

Bryan Schaaf:

(Music) Right here on the Meat Speak Podcast powered by the Certified Angus Beef Brand, Bryan Schaaf here. We are going to talk about one of my favorite subjects to at least say, although it's not actually true. And it has come down to a point where, when coworkers of mine have to do certain presentations, there's usually some sort of wager as to how many times you can get them to say this phrase in their presentation. And that phrase is of course, cow farts. But when you tear into the actual science, right, the idea of cattle flatulence, and how it impacts the environment, well, for one, we're not even talking about that end of the animal to begin with, but at least it's fun to say. And our guests today are experts in, I guess, what is actually happening and why this idea of animal agriculture and cattle producing methane is going to be the end of the world as we know it.

Bryan Schaaf:

Never mind the fact that cattle have been around since the dawn of time. Apparently it's today's cows and how they're doing it. But we have been fortunate to encounter some individuals who are quite well versed on the subject. And we'll not only talk about what is actually happening, but they'll also talk about honestly, where we probably should focus our efforts if we really are invested in making a better tomorrow here. First, before we crank into the longest part of what you're about to hear today with Dr. Frank Mitloehner, PhD, Animal Science doctor over at UC Davis in California. Before Dr. Mitloehner joins us, I have here with me via Zoom, because we're still fighting the COVID here, all the way from her office in the headquarters of Certified Angus Beef is Nicole Erceg. How are yah?

Nicole Erceg:

I'm so good Bryan, thanks so much for having me. It's exciting to be on the podcast and not just on the other end of it listening.

Bryan Schaaf:

It's not nearly as exciting on this side, is it? You're like, "Oh, I thought there would be more to it." But, let's talk about you for a moment before we dive into the meat of things, right? The question that I was like to, I guess, answer is the why, right? You have spent a lot of time on this subject and you come from out West. There originally you're a farm kid at heart and you've spent a long time dealing with a lot of these topics. Tell us about you.

Nicole Erceg:

Yeah. So when you say I grew up out West, I did grow up in Cattle Country, in Oregon. I say I got into the beef industry as soon as I could, even though my parents didn't necessarily come from an agriculture background, but love cattle, love cattle people, and love beef obviously. And for most of my career here at Certified Angus Beef, I've worked on the production side of our business or/and working with farm farmers and ranchers. And today I get to work on the consumer communication side of our business, which is really fun, but it also means I get to talk about questions that people have about how our beef is produced.

Nicole Erceg:

So sustainability and environmental impact of beef production is something that has been a hot topic in mainstream media recently especially, but it's something that I think the farming ranching community has always been focused on for as long as... I mean, we use environment, the environment and natural resources to produce beef. So it's something that, honestly, at the end of the day, we're a beef

company, but you might even be able to say we're a natural resources company too. So excited to talk about that piece of it today, Bryan.

Bryan Schaaf:

Well said. And I'm glad you touched on it. And one of the things that we wanted to discuss was an event, which was in the news recently, and we won't name any names specifically, but let's just say they are self-proclaimed as the King of Burgers. And they happened to have a mascot with a giant plastic head who always, always, I think is hilarious. But that said, said unnamed King of Burgers company, they in my heart of hearts, because I happen to love the King of Burgers, right? I grew up with them. It honestly seemed like an effort where they were trying to do good. They had good intentions and they decided if we feed our cattle lemon grass, it'll reduce their methane emissions and ultimately save the planet and we all hold hands and sing. But that's not exactly what was actual fact? Can you tell us a little bit about that?

Nicole Erceg:

BK is, if I can say that. So I think BK, if I can call them that, their latest commercial was, I think we are all in food and food marketing and production agriculture. We want to give people and our consumers what they want. And I think we all want something that is good for the environment and also tastes great. I think that one hits those of us who are close to cattle production farming and ranching a little bit hard, just because it felt very critical of where we've been. And the lemon grass idea, if we wanted to dive into the science of it, which I think maybe is not where we want to go today, but isn't quite solid yet. And we as a brand of beef really strive to be a science based company. So any decisions we are making are rooted in scientific fact.

