

Robb: I think we're live.

Nicki: I think we're live.

Robb: Welcome back to The Rebellion. Wife, how are you doing?

Nicki: The Healthy Rebellion Radio. I'm great, thank you for asking.

Robb: That's the most insincere tone of voice I think you've ever used. It was right up there with-

Nicki: Well, it's kind of cheesy when you ask me how I'm doing and we've been in the same-

Robb: Not spent a moment apart.

Nicki: We've been in the same house together for the last, yeah, we haven't left the house in a couple days.

Robb: Do like you do with other parts of our relationship, just act.

Nicki: Oh, Jesus. Babe. Ah, I don't have a pithy response to you for that.

Robb: No pithy rejoinder?

Nicki: No, nothing.

Robb: Well that's okay because we have awesome stuff going on in The Healthy Rebellion.

Nicki: We do. Let's do a couple of announcements as we kick this podcast off this week.

Robb: You're good at announcements, you tackle that.

Nicki: Okay. I'll tackle a couple of announcements. Let's see, today's episode is coming out on Friday, is it the 13th tomorrow?

Robb: 13th, yes.

Nicki: Okay, so Friday the 13th of March.

Robb: It's like full moon, Friday the 13th and there was one other-

Nicki: Yeah, that was my mom's birthday. My mom's birthday, my uncle John's birthday. Happy birthday, uncle John. So anyway, our mobility reset, which is focused on cars and controlled articular rotations, ala the Kinstretch methodology, functional range conditioning methodology, is being led by Sarah Strange of Basis Health and Performance. And that begins on Monday. No, today. What day is today? Okay, I have, you in the notes, we have this wrong. I'm reading it starts on Monday the 13th but

today, but it starts on Monday the 16th. Because this podcast comes out on tomorrow, which is the 13th.

Robb: Man, whoever put these notes together sucks.

Nicki: I'm sorry, we're a little- and as you'll hear, I was going to save this for the later on, but this is actually the second time we've recorded this intro because we recorded this entire-

Robb: There will likely be a third time.

Nicki: We recorded this entire podcast last week. But our news topic being the-

Robb: COVID virus.

Nicki: COVID virus, Coronavirus, so much has changed in one week that we felt compelled to rerecord this intro and the news piece and all of that. So, which is why things are a little jumbly upfront. But anyway, back to my announcements. Monday the 16th, we're starting our cars reset. So it's free to all members of The Healthy Rebellion. So if you'd like to get, partake in that, we're going to be tackling joints, from cervical spine to your toe joints over four weeks. And Sarah is going to lead us through a great program. So if you'd like to get in on that, make sure you join The Healthy Rebellion ASAP. That will be open for members until Monday. After Monday it's closing because we like to do it in a cohort fashion and keep everybody moving along on the same page at the same time. So we're not going to let people join midway through.

Robb: No gaggers of lollies.

Nicki: No lagger. Yep, exactly. Let's see. And then our next 30 Day Rebel Reset, with a seven day carb test on the end, that is going to start on April 20th. So that's coming up as well. And that's where we focus on the four pillars of health that Robb lays out in *Wired to Eat*. So we talk about sleep and movement and community and food of course. So that's another thing that's coming up. So another reason to jump in and join us in the community,

Robb: And again, a membership to The Healthy Rebellion gets you access to these resets. So there is not an additional fee to participate in that.

Nicki: Correct. And let's see, we're still looking into details but one of our members, Nikki in Spain, we're talking about maybe trying to put together a Rebel Adventure in the fall of 2021. Tackling or taking on the Camino de Compostela in Northern Spain. So that would be really fun. So we're looking at some fun stuff like that to do as a group. And today we actually had, today the real today, not the day this releases but the day before because this is the day before.

Robb: Because we're on the ball like that.

Nicki: We're on the ball. We actually just did a live chat in The Healthy Rebellion about all things COVID-19, and that is the news topic de jour, because it's-

Robb: It is the news topic. Yeah.

Nicki: It is the news topic. Yeah. So, let's tackle that.

Robb: So we did a piece on this originally and there were, it's been interesting to watch this all develop. I guess varying degrees of, "oh man, this is really bad," or "no, this isn't that bad."

Nicki: There's just much hype.

Robb: And there's some hype.

Nicki: Is it all hype? Is it all just media taking things out of control?

Robb: Yeah, and the media loves going crazy with things. If it bleeds, it leads and all that type of stuff. So this thing's pretty perfect for that. It's an election year, super contentious election. So anything that you can, there's a million ways that everybody can blame each other for the shortcomings of however this thing has been playing out. But I've generally been on the somewhat lukewarm side with this, where it's like, "ah, it doesn't look as bad as the flu and all that type of stuff." And that was largely what we talked about in the original piece. But then we've had some additional information.

Nicki: It's been a week.

Robb: It's been a week.

