



Episode 374: Sacred Cow: The Case for (Better) Meat (& Methane Explained) With Diana Rodgers

Child: Welcome to my Mommy's podcast.

This episode is brought to you by Beekeeper's Naturals. Beekeeper's is on a mission to reinvent your medicine cabinet with clean natural remedies that actually work. With back to school and all that comes with it, I will not be without their Propolis Throat Spray right now. It's a daily defense when it comes to supporting immune health and soothing scratchy throats. They have a kid's version with buckwheat honey as well. If you've never heard of propolis, it's an incredible antioxidant-rich bee product with powerful germ-fighting properties. And it's quickly becoming a medicine cabinet staple. Here's why. Their Propolis Throat Spray is naturally sourced and obsessively tested. It contains just three simple ingredients and is free of refined sugars, dyes, and dirty chemicals, which can't be said for a lot of remedies. I am so fascinated by propolis because it's a bee product with medicinal use dating back at least as far as 300 BC, based on what we know from historical documentation. And it's not honey, it's not even a source of sugars like honey is, bees make propolis out of plant and tree resins. It's packed with antioxidants and it's made and used by the bees to defend their hive from germs. It's essentially the immune system of a beehive. Like I said, our family uses it all the time for immune support. And it's our first line of defense at the first sign of sniffles or scratchy throat. I feel like we can all use a little bit more defense and support right now, and Propolis Throat Spray is my family's first line of defense. You can try this and all of their products, including their B.Powered, which is a nutrient-rich honey with some beneficial secret ingredients. The B.LXR, which is an energy shot that I use often and even a CBD-infused honey, that my kids love before bed. Try all of that and upgrade your medicine cabinet by going to beekeepersnaturals.com/wellnessmama. You can also save 15% by using that link.

This podcast is sponsored by Alitura skincare. This a company founded by my friend (and previous podcast guest) Andy, who formulated these products to heal after a horrific accident left him with scars on his face. He mixed some of the most nutrient dense ingredients on the planet to create truly natural products that feed and benefit the skin, leaving it nourished and in my experience, hydrated and younger looking. I know from talking to Andy that he has literally gone all over the world to source some of these ingredients and is meticulous about testing them for quality and finding the combination that works the best. Even the name, Alitura, means feeding and nourishing in latin. My personal favorites are the mask and the gold serum, but all of their products are great. Here's a tip with the mask... mix with apple cider vinegar instead of water for an extra boost and to deep clean pores. I use the mask a few times a week and I use the gold serum at night and after sun exposure to keep my skin nourished and hydrated. Check out these and all of their products at alitanaturals.com/wellnessmama and use the code WELLNESSMAMA for 20% off and free shipping.

Katie: Hello, and welcome to the "Wellness Mama" podcast. I'm Katie from wellnessmama.com and wellnesse.com, that's wellnesse with an E on the end which is my new line of personal care products like hair care, toothpaste, and hand sanitizer.

And this episode is a must listen, I would say, especially for women and moms. I'm here with Diana Rogers, who is a real food license registered dietician. And she runs her practice where she helps people with weight

management, metabolic issues, intestinal issues, and all kinds of other issues to recover their health through diet and lifestyle.

She's the founder and author of sustainable dish and host of the "Sustainable Dish" podcast. She's also a mom of two and an internationally recognized speaker about nutrition and sustainability, social justice, animal welfare, and food policy. She just released a book with a friend of mine, Robb Wolf, the book is called "Sacred Cow: The Case For Better Meat," and it explores the important role of animals in our food system. She will also soon be releasing a documentary by the same name.

In this episode, we go deep on that and why we absolutely actually need cows for the sake of our environment. Why the idea that cows cause climate issues is very nuanced and not as clear cut as methane. And we really go deep on the importance of protein, especially animal protein for health, for many of us, and how this was a big part of my own health changes over the last couple of years and what she sees as one of the biggest factors in health for women in her practice. So we really go deep on a few issues, we even get into some pretty sciencey topics like mTOR and why I don't worry about this at all when it comes to protein consumption. A really fascinating episode, I know that you will be as fascinated as I was and learn as much as I did. So, without further ado, let's join Diana. Diana, welcome. Thank you for being here today.

Diana: Thank you so much for having me. I'm really psyched to talk to you.

Katie: I am really excited as well. I have known you for years now and admire your work for a long time. I actually can't believe I haven't had you on yet. And I'm just so glad we get to have this conversation. And I think for some background, I would love to start with your story because it's pretty incredible. I'd love to hear and have our listeners hear how you got into this world and what you now do.

Diana: Sure. Well, it all started when I got diagnosed with celiac disease at 26, which answered a lot of questions as to why I was such a sick kid, just very underweight and low muscle tone, and going gluten-free solved a lot of pain problems for me, but not a lot of like metabolic stuff. So I kept on going to the doctor, like, why do I need to eat every two hours, you know, without getting like a massive headache and shaking basically? And I just kept having them test me for diabetes because I was certain that that's what was happening, but I kind of was in the normal range every time they did it. And after I had my second child, I decided to quit my corporate job. I was actually working at Whole Foods doing marketing after a career in food marketing.

And I started working at our farm. So I had married a farmer and was running all of the farm stand and the ordering. And we had a 500-member CSA and we were hosting a raw milk co-op. And it was just a group that we didn't know very well, but they were also CSA members and they just needed a distribution place. And so we were happy to have them come in because they would pick up their raw milk, but often buy lots of other stuff too. And so I kept getting requests for coconut oil and, you know, do you render your own lard from your

pigs? And I was like, what is it with all these people and this fat? Like, they're eating so much fat and it's not supposed to be bad for you and all of that. And then I started learning a little bit more.