Nicole Erceg:

I think what is cool about it is that they kind of started on that path, realized that there was maybe some facts that they didn't have straight, and our guests later today actually reached out to them and had a great conversation. He's a leading scientist in this area of how do we reduce the greenhouse gas emissions in beef production. And he's not going to be working with them on their environmental sustainability initiatives at BK, which I think is very cool to see them, their heart's in the right place. And you know what, if our marketing doesn't always match it, we're going to go back and try and look at different ways to fix it. And I think at Certified Angus Beef, that's what we try to do too, of how can we get better? Here we call it raising standards. How can we raise the standards on environment, care for our cattle, our community, and then of course raising that next generation in beef production, how can we raise standards on that? And when we do that, we're going to be rooted in science.

Nicole Erceg:

So I think it's interesting to see that, and it's really, really encouraging to see them take a step back and work with the leading animal scientists on this initiative, because we all want to get better. And you know what, at the end of the day, maybe lemon grass is one of the ways to do that. There's a ton of people actually looking at how do we reduce the greenhouse gas emissions of beef. And in fact, I think one of the things that gets really exciting Bryan, is that as a farming and ranching, especially for beef specifically, we have the opportunity to potentially be one of the first carbon negative industries. And when I say carbon negative, that means that we are taking more carbon out of the atmosphere than we are putting into it. So there's a lot of companies you'll see put out sustainability initiatives or

environmental goals that strive to be either reducing their carbon emissions or being carbon neutral, which means they're not putting out more. They're just kind of equating what they put out.

Nicole Erceg:

And I think beef in general, as the way that we produce beef, has the potential to be the first industry that's actually carbon negative, and that we are sucking more out of the atmosphere and contributing to the environment more than we're actually taking from it.

Bryan Schaaf:

Can you believe that. It's one of those things, it's no secret. And of course, we live in the industry. There is a large faction of folks that would lead you to believe that agriculture in general is the root of all evil. And that is why the earth is having a lot of problems in. In reality, and Dr. Mitloehner will get into it here in a couple moments, to your point, agriculture is actually one of the folks who are able to lead the way out of this. So just a really, really fascinating individual. Nicole, if you could, we'd ask if you could stick around til afterwards, come back here with me, join me we'll wrap this up after we hear from Dr. Mitloehner on the science. But man, I've been so [inaudible 00:09:06] to pull the trigger on this episode, especially after the most recent happenings with King of Burgers.

Bryan Schaaf:

So that said, we're going to jump right into this segment of the interview. You might say that I'm going to have this interview my way. So stick around Dr. Frank Mitloehner, animal scientists from UC Davis and a just a wealth of knowledge on environmental science and whatnot. So stick around here on the Meat Speak Podcast powered by the Certified Angus Beef Brand. (Music)

Bryan Schaaf:

Back you're on the Meat Speak Podcast coming to you from the Omni Amelia Island Resort on the coast of Florida. Joining me in the inner sanctum of one of the meeting rooms here is a fascinating gentleman whose presentation I got to sit through this morning. All the way from UC Davis in California, where he is a professor, and I have to double check my notes. He is a self proclaimed expert on cattle belches, which you don't hear every day. I need to know if that shows up on the business card. Dr. Frank Mitloehner, sir, it's a pleasure having you join us here.

Dr. Frank Mitloehner:

Thank you for having me.

Bryan Schaaf:

Oh, thank you. You have an incredible perspective, that is we do a lot of work through the podcast through Certified Angus Beef, that things are rooted in science. They're science-based because they hold up when challenged. And it seems when you look at things like the environment, it's such a hot button issue. And it would appear that it's really easy to maybe get your facts wrong, or if you are a newspaper or print media to only pull a couple of relevant ideas out of a certain speech, and maybe miss a lot of the underlying factors. You've spent a career now talking about the effects of cattle production and agriculture production on the environment. And a lot of the things that you have found are maybe counter to what you read in the media. Can you talk a little bit about that?

