

Nicki: Welcome to The Healthy Rebellion Radio. This is an episode of Salty Talk. A deep dive into popular and relevant health and performance news pieces, mixed with the occasional salty conversation with movers and shakers in the world of research, performance, health and longevity. Healthy Rebellion Radio's Salty Talk episodes are brought to you by Drink LMNT. The only electrolyte drink mix that's salty enough to make a difference in how you look, feel, and perform. We co-founded this company to fill a void in the hydration space. We needed an electrolyte drink that actually met the sodium needs of active people, low carb, keto, and carnivore adherence, without any of the sugar, colors and fillers found in popular commercial products. Health rebels, this is Salty Talk.

Nicki: And now the thing our attorney advises. 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 change. And given that this is Salty Talk, you should expect the occasional expletive.

Nicki: All right. We are rolling. Welcome back to another episode of Salty Talk.

Robb: How's it going, wife?

Nicki: Going pretty good. How about you, hubs?

Robb: Just finishing some lunch.

Nicki: You were, you were.

Robb: Just barely done. Nicki was sitting here giving me the stink eye and I'm like, "I'm a chewer. Sorry. I chew."

Nicki: He was having some macadamia nuts and just chewing like 100,000 times.

Robb: Damn me and my desire for good digestion.

Nicki: Yes. I know. I'm not faulting you it's just... You know?

Robb: And now all the carnivore people are going to freak out because I was eating macadamia nuts. I defaulted on carnivore-hood.

Nicki: Well, you haven't really been devout anyway.

Robb: That's true enough.

Nicki: So today we actually have a pretty cool episode. You and Diana Rogers spent some time going through the article that kind of made some waves. It was a New York Times opinion piece titled The End of Meat is Here. And you guys went through, and kind of line-by-line went through the claims and...

Robb: Yeah, and I mean, we started off and we went over, what are our biases? What's the bullshit that we're bringing to the table? Just to try to and set an even keel on this stuff. And so we went through what our biases were. And we talked a little bit about the author's background, but we didn't turn it into a 20 minute dismissal, via ad hominem attack, straw man. We acknowledged that the guy's a vegan. Well, he's not even vegan, but-

Nicki: No, he eats meat occasionally.

Robb: He's heavily vegetarian, vegan-friendly. He's on the board of some sort of farm related website, whose stated goal is to remove animal husbandry from the food system. And we went, just like you said, we kind of went line-by-line through everything that he claims in there. And it's so interesting in this age of COVID and everything else, it's always fascinating to me when you see people make statements of fact with no error bars at all. And he did this on a host of things from-

Nicki: Meat causes climate change.

Robb: Climate change, bad for your health. And I mean, there was no wiggle room, no error bars in this thing, which at this point, hopefully folks start recognizing that whatever side of this equation folks are on, it's not really even approaching a scientific or rational discussion if we're doing anything beyond gravity or Newtonian physics. Those things are pretty fucking buttoned up. And you've got heavy predictive value there. But then beyond that, there's things that we know, and then there's a lot of gray area beyond that. Carbon has four bonds. It's not going to have five, it's not going to have three. It's going to be happy with four bonds.

Nicki: I feel like carbon might just want to have six bonds though.

Robb: And there you go. There you go. And that's a lot of the tenor of this piece, is that there's just stuff's stated with this certitude. And again, Diana and I tried to go through this thing kind of a line-by-line deal, and just say, "Hey, this is what the claim is. Here's some stuff to kind of maybe consider as a counterpoint." And we went through the whole piece on that. It's a decently long podcast, but I think it's pretty valuable. This thing was trending heavily on Twitter and the other social media outlets. And it's interesting too, in the way that the guy tried to dovetail everything from climate change, to social justice warrior-ing, to morality and the pending implosion of the healthcare system.

Robb: And now granted, I'm guilty as charged on trying to take 50 different things from different venues and weave them all together. But it was some of what he does. And again, we mentioned this throughout the course of doing it. It's so wacky some of the shit that the guy throws out there. It's just kind of like this virtue signaling, and pandering. And of course this is our flawed bias. Clearly Diane and I are being paid off by big meat. We're just rolling in the dough. That's why her film didn't receive \$1 million in less than a day in a Crowdfunder, like What the Health did. And it's been an absolute fucking trench warfare shit show to get that thing funded, so clearly we're just flush with cash from big meat. Not to divert this too far, but this is one of the interesting things,

we're really advocating for regenerative agriculture, which is a significant departure from the industrial food system, including the industrial animal husbandry part of this stuff.

Robb: And so the different pieces of the food production system, whether regenerative or more mainstream, are completely at odds with one another. And they look down their noses at one another. Like one of our friends, Maggie, who runs one of the local meat outfits here was talking about how, when she's at the Pearl Farmer's Market down in San Antonio, she'll get some old codger who starts giving her kind of a rash and a shit about like, "You can't grass finish meat." And she's like, "Yeah, we do it all the time." And then as she pokes and prods, then he's on the industrial ag side of this stuff. And so it's like this pissing match and dick measuring contest, and this competition going on. All the while the vegans are doing a fantastic divide and conquer, and everything from training reporters, and infiltrating school lunch systems, to just really having control of what does and doesn't get passed on YouTube and other social media outlets. So, yeah, I don't know.

Nicki: It's a heavy topic.

Robb: It's a salty topic.

Nicki: It's a salty topic. There we go. Well, let's dig into this. And of course, folks we'll post the link to this article if you haven't seen it yet in the show notes.

Robb: Howdy Diana. What's going on?

Diana: Oh, well, it's a little warm here today in Boston. It's about 85 or 90, I don't know, and 100% humidity. So I just stood in the walk in for a little bit to try to cool down before we recorded here.

Robb: Good times. Texas is not that bad yet, but on the days where it's both cloudy and warm, it's a gut check. It's no joke.

Diana: Yeah.

Robb: So, hey, let's see here. How do we want to tackle this? We're going to discuss this article that appeared in the New York Times, The End of Meat is Here. This is by a guy, Johnathan Foer. And me averting my gaze at you is because I'm looking at my other monitor, not because I'm trying to be rude or anything. But God, there's so many different ways to dig into this thing. And part of, I think what we're going to hopefully try to do kind of a critique and analysis on the commentary, the content, the tone, a bunch of different angles on it. But there's really no discussion of this guy's biases and background. You have to kind of dig into that to get to it. So I think that's a good place for us to start. What are our biases and backgrounds? And let's go ahead and start with you.

Robb: I just think that that's valuable in this day and age. It's almost like the professional disclosure thing before you do a talk. It's like, "Oh, I have investments in this company and whatever." But what are our biases? Clearly you are paid off by big meat and are rolling in the dough because you're advocating for them, right?

Diana: Yeah. And it's really interesting. I mean, I think all scientists should be disclosing their personal dietary habits. The position statement of the Academy of Nutrition and Dietetics on vegetarian and vegan diets was written by 100% vegans and vegetarians, but that was not disclosed. And so I think everybody eats and what you eat largely influences your opinions on the food system and what's appropriate. And so us coming from a more paleo type background, where we believe that the issues with our modern health decline is largely the processed food industry and big ag. I personally have been living on an organic farm for the last 18 years. We started as a vegetable farm, but realized that we needed animals in order for our fertility cycle to be sustainable and regenerative. And so we slowly started raising meat in a very responsible way.

Diana: And so I currently live, it's still primarily a organic vegetable farm, but we do raise pigs, chickens for eggs, goats and sheep. We only don't raise beef because we don't have the land for it, where we just don't have... You need a little more land than what we have. We've never had a busier year. We were booked out for all of 2020 at the slaughterhouse, and with our meat and vegetable program. And you and I have this book coming out about the benefits of animal products, and raising cattle for both our health and the environment.