I went to a Weston A. Price conference and started eating more fat and realized that that was a real turning point for me with helping me regulate my blood sugar swings a little bit. So I actually walked up to Sally Fallon at this conference in San Francisco, probably in, like, 2008. And I said, "What can I do? Like, I wanna change my career and I wanna become...I wanna help people get on this diet." And she said at the time to become a dietician and I was like, "Oh, my God, that is a lot of work. And I have little kids and I can't even imagine grad school." And so I started looking around and found Nutritional Therapy Association, which just, at the time, seemed a lot more digestible to me. It's a great program, really good primer on real food, whole food education. They're very based in Weston A. Price philosophy.

And it really answered a lot of questions for me because before I entered that program, I would read a book on raw juicing and it all sounded good to me. And then I'd read another book on, you know, why you should drink tons of cranberry juice and only eat grapefruit. And that sounded good to me too. Like, you know, a lot of these books are...the people that write them are quite convincing, really good marketers. And after I became a nutritional therapy practitioner, I really much better understood what humans are designed to eat, what foods are ideal. And I opened a practice. Towards the end of the NTA program, one of our assignments was to read a book that had a diet challenge in it and do that diet challenge and report back.

And so, there was a book called "The Paleo Solution" that had just come out. So I read it and I did the diet in there. And at the time it seemed totally...like I was already gluten-free, but not eating grains to me at the time just seemed like the hardest thing in the world. And I was like, "What am I gonna do without my lentils and all my carbs? And I don't think this is gonna work." And so the first two weeks I was exhausted, I felt like I was on, like, two, three Benadryl a day. And then right about day 14, I just woke up and I was able to go from breakfast to lunch without a snack, I was able to even delay lunch and not go into a full sort of almost panic attack.

And it was just so incredibly liberating for me. And so when I opened my nutritional therapy practice, I started using the paleo diet with just about everybody who walked in the door and just kept seeing these amazing results. Like, you know, people that had really bad digestive problems, really bad sleep, just everybody seemed to be doing so well on paleo. But at the same time, I realized that a lot of people weren't able to come see me because, as a nutritional therapy practitioner, I couldn't really prescribe diets. So if you have celiac disease, you have to go to a dietician in order to be given the gluten-free diet, because that's technically considered a medical intervention, and so only dieticians can do that. And in addition, only dieticians can take insurance. And that was another thing that was really important to me because I wanted to see a broader range of people and help a broader range of people that, you know, more than could just pay cash.

And so I started the very long process of becoming a dietician with little kids at home, part time, and it took about seven years. And it was just sort of, like, I just kind of put my head down and decided this was gonna be my hobby for the next seven years, would be grad school. And so, you know, biochem was what I did at night, and on the weekends while still running my practice and raising the kids and still involved in the farm. And

after I became a dietician, I started looking around and it really became obvious to me that all of the people that were talking about sustainable diets and, you know, these global diets that are both healthy and sustainable had to be less meat or no meat, right? Like vegetarian or vegan diets were being talked about.

And I realized that there was really nobody who was advocating, from a sustainability standpoint, a paleo type diet or, you know, even a Weston A. Price diet for a sustainability solution. And so I thought that that would be a really interesting space to explore. And I kept bothering Robb Wolf who became a friend of mine that we had to write this book, had to write this book. And he kept saying it's not the right time. Nobody is paying attention. And so when we would go to conferences and give our talks on sustainability and nutrition, you know, the first few years there were really only, like, three people in the room. But then, you know, as more people got interested in this topic and I started doing more writing about it on my blog and really focusing on that in my podcast, started the blog called "Sustainable Dish."

It really kind of started...I started getting a little bit of a following and I would go to conferences, and the room would be packed and there'd be people standing in the back and lots of questions. And so, you know, I truly believe that the diet that is ideal for humans, which is, you know, largely based on, you know, what we evolved eating can be produced in the most sustainable way through regenerative agriculture. And so my latest book and film project really explores that. We talk about the importance of animal products for human health and why animals can be critical when raised well for the environment.

And we dive into the ethics because that's always where people start, but we realize that, you know, you can't have a good ethical discussion about whether or not to eat meat without fully understanding the nutritional implications of telling people, especially women and children, to be eating less meat worldwide, and understanding that there is no vegan or vegetarian food system that is sustainable, that you absolutely have to have animals as part of that mix in order to have a really strong close loop, organic, and sustainable food system.

So that was a long monologue there, but that's where I was coming from. And we have the book "Sacred Cow" that just came out that Robb and I launched in July, and the film "Sacred Cow," which is a documentary film that we finished filming, thank gosh, before COVID started, so we were all just remotely editing during COVID, and it's just about done. We're gonna be releasing it on my website, sacredcow.info this fall. And so people can go to my website, sign up for the newsletter in order to find out when we're gonna do that free screening. And then after that free week, it'll be available on all the major platforms for viewing.

Katie: There are so many points I want to go deeper on. I feel like to start, one thing you just said really stuck out to me, which was that there's no vegan food system that's fully sustainable. And I think that's a great springboard into this to kind of delve into all of the environmental impact things related to our food system in general. But certainly, this is what seems to be a very common misconception, and I know many people choose to eat plant-based because they think of...for the health reasons. But also we hear about the environmental reasons quite a lot when it comes to people making a case for being plant-based. So can you walk us through why there is not a vegan system, sustainable system of eating that actually works?

Diana: Sure. Yeah. But when you look at ecosystems occurring naturally, you know, out in the wild, untouched by humans, they all have plants and animals as part of it, right? There's insects, there's grazing animals usually, there's birds, you know, there's a wide variety of different plant species. And so when we're looking at our farming system, what we've done to screw it up is monocrop agriculture. So that's when you're flying over the country and you look down on all the squares and circles, that's all monocropping, meaning one crop for acres and acres and miles and miles. And it's quite destructive. Not only is it just bad for the environment to have just corn or just soy, but even the act of plowing up that land and converting it from largely grasslands in America that had grazing animals on it to crop land, the plowing you have to go in and annihilate an ecosystem first.