Nicki: And there's been some great pieces that have come out. One, which is this video that we'll post in the show notes and we should also post that media or medium link as well.

Robb: You mean all these things down here in the show notes wife?

Nicki: Exactly. All the, yep, all of those.

Robb: So really quickly just going through this, there's going to be a video from SARS expert, Dr Hui, who is interviewed in a English language Hong Kong TV program and it's very good.

Nicki: It's like 23 minutes.

Robb: 23 minutes and it'll pucker your giblets a little bit. He makes the case that there's zero innate immunity, because this is a novel virus, we've never really seen it on a large scale before. So there's unlikely to be much in the way of natural immunity. The folks primarily affected seemed to be older, already immunocompromised, definitely any type of lung issues are a big deal. And he makes the case that medical systems can get overrun very quickly with this. And so there's some need to slow the spread so that, if

medical systems are able to get adequate care to people, then the morbidity, mortality, although it appears to be higher than what it was initially being reported, and this is again, it goes back and forth on this stuff. And the medium piece actually unpacks this pretty well-

Nicki: A lot of that.

Robb: Which I'll get to in a moment. But he makes the case that it's technically a pandemic at this point. It's on all the continents except Antarctica.

Nicki: Antarctica.

Robb: And a vaccine is 12 to 18 months away at the earliest. And the way to mitigate this and manage it is to minimize the spread so that medical systems don't get overwhelmed. Some of the, a good of this I guess or a fortunate thing here is it doesn't look like children are affected and generally if you're pretty healthy, you should do okay. But some people end up needing really dramatic interventions and some of those interventions including intubated ventilator treatment. And there's a limited number of those things and it's very easy to have those get overwhelmed. There's a piece from a website The Prepared, which is kind of a prepper website, but it was very well done. It's called a framework for thinking through COVID-19 and so I have a link to that. Ellie Pariser has an amazing-

Nicki: Eli.

Robb: Eli, sorry. Eli Pariser has a great piece on Twitter, which I have a link to that. And it's eight days of US versus Italy COVID mapping. And it basically makes the case that the US is currently in this very early stage in which the number of reported cases do not remotely reflect the number of actual cases that are out there. And then Thomas Pueyo? is that how you...?

Nicki: Mm-hmm (affirmative).

Robb: Pueyo. This is a medium piece which has received more than 7,000 views in 24 hours or excuse me, 7 million views in 24 hours. And he actually unpacks in a really remarkable way, how it can come to pass that we could have say like 2,000 reported cases, but there may be actually 120,000 cases that exist as a consequence of that. There's a couple of different ways mathematically that this can be backed into. And again they make the case that containment and some social distancing and stuff like that are really going to be important.

Robb: And it looks like places like Taiwan and Japan did, really learned a lot from their experience with SARS. And they made some interventions which flattened those curves and allowed them to stay on top of the medical care that they needed. And thus far it's looking like the United States, most of Europe, places like Iran and India are not tackling this in an effective way at all. And it's pretty scary. Above and- like for us personally, we had a conversation in The Healthy Rebellion today. I'm personally not afraid of dying

from COVID, but I am concerned that the economic impacts of this whole thing could be massive, could be absolutely catastrophic.

Nicki: Mm-hmm (affirmative). Well already, we've seen not just conferences being closed, like PaleoFX has been rescheduled to July and we'll see if that is still able to-

Robb: If it actually still goes, yeah.

Nicki: It's going to depend on how this thing, the course that this takes. Right? And your gig at UCF was postponed. Lots of universities are moving to just online virtual education-

Robb: Instruction. Yeah.

Nicki: For the rest of the semesters. And then we also have a lot of people that are on work from home. So and not all workplaces are suited to that-

Robb: Restaurants, day care. All this stuff, yeah.

Nicki: And a lot of these retail places are definitely suffering right now.

Robb: And that's a whole other thing too. Okay, so they close schools and then can parents work from home?

Nicki: Can parents, right.

Robb: Not every job affords that. So the economic impact on this could be incredible.

Nicki: So it's definitely, potentially, mm-hmm (affirmative).

Robb: So on that, anyway and-

Nicki: So, I mean, things that people can do and again, literally this is in the last 24 hours we read two pieces and then more keep coming in where this is looking far more-

Robb: Far more dangerous than what, yeah.

Nicki: Far more serious than what we had originally thought. And which is why we're rerecording this whole piece. And you it's making us question, we have some travel plans in early April to go participate in the Straight Blast Gym spring camp, which we are likely not going-

Robb: Not going to at this point, yeah.

Nicki: Because the main things that we can do is to not be in social, the main things that all of us can do to the degree that we have control over where we go, is to not be around groups of people. So that if, and the guy in the video, Dr Hui I think you said, made the point, we are all going to get this. There is, nobody has any background immunity for it.

So at some point everybody will get it. It's just a matter of can you push that timeline down the road so that we don't overwhelm the hospital systems.