Robb: Right. Yeah. I forget how long the initial manuscript was that we turned in, but it was pretty enormous because we're unpacking the environmental, ethical and health considerations of a meat inclusive diet. And we really have to tackle it in that fashion because a game of what I call vegan whack-a-mole happens where if you address one thing, then this other question pops up. And what was interesting, and we'll see how good of a job that we did tying this together, but what was very interesting is the solutions in one area had insight about solutions in another area. And there was actually this kind of consistency that fruits and vegetables, large ruminants, grasslands, nutritious, ethical, sustainable. And that was very consistent, at least from our perspective. And this seems to be exactly the antithesis of say what Jonathan Foer is putting forward with his piece.

Robb: So really quickly, I'm sure that most of the folks that listen to show know what my biases are. Former research biochemist, wrote what was the first popular book in this paleo diet genre, definitely more low carb, paleo-centric. Got into all this stuff due to a health crisis from eating a vegan diet, which maybe a vegan diet will work better for some other people, but it certainly didn't work particularly well for me. So I mean, what else should I disclose? I was a cancer researcher. What are my other... Although it's funny because I appreciate low-carb diets. I'm not a religious zealot. And so when I wrote a piece about how low-carb diets may not be the best thing for athletic performance, then people said that I was bought off by big sweet potato.

Diana: Right. And so I think what you and I tried to do with our book is constantly test our hypothesis, right? And we even went with a vegan publisher to seal that deal. And so who better to vet our book than the publisher of the China study.

Robb: Right. Right.

Diana: And so one thing that we really harp on a lot is that you can't have an ethical argument about whether or not you should eat meat without considering the nutritional and environmental ramifications of what a food system without meat looks like. And we also came to some really interesting social justice questions in there about people coming from a position of privilege to be able to push away a nutrient dense food, then imposing their moral stance on others who may not have that privilege. And so that was the real trigger for me in this article, and I think for you too. Was claiming that people who are food insecure or poor should definitely be vegan because of his ethical perspective. And so we really have to dig into that one, I think really hard. So maybe we should just start though, by talking about his background.

Robb: Right. Right. Let's see here. So he's the author of *Eating Animals* and *We Are the Weather*. He's a medical school dropout, mostly a fiction writer, lives in DC, graduated from Princeton with a degree in philosophy, board member of Farm Forward, which we'll talk about Farm Forward here later. It's one of the outlets that he cites in kind of the way that one would cite something coming from PubMed, or the CDC, or something like that, which is kind of ironic because Farm Forward is this pro-vegan, try to remove animals from the food system, organization.

Diana: And largely seems to be an organization founded by the need to promote his work.

Robb: Right. They don't encourage regenerative agriculture, they just criticize industrial ag as the bad guy. What else do we have kind of with Foer's background?

Diana: And he's not a vegetarian 100%, which I think is really interesting too. So I wonder who his allies are in this space, because when I looked at the board members of this Farm Forward, it wasn't your typical guys like Neal Barnard, and the PETA folks. So I'm curious who his circle is.

Robb: Right. Yeah. Yeah. Yeah. There's a lot of interesting stuff to unpack on that. And again, I don't want this to launch in as like a straw man deal, by discrediting him out of hand because of his background or whatever. But again, I think it's worth having a discussion around, okay, what's this guy's kind of credentials and background? And again, I'm one of these people that I really don't give two shits what the person's formalized education is, unless they're doing surgery or building a bridge. There are certain things that... Like technical understanding is clearly important, but beyond that, if we're talking about just general information, and thinking about systems, and stuff like that, I'm okay with somebody having no steeping in a particular topic, but then becoming an expert on it because there's things like the internet, and Ted Talks, and Khan Academy, and stuff like that. So the goal there isn't to try to discredit him outright because of his background, but just to put a little bit of perspective about where this guy's coming from.

Diana: Yeah. And I should mention that I do have a medical degree in nutrition. I'm a registered dietician, in case anyone watching this doesn't know that

Robb: I do not. So you are more credentialed than I am. Do you want me to dig in and start kind of reading out of the main body of what he has? Or do you want to go kind of with the bullet points that we've pulled up?

Diana: Yeah. It might be helpful just to read most of it, and then to just kind of... You and I have a lot of notes on this, so maybe if it gets too laborious in his wording, we can just kind of cut to the chase. I mean, basically he's critiquing the meat industry, and saying that we should not eat meat because of industrial ag and how farm workers, slaughterhouse workers and animals are treated, which I akin to saying, "Well, we shouldn't wear clothing because of sweatshops."

Robb: So flesh that out. I think that that's a really fantastic analogy there. So we can, and should, probably, be concerned about the welfare of animals, the welfare of workers, the conditions that they're in, some thought around sustainability. And this can apply to food and this can apply to clothing. But in this situation, if we were to use the same analogy that he uses with clothing, we would run around naked, which isn't necessarily the worst thing, unless you live in Boston in the winter.

Diana: Right. So can you survive without clothes? Just like he's saying, "Can you survive without meat?" Do we need clothes? I guess not, right? If we wanted to live and heat our houses really high, and never go outside in the winter, and things like that. Yeah, I suppose. But is there a way that you can actually improve the system and make it better for the people that are working there instead of just boycotting the system? And is it possible the people who have the same concerns actually came to a different conclusion and perhaps a deeper, more nuanced solution? Yeah. So that's where you and I are coming from in general, against this article.

Robb: Let me read some of what he has here. Hopefully folks will read it themselves, but if not, if you're listening this only as a podcast. "So is any panic more primitive than the one prompted by the thought of an empty grocery store shelf? Is any relief more primitive than the one provided by comfort food? Most everyone has been doing more cooking these days, more documenting of the cooking, and more thinking about food in general. The combination of meat shortages and President Trump's decision..." Which he has a link to that, "... to order slaughterhouses open despite the protestations of endangered workers, has inspired many Americans to consider just how essential meat is."

Robb: So there's a little background on that too, which I don't want to get too far out in the weeds, but it's already been well-recognized that, although we likely... I don't want to impact COVID a ton, but we probably needed some sort of economic stimulus to keep the wheels on the wagon and not have to everything implode. But it's also crystal clear that the unemployment benefits are so generous that people are opting to be fired and unemployed because it pays better to be home than to go to work. So there's multiple layers to this. Not just the fact that some of these people are legitimately working in an environment that fosters the transmission of this airborne disease. But there's also the

reality that we have a system which has incentivized, "Hey man, I'd rather stay home. Catch you in six months."

Diana: Right.

Robb: Let's see here. Is there anything else in that one that's super important? He talks about the Tyson plant in Perry, Iowa. It had 730 cases of coronavirus, nearly 60% of its employees. And another Tyson plant in Waterloo, Iowa. There were 1,031 reported cases among 2,800 workers. So pretty big deal. On Joe Rogan, Joel Salatin made the case that these mega facilities are perfectly designed for disease transmission, like this. They're cool, they have recirculated air, people work cheek to jowl on top of each other, the dormitory sleeping arrangements for what are oftentimes migrant workers are super tight. They would literally be better off being outdoors in tents if we were to just think about communicable disease transmission.

Diana: Yeah. And they're often shouting at each other, so the particles are going more quickly.

Robb: Because of the noise, and the environment, and...

Diana: They're highly stressed, so their immune systems are likely much more compromised. They don't have the privilege to be working from home. All of those things. Likely aren't eating the best diet, things like that.

