

**Nicki:** It's time to make your health an act of rebellion. We're tackling personalized nutrition, metabolic flexibility, resilient aging, and answering your diet and lifestyle questions. This is the only show with a bold aim to help 1 million people liberate themselves from the sick care system. You're listening to The Healthy Rebellion Radio. The contents of this show are for entertainment and educational purposes only. Nothing in this podcast should be considered medical advice. Please consult your licensed and credentialed functional medicine practitioner before embarking on any health, dietary or fitness challenge. 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 Plus.

**Robb:** Trying to make a squeak there.

**Nicki:** No squeaks.

**Robb:** No squeaks. There is no squeaking in podcasting.

**Nicki:** No.

**Robb:** Good morning wife.

**Nicki:** Good morning hubs.

**Robb:** What's new? What's exciting?

**Nicki:** Oh goodness. We're back at it. We just got back from our trip to Reno.

**Robb:** With family.

**Nicki:** We spent a week in Nevada with my dad and visiting friends and celebrating my 43rd trip around the sun.

**Robb:** I thought it was your 38th birthday.

**Nicki:** That's what Jason kept saying. He's been very kind.

**Robb:** That was the word on the street. Yes. That was a grand time.

**Nicki:** Yeah.

**Robb:** Would I remember of it?

**Nicki:** And It was perfect weather, gorgeous fall, cool air. Cool in the evening. Cool in the morning, sunny and warm during the day. It was lovely.

**Robb:** Awesome.

**Nicki:** Yeah. That's getting a little nostalgic.

**Robb:** You can do that. You're 43.

**Nicki:** Let's see. What else? Yeah, we got to visit a lot of folks. I got my hair cut from my favorite hairstylist on the planet, a good friend of mine. It was interesting chatting with her about all the changes they've had to make since the coronavirus. Fortunately,

they're back working. Salons obviously are one of the places that are back in action. They did have plexiglass between all of the shampoo stations now. Standard precautions, wiping everything down, all that kind of thing. But it's interesting talking to her. She shared that one of her clients, an elderly woman who I guess her husband had cancer.

**Robb:** You said lymphoma?

**Nicki:** I don't remember if she specified, but at the onset of this whole thing, they decided that they were going to completely stay home. So, ordering groceries, not seeing anyone, not even children and grandchildren and to try to keep him safe, because obviously he was in the vulnerable population.

**Robb:** High risk. Yeah.

**Nicki:** Then she shared, unfortunately, this woman had an aneurysm a couple of weeks ago and passed away. Again, there's just so many ... it's just a complicated story. Right?

**Robb:** Well, and I don't know if we were going to mention this, but generally our reviews are pretty favorable. Occasionally my language gets somebody up in arms, but we had somebody post, and I think the title was something like COVID Truther.

**Nicki:** Yeah, we got a one-star review from a nurse who said he or she, I don't know, is unsubscribing from the podcast and can't believe about our stance on masks, which I think I was trying to recall, when Robb and I were talking, I think the main thing that we've discussed is that we've shared different people's experiences who have either had traumatic experiences and struggle with wearing a mask or what are the knock-on effects, like little infants in neo-

**Robb:** Well, and I did get into some early ... not early, like some ten-year-old studies looking at influenza transmission. I thought that those might be fairly apolitical, like they actually might be doing science for the sake of doing science. What I took from that was that, for a mask to work at all in mitigating the transmission of airborne transmissible diseases, needs to be one of these N95 mask, you have to wear it exactly properly. You have to do all this other hygiene stuff like not touching your face, not putting it on, not taking it off, or it just doesn't work. Even then, it mitigates things by about a 10% margin, which is non-trivial potentially, but virtually no one other than health care providers are wearing an N95 mask, and the way that we have this stuff set up, like going into a restaurant, you take it out of your pocket or your purse or off of the bottom of the car, as our kids warp them up and throw them wherever.

**Robb:** Then you put them on and you walk through the place and then you sit down and then you take them off. It's just one of these things where I guess it's just this thing that feels like theater. This is largely what I've been trying to talk about. I don't know what the fucking right answer is. We have some people who are like, "Just wear the damn mask." Like it doesn't call anybody in.

**Nicki:** What was the article that somebody shared, I believe in Healthy Rebellion, and the man who wrote it was some scientific researcher guy who worked with some very dangerous compounds and had to be specially fitted for this, like super mask that has like ... he talked about ingress and egress. If you have a really dangerous substance that you're working with, you inhale through two sides where there's multiple filters filtering stuff out and you exhale through a different canister that has a different kind of filter. He talked about how he would have to go through this process when he would remove it

and put it on to make sure that his hands didn't touch, because basically that type of mask is actually filtering stuff out. What we're wearing, it's not a barrier to COVID.

**Robb:** Well, it is to a degree, but everything needs to work. The point that he made there was that the type of mass that we're dealing with here is that, if you get exposed to some airborne COVID, to the degree, the mask works, now the exterior of the mask is covered on the mask.

**Nicki:** It's on the exterior of the mask, which then you're going to touch.

**Robb:** Which then you're going to touch, pulling the mask up, pulling the mask down. Again, I see even bringing this up, we're probably going to get 10 more one-star reviews, and that we're-

**Nicki:** I think the main thing is that we're trying to talk about it in a nuanced, non-religious way. Let's really look at it as it. Is it really everything that it ... Why does it have to become this politicized issue? Really look at it.

**Robb:** The flip side of that though, and I don't mean to interrupt, because that's me putting my white male privilege all over you. But there are folks out there that are like, "Listen, just wear the damn mask." I've been trying to warm up to that more. I'm like, well, okay, well, what's my problem with this? But this is some of the stuff that I had problems with going through TSA. Just as a chemist, seeing these people swab folks' hands at this random deal and then go ...

