to us other than being a carrier oil or to fill a bottle."

**Robb:** I think he meant-

**Nicki:** He meant to say the-

**Robb:** Sunflower oil, yeah.

**Nicki:** Sunflower oil being a PUFA, yep. "Just curious and looking for a good product to refer our clients to with a good conscience." That's from Brian.

**Robb:** Carlson's is good. There are lots of places that don't use any sunflower oil. I think you would just have to look around a little bit. The Barry Sears zone stuff, I'm pretty sure, is free of sunflower oil. And then that said, it is absolutely paltry amounts of sunflower oil that go into these things. Most of the oil in the sunflower oil is a mono-unsaturated fat. It's oleic oils. This is some of the stuff where the seed oil folks right now I think have kind of gone a little bit crazy. So there were some folks that were freaking out about some high oleic safflower oil that was in a Whole30 salad dressing, which I don't care. If you eat them or don't eat them, I really don't care one way or the other. But this high oleic safflower oil is at most at about 3 to 6% polyunsaturated fats.

**Robb:** Olive oil can be anywhere from 6 to 20% polyunsaturated fats and mainly Omega-6. So, olive oil could end up being far worse of an option from just the PUFA standpoint. And I need to dig this stuff up, but ages ago, when I was spending more time with Mat Lalonde, he made the case that this was really only a major concern if the individual was deficient in EPA and DHA. And I forgot what the details are on that, I don't know what literature he had to support that, but the omega-3, omega-6 imbalance really became pronounced and of interest if you were particularly deficient in EPA, DHA, which ostensibly, the fish oil would solve. So if you poke around again with some companies like Carlson's, Nordic Naturals, I think you can find some folks that definitely do not have the carrier oils in them. But then aside from that, it's really, to me, not that big of a deal.

**Nicki:** And I believe you can test your omega status too. I know GrassrootsHealth, where I get my vitamin D tested, they have an omega test too, if people are curious.

**Robb:** Right.

**Nicki:** What does my omega status look like?

**Robb:** Yep.

**Nicki:** Okay, our final question this week is from Cassandra. "Is this hypernatremia? Hi, Robb and Nikki. My name is Cassandra, and I'm a 57-year-old woman with lymphocytic colitis, gastritis, and intestinal metaplasia. I've been a carnivore for about two years, mostly consuming fatty ribeye with beef towel. Regardless, my symptoms have flared up considerably. I'm also a personal trainer of 25 years and work about 60 hours a week. I walk about 15,000 steps a day and lift weights daily for 90-ish minutes." I had done so earlier on the day she's going to describe here. "I have a clearlight infrared sauna. I've just gotten up to 150 degrees this past week. Prior to that, I've been getting out at 135 to 144. I always use LMNT prior to the sauna, and continue to drink it after the sauna. I only use a quarter to half of the packet as it's too salty.

**Nicki:** Otherwise, I use about 10 to 16 ounces of water for a half packet. Yesterday evening, I spent about 30 minutes in the hot sauna and then drank the electrolyte drink afterwards. Because it was late at night, I did not notice that I poured the whole packet in before adding water. So as I was drinking the LMNT and the water, it tasted mild as usual. But when I got to the bottom, a bolus of LMNT swept into my mouth and I swallowed before I could stop it. I didn't think anything of it and went to bed. But a few hours later, I was vomiting and severe diarrhea that lasted throughout the night and into this afternoon the next day. I've been tired and weak and unable to work. Did I cause hypernatremia? Thank you for your input. I thoroughly enjoy your podcast."

**Robb:** Really good question and a very long question and kind of a short answer. Hypernatremia has to do with the sodium status of the blood. What happened here was basically introducing a very hypertonic solution into her gut, and then that ends up pulling fluid from her body additionally into the gut to try to balance it. And it'll give you a disaster pants, and can make you throw up and whatnot. She might be a little bit sensitive to magnesium also. We use magnesium malate in LMNT, which is pretty darn absorbable, but there's some people that don't even tolerate that. Like the nearly indestructible Kirk Parsley, it has to use LMNT very sparingly. Otherwise, it'll give them the trots. And it seems to be the magnesium piece in there. So not hypernatremia that was the issue here most likely, but definitely a hypertonic, high salt solution. I seem to recall that in the same vein as a syrup of ipecac, where they will give that to people that maybe of a drug overdose or something, or a kid has-

**Nicki:** I was given syrup of ipecac when I climbed up on the counter and got the chewable, pink, baby aspirin or whatever when I was a kid.

**Robb:** Yes. Horrible on both counts.

**Nicki:** Yes.

**Robb:** But I seem to recall hypertonic sodium solutions being used in a similar way, that it was maybe not as reliable as the syrup of ipecac, but if you were lacking in that and you needed to do induced vomiting, that a super high salt solution would do that. I looked and looked and looked and I couldn't find anything that supported that. I tracked down



some field medicine sites and everything. So I may be completely making that up, but I do know that one of the side effects that we warn people about is if you do too concentrated of an electrolyte, regardless of-

**Nicki:** -Quickly. And if you drink it quickly.

**Robb:** And too quickly, that it can definitely loosen stools, give you diarrhea. And in this case, it could definitely make you vomit too. Yeah.

**Nicki:** And definitely diluting it. I know she's using quarter to half of a packet in 10 to 60 ounces of water. Some people prefer... They'll put one packet in a 40 ounce thing.

**Robb:** Right.

**Nicki:** That part is totally preference.

**Robb:** We have kind of a cool thing that we use for the girls. It's a 64 ounce mason jar that has kind of a cool lid on it.

**Nicki:** A lid that has a handle. A screw top lid with a little spout, like an iced tea type spout, or I don't know. You can close it. We usually put two in there. This is when we'll do our flavor combinations. We'll mix raspberry and orange, 64 ounces of water, shake it up, and just keep it in the fridge, and they can just self serve.

**Robb:** If you do it that way, it's in an appropriate dilution, you don't have to worry about kind of fudging, getting... You can just dispense 10 ounces in-

**Nicki:** A half packet.

**Robb:** Or five ounces or whatever, but then the solution is the same concentration across the board.

**Nicki:** Right.

**Robb:** So, I would definitely recommend doing something like that. It's easy. It's freezing cold because it's in your refrigerator and everything. So, it might be an idea to do that.

**Nicki:** All right, let's see. I think that's a wrap for this week. I hope you all have a fabulous weekend. Hopefully, the sun is shining wherever you are. I really hope that it shines here, with the weather.

**Robb:** It's always shining. It's just a matter of if it makes it to earth.

**Nicki:** I know. It's looking like it might be kind of cloudy this weekend. But please join us in The Healthy Rebellion if you're interested in joining in any of our upcoming summer activities. Again, that book club begins on May 30th, The Book of Joy, and our seven day breath work challenge begins the first week of June. And remember to check out our show sponsor, LMNT, at [drinklmnt.com/robb](http://drinklmnt.com/robb). And I think that's all we've got for this week, so we'll see you all next week.

**Robb:** Bye everybody.

**Nicki:** Bye.