So all of the different species of plants, the little critters that lived underground and in the grasses or eat in a forest, if that's what's being taken down, all of those animals are being displaced and/or killed when you have to convert that into croppable land. And then, you know, in the planting of the crops, you've got tractors going over, you know, squashing things. We've got insecticides that are killing insects that birds would be eating or poisoning the birds. We've got other chemicals that are getting into our waterways, you know, creating dead zones in the Gulf of Mexico. And then we're, you know, harvesting all of this and converting it into ultra processed food that is also not good for us. So the entire system of modern agriculture is largely broken. And our solution is to really look at Ag systems that include the most life as possible.

So we, in the book, we walk people through this idea. It's a brain experiment in the beginning of the environmental section called grass world, where we try to illustrate the importance of biodiversity. And so, if you were to imagine a planet that had sort of the same weather patterns as earth but there was no animals on it and there was just grass, if you were to come back a few years later with no, you know, no animals grazing on that grass, the grass would die. And that's because their grasslands have to have grazing animals chewing the grass, pooping, you know, moving moisture around, fertilizing the ground. That's all really, really important for a healthy grassland. But if you only have cattle on the land, you know, they can easily overgraze certain sections, undergraze other sections.

And so you need the impact of predators in order to keep those animals moving. And so we're able to do that with electric fencing on farms. And I'm just realizing I'm totally going down a rabbit hole. You just asked me about vegan versus, you know, animals and sustainability, but it's all connected. So what you need to have in a healthy farm system is as much life as possible, right? Because if one virus came and wiped out the wolves, then you'd go back to having problems again with cattle overgrazing. So you want multi type of grazing animals. You want multi types of predators. You want lots of different insect life, bird life. And so that can all be created in a regenerative agriculture system, and it requires animals to be part of it.

There are no sustainable farms out there that don't have animals or at least animal inputs, right? Like, there are lots of urban gardens and organic farms that don't have animals. But what they're doing is bringing in manure, or here in the Northeast, we use a lot of fish emulsion leftover from the seafood industry here in Gloucester. And so the animals are part of the system whether you eat them or not. And I think, you know, if

you're really looking for a diet of least harm, then consuming grazing animals as part of your diet is actually gonna create less harm than eating a diet of only plants.

Katie: That makes sense. There's the synergy needed in...when you're talking about the environmental aspect of growing any kind of food. And obviously another area that cows kind of get brought into the equation and get a bad rap is on the topic of methane. And we hear, you know, the claims that this contributes to all the climate problems and that basically cows are the problem and eating less meat is the solution. And I know that you have written about this and you address it in "Sacred Cow," but can you kind of walk us through the overview of why it's a lot more nuanced than that?

Diana: Yeah, definitely. There's a couple reasons why, and the first one is that we don't have more beef cattle here in the U.S. than the number of grazing animals that were here before we got rid of the bison and all the other wild grazing animals, you know, before we came and colonized the U.S. And so we don't have more methane-producing animals than we did before. But the second thing is that biogenic methane, the methane that is created from a grazing animal, is actually part of a cycle. So it all gets recycled. It's not like it's just methane going up into the air and staying there, heating everything up. Methane lasts for about 10 years.

When a cow belches methane, which is a natural process from digesting largely food we can't eat into upcycling it into nutrient dense protein and fat, when it belches out the methane, that methane then lives for about 10 years in the atmosphere, but then gets broken down into water molecules, H₂O, which become part of the water cycle like rain, and CO₂, which is something that plants require in order to, you know, go through photosynthesis, and some of that carbon from the CO₂ actually then can be sequestered in the ground. Other, you know, pieces of the carbon actually just go back into the cow and is, you know, converted into protein.

And so, again, this is all...it's a circular system. Whereas fossil fuels are pulling ancient carbon and methane from way, way down, deep in earth's core, and releasing it into the atmosphere, but with no other check and balance really to absorb it. And so it's an unbalanced equation. If you remember sort of high school chemistry, what you want is a balanced equation, and it's really fossil fuels and, you know, transportation is way, way, way worse than belching cattle that are providing food for humans.

Katie: That makes sense. And I love that you also clarified the belching aspect because it's so funny. I see all the articles about cow farts and that being the problem, and it cracks me up. Okay. So you've mentioned the term regenerative agriculture, and I'd love to go a little deeper on this because I've done some reading about it. I am so fascinated by this concept. And so, kind of walk us through, first of all, what that is, and in a more detailed way, and what an ideal food system that uses regenerative agriculture would look like.

Diana: Sure. When organics started, like, in the '70s, I guess, and then there was a sustainable farming movement later. Now it's regenerative, but really, it's at the heart of what organic and sustainable farmers were looking to do when they started it, it's just that those terms got co-opted by big business. And actually regenerative is slightly getting co-opted too. I've met a lot of people that are, like, importing, you know,

cashews and calling it regenerative. And I'm like, "Really?" Like, how is that...you know, how are you accounting for the flight and the plastic and all of that? So the idea behind regenerative is that it's actually improving land. So instead of just being extractive, which is how you might describe modern agriculture, regenerative agriculture is actually increasing soil, adding to life, providing habitat for wild animals so everything can kind of coexist together and providing food that's also nutrient dense. That's a really important piece of it as well.

And so what you might see on a regenerative farm would be animals not stationary. So that's a big piece of this regenerative movement is it's really important for animals to be moving constantly because, in nature, no animals are just sedentary. They're not, you know, staying in their you know, 10-foot by 10-foot square, right? Their grazing animals are migrating constantly, and that actually prevents overgrazing, like I was describing before with the grass world example. And so you would see moving animals constantly, you might see cattle moving, but then right after the cattle, a farmer could bring in some chickens, and the role of the chickens would be to eat any parasites that are left in the manure from the cattle. But also the chickens are scratching at the ground and pooping and adding different types of nutrients to the soil.