Robb: I'm kind of liking this. There was a time, gosh, I'll go ahead and go into this, where feminists were regaining the word cunt. They were like, "We're going to take ownership of this and make it a non-bad thing." And the term privilege has given me a red ass for a long time, but I'm kind of liking we're taking this thing back. So Joel Salatin made this point, that these industrial systems are effectively a monopoly.

Robb: This is not the way that it needs to be done. Instead of having a few facilities, I think like 100, 150 facilities around the US. He's advocating for tens of thousands, potentially hundreds of thousands of decentralized facilities where it's more open air, it's lower throughput, much better working environment, higher wages for these people. It's a more skilled process instead of kind of a factory line operation. Again, this is one, just an interesting feature of a piece like this. It is a black and white thing. There's either industrial ag or plant into the vegans and there's nothing presented in between. In fact, without naming regenerative ag, they dismiss it later in the piece in a very offhand fashion.

Diana: Yeah. And I should mention too, that one of the small slaughter houses that we work with in Rhode Island that just opened, actually it's in Southern Massachusetts called Meatworks. They just sent us an email this morning saying that they're now booking out 18 months. So we already have the dates for our animals now, and now we have to book dates for the animals that aren't even born yet.

Robb: Oh, wow.

Diana: Yeah.

Robb: Which that's a logistical-

Diana: We've got a huge problem with the slaughter industry and especially for those of us who want ethical slaughter. It's a big problem.

Robb: Right. And this is again, mainly because the way that the consolidation has occurred, there are very few players. Like you've told the stories of where some of these slaughterhouses may be empty, but they are basically booked because the big players are like, "Yeah, none of you piss ants are going to get in here." So it's actually worthwhile for them to... It's kind of like a receptor site blocking. Like you guys can't dock there, so you guys go out of business and this is the way that these things just keep on getting bigger and more consolidated.

Diana: Yeah. Especially in the West, that's really happening a lot.

Robb: Okay. Let's see here. You mentioned the entitlement perspective. We have a mixture of notes and also the main body. These people, I think to your point, they don't necessarily have the privilege of going home and working from home. This is true of lots of people, power line workers and what not, but it is hard to imagine an environment that isn't more amenable for transmitting an airborne pneumonia based disease. You mentioned the meat industry has been allowed to get out totally out of control. That's not steak's fault. That's bad policy, not controlling monopolies, allowing corporate influence over policy.

Diana: Well, and it's the same thing. We see the same poor treatment of workers in restaurants. In back of house restaurants, dishwashers. I mean, that's really just starting to come to light too. There's some restaurants that are starting to pay living wages and building that into the cost of the food and charging more and not accepting tips, but building that into the cost of the meal ticket. So these problems are all over the food industry. They're in the plant-based industry to tomato pickers. I mean, we haven't seen yet the issues with our plant harvesting because we're just not harvesting them yet, but we're going to have some major problems come this summer with farm workers out in the fields, because they're also living in really tight quarters.

Robb: Tight quarters.

Diana: Don't have a lot of health care options, good food options and things like that.

Robb: Right, okay. I'll jump back into the main body here. Sick workers meant plant shut downs, which has led to a backlog of animals. Some farmers are injecting pregnant cows to cause abortions. Others are forced to euthanize their animals often by gassing or shooting them. And again, this is because there's a lack of processing.

Diana: It's not because farmers want to be doing that or anyone wants to be doing this. It doesn't make sense on any level. It's just the bottleneck issues.

Robb: Yeah. Which is completely at the processing level. And also we've been beating the drum on the prime act, which would be a major step towards opening this up and providing both more resilience. Again, this thing could go in a million different directions and probably most of them will be bad. But one of the crazy things about this, like if you're concerned at all about national security and things like that. A brittle food system is a disaster. Just a disaster waiting to happen. Like it's one terrorist activity, one act of God away from like a major problem shutting the whole system down. Whereas if we have much more decentralization, it's virtually impossible to break the whole thing. Whereas though when we have this consolidated the way it is it...

Robb: So it should be a national security issue. It should be a human rights issue and it doesn't really paint it favorably for planet of the vegans, but we'll kind of get there. Has gotten bad enough that Senator Chuck Grassley from Iowa has asked the Trump administration provide mental health resources for hog farmers. So that's actually kind of a hat tip of the fact that even though these people are painted as kind of they don't care. They totally care about these animals and it's not just the financial investment. They care about the animals and euthanizing them like this. And literally there were so many pigs being euthanized. They had to figure out how to liquefy them so that the carcasses didn't create a whole other set of problems.

Robb: Despite the grizzly reality and the widely reported effects on the factory farm industry-

Diana: So there he goes under the... And he's citing his own organization there.

Robb: Which is the farm for... So we have a citation here and this is from Farm Forward, which is his own organization, which is not a governmental entity. It's not a research entity. It seems to be just mainly focused on removing animal husbandry from the food system.

Diana: Yeah. I mean, they don't claim that, that's what they're doing, but I didn't really see any regenerative solutions on there. All I saw was let's ban chickens, and they say industrial, but I didn't see any resources for someone who may want to eat meat to find better meat.

Robb: Right. So again, this kind of false dichotomy that there's either industrial ag or planet of vegans-

Diana: Veganism.

Robb: ... which ironically also planted the vegans as industrial ag on steroids. But I think we'll get a chance to comment about all that in a bit.

Diana: Yeah, we should explain that too more a little bit.

Robb: Well, do you want to... I feel like there's some stuff a little bit later, but I mean, it doesn't hurt to reiterate this.

Diana: No. Just basically, if you're trying to have as enclosed ecosystem as possible on your farm, like on the farm where I live, you absolutely have to have animals as part of those inputs. You need the manure, you need them grazing the grass. It's absolutely required. So we just cannot grow food at scale by just using kitchen scraps and lawn clippings.

Robb: So in our book, *Sacred Cow*, we use this example of a grass world, which I think is pretty slick, but just really quickly what happens. Let's say we go to the giant African Savannah. These grasslands that just go on and on and on. What happens to the grasslands if we remove the animals? What if we just put a big fence around them. Won't just grow and thrive and everything will be great?

Diana: Right. Or actually one of his citations later is from a New York Times article claiming that, "Well, why don't we just turn all these grasslands into forests?" As if the whole world just wants to be a forest naturally, which just shows such a lack of understanding on such a basic ecosystem level. It's like saying, "We should just plant orchids in the Tundra." Like, "Okay." So when grass grows and it's not biologically broken down by a ruminant animal, not chewed gone through the digestive system and spit out the other end, it just grows and oxidizes and lays down and eventually dies. Because nothing is breaking it down. Grasslands, co-evolved with ruminant animals and they need each other in order to thrive and be healthy.

Diana: So we did in the book propose what would happen if there was a planet similar to earth with just grass on it, but no animals to eat the grass. You come back in a few years and the grass is dead. So everyone who has a lawn knows that it needs to be clipped, but you have to fertilize it in order for it... You can't just keep on clipping it. So we actually just graze sheep on our front yard and that takes care of that. So if we are to have a food system without animal inputs, where are we going to get the inputs? We're going to have to get them from Monsanto and other chemical companies. There are some people that are saying that we can do veganic agriculture using algae, but I looked into the processing of how these algae farms are made and they actually require way more inputs and release way more greenhouse gases.

Diana: And plus then you have to transport it because not everyone lives next to an algae production facility. So again, if the goal is to have as enclosed an ecosystem as possible on your farm with as little outside inputs as possible, you absolutely have to have animals as part of that mix. Because there are no ecosystems in nature that don't have animals.