Dr. Frank Mitloehner:

Yes. One of the biggest challenges is that the carbon footprint of cattle, so that's the contribution of cattle, both beef and dairy, to greenhouse gases that then affect climate, that carbon footprint discussion is based on data that are, in my opinion, drastically outdated. Not so much the data, but the means by which they are calculated. So the so-called global warming potential of these gases is, or depicts the potency of these gases to trap heat from the sun. And while I agree that methane is almost 30 times worse as a greenhouse gas, than let's say CO₂, what is left out of the discussion and it shouldn't be left out is the fact that methane has a drastically different lifespan. Meaning while CO₂ is in the air, once it's admitted, it's in the air for about a thousand years, there's really no process that destroys it.

Dr. Frank Mitloehner:

Methane has a lifespan of 10 years, and that means that overall, globally, but also in the United States, the amount of methane produced and the amount of methane destroyed in the atmosphere by natural processes almost even each other out. So there's a process called, and I know it sounds technical because it is, hydroxy oxidation. And this hydroxy oxidation is a process by which methane that's in the atmosphere after about 10 years is converted into water and CO₂. And what's interesting about this is that the carbon that flows through the cattle system really originates in atmospheric CO₂, in the air. CO₂ that's in the air is gobbled up by plants that the animals eat during photosynthesis. And so atmospheric CO₂ goes into plants, is then eaten up by cattle, some of it is belched out, or it comes from the animal via manure emissions. And then that methane stays in the air for 10 years is then converted into CO₂, and that CO₂ goes back into the cycle.

Dr. Frank Mitloehner:

And so you have a cyclical situation from the air, into the plants, into the animals, and back into the air, plants, animals. That's called the biogenic carbon cycle. And for whatever reason, that's never considered that we are actually not adding new additional carbon to the atmosphere, through our ruminant livestock, unless we drastically increase herd size, and we haven't done that. In fact, we have shrunk herd sizes over the last few decades and a shrinking herd size actually means that you take carbon out of the atmosphere. And if you take carbon out of the atmosphere, then that leads to what's called global cooling. So none of that has really been transpired in any of the reporting that I'm witnessing, that I'm hearing and watching day in day out. And it should be.

Bryan Schaaf:

Yeah. You had discussed the recent Oscars, and as a way to save the environment, to save the earth, of course, they went meatless for their dinner last night, that evening. Can you talk a little bit about that? And the things like just giving up meat, just ceasing to maybe participate in animal agriculture, what kind of impact do you see that actually having on the planet?

Dr. Frank Mitloehner:

So, first of all related to your first question, I have to say that I've view what those celebrities, the Golden Globes and that the Oscars did as nothing other than a stunt. Because these people fly in their Learjets to the location. They are shipped via limo to the venue. They're wearing their fancy clothes for one night, they're importing the water they drink from Iceland, the flowers they adore from Italy, and then they decide to eat no meat that evening to save the planet. So there's no other word for it than the word stunt. That's what it is. There's published information that compares different lifestyle choices, including food choices. One that came out recently looked at what the impact is of forgoing all animal

source foods for one year. So what if you were to go vegan for one year? It would reduce your carbon footprint by 0.8 tons, 0.8. Tons of what's called CO2 equivalent. Okay.

Dr. Frank Mitloehner:

If you were to go to Europe, one transatlantic flight per person equals 1.6 tons. One flight across the Atlantic per person, 1.6 tons, but going vegan for one year is 0.8 tons. That just gives you a general idea of how much, or how little a conversion of an omnivore into a vegan what that equals to.

Bryan Schaaf:

One of the things that you had touched on, and it's one of the things that I don't know that I had heard similar presentations about it before, but never quite put as eloquently or as directly as you produced it. And the idea of there's only so much landmass on the planet. And of that landmass, there's only so much that's considered agricultural land, but even within that, there's really only so much of that agricultural land that we can actually grow crops on. Can you expand on that? And the reason that a lot of this land that's considered agricultural land is considered that is because we run cattle on it, because you can't really grow anything else.