**Nicki:** I got my swabbed this weekend.

**Robb:** Then go over and do a GCMS. In the back of my head, I'm like, when was that instrument calibrated? How was it calibrated? How did they do their QA/QC process on it? There's all this stuff that starts going. To say nothing of the rest of it, and it's just one of these things, and I'm not the smartest person in the room by any means, but I know enough about some of this stuff. That if you're going to go through the process of just adding millions of dead hours of people traveling around the United States and lost productivity in a TSA process, make it fucking work. Just set it up in a way where it really works, or don't do it at all. Do it the way that they do in Israel, where it is ... They have a metal detector that you kind of jam through, and then they have lots and lots of people that are trained, and it's like interview and interrogation stuff.

**Robb:** They see you perspiring a little bit, and they're like, "Hey, where are you going? What's your story?" They largely default to humans interacting with humans to do the bulk of the stuff, and it works very, very well, and its low infrastructure costs, and it's actually much more difficult to circumvent. These things like security theater makes me crazy. We go to Schlitterbahn here with the girls, the water park.

**Nicki:** Yeah, we talked about that earlier in the year.

**Robb:** Well, I'll mention it again. Thank you. In theory, they look in your bag, but it's like, they look and their mouth breathing. It's just like, either do it, like really do it, or don't do it at all. But I guess this is part and parcel for the world. People are okay with the perception of efficacy.

**Nicki:** The perception of safety.

**Robb:** And the perception of safety. Whereas for me, it's like either do it right, or don't do it at all. The case that I've been making is that the way that this mask thing has been handled for me just doesn't make sense because it's like, shut the whole fucking world down then. If it is so dangerous, then just shut everything down, kill every business, and we will all be ... Population will not be a problem because we'll be eating each other within six months because everything will have collapsed and it will be absolute chaos. Either really do it, like if you're so morally bent that the coronavirus is the most dangerous thing facing humanity, then do what's really necessary to make coronavirus a non-issue. It will have knock on unintended consequences that will make it pale.

**Nicki:** It already has. Yeah.

**Robb:** I would argue it already has, but this is the spot that I'm at. What's fascinating to me is I'm a truther for even, which that's this whole ... that's like, you're a racist, you're a sexist. It's like this super emotionally charged word versus like, hey, here are the points that I agree on, here are the points I disagree on. But instead of that, we just have this broad brush dismissal of all this stuff. Again, we had agreed not really to talk about that.

**Nicki:** He or she feels like ...

**Robb:** We're going to kill people.

**Nicki:** ... you're unwittingly causing deaths of people because our listeners are going to not wear masks, even though we've never said don't wear a mask, and then they were going to unwittingly kill people. Anyway.

**Robb:** I'm not entirely sure what my point was to even bringing that up, but it's just, so like, in the case of your friend, you have these ... it's super sad.

**Nicki:** It's just tragic. A lot of people are living in fear of something that yes, takes lives, but by all accounts, the numbers that the CDC has posted is not as deadly as we feared in early March.

**Robb:** If you're hospitalized for a serious case of COVID, the fatality rate has dropped something like 75%. It used to be a 25% fatality rate if X, Y, Z parameters were met, and now it's something like a 7% fatality rate because we've had nearly a year of treating people to learn how to do things better. Then there are all these novel therapeutics and different things like that. I don't know, man, there's just a lot going on. I feel like there's like this terror that comes ... that is being broadcast. Like, there's not a ray of hope. It's going to be a dark, dark winter.

**Nicki:** We had people on the plane wearing two masks, like overlapping them. Yeah. I don't know. It's an interesting time.

**Robb:** I know. Again, all of our podcasts are kind of turning into like quasi salty talks at this point. It's funny, having somebody ... I think a lot of folks would be like, well, why do you even let this one person's comment bother you? We've talked about the evolutionary biology of this stuff before, where somebody who is threatening you, it's way more important to pay attention to them than somebody that's like, "Hey, Robb, good job." That's a non threat, so you acknowledge it, but it doesn't really have the same impact, but it's just interesting how weaponized all of this stuff has become where I'm a truther, we are likely killing people by suggesting that ...

**Nicki:** There's nuance around any given topic.

**Robb:** That there's nuance around this, that we might have a discussion around and whatnot. Then I constantly reevaluate where I am with this stuff, but there's just pieces of the story that are so grading and annoying and inconsistent. This is again why we got paid really, really well working for CrossFit. There were just moral inconsistencies there that I couldn't ignore, couldn't shut my mouth about. Lots of other people did, lots of other people got to mobilize their way around the moral hazard that they were facing being a part of all that, and I couldn't, that doesn't make me a saint, but this is kind of who I am, and you were very much the same way. I see things with this and I'm just like, "Hey man, can we have a discussion around this?" What I think folks don't fully grasp is, just having a discussion is now verboten. We posted that thing about Bret Weinstein getting his Facebook ...

**Nicki:** Account deactivated.

**Robb:** ... account deactivated, and there was a whole fascinating backstory. I think it's episode 50 of the dark horse podcast, where they unpack that. It's really interesting. It is completely one, he had not even logged into there in a couple of months. He had not posted anything there.

**Nicki:** He barely posted anything on Facebook at this point.

**Robb:** He'd barely post anything. It was a really squirrely explanation that Facebook put forward. Then it turned out that all of the people in the supply chain of making that decision are either current or former DNC like operatives. One gal was-

**Nicki:** Working for Nancy Pelosi.

**Robb:** Yeah, and Elizabeth Warren and all this stuff. Again, I don't want to turn this into crazyville politics show, but ...

**Nicki:** It's just a fascinating episode. If this is something you're ... they talk a lot about censorship. They've been the target of a lot of censorship of late, and so if that's interesting to you, listen to the podcast. It'll give the full picture.

**Robb:** It's fascinating and it makes the point better than what I'm doing here, that all of this stuff, the censorship, the hyper-reactivity to the ability to just have a conversation. Bret makes the case, both he and his wife and I've made this case in the past too, if you don't allow people to have a discussion, like there was a time when speech and thought was protected, even if we didn't like the content of that stuff, and it was understood that it was better to have it out because then it's like, okay, I know who those people are. I know what they're about. Even the right to protest, some of that is like, okay, now we know everybody that's in this politically or socially affiliated scene. It allows one to blow off steam, but also from a state level, it's like, well, we know who these people are.