Robb: Awesome unpacking of that. Again, just to reiterate, if we remove animals from the food system equation, the only thing that we're left with is either a synthetic chemical fertilizer solution and, or some of these things like you mentioned, farming algae and seaweed. Which then needs to be trucked all around the world to provide... And I don't know that like, is there enough nitrogen capture there? What are the knock on it? Because there's knock on effects to everything versus what you're talking about, which if humanity disappeared. Like blink of an eye, we disappear, 100 years from now, there will be plants and animals interfacing in these dynamic equilibria, where populations increase a little bit and then they decrease a little bit. Maybe one environmental factor

changes and something really explodes. And then its population crashes because that's what non-equilibrium systems do when they're living.

Robb: So if we want something that we could come back to 5,000 years from now, and again, this stuff is really hard to unpack, but I'm going to go out on a limb and say that it needs to look a lot more like an 18th century farm. Then it's going to look like George Jetson and shit being grown in that. Like that is not a longterm sustainable solution and it doesn't end up addressing multiple needs on multiple levels, all tied together. But again, that's part of the reason why we wrote the book because there's like a million little details that have to be addressed.

Diana: Yeah. And I just want to take it one step further before we move on. Because if folks are on board with us, that we have to have animals as part of the mix and we need chicken manure, we need cattle. Well, then why eat them? And that's just like the natural next question. So I just wanted to really quickly address why with them.

Robb: Weaves, yeah.

Diana: So I have no issue if someone is repulsed by meat and doesn't want to eat it. Like that's their decision, that's fine. But these animals do need to be called in some way or else they'll take over. And in our grass world example, step two is if we bring in cattle, but then don't have any predators or any sort of checks on their population, they'll end up eating all the grass. The cattle died, the grass dies and then we're back to square one again. So the right thing to do is to eat the animals and then keep the healthier ones going and grazing, breed them more, and then keep the cycle going. Humans are omnivores. We thrive on meat. And to me it just doesn't make sense to then propose that everyone eliminate animals-

Robb: We had a whole- I was going to do a chapter on non-equilibrium thermodynamics, which is this whole branch of physics. And I managed to little like we just pulled our hair out, trying to figure out how to deal with this thing, because it becomes a deal where you either say very little, very obliquely, or you've got to say a lot to really be able to flush the whole thing out. And I think that we struck a pretty good balance with this, which was this idea of non-equilibrium thermodynamics, pure equilibrium is dead. Once everything's equal, it's all dead. There's no energy differential. One thing versus another.

Robb: The hallmark of life is capturing energy and transiently increasing the energetic potential of different biomolecules or systems, or what have you. And in that non-equilibrium thermodynamics model, what you want is as much life as possible.

Diana: And as much different types of life as possible, as much different plants, as much different animals as possible.

Robb: Yeah. So within that context, then you want to raise lots and lots of grass. Lots and lots of plants, and also lots and lots of animals. And those things need to go through a reasonable life cycle. And this is just kind of one of these harsh realities that everything lives, everything dies and it's not-

Diana: But death is not an end. It's just a piece of the circle.

Robb: A piece of the circle. Yeah.

Diana: And then later we could talk about, "Well, then why not just re-wild everything and we could just live in these little George Jetson ecosystems, and then just have neat nature and human." So that's something we can talk about later, but that's another thing I think that a lot of people, that's their next step. "Okay. I'm onboard with the animals. Animals live in ecosystems, but then why can't we just have the animals like there."

Robb: Right. Yeah. Let's definitely-

Diana: As of humans, not animals, but any away.

Robb: Let's definitely unpack that. Only around half of Americans say they are trying to reduce their meat consumption. I highlighted that because it's presentive. My notes on that are what a massive opinion piece, this is bad. It's bad that only half of Americans are considering reducing the most nutritious food available. And this is again, I guess, one of these frustrating elements of stuff like this is that there's no error bars presented in this thing anywhere. This is presented as little shit. Only half of Americans are considering reducing their meat intake and clearly that's a problem.

Robb: What if it's not a problem? Maybe what if it's a problem that half of Americans are considering reducing their meat intake? And in fact, people have eaten less red meat over the last 30 years. Eaten ironically, more chicken and pork, which are far less sustainable than what beef and lamb are. But do you have any thoughts on that again. It's one of these things that just it's a really interesting tool to throw that in there because it's just this statement of fact. That like, well, clearly this is a bad thing to only half of the US is considering curtailing their meat consumption.

Diana: And right after that, he goes into how meat is embedded in our culture, our personal histories in ways that matter too much. So that's where I got really triggered right, because this whole idea of food sovereignty, we go into it in the book. But it's the idea that people actually have the right to eat what they feel is culturally appropriate, healthy food. And essentially he's violating that. He's saying that actually, "No, you don't have the right to choose your own food. I have an ethical issue with eating meat and so screw you and your culture and what you think is healthy. My position as someone with a degree in philosophy is more important than anything you think." And we know that underprivileged kids, food insecure kids when they're given a supplement of meat actually do better.

Diana: There's been one randomized control trial on kids who are food insecure and they gave them either meat, milk, or just extra calories. And the meat group is the only one that outperformed all of the other ones in terms of behavior, academics and physically. So when we take that into account and when we take into account that 70% of Americans are overweight or obese, should we really be telling them to reduce a whole natural food that is low in carbs when what we do know is that spending on meat has gone

down. But spending on processed food has doubled over the last about 10 years. So is it really the meat, something that humans have been eating for millions of years, or perhaps is it a more modern food that's causing all these modern health problems.

Robb: Right. And we'll talk, I think a little bit about this, but like he ends up citing some favorably, like beyond meat and some things like that, which are just hyper processed food substitutes, which are not remotely sustainable. And that ironically the life cycle analysis have been done on these comparing like white Oaks pastures meat production versus like the Impossible Burger or Beyond Burger, whichever one it was.

Diana: It was both.

Robb: It was both?

Diana: And it turned out that you had to eat one grass fed burger from-

Robb: To offset.

Diana: ... white of pasta to offset your emissions from a Beyond Burger or an Impossible Burger.

Robb: Totally is.

Diana: And ironically, when I went to walmart.com and just look at the price of organic grass fed meat versus Beyond Burgers. Beyond Burgers were twice as expensive as organic grass fed beef.

Robb: Again, this is something that's so fascinating because he paints and we'll dig through this. He paints veganism as this like cheaper, more ethical, more sustainable way of eating. And in fact, in many ways, it's not.

Diana: Yeah. And if you were to do a cheaper version, let's say beans and rice, which arguably is a healthier way to go. If you wanted to get your plant based-

Robb: Complete protein.

Diana: Yeah. A complete protein, but that's four times the calories than eating four ounces of steak.

Robb: And it wasn't EAT-Lancet. Who was it that talked about that, that they basically said, if we shift to this more plant based protein model, that people by default will over-consume calories and therefore overeat and have these other health problems? Who was that?

Diana: Yeah. It was the study in PNAS, actually that where they modeled in the US. So I think that's the one you're talking about.

Robb: Yeah.

Diana: So they modeled what it would look like in the US if we completely eliminated animal products from our diets and they found only a 2.6% reduction in greenhouse gases. Only 2.6%, but yet our calories would go up, our carbohydrate intake would go up and our nutrient deficiencies would go up. So this is already a population, again, that's overweight and obese, nutrient deficient. And another thing we go into in our book is that no one is actually taking into account the greenhouse gases and costs of a disease like diabetes, all the hospital costs, amputations, the time out of work, all of that. And there have been a couple of-

Robb: Or plastic for like dialysis and wound care.