And then, you know, with cropping, you can actually graze animals after you've harvested a crop. So in the fall, like here in New England, the sheep can come in and eat the rest of the cabbage leaves that are left out in their field. And so, you know, some might call that crop waste or crop residue, but that's really important food for sheep. And then as they're grazing, they're pooping and giving life back into the soil. And so a truly regenerative farm actually has components of animals and plants, and very little tilling because tilling actually releases carbon. And so you want as low till or no till as possible, which isn't always easy to do, especially in market gardens where they're growing lots of vegetables. But, you know, there's not one right way and one wrong way for anything. It's sort of just, like, scales of better practices. But, you know, again, that's how I believe humans should be eating too, as locally as possible, plants and animals, and, you know, seasonally. So it really kind of combines really nicely with this ancestral way of eating.

Katie: That makes sense. And I love that you brought up the idea of not just animals, but them having room to move. I think that's an important key because I feel like often in the debate about what is the best way to eat and should we eat animals or not, it gets overlooked, that I'm yet to hear anyone argue for the benefits of feedlot or cage farming. Like we seem to actually be all pretty much in agreement that animals should be raised in a much different way than that. And so I love that you brought that part up. I'm also curious because another objection that's often brought up is that we need these other types of ways of eating or that like plant-based is a more sustainable way to feed the entire world population. But when it comes to this more sustainable regenerative agriculture model, could we actually feed the world's population with something like that?

Diana: Yeah. That's one of the most common questions I get. And so we have a whole chapter in the book that addresses that. The thing is our current agriculture system is headed for disaster and it's just not a sustainable system. So if we were to come back 500 years from now, there's no way that we would still be cropping the way we do. We would destroy... I mean, the Midwest is gonna turn into a desert. We would just...we're just continuing to destroy all the soil there. And it's making everyone sick, right? It's like all this ultra processed

food, you know, corn syrup, all of the results of modern agriculture are pretty much gonna guarantee that there won't be any people left anyway. And so what we need to return to is, you know, much more regional food systems that are producing a nourishing food.

And so we don't have a problem currently with calorie production. We produce tons of calories. In fact, we're actually, you know, making 30% to 50% more food than we even need right now, but it's not nutrient dense food. And so instead of focusing on calorie production, we need to be focusing on nutrient production, and specifically protein production and healthy fats, moving away from, you know, ultra processed oils and things like that. I did go through the math for the United States. We do have enough land, it looks like, to grass finish all of the beef cattle that we currently are finishing and feedlots.

And so just to back up and clarify a little bit on that, all cattle start on grass with their moms. And so the calf-cow operation is our pasture-based operations, even in, you know, the beef that you would buy in a typical supermarket. And then the cattle are either, you know, once they reach a certain weight, they are either finished on a feedlot or finished on grass. When you look at the land that we have available, a lot of it is underutilized or not utilized at all for grazing. There's certain policies that are in place right now that actually pays farmers not to graze some of their land to keep it fallow. We have a lot of underutilized land that's not managed properly, where the cattle are just sort of, like, sprinkled out all over massive pieces of land without being moved properly. And when you move the animals in this sort of intensive grazing way that we describe really well in the book and illustrate in the film, you actually are creating healthier animals, but also increasing the amount of forage that the land can produce.

So you're actually going to increase the amount of animals that are able to graze on that land in the first place. And so if we were to take all the corn that's specifically grown for cattle feed and convert that to pasture, plus use the land that's underutilized and get rid of the CRP program that's paying farmers to not graze, if we converted all of that to regenerative agriculture, we would have more than enough land to grass finish all of the cattle.

Now, if we look worldwide, I'm a big believer in this concept of food sovereignty. So, you know, not dictating to other people how they should be eating, telling them that they should be eating less meat, things like that. And it's not necessary to only use cattle. It might make sense to have more goats or camels in certain areas. I know a lot of people in Peru that, you know, grazing is harder there and there's not a lot of refrigeration, so Guinea pigs is their main source of protein. And so I think it needs to be context specific. It needs to be culturally appropriate, honoring traditional food ways of the people that are there. Sustainability looks very different depending on where you are in the world.

Katie: That's an important point. And I like that you also brought up the idea of nutrient density versus calories. And I think this is a point that is not discussed enough when it comes to talking about what is the optimal human diet, which, I think, is also very personalized for each of us, but there are some commonalities. And I think like a lot of the listeners of this podcast certainly would agree that things like processed foods, which are higher in calories, but lower in actual nutrients, aren't the answer. I think a lot of us would agree on

that point, but for me, for instance, on a personal level, over the last couple of years, I have lost over 80 pounds and gotten...I put my Hashimoto's in remission and drastically improved my health. And part of this, for me, was eating a lot more protein.

So I was drastically undereating protein, and I wanna talk about protein requirements in a minute, but this was a reason I really started delving into the different nutrient density of foods and how that relates to calories. When I started trying to be able to eat a certain amount of protein per meal, and I realized that to eat, for instance, sardines or chicken or beef, and to get the 30 to 40 grams of protein I was trying to get per meal, I could do that with, you know, 300 to 400 calories, and I was getting all this nutrient density and B vitamins and this whole host of other beneficial things. Whereas to, for instance, if I tried to do that with lentils, that would...I would have to eat several cups of lentils. While over 600 calories, I would get less nutrients and a whole lot more carbohydrates and calories in general.

Same with things like quinoa, which would have been, I think, if I remember, over 1,000 calories in quinoa, which is like 5 cups to get the same amount of protein. So that's an argument that I also often hear is, you know, you can get all of these things that you need from plants, which is technically true. And you can, I'm sure, speak to this better than I can, but in many cases you have to eat a whole lot of plants to get the same macros.