Robb: And the medium piece is interesting because it makes the case that if we do this effectively, then the morbidity, mortality, the death and illness could be a factor of anywhere from 10 to a thousand times less than if we do this ineffectively. If the medical systems get overwhelmed, if medical workers get overwhelmed, there's not enough masks to go around in the United States for medical workers right now. And we've offshored all of our manufacturing-

Nicki: The production. Right.

Robb: Which is-

Nicki: And I forget which article made the case, it's an exponential problem and in the beginning of an exponential problem it seems like nothing's happening. And Robb, there's that, who put out that great-?

Robb: Chris Martenson.

Nicki: There's a great video-

Robb: And so I'll put a link to this in the show notes. It is a good one and I shared it in The Rebellion. Imagine you're in Yankee Stadium and you're handcuffed to the very top seat in Yankee Stadium, like the nosebleed seats. Then down at home base on minute one at noon, one drop of water is put on home base. Then at 12:01 a second drop of water-

Nicki: It doubles every second.

Robb: Two drops are put. And then at minute three-

Nicki: Six drops.

Robb: Six drops and on and on.

Nicki: 12, 24.

Robb: And how long do you have before you drown? And people were like, weeks, months. But it's actually about 12:45. It's about 45 minutes before Yankee Stadium is full. And what's really, that's kind of mind blowing but what's difficult to grasp is, I believe it's at 12:45 that you drown, but at like 12:40 there's only a few inches in the infield. But that's the flat part of this J curve. And the human brain just doesn't deal with exponentials because exponentials don't exist in nature for very long. It's a bomb going off. It's a supernova exploding. It is the spread of a pandemic. And they happen quickly and it typically alters the landscape in which it exists. And so I will put a link to that in the show notes. It's a fascinating piece. Yeah.

Nicki: Mm-hmm (affirmative). I think it's a pretty powerful visual. And hopefully us sharing this, people will also, if you have travel plans that are not essential, don't go. This is what we can all do, we're at Yankee Stadium at minute one or whatever and it looks like nothing and people might think, "oh people are overreacting." And again, we did, up till 24 hours ago. But I think it's worth taking heat and using some caution here.

Robb: And lots of people have made the point that it would be far better at this juncture to look silly at being over reactionary than the catastrophic consequences of not. And if you guys have followed us or me at all, you know I'm kind of, lunatic fringe with some things. I'm always like, "well, why is this happening? Is the government taking advantage of it?" And stuff like that. And I've had some thoughts around that and I wouldn't be surprised if there is some opportunism that's occurring here. I really wish I had bought stock in Purell or something else two weeks ago that I wouldn't need.

Nicki: Toilet paper.

Robb: Yeah, I wouldn't need the baseball game list. I would just, go put money on Purell. So some of my I guess kind of freedom oriented libertarian leaning type stuff, yeah, that's there. But this is the, it's well established throughout history, like the 1918 flu pandemic, the places they intervened early, it dramatically altered the course of the disease. And the places that waffled or maybe relaxed strictures on social interactions early, they suffered massively. And it will really negatively impact the economy. If we do a good job on this, it's going to have a significant impact. If we do a terrible job on this and hospitals are overwhelmed, we have doctors and staff members dying and like, that's going to be a whole other layer to this. So again, use your best judgment but it seems like hunkering in and trying to ride this thing out, to mitigate the rapidity at which this stuff spreads, is the way to deal with this.

Nicki: And definitely check out all of these links in the show notes. They're really good, really well done pieces.

Robb: And kind of a shameless plug for The Healthy Rebellion, we are hoping that the lifestyle and community features that we have there, are going to help people weather this-

Nicki: To the best of your ability to reduce inflammation in your body, to get enough sleep to do all of these things that all of you listening know you should be doing. Those are the things that can also shore up your immune system.

Robb: It puts you in the less susceptible category for sure.

Nicki: Less, exactly. Yeah. I think we've rambled enough. Let's just patch this into the episode that we already recorded.

Robb: Cool.

Nicki: Okay. We got our t-shirt winner from our iTunes review. I really liked this one.

Robb: This one's good.

Nicki: This one's from artful_dodger_mkm and the title is Holy Birdbrained Bullseye, Batman. "This podcast is dope. I've followed Robb and now Nicki since the Early Paleo Solution podcast days and I never tire of hearing him talk about all the matters in the health and fitness space. I'm a full fledged card caring F-bomb dropping member of the Healthy Rebellion Community and I look forward to helping them reach their goal of liberating one million people from the sick care system. Party on, Garth."

Nicki: That made me laugh. Artful Dodger MKM, thank you for your review, shoot us an email over to hello@robbwolf.com with your t-shirt size and your mailing address and we will send you a Healthy Rebellion Radio t-shirt.

Robb: And you can't win if you don't play.

Nicki: This is true.