Diana: The land sets and all the paraphernalia you need to be checking your blood sugar all the time. So I actually did find a few studies on that and just kind of threw that in there as like, "Is our problem a calorie generation? Or is our calorie nutrient generation on the land that we have." And actually, we're just not growing the right nutrients. We don't have a problem with generating calories in America.

Robb: Well, and globally really. So let's hear, going back to his main body, animal agriculture is now recognized as a leading cause of global warming, which-

Diana: With no citation.

Robb: With no citation and this is patently false. So when we dig into this, and this is one of the things that is really kind of crazy about this. I just can't say plant base because it's just mealy mouth lift. It's vegan. It's like a vegan agenda. Let's just call it for what it is. This vegan agenda says again and again. And like major players in the scene will make statements like this until it appears to be true. Like there was an example of this, which would have played great to the case that we were making, which was that there are 60 harvests left and this just, "Oh, fuck." I mean, the end of the world, of course, there's 60 harvests left. Everything else is going to hell in a hand basket. Of course there's only 60 harvest left.

Robb: So this has taken on life of its own. It's been incorporated into peer reviewed research. And can you talk about the background on that statement?

Diana: Yeah.

Robb: And I'm making this point because if people say shit long enough, then eventually it's just accepted as fact.

Diana: Right. Yeah. So we actually were going with that assumption in our book and then-

Robb: Then we did something crazy and we wanted to track down the citation.

Diana: To look it up.

Robb: Yeah.

Diana: Yes. And so I actually, for the film I'm working on, I interviewed Anne Mottet from the UN FAO, which is the same organization, supposedly, that put out this statement, and I found out that it was actually a woman from the UN FAO that Anne knows, who just happened to say it at a conference, as she was up on a podium with no background information, nothing to back it up, there's no studies showing that. Anne said, "That's not an official position of the UN, we don't really know why she said that," and perhaps that could be something, and clearly we're having a problem, but to state that as a fact, and to base your arguments on something like that, it's really dangerous. I think there's a lot of people out there clinging onto something because emotionally it fits their worldview when it's really important to... We did that too, when we looked at the health benefits of grass fed beef. It's just really important as scientists to be checking your hypothesis, trying to find out, prove yourself wrong all the time.

Robb: Right, right. Yeah. There will be plenty of people still cranky with us on the grass fed meat deal. On this leading cause of global warming deal, we address this pretty thoroughly in the book, and I believe, again, this is where it gets to so hard, they're like, "Well, we're right," and then, "Well, we're right." I think we credibly cite sources, and animal husbandry is not the driver of climate change emissions the way that it's presented, and there's maybe multiple layers to this. One, in total magnitude, it's not nearly as large as what is presented, and then two, there's this whole consideration of biological systems being part of a carbon cycle, which is an entirely different story versus taking carbon, which has been sequestered for hundreds of millions of years, potentially, and then just boiling it off in massive amounts.

Robb: This is where this stuff really is super dangerous getting this wrong, because people are so fired up about any type of methane or carbon dioxide emission that they're looking at the fact that mussels on the sea floor emit methane. Well, get rid of the mussels-

Diana: Shoot the moose.

Robb: ... reindeer, shoot the moose. There was a piece in Finland that was like, "We need to cull all of the moose because they eat lichen and fart methane."

Diana: Yeah.

Robb: This is where... And people think this is credible. I mean, "Greenhouse gasses are really important, we've got to reduce their numbers at any cost." COVID is interesting, because we're getting a little sense of, "Well, what does at any cost mean? And when does that cost start?" The intentionality may be one thing, but when does the actual cost, the bill that you got to pay at the end of this experiment, when that starts coming due and you're like, "Holy smokes, that was not what I intended." This is our world, the law of unintended consequences popping up everywhere.

Robb: Now a quick word from today's sponsor.

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Robb: Might make me a little bit frisky when you go wafting by with it. I'll admit to that.

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Diana: Now back to today's episode.

Robb: A further example of where this is just so ridiculous saying that animal agriculture is now recognized as the leading cause of global warming. It's funny. I don't know if this thing was written before COVID or he just did a remarkable job of ignoring a bunch of things that came up as a consequence of COVID, but what did we see with regards to emissions, once the transportation sector was effectively shut down?

Diana: Yeah. I mean, it's really interesting, we did see less fog, or haze, or whatever, smog over LA and things like that.

Robb: Well, the CO2 part per million emissions plummeted, but cows are still living. In theory, if transportation... People in this area will actually dismiss transportation as a major factor, when it is in fact, the factor in this story, particularly when we consider the carbon cycle versus the fossil fuel store.

Diana: Right. Exactly.

Robb: Let's see here. "Impossible and Beyond Burgers available everywhere from Whole Foods to White Castle." Yeah. He's really...

Diana: He's really fired up about the Beyond Burger solution, when what we're seeing, is actually their stock has been downgraded. It's being taken off menus. When you think of a food chain nightmare, when you're trying to produce a lot of food for an emergency, ultra processed food that needs to be harvested, churned through a factory, and then spit out the other end, is actually pretty inconvenient.

Robb: Right. Right. "Our hand has been reaching for the doorknob for the last few years. COVID-19 has kicked open the door." Okay. "At the very least it has forced us to look when it comes to a subject as inconvenient as meat," again, and why do I have a...

Diana: A food that's been eaten...

Robb: There's a food that's been part of humanity for two to 3 million years, inconvenience. Again, it's some of this stuff where it's... And I guess maybe he's doing a little homage to Al Gore and an Inconvenient Truth, or something like... But why is meat inconvenient? Why is... This is just some manipulative language.

Diana: It's very shaming. It's shaming meat, unscientifically.

Robb: Okay, and to that point, "It is tempting to pretend unambiguous science is advocacy." Again, what science is 100% unambiguous?

Diana: Especially when it comes to food, right?

Robb: Even at the building block level of reality physics research, it's like, "Well, is it quarks, or leptons, or gravitons?" There's still debate about the way that gravity works and the interaction of electromagnetic forces. Granted they understand a lot of that stuff, but then as you scale this up into more complex systems; unambiguous is the definition of science because we just don't fucking know, but this is presented as if the case is closed. We understand this, which I, again, I don't want to divert too far out in the weeds, but this is some interesting stuff that the information monopolies are doing, like around COVID. Anything that isn't CDC or WHO backed is taken offline, and this creates a massive echo chamber. When you assume that you have all of the answers, then you do, because you will never learn a new thing ever again, because it's done.

Diana: Yeah. I mean, my comment back to you on your comment on this one was, "Spoken by a true non-scientist."

Robb: Non-scientist. Right, right.

Diana: I mean, that's what you get when you have a philosopher writing about food science.

Robb: Touché, touché.

Diana: Yeah.

Robb: Let's see here. "Some of the most thoughtful people I know, find ways not to give the problems of animal agriculture any thought, just as I find ways to avoid thinking about climate change and income inequality, not to mention the paradoxes in my own eating life. One of the unexpected side effects of these months of sheltering in place is that it's hard not to think about these things that are essential to who we are."

Diana: Unless you're trying to save your butt and work. Not everyone has the privilege to sit from home, in a well fed state, and debate in their head whether or not meat should be consumed by humans who are on the force. I mean, not everybody has that luxury. One thing that I learned when I was doing my dietetic internship, when I was working in a low income area, trying to work at this health food store, trying to get customers to come in, I went around to all these community health centers, and I'm like, "Here we are, everyone's complaining about food deserts. Why aren't people coming in to our store?" We were selling inexpensive, really healthy food, and then I was really humbled by the answer, which was, "Not everyone has the privilege to worry about long-term health and longevity, and some people are just worried about starting their car tomorrow, and not getting shot."