Dr. Frank Mitloehner:

Yeah, that's correct. So in general, about a third of the land in the world is agricultural land. And of that agricultural land, two thirds of what's referred to as marginal land, okay, marginal land. It's called marginal because you cannot really grow crops there, why not? Because the soil is not fertile enough and/or there's not enough water. So marginal land is about two thirds of all agricultural land. What do we do with that land? We run cattle and sheep and goats there because they can make use of non-human edible feed stuff, for example, cellulose in grasses. And the reason why they can make use of that is because they're ruminants. They have a ruminant digestive system that allows them to digest cellulose that's not digestible to humans or pigs or poultry. And so 70% of all agricultural land in the world, but also here in the United States is marginal and only usable via ruminant livestock.

Dr. Frank Mitloehner:

The remainder 30%, or the remaining 30% of agricultural land is what we refer to as arable land. And arable land can be used to grow crops for any purpose. So 70% of agricultural land is marginal, 30% of agricultural land is arable. And without ruminant livestock, we could not make use of 70% of that total agricultural land mass, both globally and here in the United States.

Bryan Schaaf:

Excellent. One of the things that you discussed and obviously today's say political climate, but really everyday life climate, the idea of climate change. It is one of those subjects that appears to be so polarizing that there are two general camps, one, it's manmade climate change, and we have to seize animal agriculture and eat plants and never leave our front door. The other side is, of course at the extreme opposite where humans can't possibly affect climate change. I mean, you seem to fall kind of right in the middle and that you acknowledge in your studies that humans do affect what's going on in the world right now. But you seem to walk a really fine line of understanding what we're doing and what we aren't doing, that's necessarily playing a role into that. Can you talk a little bit about that? And you seem to really position a lot of what you talk about around the idea of we're just really pinning the culprit or the blame for a lot of this change on the wrong things.

Dr. Frank Mitloehner:

So, first of all climate change is real, it's happening. And I firmly believe that human activity has a lot to do with that. The question is not really whether or not climate change happens. I mean, most every scientist I've ever spoken to who is expert in that field would agree climate is changing, human activity has a lot to do with that. The question then is really what kind of human activity is involved in the change in climate? Those people who have been anti-animal agriculture for decades, and who in the past argued on behalf of veganism and so on, from a more of an animal welfare animal rights standpoint, they have now moved into the climate camp saying, "We have a climate crisis. We need to abandon the use of animal source foods because it's bad for the climate." And that's them.

Dr. Frank Mitloehner:

But that's not the climate scientists community, most of whom would agree that the main human culprit in a changing climate is because of the use of fossil fuels, oil, coal, and gas, which is pure carbon that was stored in the ground for a long time. Within a very short period of time, the last 70 or so years, we have extracted about half of that fossil fuel. What have we done with it? We have burned it and now that carbon is no longer in the ground. It's now in the air. And every time solar radiation hits those molecules, those gas molecules, they heat up and they're trapped the heat. So in summary, I believe like most of my colleagues do that climate change is taking place. I think there's a large consensus that fossil fuel is the main culprit.

Dr. Frank Mitloehner:

I'm afraid that this discussion that some of those activists are leading and unfortunately a lot of the media is reporting around the impact of what we eat on climate is drastically overblown, and leads us, and that's the dangerous part onto a wrong path for solutions. Why? Because of all the sources, for example, here in the United States that produce greenhouse gases, beef is responsible for 2%, dairy approximately the same. The fossil fuel sector, in the broadest sense in the United States is responsible for 80%, eight zero. So for people saying, "We need to become vegan in order to protect the climate," I think that we are really setting onto the wrong horse here and that's dangerous.

Bryan Schaaf:

Yeah. Well, I mean, if you said about going that as a widely accepted chorus, eventually you're going to find out that it probably isn't true, and then you have to start right back over where you were. Oh, why do you think that message especially, with a lot of the work that you've done and the papers that you've written and the papers that your peers have written, why do you think that message has gone largely un-amplified, I guess to the greater masses?