Robb: And playing is giving us a super awesome review.

Nicki: All right, this episode of the Healthy Rebellion Radio is sponsored by Joove. Joove is the leading manufacture of personal, in home, red light therapy devices that help reduce pain, fight inflammation so you can live a happier and healthier life. So if you're training hard and want to improve recovery, if you're struggling with pain or inflammation, looking to improve your sleep.

Robb: In particular, we did a piece on this looking at folks that train in the evening and maybe find it difficult to unwind after that training. The red light therapy in the evening, there's not a ton of research, but good research that suggests that it could help you to ramp up melatonin production and interestingly drop body temperature and stuff like that so that you can actually get good, restful sleep. So that could be a really interesting way. I would almost file this under the hack category even though I hate that term. It is something that could be used in a very targeted way to potentially help with those problematic go to bed after a hard-

Nicki: Because a lot of people do... the only time they can train is in the evening.

Robb: Yeah, totally.

Nicki: And most people have a hard time winding down after, especially if it's a hard training session.

Robb: That's why it's taken me 30 years to get a black belt in jujitsu because it would knacker me in the evening classes.

Nicki: Don't go to the evening classes. And even libido. These are all things that red light therapy can help with and Joove is your go to for all things red light therapy. So go to Joove.com/robb and get clinical grade power to help reduce pain, fight inflammation

and boost your libido so that you can live your best life and that's J-O-O-V-E dot com forward slash R-O-B-B. You ready for today's questions?

Robb: Lay it on me. Hit me, baby, one more time.

Nicki: Oh my gosh. So that song, we listened to it quite a bit, it's on our kid-

Robb: Kid play list. The kids picked it.

Nicki: When we drive and Segan started swapping out instead of hit me baby one more time, she started making it about our cat, our kitten. Scratch me Marphy one more time. And so we have these whole-

Robb: It's a pretty good song.

Nicki: This whole alternate lyric... okay, never mind. That was a total tangential. We have a question from Micah on how to offset the effects of longterm anticoagulant use. "Hi, Robb, I absolutely love your podcast and I have a question I was hoping you could help me with. I've been hearing a lot about Vitamin K2 and how it helps move calcium out of the arteries and into the bone. My issue is I am on Warfarin for life due to multiple blood clots over the past few years and I worry about the long term effects. My doctors believe the clots are due to my ulcerative colitis, which is now under control thanks to the GAPS protocol and now a mostly Paleo diet. They're still unwilling to take me off the blood thinners. My question is is there anything I can do to offset the effects of long term anticoagulant use in my arteries and bones? I'm a 31 year old male and healthy with the exceptions of the issues I've mentioned above. I lift weights four to five times a week in a body building type style."

Robb: Man, I did a good amount of digging in this and I found two papers that I linked in the show notes, one from 2009, where the title is "Reduce Bone Density in Patients on Long Term Warfarin." And it was more of hypothesis paper. There really wasn't research done at that point, but it kind of made sense. In this story of kind of calcium retention and bone density and what not, vitamin D really enhances our ability to retain calcium, but it's fairly arbitrary in where that calcium goes. So vitamin D absent vitamin K can end up in the arteries and enhance calcification of the arteries and what not. So this is the other paper, which was in 2015, "Longterm Warfarin Therapy and Biomarkers for Osteoporosis and Atherosclerosis." And it makes the case that folks on Warfarin longterm definitely have increased rates of osteoporosis and they appeared to also have accelerated atherosclerosis.

Robb: What you can do in this scenario, the fact that Micah's already lifting weights, I think that's a great hedge in this story. But there's kind of a reality that once folks go on blood thinners, it is a devilishly difficult and dangerous process to get somebody off. This would be something that you would just have to really communicate with your doctors about and everybody needs to be prepared that there could be a catastrophic event in tinkering with this. And the fact that maybe the ulcerative colitis is dealt with now, then in theory these blood clotting potentials could be reduced or maybe they're a nonissue,

but it's a big ask to have a doctor go in and do this. Assuming Micah's in the United States, the litigious nature of medicine in the United States, the fact that following standard of care is the main protection that physicians have for protecting themselves from malpractice and what not.

Robb: I could make the case that to the degree that there is some blood thinning need here, things like high dose fish oil, dialing down Warfarin, being very careful about how much vitamin k2 is in the diet, there could be protocols around that, but it's going to be a dodgy process.

Robb: What you're trading is some potential problems with osteoporosis and atherosclerosis longterm verses an acute problem of dying short term from a blood clot and I don't remotely have a good answer on the risk analysis there. When I think it through, I think that there's a reasonable case to be made that if, again, the baseline blood clotting issue has been addressed, that we should be able to make a case that this situation could be dialed down and titrated off, but again, this is going to be something that you have to talk to your docs with extensively and I wouldn't be surprised if he or she is not remotely willing to tinker with this because there's virtually no upside for them.