Diana: To assume that everyone is in your place of enlightened being and able to worry about the things that you're worried about... A lot of people, maybe they're worried about other things. Maybe they're worried about civil rights and mad that you're not worried about civil rights. I mean, lots of people have things that they're worried about. To demand that the world worry about exactly the same things you're worried about is pretty narcissistic and egotistical.

Robb: Well said. Let's see here, "We cannot protect our environment while continuing to eat meat regularly." Again, this is one of these, it's just a statement of fact, which-

Diana: What does regularly mean? That's the other thing, is like, "Well, okay, Mr. Philosopher, you tell me what your nutrition recommendation is when you do eat meat, but not too much, but we can't eat it regularly." Tell me what does regularly mean? That's such a frustrating thing to read.

Robb: "This is a not refutable perspective," and who does he cite on that? There's a Ted talk there, but a banal truism. Again, he's citing a Ted talk from a non-scientist as support that eating meat will destroy the environment, but a banal truism, "Whether they become Whoppers or boutique grass fed steaks, cows produce an enormous amount of greenhouse gas." Again, the carbon cycle picture behind Diana. If we're going to vilify cows, then we need to vilify rice paddies, and we need to vilify termites-

Diana: Mussels.

Robb: ... and mussels, and moose, and all this other stuff, and people are doing that. This is again, is the danger; people are doing that, and so there are people, including scientists, that are suggesting that we should expunge life on the bottom of the sea floor to reduce carbon emissions. When I've talked about this on social media, there are people that are like, "Well, they should probably do that, at least until we get on top of some of this

other stuff." It's like, "No, you don't." These are apples and oranges, but again, this is why we did a book on this. "If cows were a country, they would be the third largest greenhouse gas emitter," which I think that that is just patently false.

Diana: Right. I did look at this citation, he cites this, and I looked at it and it was an article in the Washington post, so it wasn't actually a study, and that article actually said this, but had no citation to back themselves up. He's just, again, it's just this echo chamber. That's-

Robb: Again, when we did the analysis on this, it's not even remotely that magnitude, and it's part of a cycle, not part of liberating, effectively, new carbon into the environment.

Diana: Yeah. Yeah. That same article that he's citing, also said, "Oh, cattle require twice as much land as chicken and pork," which is so misguided, because it's not taking into account that most of the cattle that we have are actually grazing on land that we can't crop, and so if you're going to be cropping corn and soy for chicken and pork, yes, that's less land, but we don't have a lot of that type of land that we can actually crop, compared to all of the marginal land, which is about three quarters of-

Robb: Of the land mass.

Diana: ... the agricultural land. If we didn't graze animals on it, it would be unutilized. Cattle are actually utilizing land we can't really use for-

Robb: Anything else.

Diana: ... for other food production.

Robb: Again, we've focused a lot on cattle, but there's sheep and goats, and other undulate, there's a lot of other animals that can plug into these different niches and produce food and upcycle food, type of thing.

Diana: Mm-hmm (affirmative).

Robb: Let's see here, "We can not claim to care about the human treatment of animals while continuing to eat meat regularly."

Diana: Uh-huh (affirmative).

Robb: Again, Joel Salatin, White Oak Pastures. Again, this is presented as a one-size-fits-all deal. "The farming system we rely on is woven through with misery. Modern chickens have been so genetically modified that their very body..." He goes through and just kind of lists all this stuff that's arguably not great.

Diana: But all plant-based agriculture, the folks that are harvesting our lettuce and our tomatoes are not miserable? They're leaping through the fields, riding unicorns, and rainbows, and everything? No social justice, human rights issues going on at all in that industry?

Robb: Then he cites this one thing, "Mother cows have their calves ripped from them before weaning," and this is a Facebook reference.

Diana: Yeah.

Robb: Again, this is what's kind of frustrating about this, is-

Diana: This is reported in the New York Times too.

Robb: This is the New York times op ed. When you do a citation like this, again, having it at least a modicum of a scientific background, and kind of have this anticipation... I expect something kind of other than Facebook as a reference. Again, we will have links to all this stuff in the show notes so that people can dig through it. "Again, we can not protect against pandemics while continuing to eat meat regularly." Where is...

Diana: But we can eat Twinkies, and pasta, and never-ending breadsticks and things like that?

Robb: Part of the point that he's trying to get out here is, there have been, so like swine flu and avian flu, and these cross species kind of scenarios, which are, a hundred percent, a consequence of industrial food systems. They're not a feature of things like Polyface Farms, even though there are cows, and chickens, and pigs interfacing, it's not the same way as them stacked on top of each other. They're in a natural environment, but I think the point that you were making is that if people are just healthy, like if the world were generally healthy, COVID would not have been that big of a deal. It's really interesting, because...

Diana: That's again, as something that's an untouchable topic, it's a little taboo to be talking about that, but largely the people who are really affected by COVID are those who are metabolically unhealthy.

Robb: Right, right. What else do we want to do here? "It goes without saying that we want to be safe, we know how to make ourselves safer, but wanting and knowing, are not enough. These are not my, or anyone else's opinions." It's like, yes, this is a hundred percent an opinion piece, but this thing trended big, it had folks really fired up, and I guess this is... I've been continually waffling on this spot that I'm at, because saying things with this emphatic fervor and belief is powerful, because then you build a following.

Diana: Based on your fanaticism.

Robb: People are like, "That makes sense, and aye, aye captain, I'm on board," but I guess it's this kind of asymmetric warfare because this guy is saying, "Well, this isn't any of our opinions, there's no opinion piece here. The science has spoken," and you present it like that, and there's no fucking error bars. There's no acknowledgement of, "Here's the boundary of what we do know. Here's the boundary of what we don't know, and let's have some conversations around this." It's presented in this like... Göring, SS

propaganda deal where it's just like, "These are the facts, they're irrefutable and for you to even..."

Diana: See, I cited Facebook.

Robb: Yeah. Well, citing Facebook and an organization that he's directly involved with, the farm deal, but I guess, I'm flailing around here. I really want to try to maintain this, I guess, integrity, and say, "Hey, so here's the things we know, here are the things we don't know," but it feels unfair or weird, when we're dealing with... I feel like I need to... When they say, "These are not my or anyone else's opinions," and then I say, "No, that's not accurate." It's so crazy, because these people provide no error bars, so then for me to assail it, I feel like I'm doing exactly the same thing that they're doing, and probably nobody cares at this point, because we're down to literally six listeners.

Diana: And the questions to the most common responses raised by any serious questioning of animal agriculture, aren't opinions. Do we need animal protein? No.

Robb: Which again, what context are we talking about? Pregnant women, children?

Diana: Yeah. Right, right. We have this in the film, but there are places in the world where there aren't doctors or CVS's around for hundreds of miles, and the only things that thrive in that environment are animals.

Robb: Right. Well, and you dug up the story of millions, tens of millions of women that are effectively unable to own property other than grazing animals, and that is their sole source of...

Diana: Income.

Robb: Economic stability, social status, providing for their family, but yet, according to this guy, they're destroying the world and they're terrible people.

Diana: Yes.

Robb: And should be able to get by with something else.

Diana: Right. If you're on board with that one, but then again, you look at this inner city poor kids, what studies have been done comparing diets of just plants versus diets with some meat in them, and the only one we have shows that meat actually gives these kids a leg up. Iron is really important to brain and physical development. It's really hard to get that from spinach. It's really hard to get that much spinach into a kid.

Robb: Right.

Diana: In populations that can't afford Beyond Burgers, should they eat rice and beans instead of eating meat, because you don't like meat?