**Robb:** If you suppress the ability to just have a discussion to just share ideas, then you don't know who is where and what they're thinking. Just the potential for just stunningly catastrophic, bad stuff to happen is just seems so obvious, but I have people push back on this all the time. People like Jordan Peterson, Bret Weinstein, us, it seems pretty clear what the dangers are here, but for other people, it just ... a publisher platform, they can pick what they want. I'm still just stupefied, but I had the two knucklehead Polish doctors that I ended up panicking, because they were all fired up about other doctors getting banned from the internet if they felt like what they were promoting was outside the orthodoxy and whatnot. It is coming around where anything that doesn't fit the narrative, and so like meat doesn't fit the narrative because it's ...

**Nicki:** So many things in history have not fit the narrative and have been out of the standard, like orthodoxy have turned out to be like major breakthroughs in science.

**Robb:** Right. Again, Semmelweis and all this stuff we've talked about.

**Nicki:** That alone should give people pause and let's just see where this goes.

**Robb:** Right. I didn't anticipate that going quite that direction, but shall we ...

**Nicki:** Shall we move on?

**Robb:** Yes, we shall.

**Nicki:** What is your news topic today?

**Robb:** So, it's a Vox piece, which I'm ... mixed on Vox. They're an interesting outlet, but they have an interesting piece. We must burn the West to save it. How an ancient American Indian practice can reduce the risk of massive wildfires. I'll read a little section from this in a second, but one of the things that deeply endeared me to Nicki early on, in addition to her stunning good looks and a bubbly personality ...

**Nicki:** Ooh, bubbly. Haven't heard that one before.

**Robb:** I was thumbing through your book section and you had an anthropology book, which I'm always kind of a fan of anthropology, and it had a section on Northern California native American tribes, and one of the chapters, so this was a compendium of different subject matter experts on Northern California native American tribes. One of the chapters talked about the use of controlled fire to dramatically enhance, both the carrying capacity of the area and the productivity of the land, the productivity of the food system. These native American peoples in say, kind of San. Luis Obispo North, maybe even a little bit further South than that, but lots of grasslands, lots of giant oak trees, but separated from each other. So, it was like this really interesting kind of fractal mosaic of like grass and oak trees, and the oak trees were huge, but they were separated from each other.

**Robb:** What these folks had a tendency to do was on a pretty consistent and plan basis was set fires to the grasslands, which would encourage a lot of things. It minimized disease that could impact the oak trees, and the oak trees, the acorns they produced were major staple for the folks that lived in that area. It improved the productivity of the grasslands, so that, that interaction between the grazing animals and this freshly burned area, the next go around, it releases stored nutrients and gets it back into the grass, and so the grass grows really well. The long and short of it is that, that area of Northern California carried between three to five times greater population density than virtually any other native American area in the Americas, North, South central America. You could make the argument that they were on this cusp of agriculture, transitional horticulturalists, agriculturalists.

**Robb:** You can make the same case of the Pacific Northwest tribes that basically farmed salmon. They caught salmon, but the whole setup is much more reminiscent of an agricultural society, the way that they planned and stored and did all that stuff, and they were actually in fairly stable locations versus moving around like hunter-gatherers and whatnot. But anyway, the way that they managed all this stuff was with controlled burns. Reading from this piece, "A number of unique factors this year combined with long-term trends to create the devastating and unprecedented fires of 2020. But a

major reason for the massive scale of the destruction is that natural fires and burning practices first developed by Indigenous people have been suppressed for generations."

**Robb:** "Wildfires are essential to many Western ecosystems, restoring nutrients to the soil, clearing decaying brush, and helping plants germinate. Without these fires, vegetation in woodlands, grasslands, and chaparral shrublands accumulates, so more fuel is available to burn, especially when a megadrought keeps drying out the fuel, year after year. A debt to the landscape starts to mount, and when it comes due, there is hell to pay." Then they're quoting someone who's being quoted here.

**Robb:** If we're not using fire in the same way that this landscape evolved with over millennia, then we could be creating a situation where we're creating a further imbalance," said Don Hankins, an environmental geographer at California State University Chico and a Plains Miwok Indigenous fire practitioner." This is another one of these things where ... The article is interesting in that it makes the case that fire suppression was actually kind of a racist anti-indigenous population practice because the indigenous population wanted to do this, then the more European settlers tried to suppress it because it was suppressing part of their life-way. I think we've gone through cycles of this. There was a time when clearly significant logging occurred in the West and maybe to an extreme where there wasn't enough replanting and all kinds of problems happened with that. But then-

**Nicki:** Forest Service used to do controlled burns too, right?

**Robb:** We've gone through cycles through that stuff and we have been in a period of time. What this article makes the case and other people have made this case, is that climate change is likely a piece of the story, but is a tiny piece compared to the general mismanagement of these areas. What's interesting is it generally, I'll do quotations, it's generally environmentalist minded people that are pushing the agenda of, we can't do burning, we can't do logging like, and so then we end up with 20, 30, 40 years of buildup, and then when a fire does occur, it happens in a way that never occurred in history previously, whether humans were in the area or not. This case is being made in a lot of areas, it's being made in Australia, it's being made all throughout the Americas.

**Robb:** But it's a pretty unpopular position, but the irony here is we actually have an indigenous population example of how they managed these areas very differently than what we're doing now. We have other problems in that people are building houses up into hills and stuff like that. These are very amenable for catastrophic fires, but it makes even a bigger case for keep all that overabundance of fuel at a minimum, like try to minimize that. I was trying to think of an analogy around controlled burns and vaccinations. It's like the mega fire is kind of like catching smallpox or something, and the small fires are like an immunization. Immunizations don't always go exactly the way you want, and don't always come without some degree of consequences, but now I'm going to be a vaccine by saying that.

**Robb:** But there is a reality. Every once in a while, a controlled burn gets squirrely, but as this article cites, there were some pretty good rules that were used when indigenous peoples would or would not do a particular controlled burn, and I think that we can learn a lot from that. We could use satellite imaging. We could use our modern weather forecasting. If it looks like the wind is coming up, then even though we had a controlled burn planned, we don't do it that day, or we figure out other workarounds, but this is another one, these kind of climate change pieces, like the totality of this problem is being leveled at climate change. Again, there is, without a doubt that is a factor in this story, but it is not the primary driver.