Robb: If you have problems from osteoporosis or atherosclerosis it's going to be in 20 or 30 years, not today, whereas if you have problems from tinkering with this stuff, it happens today, it happens catastrophically and that's a big deal. That's the best I've got.

Nicki: All righty. Our next question is from Gaju the Keto Pooper about diarrhea on Keto.

Robb: He should get a t-shirt for his handle alone.

Nicki: "Hey Robb, I dig your content. You were responsible for turning me onto paleo. I've been doing keto for close to a year now, however, whenever the fat content in my meal goes up and there's some fiber present from vegetables, diarrhea occurs soon after. Unless my physiology is abnormal I expected my body to be able to process the fat by now. Reduce the veggies or the fat that I add to my meals in the form of olive oil, duck fat, avocado oil and so on seems to keep the diarrhea in check but the calories consumed go down substantially. As an active person looking to make significant strength gains in the gym, this bums me out. Right now I'm trying to see if the magnesium in the electrolytes I consume might be the culprit, but any leads you can provide would be helpful."

Robb: So I looked in to the electrolyte that Gashu mentioned and I don't see any... one, it barely has anything in it, so I don't really see that being a problem. It's interesting because this sounds like an IBS scenario and if we put on our carnivore hat and, "Oh, evil plants are causing problems in his gut," and that could be, there could also be an underproduction of bile salts that are helping to emulsify the fats and so maybe the fiber is mildly irritating, the excess fat is mildly irritating, so you need a combo of both for it to really result in this scenario of pulling more fluid into the stool and creating this diarrhea scenario.

Robb: So one spot to check would be something like the Now Food Super Enzymes. That has ox bile with it but you could use that plus a separate ox bile supplement and just see if that addresses things. Then also, just as always, keto's great, I love it, it's my preferred metabolic state, but why are you doing it?

Nicki: He says he's done Paleo before, so one question is did you not experience any of this on Paleo and it's only doing the extra fat? The other question is how much fat are you doing? Are you doing high fat keto or are you doing kind of a protein centric ketogenic diet with fat kind of as a condiment. I know he's also trying to make strength gains, so he's probably also trying to eat a lot.

Robb: A lot, yeah. But it begs the question, why are you doing keto? Do you just disproportionately feel better, do you have great appetite control and stuff like that, that's all compelling, but if there's not a big delta between keto and just paleo and you're not having disaster pains on paleo, then problem solved. There's different things that we can do, like would sticking more of a starchy carb centric meal early in the day and then kind of mitigating the amount of fiber consumed later in the day? Could that help? There's definitely a lot of different ways to tinker with that.

Robb: The first things that I would kind of ask is why are you doing keto and what's the upside there?

Nicki: Especially if you had none of these problems doing a standard paleo diet.

Robb: Yeah. But if keto is really, really compelling, then we need to look at kind of two sides to tackle this. Or I guess really one side is augmenting digestion one way or another, so something like the Now Food Super Enzymes plus ox bile should help both in the general food digestion, but more specifically in improving the absorption of those fats so that they don't stay in the transit process and give you problems further downstream.

Nicki: Cool. All righty, we have a question from Karen and how to make Paleo and Atheist friends. She says, "Hi, I've been eating a Paleo derived diet since 2011, when I read your book and lost 45 pounds in four months and I have kept it off since. Recently I've had two children and I feel like it's difficult to live this lifestyle in the Orange County, California area with children. Also my husband and I are atheists, my dad is a Scientologist, and I don't know if you've answered this before but I'm curious how I'm supposed to meet like minded people with a similar diet in the area? We already belong to a crossfit gym and they are predominately unhealthy eaters and religious. Maybe I should just join a different one or find a meet up group."

Robb: Do you have any thoughts on this?

Nicki: It's tough. A lot of crossfit gyms are... there are a lot of religious people in crossfit gyms. We aren't religious, but we have a lot of religious friends, and I think the key is finding people that aren't trying to convert you. We have plenty of religious friends-

Robb: Virtually all of our friends our. That's just kind of a non issue-

Nicki: It's not a thing. They're not trying to convert us and we respect their beliefs. It's a nonissue.

Robb: People have asked us that about moving to Texas. They're like, "Wow, man, isn't it super religious there?" And I think maybe in some outskirts, I think other parts of the south, like when you meet someone, they may ask you which church do you go to before they ask you your name.

Nicki: Right, we have not experienced that at all.