Diana: Exactly. And, you know, you just gave away my big clinical secret, which is just 30 to 40 grams of protein per meal. That's if I were to do nothing else to anyone's diet and just get them to do that and get it from animal sources, you're so satiated. And so, you know, cravings come from feeling hungry, and protein is the most satiating of the macronutrients. A lot of people think it's fat, but it's actually protein. But also nutrient deficiencies can drive cravings, too. And so if you're getting the nutrients you need from beef and chicken and fish and other sardines are amazing, then you're much less likely to crave other foods. And so, yeah, just protein, protein, protein is the ticket. And it's really what we hammer in the book and the whole idea of nutrient density.

So if you were to take emotion completely out of it and just look at straight science, nutrient density, the solution for how to get the maximum amount of nutrients for the least amount of calories, because it is, at the end of the day, about calories. I know a lot of people don't wanna admit that, but what I like to do instead of having people counting calories, which can lead to hunger and, you know, it's not fun, right? It's not fun to track your food. What I like to do is, you know, if they're getting, for women, at least 100 grams of protein, but sometimes more than that, often more than that, I eat more than that, if you're focusing on animal source protein, and then just throwing a nutrient dense plant foods, like broccoli and asparagus and spinach, you're gonna get the most ideal diet.

And to your analogy with the quinoa, we have that, we have some graphics on sacredcow.info that I share on Instagram and also in the book, where we talk about, you know, you can get 30 grams of protein from about 200 calories worth of steak or 140 calories worth of cod, but you would need over 700 calories worth of beans and rice in order to get the same amount of protein, and plus you're eating all those extra carbs and you're

not even absorbing the protein in the same way. So animal-sourced protein is much more bioavailable than plant-based protein. It has the right spectrum of amino acids because it's actually not protein that we need. It's amino acids that we need. And so animal source protein has that right balance for us.

As far as minerals go, vitamins and minerals, that's the other thing is, you know, people think, "Well, I get my iron because I eat spinach," but you have to eat cups and cups and cups of spinach. And that's why I'm really excited to be on your show, because it's important for moms to hear this. You know, kids are squirmy, they're less likely to eat cups and cups and cups of spinach, when most kids really love bacon and some steak and, you know, it can be hard to get the right amount of nutrients into a kid. But if you're giving them enough meat, that's what they need to grow. We know that the only randomized controlled trial that's ever been done on, you know, meat versus less meat with children has shown that the kids who get more meat actually perform better academically, behaviorally, and mentally. And so I'm very actually against a lot of these programs that are trying to remove meat from schools because there's just no evidence that that is beneficial in any way.

Katie: Yeah. And it seems like we're seeing pushback on that. Certainly a lot of people listening homeschool or do alternative school methods. And that is one, I would say, positive outcome of everything over the past year, is there's a lot more acceptance of virtual and alternative school options right now. So a lot of families are exploring that and a beautiful byproduct of that is we get to then create a good food culture for our kids as well in every meal of their day. But I, to echo what you said, have noticed a drastic difference in that with my kids, because when I started increasing my protein, of course, by just kind of roll over effect, our whole family started eating more protein since I do a lot of the cooking. And especially when it comes to protein in the morning, I see a drastic difference with my kids in their attention span, in their focus for the day, and just how much energy they have when they get enough protein, especially at breakfast and lunch, even more so than dinner, I would say, which kind of makes sense when you think about circadian rhythm.

And we typically, if we're gonna do carbs, it's more at dinner, things like sweet potatoes or fruit for dessert or things like that. And they tend to sleep great by doing that, but I've noticed a big difference. And my kids were already eating really clean and what would be considered pretty much paleo at our house all the time. But the increase in protein has been really beneficial for them as well. And we've seen that pay off in sports and school. So it makes sense for them. Do you remember off hand what that study is so I can find it?

Diana: I can send it to you. Yeah, we have it in the book listed and it was not too long ago. Yeah, I'll send it to you.

Katie: Awesome. Then I'll make sure to put a link in the show notes, as well as to the graphics you mentioned and the book, which I think everyone should read, because it really goes deeper than we can go in an hour on all of these different points. But I also love that protein... I know you talk about this on your blog, which, "Sustainable Dish," I'll link to as well. But I think this is not talked about enough and I recently just mentioned it on Instagram that I eat that much protein and that's part of how I lost weight and had, like, literally hundreds of responses from people going, "How the heck do you actually eat that much protein?"

Diana: It's hard.

Katie: And you have to be conscious of it. But I have found, I literally don't have to count any other macro at all, as long as my...I hit that basic protein requirement at every meal, and then I eat essentially whatever I want after that. Like, if I'm still actually hungry, I'll eat whatever I want. I eat a lot of olive oil and like the greens you mentioned, things like that, but I always make sure I hit the protein targets first. And I'm almost always so satisfied from just that, that I get a protein and a little bit of vegetables, and I'm good. But you're right. Like, that's a great point. I think we need to bring up, is you're not gonna be able to accidentally eat this much protein.

Diana: No, no. And so what I like to do, actually, I don't know if you did this in the beginning, but when I'm working with patients, and literally this is, like...this is the intro to every single woman that's walking into my office because I do one-on-one counseling, you know, virtually and in person. And so I teach them how to use Cronometer. Do you know that tracking website?

Katie: No. Well, explain it to me.

Diana: Okay. So Cronometer, C-R-O-N-O-M-E-T-E-R. And whenever you type it out, auto-correct is gonna make it C-H, but it's just C-R. It's my favorite tracking app because it...you can track your macros. And it has the most accurate data for the USDA data. So you can enter, you know, five ounces of chicken and see exactly how many grams of protein that is. So I'll have people track just for the protein, just for like a week in the beginning so that they can see how much meat they need to be eating in order to hit 100 grams protein a day, which, I mean, most women come into my office saying, "Well, I eat an egg for breakfast and I'll have a little chicken on my salad for lunch, and then I'll have a little piece of fish for dinner." And I mean, honestly, that's maybe what I just described there, 25 grams. I mean, it's just way under, even the USDA say, like, RDA for protein, which is really, really low. That's actually the minimum you need to be eating to avoid, like, disaster. And it's certainly not the optimal level.