**Robb:** If we managed all this the way that we're doing it currently, and we were heading into an ice age, it would be the same. It would be a similar type of problem. If you have areas that are grown up in a way that it hasn't happened for like 15,000 years and probably longer than that prior to that, just from like lightning strikes and natural phenomenon of fires, we have to give some thought to the resilience of nature and the way that we can learn from stewarding that process instead of trying to ratchet it down and control it whole hard, because we can't. We just can't.

**Nicki:** Well, it's just like being overweight or in obesity, there's not a singular cause for it. There's inflammatory foods, poor sleep, stress. There's a whole factor of things that play into one end result. Thinking that there's one singular reason for a situation is kind of limited thinking.

**Robb:** It's a really good point. If you just say climate change, and then you shift your focus somewhere else, then we're not going to be looking at these multivariate inputs to say, okay, well, which of these is likely the greatest impact, and/or because we have limited resources, where should we be putting the bulk of our efforts? Should California be putting the bulk of its efforts trying to move to a completely fossil fuel free society within 10 years to address these fires? Or should they revisit the way that these landscapes have been managed for at least 10,000 years, and were managed in a way that dramatically benefited the societies that live there? These people were healthy, they were able to sustain a population that was three to five times greater than most other areas of the Americas. There's something to be learned from that.

**Robb:** Again, this is where, going back to my original piece, if we're suppressing everything that a knee-jerk response, it's like, oh, now Robb and Nicki are climate change deniers. It's like, no, we're not, man. If we just stifle everything that, at first pass, doesn't quite fit what we're thinking, and there was this time that, well, I agree with six of the 10 points the person made, and I disagree with four of them. Now we can't do that. It's like, we need to have 10 out of 10 agreement or the person's a racist or a denialist.

**Nicki:** Or on the fringe. The lunatic fringe.

**Robb:** The lunatic fringe. Again, I guess this stuff is just kind of wrong leaning into it, but it makes us very hamstrung from being able to really make good decisions and have the discussions about like, well, how should we handle this stuff, is what we've been doing the last 50 years. Is that the way that we should do it? Are we just powerless to affect this? Or there's some things that people were actually doing pre-European contact that were working really, really well, both for them and for the environment around them?

**Nicki:** All right. I think we should move on.

**Robb:** Shit. This has been a whole podcast already yeah.

**Nicki:** This is so long. Okay, let's see here. Let's read our t-shirt review winner of the week. It goes to Ancestral Dr. Josh, the real deal myth-busting source for healthy living. As a long-time follower of Robb and his crew, and both as a patient with Crohn's disease and a naturopathic physician myself, I can say that every episode, since the paleo solution episode one has been the real deal. Supremely helpful to my health journey and my favorite source for myth-busting, so much of the conventional BS that you hear reported in mainstream media. Robb is one of the best at dismantling poorly done articles and explaining how the research upon which they are based is often flawed or misrepresented by article authors in the media. He's a super smart dude, and Nicki is

great at keeping the podcast flowing nicely and has lots of wisdom and perspective till the end as well.

**Nicki:** Their dynamic together has really helped focus the podcast, though I must say it has always been entertaining from day one in its original iteration, the paleo solution. So, go back, start from the beginning, gain some incredible wisdom and get, or stay healthy. This guy is like one of the original six listeners.

**Robb:** OG.

**Nicki:** Old guard, yes. OG, for sure. Definitely worthy of a t-shirt. Ancestral. Dr. Josh, thank you. Send us an email to [hello@robbwolf.com](mailto:hello@robbwolf.com) with your t-shirt size and your mailing address, and we'll send you a Healthy Rebellion Radio t-shirt. This episode of The Healthy Rebellion Radio is sponsored by Joovv. Anyone who's familiar with light therapy knows Joovv is the leading brand. Joovv pioneered this technology, and they were the first ones to isolate red and near infrared light and make it accessible and affordable for in-home use, and they've remained the most innovative forward-thinking light therapy brand. We've seen firsthand the recovery benefits that come with using a Joovv red light therapy device.

**Robb:** Yeah, I have a good friend that was in the military for a good stint, and clearly has had a lot of TBI, traumatic brain injury events and just the stress, the circadian disruption with multiple deployments and whatnot. He has really benefited from this. Adopted some ancestral eating, really paid attention to circadian biology and whatnot, but if there is an area where some of this red light therapy shines, it's looking at some neurological effects in particular. Seems to have broad ranging systemic anti-inflammatory effects, but some of the neurological effects seem to be pretty powerful.

**Nicki:** Joovv just launched their next generation of devices and have made a huge upgrades to was already the best red light therapy system on the market. Their new devices are sleeker, they're lighter, up to 25% lighter, and they've intensified their coverage area, so you can stand as much as three times further away from the device and still get the recommended dosage. Easy mounting options. New Joovv can fit in just about any space that you have, and all Joovv devices now have ambient mode for calming lower intensity of light at night. For those of us that like to use Joovv devices to wind down from the day, you can now do that easily, and we're heading into winter, so now is the perfect time to get your Joovv red light therapy device.

**Nicki:** For a limited time, Joovv wants to hook you up with an exclusive discount on your first order. Go to [joovv.com/robb](https://joovv.com/robb). That's [joovv.com/robb](https://joovv.com/robb) and apply our code, ROBB, R-O-B-B to your qualifying order. Exclusions apply, limited time only, but check them out. Again, that's [joovv.com/robb](https://joovv.com/robb). You ready to answer some questions?

**Robb:** Yeah, we're like 40 minutes in. I'll answer some questions.

**Nicki:** Okay. Our first one is from Josh On Strong man, Joshua from On Strongman Nutrition. He says, "Good afternoon. I'm a 30 year old father of seven." Seven kids at 30. Wow, we started late.