Robb: We have not experienced that at all. So, this is kind of a tough one. One thing that I wonder on this, in my youth, I was a very prickly kind of agnosto-atheist. I was sending out slings and arrows left, right and center and I don't know if I've mellowed with age or created some empathy but I'm not antagonistic towards people now and the fact that I'm not antagonistic towards people has oddly probably reduced the potential push back in that stuff. I'm not saying that Karen does this, but if it is that kind of... it's real easy to throw some sand in the gears and to create that little bit of friction-

Nicki: Well the same thing with food. It's easy to be like, "Oh, I don't eat-" you know, you can really make it a thing about the way that you eat, or you can kind of make it a nothing by just choosing if you're in a social gathering and choosing the things you can eat, and if somebody asked about it just like, "My body feels better this way," instead of going into the whole diatribe of, "Well, we're supposed to eat this way and grains are bad," you don't have to launch into all of that stuff, and again, I'm not suggesting that Karen is doing this.

Nicki: I think to your point, there's plenty of other things to talk about. You don't have to make religion or the diet the central focal point of the conversions.

Robb: Yeah. Because we've made some friends here that are religious, that definitely don't generally eat the way that we do. We've had folks over for dinner-

Nicki: And we cook what we cook and they eat it.

Robb: They've loved it so far and it's been no drama and even if we hit somebody else's place, I'm like, "I'm allergic to wheat, all the rest of this stuff looks great," and if there's nothing that actually works then I just don't eat that day and I drink alcohol instead. I think just relaxing into the whole thing and having empathy and not really needing to make it a self identification process. And again, we've been doing this for so long that I think we're at a pretty comfortable spot with it, so it's definitely a nontrivial thing. Cultivating community is not the easiest thing in the world to do. You certainly could poke around different crossfit gyms. If there is a place that you're at least potentially likely to find somebody that's into Keto or Paleo or something like that, that's a pretty darn good place to... a good whistle stop to make in increasing the likelihood.

Robb: Like hanging out at the post office, probably not going to meet many people-

Nicki: Or the DMV?

Robb: Or the DMV. Low likelihood of success there. I could make the case for just kind of shopping around the crossfit scene a little bit. Some meetups are great. We'd love to have you in the Healthy Rebellion also and we're starting to do some in person stuff around that. Even absent that, a lot of people have reported that they get some really great benefit, even though it's virtual community. When you remove all the bullshit that's involved with Instagram and Facebook and all that stuff and you have a shitty day and you're like, "Oh, this thing happened to me," and people are like, "Dude that sucks. I feel for you, if there's anything I can do, let me know."

Robb: That is huge. We still need the stuff in real life. We still need living, breathing people in our lives, but getting a little lifeline like that can go a long ways, too.

Nicki: All right, our next question is from Tyler on something that I've never heard of before called The Croissant Diet. The Croissant Diet. Is there something here? "Hey, Robb and Nicki, I've been a show listener for several years now and I always enjoy y'all's (Yes, I'm from Texas) perspective on a variety of health topics because it's unique and usually gets me thinking. So Mark Sisson posted a blog post recently from a guy who did a so called croissant diet for weight loss which really boils down to maintaining a certain ratio of saturated and unsaturated fat intake and a few other things which he claims can alter metabolism favorably in terms of weight loss. He also asserts that it is an ancestral diet, aka the French, though really a rather recent one.

Nicki: My question is this, is he onto something? Is there any substance or lessons that can be learned from him? Sounds like it was really satiating, which probably helped drive the weight loss and if he is onto something, how could someone apply it and especially those of us in whom high saturated fat intake seems to equal sky high LDLP levels? Thanks for all y'all's work, it's much appreciated, Tyler."

Robb: This one was a goody. When I first read this, I was kind of like, "Oh, this is just going to be bullshit." We have a link in the show notes to this website fireinabottle.net and this guy seems very, very smart. It's the first time I've seen his work, but the tagline is fire in a bottle, humans as oxidative vessels. So looking at this stuff from redox reactions and what not, it's really interesting. It has been kicked around in various circles over the years that things like monounsaturated fat, which the interesting thing about this, and this is where this stuff starts becoming... provides a headache for me, in theory, olive oil is very high in monounsaturated fat and within some circles it's claimed that these monounsaturated fats enhance fat gain because of the lack of oxidative signaling that occurs in the mitochondria, unlike things like steric acid, which is a saturated fat. But where this starts getting really oblique for me is that most fat sources are a pretty good mix of fats. They're not just purely steric acid or purely oleic acid. There's kind of a mix in there.

Robb: A great example of that is a rib eye, which is something like 60-70% oleic acid. It's largely polyunsaturated fat. Anyway, this guy goes into all kinds of stuff like I had forgotten about Peter over at Hyper Lipid, a brilliant guy that's very geeked out on metabolism

and low carb diets and he has a thing called the ROSS, the reactive oxygen species theory of obesity and basically the notion here is that if you pump enough saturated fat into your mitochondria, particularly the fat cells, that this will cause localized insulin resistance in the fat cells, causing them to not be able to uptake more energy and so they will actually use their own energy as a fuel selector, off load that energy.