But anyway, so entering all of that in Cronometer, where you can look at the grams of protein that you're actually taking in for a week to see how much protein you're eating, but it also shows your micronutrients, which is really cool. So it'll show how much iron you're getting, how much zinc. And I actually did a nutrient density challenge not too long ago where I tried to get all my micronutrients every day. So all my B12, all my zinc, all my copper, all my selenium, all through food. I don't know how somebody would be able to do that on a plant-based diet because...well, you just can't through real food because it's just impossible for the B12. But also a lot of the other things too, to try to get that, and then also stay, you know, in reasonable portion sizes, there is no way. But I learned, you know, how hard it can be to get iron, for example. If you're not eating liver, then you're even...however much steak you can get down, you're still probably not getting the right amount of iron.

And zinc is another hard one. I mean, oysters are off the charts for nutrient density. And so it's really fun. And I like that it's also, instead of depriving yourself, you're actually trying to reach nourishment goals, right? Like, "Ooh, how can I get copper?" And you might look up, you know, what plants have copper in it, or what meats have copper and then, you know, go seek those out. So it was really fun for me, and that's what we talk about in the book. We actually have a 30-day nutrient density challenge that we call eat like a nutrivore. And I think a lot of my work in the future is gonna be focused around this.

Katie: I really appreciate the link to that tracker. I'll make sure that's linked in the show notes as well. And I think you're right, that paradigm shift of trying to eat enough nutrients versus deprive ourselves of calories makes a huge difference. And it also was part of my internal mindset shift of not trying to kind of punish myself to lose weight, but accept and love myself and nourish my body from that place and how that drastically changed my physical body as well. But it all started on the internal side. And, okay, so you mentioned protein requirements and you made...that's such a great point. Most of us probably aren't even hitting the RDA minimum, which, like you said, that's just to avoid disease, but do we have any good data on what optimal goals or protein targets actually should be for men and women? You mentioned over 100 grams per day. How do we figure out what's optimal?

Diana: So, yeah, I like to look at it as 20% of your...you know, a minimum of your caloric intake should be coming from protein. And so that's actually, you know, because meat is so low in calories, it's actually...that's quite a lot of meat. And so, you know, 20% to 35% is the acceptable...accepted macronutrient distribution range, AMDR, which is another set of data from the government, where they try to kind of give you these goals. But the RDA for protein was really set on these really outdated and inaccurate studies called nitrogen balance studies, where they measured nitrogen in, and then they looked at nitrogen out, like, through your urine. And whenever you hit zero for nitrogen out, they were like, "Okay, you've gotten enough protein." And maybe, but that wasn't taking into consideration all the other benefits, especially, of animal protein.

So the nutrient density, the satiating qualities of protein, and there have been a lot of studies that have looked at the benefits of really high protein diets in athletes, in anyone over 40, in anyone with an autoimmune disease, or recovering from an illness, especially burns, believe it or not. That's the highest protein requirement, like, in a hospital, is someone who has had a lot of burns because your body is made of protein. And so you have to be ingesting a ton of it in order to build back, you know, heal from anything. Anyone who's growing needs more protein. So you're pretty much...you know, it's just about every single person out there can be benefiting from more protein. And there isn't, like, a hard line as far as, you know, what dietitians are supposed to tell people for optimal amount.

I mean, a lot of them are using the RDA. But then what they're doing is they're taking this RDA, which is 0.8 grams per kilogram of body weight, and they're translating that into what women and what men should eat. But they're basing that on a woman of 125 pounds because that's ideal body weight for a woman, standard woman, and 154 pounds for men. That's the standard for men. But the problem is the average American woman is over 160 pounds and the average American man is over 190. And so when you look at protein requirements, even 0.8 grams per kilogram, you got something way higher than the numbers that are circulated around there. So I think right now, most people assume that women are supposed to get 45 grams

and men are supposed to get 54, but really, if you calculate out the RDA for even average weights, according to the CDC, you're looking at double what we should be getting, you know, and taking into account that 20 gram...even 20% of the average macronutrient ratio.

And so what Robb and I recommend in the book is really, you know, anywhere from one gram of protein per pound of body weight, and that's not gram of fish, that's gram of protein. So that's why it's nice to go into Cronometer and see like how many grams of protein is in a three-ounce piece of fish, for example. And so I like to start women at a minimum of 100 grams of protein, but it really can go up from there. I mean, I've eaten as high as 145 grams of protein, and I felt amazing. And, again, it's definitely a huge challenge to get in that much. It's really hard to even eat like 30% protein. But it's a good challenge and you feel amazing when you do it. I mean, mental clarity, like, it's just incredible.

Katie: Yeah. I can definitely attest to that as well. And that's kind of how I settled on trying that myself was looking at what are the things that, for instance, bodybuilders would do when they went to cut weight, which, I think, is another helpful reframe for women. It's not about losing weight because none of us wanna actually lose anything. Psychologically we're wired against that, but when they cut weight and they are increasing their protein, but they might reduce calories. And then a lot of these diets, when you remove processed food, whether it's the paleo diet or keto, you're also typically increasing protein and reducing carbohydrates and calories from processed food.