**Robb:** We started really late.

**Nicki:** "I'm 166 centimeters tall and 90 kilos at 30% body fat based on the Navy Body Fat Test. I recently have been inspired to get as strong as possible so I can be my children's own superhero after watching," and I'm going to butcher this name, Hafþor Julius Bjornsson

pull the 501 kilo world record deadlift. I know you have also been really successful with power lifting in the past, so my question for you would be how would one eat to get as strong as possible?"

**Robb:** Good question. I'm possibly not the best person in the world to ask this, but Joshua asked me anyways, so I'll give it a shot. One thing is strong is kind of a relative thing and literally we have absolute strength and relative strength. Like a gymnast is relatively very, very strong, particularly in their upper body. They have a great strength to body weight ratio, whereas strong men and even say like the super heavy weight power lifting competitors, they just want to be as strong as possible. I mean, if you really want to just lift as much weight as is humanly possible and be as strong overall as possible, then you just keep gaining as much weight as possible because some fraction of that is ostensibly going to be muscle mass, and we would like to see some sort of good body composition come along with it. Doesn't always happen.

**Robb:** But I mean, the long and short of that is just adequate protein intake. Everything we look at, whether it's weight loss or muscle gain, hitting that kind of protein minimum, which a gram of protein per pound of body weight is a decent place to start with that. Then depending on what the goal is, if you want to gain weight, usually somewhere between 19 and 20 calories per pound of body weight is a good place to be, somewhere between 15 and 16 calories per pound of body weight is maintenance, somewhere around 10 to 11 calories per pound of body weight is a good place to be for weight loss. You kind of back extrapolate from that and keeping protein on the high side of all of those is very good for body composition, whether you're gaining weight or losing weight. Then from there, it's just a smart strength and conditioning program. I couldn't recommend the Basis folks enough, they can construct a customized program for you. They also have programming online. Grayson Strange is very into strongman.

**Nicki:** I don't know what this Mr. Bjornsson, the world record deadlift holder, I don't know what his body composition is, but if you want to look like a superhero, look at Grayson Strange from Basis and model your programming ...

**Robb:** He's a bearded superhero. Yeah.

**Nicki:** And he looks like he could be like a Nordic Thor-esk.

**Robb:** Indeed. Smart training program, if you don't already have one, would recommend the Basis folks. I don't know. I think that's about it, but that's a very cool goal, to be your kid's own superhero.

**Nicki:** It's awesome.

**Robb:** That's awesome. Yeah.

**Nicki:** Our next question is from Donna. She wants to know how to avoid exacerbating dawn phenomenon. "Hi, Robb, I've been about 90% paleo with some sourdough bread occasionally and some dairy since mid-March, and overall it felt a lot better. My meal routine worked fine right through the summer. In fall, I ran into a problem. My blood sugar is generally highest first thing in the morning before I've eaten anything, and this seems to be due to one, burning through my dinner calories by around 5:00 AM, now that it's colder and I resumed weight training at my gym, and two, the dawn phenomenon, assuming this is a real thing, where glucose gets poured into the blood in preparation for waking up. Some research turned up the suggestion of eating four to six ounces of a slow digesting food, 30 to 60 minutes before bedtime to prevent a big blood

sugar drop in the early morning. Do you know whether this works? And if it does, what would you suggest a protein like nuts or more of the complex carb, like dried fruit, or would you recommend an entirely different strategy?"

**Robb:** First, like dried fruit, if there's one thing that seems to consistently make blood sugar go bananas is dried fruit. Within the type one diabetic community, dried fruit is just ... people get it. Even the people in the more conventional circles are like, oh, dried fruit's really dangerous. They'll give their kids peanut M&M's and Snickers and stuff, and it doesn't seem to blood budge the blood sugar the way that dried fruit does. Whether it's complex or non-complex dried fruit's really ...

**Nicki:** Dried fruits out.

**Robb:** ... really challenging in that regard. It's interesting because, a couple of thoughts here, one, some people experience on phenomena and their blood sugar is modestly elevated in the morning, and then once they eat or they get up and get active, then it kind of normalizes. When we look at their A1C, it's fine. It's good or fine. The big challenge in all this is, if blood sugars are too elevated too often, then we start getting into some problems, and things can drift that direction, but that's one part of this, like, just because they're even modestly elevated in the morning, doesn't necessarily mean that we're we're facing dire circumstances could be something that we need to look at. Many people have noticed that if they eat more of their calories earlier in the day, more of their calories, even more carbs earlier in the day, so you're front-loading the calories, that the dawn phenomenon is mitigated.

**Robb:** There are other people that, like she's saying, that they notice if they do pre-bedtime snack, it seems to mitigate the dawn phenomenon to some degree, but all of this research that's coming out on circadian biology really paints that bedtime snack in a problematic light. Donna, I'm not entirely sure how to tackle this. Generally, what's recommended is reducing carbohydrate overall, reducing carbohydrate in the evening overall. But another piece to this is electrolytes, ironically enough. If we are low in sodium in particular, then that can produce a stress response and we get kind of an over the top blood glucose elevation from the kind of stress associated with doing lower carb and inadequate electrolytes.

**Robb:** Chris Masterjohn, maybe like two years ago, suggested doing a quarter to a half teaspoon of table salt mixed in just a scant amount of water, just enough to get it dissolved and then shooting that down immediately before bed. I've noticed that definitely helps my sleep. Some people in The Rebellion have reported that they've noticed that it helps mitigate dawn phenomenon too. There's a lot of different ways to go after this. I poked around a fair amount. I looked at the Virta website because they deal with a lot of type two diabetics and they're doing a ketogenic diet, and so dawn phenomena is a common thing that they dig up over there. Most of the recommendations were similar to what I made here, reduce carbs overall, increase calories earlier in the day. Take a peak at A1C and see if this is even really an issue. It doesn't always work. Some people do benefit from that pre bedtime meal. Probably something like a little bit of protein and nuts is a good place to go.

**Robb:** Something like pecans or pistachios or something like that.

**Nicki:** One of the less carby nuts.

**Robb:** But they've got a little bit of carbs, and so you've got a little bit of slow released carbs. You've got some monounsaturated fats, then you have a piece of jerkier chicken or

whatever, and maybe make it pretty small, 300 calories total, something like that. Make it pretty modest. But you just kind of have to tinker with this stuff. Definitely folks respond differently depending on what they have going on.

