



Episode 1,721: Eating Meat: A Nutritional, Environmental, and Ethical Defense

Guest: Robb Wolf

WOODS: It's so funny. I was just looking, you were on episode — this is Episode 1721, and you were on Episode 29 back in 2013. It's completely crazy. But I'm glad to see that *The Tom Woods Show* bump has done so well for you. You've been prospering ever since, so I don't know what conclusion to draw.

WOLF: [laughing] That is completely the attributable factors to anything, yes.

WOODS: Well, I'm really, really interested in this book because I was thinking to myself, just as I started looking through the table of contents, about the kinds of objections that people might have to what you're saying, and every time I thought of one, I looked, and there you had a chapter addressing it. So it's really thorough. I'm not in this field the way you are, but I don't know of a book that's quite as thorough in handling the kinds of objections people are likely to have. So before we get into those objections, let's start with your positive case. What is the main point you want people to walk away with after reading *Sacred Cow*?

WOLF: Man, I've done a lot of interviews, and that is actually one question I have not been asked. But something that I would really implore folks when we're talking about these discussions around food systems and climate change and all these really complex topics is that we're oftentimes fed these very simple solutions. And sometimes a simple solution is accurate to addressing a complex problem, but oftentimes it's not. The kind of knee-jerk reaction, the thing that you can wrap neatly into a soundbite or a meme, it doesn't always convey the degree of nuance that's necessary to actually get in and solve a complex problem. And so I guess I would throw out there to folks to just ask them to consider that there may be a lot more to this story of how an animal-inclusive food system could actually be a major benefit to humanity. It could be a major economic benefit, health benefit, could reestablish food sovereignty for both locations in the United States and in developing countries, and that there's a lot more to this story than just kind of the way that the media typically portrays this topic.

WOODS: Right. Now, the first section of your book deals with "The Nutritional Case for" — and then you have in parentheses — "(Better) Meat." So let's start there, because every now and again, we will read about some study that will say that if you eat meat, it seems to be associated with poor health outcomes. And there are different ways of responding to that, but one of them, one of them but probably not the strongest, is that given that people have been telling you for years and years not to eat red meat, by this point, in some cases some of the people who eat it are just the sort of people who would ignore all advice. So it's not necessarily a pure scientific study that we're doing here. But this is an area where there's so

much disagreement. You and I both know Mark Sisson of *The Primal Blueprint*; I've raised this with him. And yet on the other hand, we have people who are vegans, not just ethically but also nutritionally, who look at this completely differently, and I think they cite something that's kind of old now, the China study. How is a layman supposed to sort through all this?

WOLF: I don't know if a layman can. Like I'm a trained biochemist and spend most of my time sorting through this, and it's a headache for me. But one of the crazy things that happened in our history of kind of medicine and public health, we really knocked it out of the park when we did some epidemiological research tying smoking to various types of cancers, particularly lung cancer. And the relationship between smoking and lung cancer, to pick kind of a somewhat arbitrary number so it doesn't get really technical, would be a correlation factor of, say, 10,000. It was very strong. And correlation cannot prove causation, but when you start getting numbers very, very high, it becomes very, very suggestive that there is something powerfully linked there. So we can find similar stories with the ingestion of aflatoxin — this is the toxic stuff that ends up in mold — and various types of cancer. Like the correlation is very strong, and then we can get in and do some animal models and what not, and try to do some of the molecular mechanisms to flesh all that out.

But then when we swing over and look at this meat consumption and relationship to different health concerns, we have a couple of different problems that emerge here. One of them is that all of the research in this area or the vast majority of it is what are called retrospective studies or food frequency questionnaires, where they're asking people what did you eat yesterday, last week, last month, sometimes years ago. They're asking people to report how much of this, that, and the other thing did you consume? And it's pretty clear in looking at that research that people don't remember particularly well. Oftentimes, people lie about what they expect the researchers want them to say that they're doing, and a pretty sharp guy, Dr. John Ioannidis has been pretty critical of that whole system and has made the case that we really should not fund any more research like that because it doesn't actually answer any questions. It's all these correlative studies and the power is very poor.

But even if we were to say, okay, maybe there is something to this whole thing, if we were to compare the relationship of meat to, say, cancer versus smoking and cancer — and again, this is a somewhat arbitrary number, but it's actually pretty close — smoking is related to lung cancer at a number of, say, 10,000. Meat is related to various types of cancer, a one or a two. It's literally multiple orders of magnitude less related. And so it's very dubious whether or not there's anything there.