This episode is brought to you by Beekeeper's Naturals. Beekeeper's is on a mission to reinvent your medicine cabinet with clean natural remedies that actually work. With back to school and all that comes with it, I will not be without their Propolis Throat Spray right now. It's a daily defense when it comes to supporting immune health and soothing scratchy throats. They have a kid's version with buckwheat honey as well. If you've never heard of propolis, it's an incredible antioxidant-rich bee product with powerful germ-fighting properties. And it's quickly becoming a medicine cabinet staple. Here's why. Their Propolis Throat Spray is naturally sourced and obsessively tested. It contains just three simple ingredients and is free of refined sugars, dyes, and dirty chemicals, which can't be said for a lot of remedies. I am so fascinated by propolis because it's a bee product with medicinal use dating back at least as far as 300 BC, based on what we know from historical documentation. And it's not honey, it's not even a source of sugars like honey is, bees make propolis out of plant and tree resins. It's packed with antioxidants and it's made and used by the bees to defend their hive from germs. It's essentially the immune system of a beehive. Like I said, our family uses it all the time for immune support. And it's our first line of defense at the first sign of sniffles or scratchy throat. I feel like we can all use a little bit more defense and support right now, and Propolis Throat Spray is my family's first line of defense. You can try this and all of their products, including their B.Powered, which is a nutrient-rich honey with some beneficial secret ingredients. The B.LXR, which is an energy shot that I use often and even a CBD-infused honey, that my kids love before bed. Try all of that and upgrade your medicine cabinet by going to beekeepersnaturals.com/wellnessmama. You can also save 15% by using that link.

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and benefit the skin, leaving it nourished and in my experience, hydrated and younger looking. I know from talking to Andy that he has literally gone all over the world to source some of these ingredients and is meticulous about testing them for quality and finding the combination that works the best. Even the name, Alitura, means feeding and nourishing in latin. My personal favorites are the mask and the gold serum, but all of their products are great. Here's a tip with the mask... mix with apple cider vinegar instead of water for an extra boost and to deep clean pores. I use the mask a few times a week and I use the gold serum at night and after sun exposure to keep my skin nourished and hydrated. Check out these and all of their products at alituranaturals.com/wellnessmama and use the code WELLNESSMAMA for 20% off and free shipping.

I also thought it was fascinating to learn about, I think, they call it the thermic effect of food, and that protein is the most so. And I noticed that, I'm curious if you do as well. When I first started spiking protein and then even now, if I eat more protein than normal, I will notice my body temperature rise. And I think this might have actually been beneficial to me in getting my body temperature to return to normal after having Hashimoto's for so many years.

Diana: Yeah, definitely. I could see that. And I haven't thought about it that way, but especially for someone with Hashimoto's, that makes total sense to me and why you, in particular, would feel amazing eating more protein, right? I, you know, it takes a lot of calories to break down protein and that's not a bad thing. That's a really good thing. You want your body to be working a little bit, but also being able to fully extract all the nutrients they can from that food, and that's better with animal source foods. And anyway, so there's... You know, I just have a...it's really difficult for me when I see these people talking about how, you know, we're eating too much meat, like, really? What is too much meat? What does that even mean, too much meat?

You know, so I looked at how much meat we're eating in America. And since 1970, our red meat consumption actually has gone way down. We're eating a lot more chicken, but that's thanks to hormones and artificial vitamins and cheap oil that allows for cheap feed for chicken. Our average intake of beef per person per day in the U.S. is only two ounces. And so I, you know, as a clinician, I have a real problem with people saying, "Well, we have to eat less meat." Meat is a nutrient dense food. I think people should be buying the best meat they can afford, but even if your only choices are...you know, you don't have access, right, to grass-fed beef, and your choices are beef, pork or chicken just in the grocery store, I still would recommend moms buy the beef.

It's more nutrient dense than chicken. And for a variety of environmental and ethical reasons, one cow can produce 500 pounds of meat. How many chickens would you have to kill for that? Most cattle, again, are on grass. All cattle are on grass for most of their lives. And even when they're out of feed lot, which is, I'm not endorsing feedlot beef, but I'm just saying compared to industrially-raised chicken or pork, beef is the more humane choice. It's the more nutrient dense choice. And environmentally, I actually think that even typical cattle are better than typical chicken or pork.

Katie: So to get a little sciencey for a second and feel free to not answer the question if it gets too sciencey, but another thing that I hear, at least in the more detailed, like, debates about protein consumption in general is related to mTOR, which, I believe, stands for mammalian target of rapamycin or the mechanistic target of rapamycin. But there are sources that claim that too much protein can basically increase this in a bad way, and so that we should not eat too much protein because of mTOR. And I've seen things that kind of debunk this, but I'm curious, your take on this.

Diana: Yeah. So I mean, mTOR is the villain of the day. But you know, there's other...I'm sure next month it'll be a different one. And so we lightly address this in the book, but basically there are so many studies looking at intake of protein and the longevity and quality of life, right? So there's some people that say, "Well, if you eat less calories or less protein, you're gonna live longer." But if you don't have the right amount of protein, you're also more likely to fall, and sarcopenia, which is age-related muscle loss, is a legit real thing that is the most common problem that older people are facing. Starting at age 40, you just start losing muscle. And it's really hard to get that back again. And so I'm much more focused on the holistic idea that we need, you know, high quality of life and not getting so hung up on these individual, you know, singled out mechanisms that, you know, might do X or Y.

Eat a good high protein diet, have some muscle, feel great. And I don't think that, you know, again, there's gonna be... You know, I'm trying to think of the other one that was called out, but then it turned out that fish actually have more of it. Oh, there was another molecule. I can't remember it now, but anyway, it was proven that actually it was a good thing. So, again, I just don't get too hung up on that kind of stuff.

Katie: I agree. And I think when we step beyond the kind of buzz feed headlines on these studies and actually look into the data, I think they actually make a case for more protein. And especially if you're worried about the longevity side, what I do is mitigate that with some different forms of intermittent fasting, and then also occasional longer fast, because fasting activates the AMPK signaling pathway, which inhibits mTOR, so you can balance it. And also, you know, with fasting, you're eating less calories typically because you're eating in a smaller window. And as long as you're focused on the protein during that window, I find that that seems to balance, and I track all of my blood levels really carefully. But I just think there's other ways to address that beyond just that we should be reducing protein. And I think the data actually speaks to, we should be limiting carbohydrates because certainly there's an insulin impact on mTOR as well.