**Nicki:** Okay. Our next question is from Kate. She has a question on salad dressing. "Hi, Robb and Nicki, I really enjoy your podcast and find it to be both informative and entertaining. I have recently been using Tessemae salad dressing, which is supposed to be whole 30 approved, but I noticed it was made of high oleic sunflower oil. Is it a problem to consume this oil? And if so, what would be a better salad dressing option that contains more omega-3? I believe the high oleic sunflower oil is lower in polyunsaturated fats and omega-6 than normal sunflower oil, but should it still be avoided?"

**Robb:** This is kind of a contentious topic right now, and God bless Paul Saladino, I really like that guy, but my opinion is maybe gone a little overboard on the avoidance of polyunsaturated fats, and people have kind of lost some context on this stuff. Melissa urban came out with her own line of whole 30 salad dressings and they use high oleic sunflower oil, and some people just lost their minds, and they're like, these things are so inferior. Whether you use salad dressings or not, I don't give two shits. Do it, don't do it, I don't care. But people were like, avocado oil is far superior to this, or even olive oil. What super chap my ass is people said this with the certitude of like the law of gravity or something, and then it's like, oh, really?

**Robb:** Did you know that high oleic sunflower oil has about 6% polyunsaturated fats, and that avocado oil has 12 to 14? And did you know that olive oil ranges from as little as 3% to as high as 25%. I posted this on a couple of these assholes responses and to a person they deleted their initial comment, which I don't know if that's good or bad. It's like, if you're going to fuck up like that, at least own it and be like, oh, hey, thanks for acknowledging that, and then we leave it as public record that people make a mistake. I don't know if they just like deleted it and now they're harassing somebody else somewhere else about polyunsaturated fats. I remember it was ages ago and it's kind of funny when you're in this scene as long as we have been, back when Matt Lalonde, the kraken was still on the scene and hadn't pulled doctor, oh gosh, the guy from the Watchman, the Uber Doctor Manhattan. He hadn't pulled a ...

**Nicki:** Okay. I was not going to come up with that.

**Robb:** No, you were not going to come up with that. He hadn't pulled a Doctor Manhattan and left us all to our pathetic devices, but he really did a deep dive on all this omega-3, omega-6 short short chain polyunsaturated fats for how much has okay. What I recall him talking about, and I do need to dig this up and probably do a salty talk on it. He made the case that, so long as we have adequate EPA and DHA that, and so long as we're not over eating in general, then relative amounts of polyunsaturated fats that we get from like an occasional salad dressing or eating a handful of nuts, or God forbid, eating some chicken, even though I'm not as big a fan of chicken as I am a beef because of sustainability issues, but whatever, that it's not that big of a deal.

**Robb:** It becomes a really significant deal if you have inadequate EPA and DHA, these elongated fats. In that case, then particularly the excess short chain omega-6s can be really problematic from a pro-inflammatory standpoint. And wouldn't that be funny if that's the case that we have ... it's not a linear thing. Oh, adequate or inadequate EPA, DHA is actually a bigger factor than how much a short chain omega-3, omega-6 we have, one way or the other, and that is my best understanding of this. Again, it was like over 10 years ago, but it's funny how the shit just cycles, because I remember Matt jumped on that topic then, because there were people that were like, "Don't eat walnuts. They

have omega-6 in them." Then he's like, "Fuck you guys. "You don't know what you're talking about." Here's what the real story is.

**Robb:** Katie, I don't know if it should be avoided or not. As I recall, olive oils don't appear in the part of the supermarket that's considered staples. It's where?

**Nicki:** Condiments.

**Robb:** Condiments. The last I checked, condiments were these things that you had ...

**Nicki:** Salad dressings. Yeah.

**Robb:** Well, a condiment was my ... and luckily you-

**Nicki:** Yeah. No, I know, but you said olive oil and I'm pointing out salad dressing. I'm splitting hairs.

**Robb:** Yeah. Thank you for completely derailing on that when I had this mojo and this moment there, but ...

**Nicki:** I'm good at that.

**Robb:** Condiment says, last I checked, it means kind of by implication, a small amount off on the side. It's not like the main feedbag that you're doing. Then, even amidst this, people are saying, well, eat as much avocados or avocado oil, or olive oil as you want, and these things have more than the high oleic sunflower oil do. It's kind of like, I don't know what the exact right answer is on this stuff, but it doesn't strike me that anybody is really talking about it in a way where you do find the right answer. The right answer is make sure that you eat enough animal products, probably cold water fish and maybe some bone marrow and stuff like that so that you're certain to have enough EPA and DHA, because that, again is my ...

**Robb:** That's the kind of funny thing is it doesn't have a fuck all to do with any of this other stuff. It's actually like make sure that you've got enough of these elongated fats, EPA, DHA on the omega-3 side, arachidonic acid on the omega-6 side. Those are the really important things to have proper amounts and ratios of. Then the rest of this stuff is kind of like background noise, comparatively. If you're eating a largely whole and processed ancestral looking diet, whether it's carnival or more like Weston A. Price or something, this is majoring in the minors, unless you have some sort of really niggling health concern or something, just trying to get on top of, then we keep iterating and fiddling and all this stuff.

**Robb:** But I see people in both terror and stark raving lunacy over this topic, and they have no steeping in what the actual facts are like. Nobody bothered to sit down and just ask the question, well, how much is really in any of these things that we're talking about? This is an aside, I've been having an email exchange with Dave Feldman who's a great guy, a very smart dude. He's been championing this idea of the lean mass hyper responder and whatnot, which is an interesting idea. And he's suggesting that elevated lipoproteins and cholesterol are occurring to supplement the energy needs of individuals that are very lean, and they're also fat adapted and ketogenic. I haven't done this yet either. I've this ever-growing list of shit that I need to do to get on top of, but I shot Dave an email the other day.