Robb: It's fairly convoluted. He goes through and makes a very compelling case around this. He goes from being pretty chubby to significantly less chubby. I'm honestly not sure what the real story would be on this as far as would this really peg out lipo proteins? It's a fascinating topic, but this guy went through all the stuff and then he kind of wraps it up. It's a long post and it's definitely worth reading, but then he wraps it up saying, "Unfortunately, my life was turned upside down in mid September and I've gone back to my unstructured mode and at the moment, all days are upon me." So he had this success eating the croissant diet.

Nicki: He wasn't really eating croissants, right? He was just eating fat.

Robb: He was making croissants and pancakes and stuff.

Nicki: So he was eating grains with it, like flour?

Robb: Absolutely, yes.

Nicki: Oh okay.

Robb: And somebody asked, one of the first questions he asked was would simply incorporating steric acid into a ketogenic diet work, was one of the questions and I think the guy's name is Brad. He said, "I have no reason to think that changing the fat ratios in keto diet wouldn't work." Then it kind of goes on there. My point here is that he did this intervention, which is kind of a... I don't know, when there's carnivore out there, I was going to say they do this really extreme monochromatic version of eating and it's like I'm looking at Dr. Shaun Baker's carnivore diet book, and I'm like well that's kind of pot kettle black but he didn't stick with it.

Robb: To whatever degree-

Nicki: So he's not getting any protein?

Robb: I wouldn't say any-

Nicki: What is he eating for protein?

Robb: I forget. Again, it's a really long article and I read through it as thoroughly as I could, but it also-

Nicki: The cheats, I developed a system of cheats, the cheats were mostly for eating out at restaurants. Allowable cheats were steak, cheeseburgers with a bun, pizza, ice cream, margaritas and burritos. That sounds (laughs) like a shit diet.

Robb: Yeah, and I would just start shitting and never stop shitting.

Nicki: I have to say though, the before and after pictures don't look very impressive to me because-

Robb: They're not super stunning.

Nicki: They're at different angles. Clearly in the one on the left, he's got a significantly bigger belly.

Robb: There is that whole deal, he's got the high angle profile and sucking it in-

Nicki: Yeah, I don't know about these before and after pictures.

Robb: It's not a keto gains transformation, we'll put it that way.

Nicki: No.

Robb: I don't know man, who was it that asked the question?

Nicki: Tyler.

Robb: Tyler, it seems really appealing that we would... okay, you just need to get the right ratio of saturated to monounsaturated fats and then the world is good or you just need the right ratio of protein to carbs to fat and the world looks good, and it just doesn't seem like it plays out that way. I think all of these things end up being a scenario in which we generally limit food and pallet options and whether you're high carb or low carb, that seems to be the way to make things work, although in this scenario it's kind of sounding like it was a pretty mixed bag, but it didn't sound like there was soda, didn't sound like there was a ton of sugar, take this approach and then drink some soda with it and watch what fucking happens. That's not going to end well.

Robb: I don't know, so, the question there-

Nicki: Is he onto something is Tyler's question.

Robb: Is he onto something? I think to the degree he might be onto something it's that we have another way of kind of limiting pallet experience. There may be something to this oxidative priority or the redox consequences of saturated versus monounsaturated fat. I'm just really hard pressed to be like... because there are people that are... there are these studies that show that folks that ate monounsaturated fat tended to have higher fat gain, but when you really dig into these things it's like how good was the methodology and how were they tracking body fat and what were the... it just goes on

and on and on. It's so hard to imagine how does biology work that way? We need to be that specific about how we're eating or we're going to spiral down into this obesity cascade? That just seems kind of silly.

Robb: They do make an interesting point in this, in 1970s France, folks ate a lot of comparatively processed flour, but they didn't eat that much sugar. They eat some, but it's not the way... and people were absolutely not-

Nicki: And they're not eating it all day long either-

Robb: Right.

Nicki: It's a breakfast and then they're having protein and vegetables for their other meals.

Robb: Right. And there was the... I'm blanking on the guy's name but Peter Tia had the guy who's the fructose expert on his podcast recently and this guy made the case that when you drink fructose, or sugar in general, it enters the system so rapidly that it really alters liver metabolism in a significant way and it happens transiently. So there's a period of time where your metabolism looks pretty screwed up and the sugar producers have known this and so the way that they do the studies that they're like, "Look, look, sugar's fine," they just check at the points where the problem has already mitigated, but it's caused damage, it's caused alterations in your metabolism and then they run them in a short enough time span that you don't really see the problem emerge. But whether you're talking about Japan or China or France, these are places that have clearly eating high carb diets in the past, but they weren't eating a lot of sugar and they certainly weren't drinking much in the way of sugar

Robb: And this is absolutely something that has changed and although I know the-

Nicki: And they're more active, there's just a lot of-

Robb: There's a lot of moving parts there. This just seems kind of wacky and again to your point, I didn't even think about like the results were not particularly impressive just from a visual perspective.