Robb: It's ironic, because it is mainly a wealthy, white privileged group of people that are spearheading the bulk of this. I remember there was the woman who did the tweet, "You can't be spiritual by eating meat," and then a few folks tagged some Native American elders on that. They're like, "What do you guys think about this?" Which then it's kind of like, so if you're white... Maybe if you're Native American, or Mongol, or something, then you get a pass, but if I'm white, I don't? So now-

Diana: Yeah. I mean, the Dalai Lama eats meat, so I guess...

Robb: Yeah.

Diana: He's not everything he claims to be.

Robb: Oh man. Oh, what else do we have to provide value here?

Diana: He's claiming that Americans eat roughly twice the recommended daily intake of protein, and he cites an article from the New York times, and I actually have another article from the New York times talking about how we should actually be eating much more meat, especially if you're over 40, just to preserve muscle mass.

Robb: I didn't realize it. But John McDougall, the famous vegan doctor- had been vegan for a very long time. He had a sinus infection, was walking to the bathroom, slipped and got a spiral fracture of his femur, fractured like three vertebrae. It was as if he fell out of a building and he was taking a pee. Now a spiral ... Your femur is one of the largest strongest bones. When people break femurs, it's like, "Oh, how fast were you going when the car hit a tree?" Stuff like that.

Robb: It is not slipping and falling while taking leak. Then in addition to that, he broke like ... It's interesting on this muscle health and bone health. Protein is 50% of your bone. It's crystal clear that inadequate protein intake will lead to accelerated osteoporosis, to say nothing of just the sarcopenia that these folks experience. Really, it's going to be a fascinating, maybe decade as a big trench of the recalcitrant vegan doctors start getting up there in age and seeing exactly how they age and how they expire and all that good stuff, but-

Diana: Yeah. Anyhow, and these protein recommendations are BS and we go through all of that in the book. How they're really just based on these very poor nitrogen balance studies and an optimal protein intake is actually much different than what the RDA is currently in the U.S..

Robb: Let's see here.

Diana: Then he says people who eat diets high in animal protein are more likely to die of heart disease, diabetes, and kidney failure. Observational, maybe he doesn't understand the difference between observational and Facebook references versus randomized controlled trials. That's like saying people who die of shark attacks are more likely to eat ice cream.

Robb: Yeah. Yeah. I mean, the scene is interesting in that they self-admittedly put observational studies ahead of randomized controlled trials and whatnot. If we let the factory farm system collapse won't ham farmers suffer? No. Again, it's just so interesting that this is the one option that we're provided. Is it in the next one that he talks about corporations that speak in their name while exploiting the there are fewer American farmers today than there were during the Civil War, despite America's population being nearly 11 times greater?

Robb: Yeah. It's called industrialization. It's mainly happened with regards to agriculture. The agriculture side. Although, certainly there have been efficiencies introduced on the animal side. This is not an accident, but a business model. The ultimate dream of the animal agriculture industrial complex is for 'farms' to be fully automated transitioning toward plant-based foods and sustainable farming practices would create many more jobs than it would end. That is a complete fucking lie.

Robb: I don't even ... That is so inaccurate because we're talking about row crops, as far as the eye can see. This is the stuff that is really amenable to industrialization. This is one of these fascinating things that the buy-in to even be able to start getting into that type of production is tens if not hundreds of millions of dollars. It's like massive tracks of land, huge debt with regards to tractors. Whereas like these operations like Joel Salatin or White Oak Pastures, are fairly not ... Now, systemic challenges aside like processing centers and whatnot.

Robb: One could with a relatively modest budget and not a lot of infrastructure get in and start doing holistically managed animals and rotational grazing, and a smart allotment of different crops. You could get that up and going and be profitable and make a pretty good living and not need millions of dollars of capitalization. This is one of the things that made me lose my mind, perhaps more than anything else, because the job story is a big one. As we automate more and more things there will be fewer and fewer jobs.

Robb: Ironically, the work involved with regenerative agriculture is constant problem solving. That's all it is. That is the last area that AI will be successful, if it ever is, is the creativity of problem solving. It's having things in rows as far as the eye can see and everything standardized that lends itself towards automation. It is so irresponsible of him to suggest that this is a jobs and employment solution shifting towards planet of the vegan. I mean, what are your ... I don't know why. This one just literally made me mad.

Diana: Yeah. I mean, there's a couple of things. One is that yes, a lot of crops are grown for animal feed, right? He's arguing here that it's the crops that were doing ... There's a lot of policy. There's a lot of complexity to that statement and it's not necessary. The whole reason why we have dollar 99 a pound chicken, is because of subsidized corn and soy and cheap fuel and cheap nitrogen inputs. The type of farming that we're arguing for is not that.

Diana: The other thing is just his overall hubris to assume that he's so much more intelligent than ... Like you said, the farmer of the future is a problem solver. The farmer of the past was a problem solver. It's like assuming that these dumb farmers are just going along

with everything, but to assume that it's the meats, that it's the animal farming that's the problem. That plant-based foods and sustainable farming would create more jobs than it would end but that it has to be plant based, I'm not following. I don't see where he's backing that up with any actual evidence.

Robb: Well, and we do have good examples of, again, folks like the Savory Hubs, Joel Salatin Polyface Farms. What's Joel's line? He has so many lines, but the one line that is, "We're unapologetic in our human labor element." People do a lot of work on his farm and he has an old beat up tractor that they use to do some stuff, but it is a totally different story. There is a person out moving electric fencing, and they maybe have a quad or something that they cruise around on to move some of the stuff around, but it's labor intensive.

Robb: It requires somebody that can think. These folks get paid well. They get paid a professional wage, not just a living wage. It's a competitive process to get in and do this stuff. Again, this is something that could be developed across, not just this nation, but across the world. Like these decentralized small farms that provide mainly for the needs of the local area, but can be upcycled into the distribution channels for broader distribution and other economic concerns.

Robb: Yeah. I mean, this is the stuff that's similar to the climate change stuff, like the amount of emissions. These things are so wrong that if you even entertain these slightly as a reality then the solutions you start generating are insane and are completely divorced from reality. Man, I don't know. I guess I-

Diana: Well, that's where it might be good really fast to just address the whole idea of this rewilding thing, because I think that's where he's going with this a little bit. Certainly, many others have really proposed rewilding. It's the idea that we should just live in cities and then the nature is in nature. We just let it happen, which is just a complete fantasy because humans are nature. Everything is nature. Humans are living in very rural areas and we've actually seen the decline of rural America because of industrialization of agriculture.

Diana: This polarization between lefties and righties and urban and rural, and urban folks who are more plant-based are then therefore more evolved than stupid rural farming folks. You know? I'm not saying that I believe that. I'm saying that's where this guy's coming from.

Robb: The position. Yeah.

Diana: Is absolutely dangerous. It has come from industrialization. It hasn't come from bad meat.

Robb: Right. He talks a little bit about how factory farming and monopolies, if a single year the government removed its \$38 billion plus in props and bailouts and required meat and dairy corporations to play the normal capitalist rules it would destroy them forever. The industry could not survive in a free market. This is true across the board. This is

something that both you and I have advocated for, for a long time. It's like, "Yeah. Let's get subsidies out.

Robb: Let's get the government out of making dietary recommendations entirely." Okay. Folks, we are back. A little bit of internet hickupery. Okay. Diana, this thing's dragging on. I like chatting with you, but probably nobody else gives this many shits about this as we do.

Diana: Yeah. I think we're good.