But if we dig one more layer into this, if we look at colon cancer as a potentiality for people in westernized cultures, all of us have about a 5% risk of developing colon cancer at some point in our life. Like, that's just kind of the background noise of that potentiality within our lives. If we assume that the research on meat is actually accurate, which I think is very dubious, but let's just give it the benefit of the doubt and say that it is, and if you eat red meat every day of your life at a fairly significant intake, then in theory according to these papers, your absolute risk for developing colon cancer goes from 5% to 6%. But the way that that gets reported is the difference between 5% and 6%. So they report the relative risk, and the relative difference between 6 and 5 is 18%. And heck, why not just round up a little bit? And so it's reported that red meat intake increases your risk of colon cancer by 20%.

And so there is a remarkably circuitous route that we take to get to that spot with science that is just terrible. And it is it is not gold standard science. It is not randomized, controlled

trials. And then we have lots of examples of, say, traditional cultures that consume a mixed diet. We're not talking about people eating a purely carnivorous diet, but a mixed diet that includes animal products, but they tend to live in a non-Westernized scenario. And their incidence of all degenerative diseases, including various types of cancer, are much lower than what ours are. And again, that is also observational. That is not a randomized controlled trial. But we would expect that if there was something to simply consuming meat, that we would see some problems there.

And then even on kind of the longevity story, the kind of vegan-centric camp will often mention the Seventh Day Adventists, who tend to be vegetarian or vegan, and that they have a longer lifespan than most Americans do. And that's true. But what's interesting is that they do not have longer lifespans than Europeans. So European Seventh Day Adventists don't live longer than other Europeans. And then within the United States, Mormons live just as long and just as well as Seventh Day Adventists, but they eat a mixed diet that includes animal products. And so there's all these other externalities that get factored in. Folks that are religious tend not to smoke; they tend to drink less; they have the benefit of a tight social cohesion; there appears to be at least some stress-mitigating element to some type of religious faith. And so there's all these other externalities that kind of get lost in the mix there.

So I could ramble on about that, but this is some of the difficulty of unpacking stuff like this. The average person who is just trying to figure out what should I eat to be healthy, if they didn't commit suicide because of me talking already, then that's a lot of stuff to unpack and digest, even getting it in kind of a superficial fashion like what I just did there.

WOODS: Well, let's try to answer it this way. We can say that some of the claims made about the alleged dangers of meat are overblown or misleading. But just to say, *well, meat isn't as bad as you thought it was* is not the best selling point in the world. So what are the positive things we can say on behalf of eating meat?

WOLF: Well, that's an interesting angle. And what's intriguing to me is it both the beginning and later stages of the human lifecycle, animal products prove to be incredibly important. It is very, very difficult to raise a human child absent animal product inputs and have them develop properly. And in Europe, they actually consider a vegan diet to be child abuse, and it's largely prohibited, which there's all kinds of like personal liberty things around that. But when you dig into the literature on vegetarian and vegan diets, particularly with children but this extends to the whole population, we see a lot of nutrient deficiencies. We tend to see low iron, low zinc, low essential fatty acids, including EPA and DHA. It tends to be very difficult to get adequate protein, and folks tend to eat more calories in total because of this process of trying to get adequate nutrition. These largely plant-based options are very difficult to obtain adequate nutrition without overeating calories.

And then when we shift to the later stage of the life cycle, what we find is that humans do much better at higher protein intakes. As we age, we tend to get a blunted anabolic response to our food, so we tend to lose muscle mass, we tend to see a declining immune function. And this is one of the really interesting things. And again, this is some more of this correlative-type research, but older adults, 60s, 70s, 80s and beyond, who eat the most protein tend to fare the best. And again, this is correlation; it's not causation. But there are some great mechanistic underpinnings behind why meat-inclusive diets, animal-product-inclusive diets may be particularly beneficial, and it really does boil down to nutrient density,

the amount of vitamins, minerals, amino acids, essential proteins, and essential fatty acids that we get from our food relative to the calories that we're consuming.

And so I think that there's kind of a middle ground of adults who are done growing but not quite into later stages of life, that they can tolerate a vegan or a lower protein, lower nutrient type diet, but you also do see lots of problems. You see infertility problems for both men and women in these vegan-centric, very low-protein diets, various nutrient deficiencies, different types of anemia. This problem can be fixed to some degree with the supplementation that we can find at any drugstore, and so that is a viable option in some circumstances, particularly if somebody is eating a vegan diet for ethical reasons. But even in those circumstances, we don't see folks do quite as well as what we observe when people are eating a whole food-based diet.