And when you look at the data, sugar is actually more likely to increase those negative components of mTOR activity. But yeah, no, I appreciate you taking that pretty sciencey question and fielding it. I feel like our time has flown by and I love that we started talking about protein, that wasn't even actually on my list to bring up with you, but I think it all does go together. And I think you can't separate the environmental and sustainability aspects of this from the personal health aspects. And it's not either-or. I think, actually, when we look at the data like you guys have done in "Sacred Cow," it's very much both-and, that we can benefit people and the planet, if we are conscious about this. And I love that you make such a strong case, you and Robb, for better meat.

And that is the key because I think all of these debates and discussions about plant-based versus meat-based, they don't take into account the nuances of that. And then when we're talking about grass-fed, pasture-raised cows, we're almost talking about an entirely different thing than feedlot cows. You can't even put them in the same category for the environment or for people. And I love that you guys did such a wonderful job of detailing all of that in "Sacred Cow." Talk a little bit about the movie and when that's gonna come out and how people can watch it.

Diana: Yeah. So we are going to be doing a special one-week release this fall. We're waiting on a couple of moving pieces in order to announce the date. So the best advice I would be giving folks would be just to go to sacredcow.info and sign up for our newsletter because we're gonna be announcing it, or following me on Instagram, which is, I'm @sustainabledish on Instagram. The film is a result of, you know, really I was halfway through writing the book when another vegan film came out and they're really powerful. They're showing them in schools as if it's actual science and there was really nothing out there to counter it. And I thought, "Well, the book is gonna be good, but how many young people are gonna pick up this sciencey book and read all about it, right?" But film is really how they're digesting their information.

And so I put the book on hold temporarily and dove into making this film because I wanted to bring the farms to people. I wanted to show people what regenerative agriculture actually looks like, meet some butchers and, you know, other food producers that are really super passionate about it. It was really fun to go all over. I went to Mexico, I went to England, Belgium, shooting with experts and farmers and researchers. And it is humbling to make a film. It is really a lot of work. And it's...really happy it's over so I can move on with other things in my life. But let's see, Nick Offerman is the narrator of the film, and it turns out he's a massive supporter of regenerative agriculture.

He's actually really good friends. This is how I found out about him being into regenerative ag, was through the sheep farmer that we have in the film. Right after we left England, Nick was gonna go stay with him for about a month. And so Nick is on board and he's been helping us with the marketing. And I mean, it's got all our favorite paleo type ancestral experts in it, like, you know, Chris Kresser, Robb Wolf, Mark Hyman. And so we make a really strong case that meat is an important food for humans, animal products in general, that policies that restrict it are actually unethical.

And then we also talk about the positive role that animals play in our food system from an ecological perspective too. And so folks will learn a little bit of science and hear personal stories, like, from Lierre Keith about her experience with veganism. We're not saying that veganism is wrong. We're just saying that, you know, it might be not considering all of the other aspects that we're bringing to attention here. So I'm just hoping to have a little bit more dialogue, a little less polarization. It's not animals or plants. It's the right combination of both of them grown in the right way. So it's not the cow, it's the how is, is one of the little taglines that we like to use for it.

Katie: I love it. Again, I'll make sure all of those are linked at wellnessmama.fm. For any of you guys listening, I definitely recommend checking out the movie when it comes out. I'll make sure to promote it on Instagram so

you guys can find it and also reading the book. I really enjoyed it. And my 13-year-old is currently reading it, and he's really fascinated and interested in the sustainability aspects of regenerative agriculture. So he's loving it from that perspective.

Diana: A 13-year-old, I'm so impressed.

Katie: Yeah, he's very much into it. We have thousands of super worms in his closet that he's using to try to break down polystyrene and he's very big on solving some of these environmental problems. And we're big on, in school, letting them kind of pursue their own interests. So the environmental one is big with us right now. But I'll make sure all those links are at wellnessmama.fm, definitely would encourage you guys to go find them and continue learning from Diana, from Robb, from their work. And I know we talked about it a lot, but also would encourage you to experiment with your own protein intake because that was a big change for me that made a big difference in my health. A couple of questions, Diana, I love to ask toward the end of interviews. The first being, if there's a book who are a number of books that have really changed your life, and if so, what they are and why.

Diana: I often will cite the book "Ishmael" by Daniel Quinn. Are you familiar with that one?

Katie: I'm not.

Diana: Okay. It's just a great story. Anyway, I won't go into why or what it's all about, I guess, but it really just articulated in the most beautiful, most poetic way a lot of things that I've thought about. It's just, if I were to make another movie again, I would make that book into a movie. So that's definitely...there's a trilogy, "Ishmael," "The Story of B," and "My Ishmael." If anyone's looking for some great reading that's really moving, I highly recommend it.

Katie: I love it. That's a new recommendation. I'll make sure that's linked in the show notes as well. And lastly, any parting advice you want to leave with the listeners today?

Diana: More protein, more protein, better protein. I actually have a whole blog post about that with lots of links to studies that show, you know, the benefits of more protein. I have a list of how to get more protein. In the book, we list how to get 30 grams of protein, actually, like, all the animal source foods that you would eat. I'm just really excited to connect with you on the protein thing because I'm such a protein geek and a nutrient geek. And I really think that that's the ticket, and I think women in particular are protein-phobic, meat-phobic and, you know, it's really throughout history women have been the ones denied meat, right? We were the last ones to get it even after the kids. And so I think women, you know, it's sort of our right to take it back and own it and give our bodies what we need.

Katie: I love it. I just found that post, that will be linked to the show notes as well. You guys go find it, check it out. It's fascinating. Diana, I'm so glad we finally got to connect and record. This has been so enlightening. I'm a really big fan of the work that you guys do, and I appreciate your time today.

Diana: Thank you so much for having me. It's great.

Katie: And thank you, as always, for listening, for sharing your most valuable resource, your time, with both of us today, we're very grateful that you did, and I hope that you will join me again on the next episode of the "Wellness Mama" podcast.

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