**Robb:** I'm like, "Hey man, how much total energy is represented if we had a time point?" Right now, I've got a certain amount of glucose, I've got a certain amount of triglycerides, I've got a certain amount of lipoproteins going from the VLDLs, IDLs, LDLs, HDLs. How much of that's there? What else? Glucose, triglycerides, free fatty acids, maybe like plasma proteins. How much energy is represented in each one of these different categories. Just from like Barry, very back of my brainstem recollection, there's not actually much energy represented from the lipoproteins. I asked Dave, I'm like, have you done the calculations on how much actual energy is represented in these different circumstances? And he said, "No," which was surprising to me. I haven't taken the time to vet that one out, but this is some of the fundamental stuff.

**Robb:** If you've got some sort of like a hypothesis or theory about something, these are some pretty important things. If you're suggesting that energy that this ... Lipoprotein elevation is due to providing excess energy, but it actually only represents a tiny fraction of the total energy pool. Why wouldn't the body up-regulate triglycerides of which there are already a fair amount of? Triglycerides ostensibly would go up in these people, but it tends to go down. So, just shit like this that it's like literally basic home economics like accounting. How much shit is there? Now let's have a discussion around what the potential impact is. Again, I love Dave, he's a great guy, and this is something that we just need to do to vet out, and I'm not entirely sure how he tied it in, but again, it's just basic ... If you're going to have a pissing match over the relative amount of polyunsaturated fats and various fats ...

**Nicki:** Do your homework.

**Robb:** ... at least have a working knowledge of how much is there in these different items. Is that too much to ask?

**Nicki:** Kate, that was a good one. It's time for The Healthy Rebellion Radio Trivia. Today's trivia sponsor is Drink LMNT, and Drink LMNT is giving a box of LMNT Recharge Electrolytes to three lucky winners selected at random who answer the following question correctly. First, hubs, what flavor of LMNT should this week's winners?

**Robb:** Can they pick which flavor or we have to dictate?

**Nicki:** No, that makes a very complicated and extra work.

**Robb:** Oh, sorry. Chocolate salt. Chocolate salt.

**Nicki:** Yeah. Chocolate salt is one of my new faves, and it's great in coffee.

**Robb:** Amazingly good in coffee and tea.

**Nicki:** It is amazingly good in coffee and hot water and cold water

**Robb:** Folks have been enjoying it in cold water too. It takes a little more work to shake it up in cold water first, but the warm beverage deal is pretty legit.

**Nicki:** We are living into winter. Winter is coming.

**Robb:** In the Northern ... You're very hemisphere-centric.

**Nicki:** I know I'm being hemispherist.

**Robb:** Yeah, hemispherist.

**Nicki:** Okay. The trivia question this week, Robb, what feel good nature movie did we watch last week with the girls in Reno?

**Robb:** Hermanos de la ventana. Oh wait, no, ventana is window.

**Nicki:** That's the window.

**Robb:** Yeah, how do you say wind?

**Nicki:** Vento.

**Robb:** Vento, Hermanos del Vento. No, it's not Vento.

**Nicki:** Or Viento.

**Robb:** Something like that. We're exposing our terrible Spanish.

**Nicki:** We're totally messing that up.

**Robb:** Brothers of the Wind. A heartwarming tale of a young coming of age youth who had saved a ...

**Nicki:** He stumbles upon ...

**Robb:** Stumbles upon a ...

**Nicki:** Hatchling eagle who was pushed out of its nest from its evil brother eagle.

**Robb:** It was good. It was good. In the realm of kid friendly movie ...

**Nicki:** The cinematography was stunning.

**Robb:** Pretty breathtaking.

**Nicki:** Yeah, to was really, really good. Okay.

**Robb:** Brothers of the Wind.

**Nicki:** Brothers of the Wind is the answer. To play, go to [robbwolf.com/trivia](http://robbwolf.com/trivia) and enter your answer, and we'll randomly select three people with the correct answer to win a box of chocolate salt from Drink LMNT. Th cutoff to answer this week's trivia and be eligible to win is Thursday, November 5th at midnight. Winners will be notified via email and we'll announce the winners on Instagram as well, and this is open to residents of the US only. Let's see, our fourth question this week is from Whitney. She has a question on glucose tolerance test in pregnancy.

**Nicki:** "Hi Robb and Nicki, I've been listening to you for about a year now. Love the show. I've been gluten free for 10 years. I'm celiac and paleo-ish for about four. I'm pregnant with my first child and nearing the point where I need to take the dreaded glucose tolerance test for gestational diabetes. I was floored when I found out it consists of drinking 50 grams of sugar on an empty stomach. If you fail that test, you have to come back and do the same thing with a hundred grams of sugar. As someone who avoids sugar and keeps

my carbs in check, this makes my stomach turn. I bought a cheap glucometer and I've been monitoring my blood glucose for about a week in hopes that the OB/GYN will take that as a replacement for the glucose test."

**Nicki:** "on a broader level, I wanted to get your thoughts on this test. In my mind, this test for gestational diabetes is probably giving people diabetes. Am I making too big a deal about a one-time glucose test? I'm thinking it's time for an update to the guidelines here. Surely there has to be a better way to test for gestational diabetes, maybe fasting insulin, some sort of HOMA score. I just think it's ridiculous that our health system is forcing all pregnant women to ingest 50 to 100 grams of sugar in one go. I'd love your thoughts. Thanks for all you do."

**Robb:** Yeah. This has been a bone of contention for a long time, and there was a long period of time where I had a series of articles talking about this. There's a couple of things going on. One is that when a woman becomes pregnant, she becomes comparatively insulin resistant relative to the fetus. If we were to use an analogy of insulin sensitivity being like a lower elevation point in water running downhill, like water is like nutrients, more insulin sensitivity means that nutrients preferentially flow in that direction. In this scenario, if the mom was dramatically more insulin sensitive than the developing baby, then it would be challenging for the baby to actually extract sufficient nutrients. It's normal for the mom to get some degree of insulin resistance as a consequence of this. The way that we eat, the way that we live, the way that we don't sleep, then that base level insulin resistance is generally elevated in many people in the population.