Robb: There's one little piece here. Can we really displace meat from the center of our plates? This is the question that brings us to the threshold of the impossible, on the other side is the inevitable. This again is one of these things where we eat less meat than we have in the past and we are less healthy and we have more problems. You get into protein leverage hypothesis and eating the protein minimums and stuff like that. This isn't consistent with reality. It's not consistent with evolutionary biology. There's nothing here. Again, this thing is just evil us. We're so meat-centric and we need to change our evil ways or ... I mean, I-

Diana: Yeah. The reality is that we're eating less than two ounces of beef per day in the U.S..

Robb: Apparently I'm making up for everybody else.

Diana: Me too.

Robb: Man. What else do we need to do to wrap this thing up? Or, I think-

Diana: You know, I sent a letter to the editor. I hope that it gets published. If it doesn't, I'll just publish it on my blog. We're moving forward. We cover all of this stuff really well in the book and in film, and-

Robb: Hey, do you want to talk really quick because COVID is still kind of hot and heavy? It's interesting when you look at the recommendations we made at the end of the book for how to square away your little red wagon. It was before COVID. Do you remember off the top of your head the bullet points on that? You've mentioned it multiple times and we're like, "Wow, we were kind of prescient on this."

Diana: I don't remember all of them off the top of my head, but I do remember when I went back and looked at them for the Meat Curious course that we're working on. I was like, "Holy crap, Robb. Look at this. Look at what we sent." Because not only were we saying support regenerative ag, but we were also saying if you want to live in a sustainable society and you want to be a good contributor to a sustainable system, one of the things you can do is not get yourself into debt. Be careful with your spending. Don't be a burden on other people. Take care of your health. Don't be a burden on other people. You know, don't be a burden on the system, basically.

Robb: We had a pretty good list of things. It was like, "Oh wow. If somebody had already been doing that ..." Granted again, perhaps this is spoken from a position of privilege or whatever, not everybody's in the same spot, but I think-

Diana: There are a lot of people that are, that could care and that are whining and yet they're complaining about their finances and how they're out of work, but they could have saved.

Robb: We just had the longest upward economic run in history. The largest, the longest. If you couldn't get your fucking house squared away in that time with regards to debt and whatnot, then this is emblematic of the whole thing. The industrial food system is borrowing against tomorrow to produce today. Whereas the regenerative system ensures tomorrow by taking care of today and not going outside of boundaries, and having respect for the inputs and outputs that nature needs and can sustain in a particular area. It's ironic.

Diana: I mean, you and I were already like on the prepper end of things anyway, going into this coincidentally. We were, before COVID already like, "Oh God. Okay. Well, I have my plan, my bug out stuff."

Robb: Again, I've alluded to this and I think you would agree, although it's been disruptive for us for sure, we never really had a moment of panic or that oh shit thing of what do we do? It's like, "Okay. Well, we're buttoned up in multiple areas." Again, very fortunate to be able to do that, but also a lot of that, ironically stealing some of the vegan nomenclature on this, was from intentionality. It was from understanding the way that systems work and the way that systems can fail. The brittleness of the system. That if you leave yourself wholly dependent upon this brittle system, God save you because nobody else is going to if this shit goes sideways.

Diana: Yes, which is what we're seeing now.

Robb: Which is what we're seeing now. Okay. I have a great ... You're very succinct and good at getting things across. I'm good at spinning it out into natter's ville. Where can folks track you down on the interwebs and what can ... You just produced a bunch of material to help people help us get the word out about Sacred Cow, the book and film. Tell folks about that.

Diana: Yeah. We put together a ton ... Well, over \$200 worth of free stuff that folks can get if they preorder. Preorder is the best way to support us because it means that the book sellers will place larger orders, more books will be printed and we will not run out of books, and so sacredcow.info-

Robb: We'll just add that to all the big meat money that we're getting too.

Diana: Exactly. It's sacredcow.info/book is where folks can find information on what the preorder incentives are, including four and a half hours of interview footage from the film. That hasn't been released yet with like Chris Masterjohn, this awesome

philosopher, Andrew Smith, a vegan philosopher. Really cool interviews. Plus a cookbook and some other stuff. All of that is on sacredcow.info/book. Information on the film is there as well. I'm on Instagram @sustainabledish. The book comes out July 14th. We'll be doing another live event together about that. What else?

Robb: I think that's it. Not looking like paleo effects this year. We'll see where we run across other folks in real life, but yeah. Hey, thanks for taking the time to do this. It's kind of a timely piece. Again, I think if nothing else, even if people still have a lot of credulity around this topic. The vegan-centric model is sexy. It's elevator pitch worthy. It is soundbite worthy. The stuff that we do is not. Explaining carbon cycling versus fossil fuels.

Robb: The poster you have behind you, you actually need somebody who cares enough to listen for a little bit, to be able to get all that. That's just the way it is. I was having a conversation with a guy who's very successful in business. I was talking to him about this stuff and he said, "You know, you need to get somebody that can explain this in like 15 seconds." I was like, "That's part of the problem. Some shit isn't amenable to a 15 second solution. That's the problem."

Robb: That is the problem, is having an expectation that you can wrap your head around something in that little time. You know, it's like, it reminds me of these 1960s, William F. Buckley debates where they're smoking cigarettes and drinking coffee. It's black and white and they spend three hours hashing out over a topic. That's how you learn stuff. I know that that's not incredibly sexy, or again, it's a privileged position to have the time to allocate to that.

Robb: If folks care about this stuff, by all means, comb through Sacred Cow with a fine-tooth comb and figure out what we've got wrong. I don't want to be dumb. I don't want to be wrong. If we miss something or we misrepresent some facts by all means ping us and let us know and update us. That said, also run this through the counter narrative and see who is really citing facts. See how often we cite Facebook when we're trying to make a point. Yeah. Okay. Diana, thank you.

Diana: Yeah.

Robb: Okay. Take care. We'll talk to you soon.

Diana: Bye.

Robb: Bye.

Nicki: That was a long one Hubs.

Robb: That was a goody. That was a goody. I think both Diana and I were kind of smoked by the end of that but hopefully-

Nicki: Just a wee little internet connectivity glitch-

Robb: That helped too.

Nicki: ... but we smoothed that over a little bit. Yeah.

Robb: Yeah. Yeah. Yeah. Hopefully, folks find that valuable. It's a lot of work doing unpackings of stuff like that. Like I did the, What the Health movie review in a similar fashion. A lot more material to cover, but this is where responding to this stuff is like death by a thousand cuts. I don't get paid to do those things and it takes me away from the things that I do get paid for to do it. It's also like, this is the shit that we need to deal with.

Robb: This is what we need to face, but I can't do every single one because there's a lot more of them than there are us. There are too few people ... There's more, and I don't want to get preachy or annoying the people that are helping on this. God bless you and thank you. There are too few people that care enough about this to be like, "Okay. I'll take the short straw this time. I will tackle this thing." Again, some people are doing it. Oddly enough, the folks out of the carnivore scene in particular are-

Nicki: Definitely.

Robb: ... probably the most vocal in supporting and advocating for this stuff. Doing a pretty damn good job of describing the nuanced story behind regenerative food production on the animal husbandry side. We could stand to get more help and more support.

Nicki: Step up the game a bit

Robb: Step up the game a little bit. Yeah.

Nicki: Well, thanks for joining us everyone. Remember to check out the CBD products made by our show sponsor Ned. You can go to helloned.com/salty15, or enter code Salty15 at checkout for 15% off your order plus free shipping. Again, that's helloned.com/salty15. All right, folks. I hope you all have a fabulous week and we'll see you next time.

Robb: Take care everybody.

Nicki: Bye.

Robb: Bye.

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