WOODS: Let's go on to the environmental question, because I think this is the argument people are hearing most often these days, that the diet we have is unsustainable, because number one, it contributes to climate change, and it's extremely inefficient, because look at all the land that cattle take up, there are tremendous inefficiencies. And then, moreover, we have now developing all these meat substitutes that are supposed to taste just like meat. I can go to Burger King and I can have a burger, and I'm eating some kind of weird plant thing and it tastes strangely like meat and it's produced much more efficiently. Why wouldn't we do that? Try and unpack that for us.

WOLF: Man, it's a big one.

WOODS: Yeah.

WOLF: So the land use topic is one — land use, water use, and efficiency, it's very dishonest the way that this is couched. So if we were to look at the total landmass of the earth and then look at what is available for farming, just producing crops, there's this limited pool of land that's actually amenable to crop production. And nearly two-thirds of the remaining land outside of cities and suburbs and what is already under till for crop production is grassland. And it is amenable only for growing grass and growing the herbivores that graze on grass and that whole ecosystem that existed for hundreds of millions of years.

So when people say that it's inefficient to raise cattle on grass, they're ignoring that this is kind of a keystone element to terrestrial biospheres. Pre-Columbian times, there were over 200 million bison in the Americas, in these vibrant grasslands. And an important thing to keep in mind with that is that there was a multitude of other organisms that went along with that. Healthy grasslands are kind of indicated by the diversity of birds and omnivores and carnivores and everything that interfaces there. So if we over-graze a grassland, it can be damaged, and this has been done. If we under-graze a grassland, it can be damaged, and this has also been done. There are government subsidies to take land out of use to be used in grazing animals, and this is largely in response to vegetarian- and vegan-backed kind of groups that petitioned for different tracts of land to be taken offline, which really doesn't make sense. We could be producing food, we could be actually restoring the normal functioning of grasslands.

And then when we get into the actual climate change topic, people will mention discussions around the methane that cattle produce. And this is really interesting, because this is again where it's important to have a reasonably nuanced discussion around this topic. Recently,

there was a piece that appeared in the journal *Physics.org*. And it made the case that we've discovered that shellfish produce enormous amounts of methane. Termites produce absolutely prodigious amounts of methane. But if we're going to vilify biogenic methane, methane produced from living organisms, then we slide into this slippery slope of making recommendations that we should eradicate shellfish, termites, and terrestrial herbivores like cows and bison and things like that. There was actually a motion put before the parliament in Sweden to eradicate the moose population there because the moose produce methane.

But the thing that's getting missed in this story is that these biogenic sources of greenhouse gases are part of a cycle. There's carbon dioxide in the air that gets fixed by plants into cellulose; that cellulose gets broken down by grazing animals. Part of the byproduct of that is methane production. There's also CO₂ production. That enters the atmosphere, and it gets recycled in that process.

And something that is completely ignored in this story is that when we look at the total carbon footprint of regeneratively raised meat versus, say, conventional meat and in particular things like chicken and pork, which are wholly dependent on the production and feeding of grains — and this is actually a place that the vegetarian and vegan folks and the people are saying this is inefficient. They actually have a good a good case when we look at the way that chicken and pork are raised. But when we look at herbivores, sheep, goats, cattle, camels, they're an entirely different story because they're eating food that humans can't eat. Unless we completely genetically modify ourselves to be able to function the way a termite does, we aren't going to be able to break down cellulose and grass and turn it into food.

But the carbon footprint is really interesting in that we now have some lifecycle analyses looking at pastured grass-finished meat, and it removes more carbon out of the atmosphere than what it releases. And this is where it's really dangerous to get this story wrong. We're being told that we should reduce the number of cattle on the planet, when in fact it might be the case that this is our most potent tool in dealing with the climate change topic, if we're going to take that kind of carbon or carbon equivalent story head on and do something about it.

And I know that, again, that was a ton of material, but another piece to this kind of resource story is that folks will oftentimes say that the water usage in creating meat — and again, we're looking specifically at beef, and I'm going to parse out chicken and pork separately, but there have been analyses that say that meat is inefficient due to its water use. But when you really get in and look at that topic, from an ecological perspective, we kind of categorize water in three different categories. One is green water, which is rain, snow, sleet, hail, mist that falls to the ground; we have blue water, which includes lakes, streams, and below-ground aquifers; and then we have grey water, which is the effluent that is left over from different types of processing methods.