**Robb:** This is under the best of circumstances. That's one piece of this story. Another piece of this story is if you're eating kind of on the lower carb side of things, then you will tend to have some kind of wacky blood sugar excursions when you do get a rather sizeable bullets of carbs. One thing that people have done in this scenario is they will increase their carb intake, ratchet it up to 50 to 100 grams a day going into this. Some people do okay with that. Some people don't, but generally, it's kind of a way of cheating your way through the oral glucose tolerance tests. Like you're telling your body-

**Nicki:** Kind of gaming the test.

**Robb:** Kind of gaming the test. Another thing that people have done is just checking their A1C, and basically sitting down with the pediatrician or the OB/GYN and saying, "Hey, I want to do an A1C. I tend to eat low carb. I have no doubt that I'm not going to do great with 50 grams of carbs. I never eat 50 grams of carbs in a sitting." At the end of the day, the doctors are there for us, not the other way around. So, you really do have a lot of agency in the way that you drive the boat on that. I was so grateful when Lily Nichols, who's an amazing dietician entered onto the scene and really started talking about this. I've had her on the podcast, maybe three or four times back in the paleo solution days. She has a book, *Dealing With Gestational Diabetes*, or it's ... Oh man. We have a link to a blog post here, but she has a book. That's an interview ...

**Nicki:** *Real Food for Pregnancy*.

**Robb:** *Real Food for Pregnancy*. Yes, is the one that she has. Well, she has *Real Food for Pregnancy* and *Real Food for Gestational Diabetes*. They're amazing. They're absolutely amazing. They're super nutrient dense, very low glycemic load and folks do great on this. It is still kind of a controversial topic with a lot of doctors that a mom would eat on the lower carb side of things, but we know that with these big blood sugar excursions, babies tend to get abnormally large and there's other complications, and we're setting up epigenetic signaling that predisposes the babies to diseases of affluence, obesity,

type two diabetes, all this stuff. It really is an important thing to get righter than what we're, we're getting currently. But the way that we're going about this is very contrary to standard of care.

**Robb:** Again, I guess, to review, I think it's completely justifiable to make the case around in A1C in lieu of an oral glucose tolerance test. That's actually giving you a picture over months, weeks and months versus a single time point, which we should respect aggregate data, better than like a single test data any way, in particularly if you are just generally, it's like, hey, I don't eat large amounts of carbs. So, this isn't going to be an issue. If you're really concerned about gestational diabetes, then let's look more at the A1C. If you really like this doctor and there's like in network, out of network stuff, and you're just stuck with this person, then doing some sort of a carb refeed again, sticking more with like ancestral minimally processed carbs, but getting up in that 50 to 100 grams range, making sure your sleep is totally on point.

**Robb:** Really make sure you get enough omega-3 fats. This is an ideally one, should have been supplementing even prior to pregnancy, but a significant chunk of the weight gain that occurs in women, there was a piece with this, and I'll try to remember to dig this up and put it in the show notes, but at the Ancestral Health Symposium, back around 2013, there was a doctor there who made the case that women who have stored adequate EPA and DHA tend to gain significantly less weight during pregnancy, because most of the drive to gain weight is to make sure that there's enough EPA/DHA available to grow the fetal brain. That is a major driver of this whole thing, and also that improves insulin sensitivity and it helps to mitigate blood pressure levels for like pre-eclampsia and stuff like that.

**Nicki:** Postpartum depression.

**Robb:** And then the postpartum depression. Yeah. Oddly enough, if we follow something that emulates nature to some degree, a lot of good things happen.

**Nicki:** Okay. Our final question this week is from Sophia on grass fed beef and nutrition. "Hi, Robb, thanks for everything you're doing for the planet. It's really important work and I noticed and appreciate you. Wanted to address something you said the last time I heard you on a podcast. I can't remember which one, I listen to so many. When you got to the question around nutrition, you claimed there are really no health benefits to eating grass fed beef for dairy over conventionally raised feedlot animals. Are you aware that grain fed cows don't produce K2, a critical nutrient, and the hormone necessary for escorting calcium out of the blood supply and into the bone? I could be wrong, but based on my research, your claim that there is no notable difference between the nutrient density of the two animals is false."

**Nicki:** "Please reference Dr. Kate Rheaume-Bleue's book, Vitamin K2 and the Calcium Paradox, if you're curious about learning more. If what she says is true, then the transition from grass fed regenerative beef production to the feedlot grain finished model could correlate to the rise in our ...

**Robb:** Arteriosclerosis.

**Nicki:** Getting a tongue tie on this word, "arteriosclerosis in the States and Europe. Don't you think? Thanks again for the work you're doing. Lovingly Sophia.

**Robb:** Sophia, super appreciate this. If you go back and listen to any of these podcasts that I've done, I've made a pretty clear point that the difference between grass-fed versus

conventional meat is minimal to almost none. The difference between pastured versus conventional dairy is massive. The dairy is where the K2 winds up, whether it's milk products, butter, or what-have-you. Definitely aware of this. This is again, where we have this niggling nuanced confounder. It would've been easier for Diana and I, in this story, if pastured meat and dairy were both nutritionally far superior to conventional meat, but it's not. But there is absolutely a distinction here between pastured meat versus pastured dairy and the conventional varieties. You are absolutely spot on, the K2 is a major factor, but that only really occurs in the dairy to any appreciable amounts, but it is important. And this is one of the cases for where pastured versus conventional products are important.

**Nicki:** Okay. That is a wrap. I think this might be one of our longest episodes.

**Robb:** We keep going ever longer.

**Nicki:** Ever longer. Thank you all for joining us. Please check out our show sponsor, Joovv, for your red light therapy device and get an exclusive discount on your first order. Go to [joovv.com/robb](https://joovv.com/robb). That's [joovv.com/robb](https://joovv.com/robb), and apply the code ROBB to your qualifying order. Robb, anything else you want to add?

**Robb:** I think I rambled enough at the beginning.

**Nicki:** You did. Okay. All right, folks. Thanks again. Share the episode and hope you have a fabulous day, weekend, whatever day you're listening to this, and we'll catch you next time.

**Robb:** Bye everybody.