Nicki: It was eight to nine weeks or whatever, so yeah. I don't know, I think when there's other approaches out there that involve eating... whether it's paleo or keto where you have a lot more variety in your diet, or carnivore if you can't tolerate greens where you get amazing results. I don't know, I would rather eat meat all day than pancakes with-

Robb: I don't know, pancakes are pretty amazing.

Nicki: I think I would feel like shit.

Robb: Yeah, I know I would feel like shit.

Nicki: All right, our last question this week is from Laura on salt sensitivity. "Question, I've run my DNA through a variety of tools, Stratagene, DNA Fit, Found My Fitness, Nutritional Genome and most recently a biome gut biome test, all point to me being very salt sensitive. Being that I'm very low carb and salt sensitive, what sort of guidance would you give to be sure I get the right level of salt in my diet? I'm an Element subscriber and originally was putting a full packet in my water throughout the day, micro dosing, but then stopped when I noticed some tremendous swelling. Ankles disappeared and I took my ring off.

Nicki: Recently I've tried adding some smaller doses back in but I'm nervous around pushing too much with my salt sensitivity." Then she gives a variety of stats, she's a 45 year old female, five foot eight, 157 pounds, 18% body fat, quite active, keto carnivore for three years, currently doing one meal a day.

Robb: So this stuff, it's interesting because in general the folks that are salt sensitive or sodium sensitive hypertensive, you could make the case that that's generally triggered by a hyper insulinemia state. And this is part of the reason why when folks go from standard eating to a low carb diet that they have a lot of diuresis, they shed a lot of water, shed a lot of sodium, all that type of stuff, which is generally good. I guess what would be interesting to tinker with, and what's interesting about this is that usually when people experience swelling, not always, but usually it's from too much potassium. Inadequate sodium, excessive potassium, this is one of the things that can over the long term be a problem. That's not always the case, folks that are sodium sensitive, they will notice that their hands swell up and stuff like that.

Robb: But somebody going on a hike and they've been low sodium throughout the day and they notice their hands and feet are swelling, it's actually because of a sodium potassium imbalance, not too much sodium. So the best advice I could give in this scenario is to just tinker. I would be interested in knowing what's your baseline sodium intake, what are the signs and symptoms of hand or foot swelling, and also what's your blood pressure? I would be really interested in getting one of these good but inexpensive-

Nicki: Did she give her blood pressure?

Robb: I don't think so.

Nicki: I'm looking, I don't see blood pressure.

Robb: But that would be something that I would be really curious about because if you get a dose and we see a pretty significant blood pressure increase then that's going to be kind of concerning. I think either way with this, we just kind of have to tinker with the overall dosing and also at the end of the day, if you're not experiencing cramping-

Nicki: Fatigue, that's what I was going to ask, like, are you feeling the signs of being-

Robb: Then you may not really need it. So definitely I would make the case that sodium and electrolyte supplementation is on an as needed basis. When we were doing our jujitsu stuff, it was 95 degrees, 90% humidity and we went through a lot of-

Nicki: Like three hour sessions.

Robb: Yeah, and we would do three elements during that time, a piece. But day to day we might do one or two of them and then we just salt our food and we're pretty good to go from there. If Laura's not experiencing lethargy, fatigue, cramping, then you may just not need that much. The background you get with your food may be plenty. Or maybe you mix up some element and you split it into divided doses over two days and that's enough for you.

Nicki: Figuring out what level works for you, you're going to have to kind of test and tinker.

Robb: You're going to have to tinker with that because clearly it's sounding like she's kind of an outlier in the way that she responds. But I would be really interested in knowing what her blood pressure is generally and then if she gets exposed to some sodium, does the blood pressure go up significant with the swelling? These are just some interesting things that would be handy to know to help dial in what she's up to.

Nicki: Got you. Okay, lets see. That was our last question for the week. Be sure to check out our show's sponsor, Joove, for your personal red light therapy device, go to [Joove.com/Robb](https://www.joove.com/), that's J-O-O-V-E, forward slash R-O-B-B. You get a free gift with your purchase when you use code R-O-B-B. Please share this episode. Remember we've got two great resets coming up, the mobility one featuring carbs and kin stretch starting on March 16th, 13th? Monday. I don't have it in front of me. It's that Monday. I think it's the 13th. So be sure to sign up before then if you want to join.

Nicki: The 30 day reset is starting mid April. For both of these, you need to join before the start date so that you can participate because on the first day that the thing goes live, after that first day, we close it so that we have kind of a closed cohort participating. Because it's never smooth and easy when people join a week or two weeks into something when everybody else is off and running and on the same page. So these things run as a cohort.

Nicki: You can go to join.thehealthrebellion.com to sign up for that. What else, Babe? Leave us a review, subscribe-

Robb: Join, share, all that stuff. We'll hump your knee mercilessly to do something.

Nicki: All right, guys. Have a great week.

Robb: Take care.

Nicki: Bye.