And 96% to 98% of the water that goes into — within conventional meat, it's about 92% of water; within pastured meat, it's about 96% to 98% of the water that is accounted for is the water that just falls on the earth in the form of rain and snow. It was going to fall on the ground no matter what. It's ostensibly raising or promoting the growth of grass, which then ideally does get eaten by something. And so it's very disingenuous and dishonest to say that that is stealing water away from something else that could have been used in a different way.

An accurate place to actually level that claim is something like almonds, where they pump groundwater in places like California. Very dry, their aquifers are not getting recharged at the same rate that they're depleting them. We pump this groundwater to the surface, irrigate almonds, and then 70% to 80% of almonds get sold to China, so we're literally selling our groundwater to China in the form of almonds. But when we see the kind of media pieces, nobody talks about the negative impact on water use or resources in almonds; it all gets focused on cattle really in a dishonest fashion.

WOODS: All right, let's in the interest of time now move forward to part of the book that some people may actually skip ahead to, actually, which has to do with the ethical question, which I think is foremost in the minds of least a lot of people. I don't think that that many people are really, honestly staying up at night, worrying about the environmental impact of cattle. Some people may be, but I don't think that a lot are. But I do think some people have genuine moral scruples about eating meat, with the argument being that these are sentient creatures that can feel pain, and that if I can get a more or less complete supply of nutrients through sources other than meat, then why should I not do that and minimize the net amount of suffering in the world? I think I'm more or less summarizing what they — I mean, I'm sure that a philosophical vegan or vegetarian has a more sophisticated argument, but I think that's the way the average person who is conflicted about this thinks about it. How do you address that?

WOLF: Yeah, actually I think you couched that really well, and I think that it is a completely reasonable goal to inflict the least harm upon the world that we live in. And in both philosophy and in ecology, there is this term, the least harm principle. And this is, again, where a superficial treatment of that concept, it makes it look like a vegan diet is great. *Well, we're not killing animals to eat them.* But the difficult thing when you really dig into the way that grains, legumes, lettuce, everything that is largely a product of the conventional food system of which that is where most of this vegan-type food comes from, including the products that go into things like impossible burgers and whatnot, there is a massive amount of death and destruction that occurs there.

There's a gentleman, I'm forgetting his name, but he did a paper out of the University of Oregon, and it looks at the least harm principle and it compares and contrasts a large grazing-animal-centric food system that also includes fruits, vegetables, nuts, and seeds, which these tend to be the lowest impact on different organisms, versus a very row-crops-centric food system. And when we start taking kind of life for life — like, a mouse is a mammal. A cow is a mammal. A mouse is small, but from every other perspective like intelligence, physiology, they're very, very similar. And then we start looking at rodents and birds and invertebrates and insects — and the insect is a really interesting feature there. We're just seeing crushing decreases in bee populations and different insects from the application of synthetic chemical fertilizers and pesticides, which are endemic and an inseparable part of the industrial food system.

When you look at it through that perspective, there's actually more death and suffering that occurs from the industrial row crop food system than a food system that is built around regenerative agriculture, fruits, vegetables, nuts and seeds. And this paper has really stood the test of time. A good number of people have gotten in and tried to unpack the math in it, but it really stands up. And then we get kind of a fallback position where folks will say, *Well, the intent is to cause less harm, and if my intention is to not hurt an animal, and by*

extension I don't eat meat, then I'm okay. But I think, again, that's a pretty dishonest position.

And this is an opinion piece on my part, but I think that in our modern world, we are so divorced from the concepts of life and death, that we really try to hide those realities any way that we can. And it becomes so apparent when we consider the food system. Like the only experience that people have of their food system is a piece of deboned, deveined, defatted chicken breast that's inside of a Saran-wrapped container. There is absolutely no thought that there was a living organism there and it died to provide nutrition for something else. But there's kind of a reality that everything lives and everything dies, and I think that this is one of the pieces that really gets lost in this highly vegan-centric model – and again, I really commiserate with the notions that these folks have around this.

And I'm not really advocating for the industrial food system, the way that both animals and the environment are treated in these large-scale operations. It really isn't something that can continue for 100 years or 1,000 years. Assuming humanity goes on, we will need to do something different, and I will venture a guess that it'll look a lot like a regenerative type system. But despite the best intentions of folks, oftentimes they still make kind of superficial assessments of where the harm actually comes from and how to mitigate that. So I really am advocating for some dramatic changes in our food system that would be consistent with less harm and least harm. But it's going to look different than what folks who ascribe to more of a vegan doctrine are going to recommend.

WOODS: Well, these kind of large-scale structural changes may take some time. What kind of action item, then, do you have for somebody who's read your book, who wants to do something in his own lifestyle now that would do himself some good and the world some good?

WOLF: Yeah, if you have some means, financial means, I would recommend purchasing as much of your food locally as you can, particularly on the meat side. Support local regenerative ranchers and farmers. It's interesting in this time of COVID – we've always been done that. We've always for 15 years received the bulk of our food from local producers, and we were very fortunate in a variety of ways. But we were fortunate on the food side of this COVID experience, we didn't really have any type of food scarcity anxiety. We have a large freezer. I have a backup generator. We keep that thing pretty topped off. And again, we're lucky to have the resources to do that. But I've tried to extract myself as much as possible out of the kind of conventional food system, and so I'm helping to subsidize the folks doing this good regenerative agriculture and good food production.

Because the reality is that the way that the incentives are misaligned within our agricultural subsidies system, everything looks either inexplicably more or less expensive than really what it should be. Grass-fed meat should be cheaper than grain-fed meat. If you go to Australia and eat some grass-fed meat, it will be about 30% more expensive than what you would pay for their standard grass-finished meat. It is insanity that a Twinkie should be cheaper than an apple. Like when you think about the amount of technology and processing and infrastructure that goes into making a Twinkie, that thing should be \$20 a unit. And it is kind of a hat tip to the amazing innovation that has occurred in the food processing arena, but a lot of the real costs get hidden via taxes and via subsidies. So to the degree possible, the folks that have some resources, buy more of your food local.

And this is a great food security story too. Like if things get squirrely with another pandemic or social unrest or whatnot and you have a relationship with a local food producer, those folks are going to take care of you and make sure that you have access to the food that you need.

And then for other folks, if you're a young family kind of living on the margin, you're early in your career and just trying to get by, then I would encourage people to eat the best quality food that they can but within their budget. And that's where shopping at Costco or a big box store and focusing on nutrient-dense food is going to be incredibly favorable for both you and your family. Again, in this time of COVID, what we see clearly, like crystal clear – and we started seeing this from the very earliest days – people with metabolic disease, high blood pressure, blood glucose dysregulation, and general poor health, fair horribly under the pressures of COVID. And for people who are metabolically healthy, even if they're on the older side, it's really not that big of a deal.

And so not to derail this into a COVID topic, but it's fascinating to me that we're seven months into this process at this point, and there's no discussion at the kind of international and national level about the need for people to just get healthier. So that's one thing that, regardless of whatever else people do, if you get healthier, you're going to be in a much better position to be resilient, whatever life throws at you.

WOODS: Can we say a quick word before we wrap up about your forthcoming documentary? Because we'll talk about it when it does come out, but people should keep an eye open for it.

WOLF: Yeah, yeah, so same title, *Sacred Cow*, and it covers much of the same topics that we cover in the book: the health, environmental, and ethical considerations of a meat-inclusive food system. But the book really, to your point, like we spent nearly six years working on both the book and film, but the book was oriented to address all of these common concerns that people raise, and the film is a bit more of a story arc narrative about where this whole system could go. So as an example, we spend a good chunk of time down in the Chihuahuan Desert and look at a regenerative rancher down there who has transformed a million acres of desert back into grasslands using regenerative agriculture. So we try to show examples of success while also telling this general story.

WOODS: Well, the book is *Sacred Cow: The Case for (Better) Meat: Why Well-Raised Meat Is Good for You and Good for the Planet*. I'm linking to it at TomWoods.com/1721. It's everything you've been wanting to read on this. Now, I know that I have some vegan listeners who are probably ready to come through the computer screen at me, because I've talked to you a couple of times, have had Mark Sisson on a couple of times, people like that, because that that really is where I'm coming from. And yeah, people say you should have both sides on, but I don't know. I mean, it's *The Tom Woods Show*. I talk about Tom Woods things. And I like what you're doing.

I think this book is extremely persuasive, and it could have been much, much longer than it is, but it's totally manageable, the chapters are a reasonable length. You'll start this and get through it in no time at all, and you'll feel like you're on really solid ground on what has, oddly enough, become a controversial position. But it's also interesting and I'm glad that at the end you're not saying that the status quo is the ideal situation, that our meat can actually be improved and much better, and the system by which it's raised and distributed can be much better. And that's certainly a conversation we need to be having. So thanks again, Robb. I appreciate it.

WOLF: Huge honor to be here. Thank you.