Dr. Frank Mitloehner:

That's a good question. And I'm looking for someone to answer it because I have not figured out why that is. What I can tell you is, it is complicated to understand the nuances in this field that I'm working in. It's complicated to communicate it. I'm doing my best to be, not just a scientist, teaching and doing research, but also a science communicator and boiling things down in ways that people, consumers will understand. I really wish that there were less bias and more impartial reporting these days. I unfortunately don't see that happening.

Bryan Schaaf:

Can you tell us a little bit about you from a personal level, your journey. I believe you're originally from Germany?

Dr. Frank Mitloehner:

Yes I am.

Bryan Schaaf:

Can you walk us through the path, that kind of you've gone on that has led you to UC and has led you down this specific field of environmental studies?

Dr. Frank Mitloehner:

I grew up in Germany. I lived there for 27 years in West Germany, near the Dutch border. I was the first West German student to study in East Germany, right after the wall came down. Did a Master in Agriculture Engineering. And then at age 28, I moved to Lubbock, Texas to do my PhD at Texas Tech University, studying Environmental Management, Environmental Impacts of Livestock, particularly of beef and dairy. And during all these years I traveled the world. I mean, literally all continents and many countries in tropical, subtropical areas, also temperate areas, of course. And I'm an expert in the environmental impact that livestock has. And ways to reduce those impacts to protect the environment on the one hand, but also to reduce negative impacts, environmental impacts, that are stressful to livestock. I do that too.

Dr. Frank Mitloehner:

So back in 2002, then I joined the faculty at UC Davis, I'm in the Department of Animal Science and I'm an air quality specialist. So I studied the air impacts of livestock, so particles and gases and nuisance issues and so forth.

Bryan Schaaf:

Excellent. And this is going to show you where my brain generally exists. You'd mentioned that you spend time in Lubbock, Texas. Did you develop a taste for barbecue?

Dr. Frank Mitloehner:

Oh, absolutely.

Bryan Schaaf:

Excellent. Excellent. So if brisket hits the table, you're participating?

Dr. Frank Mitloehner:

Yes.

Bryan Schaaf:

Excellent. It's good to know. Kind of with an open platform, somebody who has come in with your background and done the work, most of us, 99.9% of the population, the information that we gather, the information that we recite are things that we just kind of pick and choose. Probably honestly, not that unlike a lot of the media that's out there because there's so much information, especially with the

internet and checking sources and whatnot. If you could give us a framework for where we should go. What are the things that maybe we can do to make a greater impact on what's going on?

Dr. Frank Mitloehner:

I'm afraid that when reading the traditional media and with that mean the print media, but also TV news and so on, you will not really have a balanced discussion around the environmental footprint of livestock. I find the reporting very biased. And when I say biased, I mean, biased in an anti-agricultural way. I am deeply concerned about that. Deeply concerned about the way that agriculture is depicted. And I don't mean animal agriculture only, I mean, agriculture overall. People seem to have forgotten who feeds them every day. There's a sticker that some people have on their cars, no farms, no food. And you know what, that's the truth. That is the truth. Every bite you've put in your mouth all week, all month, all last year grew on a farm, had then be processed in some way, shape or form in some way, but it all grew there.

Dr. Frank Mitloehner:

And so I think that the news we hear about agriculture are almost entirely negative. Everything we hear about how our food is grown seems to be bad. From the use of chemicals, to the use of technologies, to grow crops, grow animals, and so on. It's all bad. I tell you a little statistics that I find really intriguing. We have 2 million farmers in this country. That sounds like a big number, but most people don't know that one and a half of the 2 million farmers have an annual revenue of less than \$25,000. Meaning one and a half out of 2 million farmers are hobby farmers. And according to the last agricultural census, 80,000 of those, 80,000 farmers produce two thirds of all food consumed in the United States. That's a really small number. Their average age 60. We have sustainability issue in our food supply chain, which is that we have a small number of people producing a lot of food, their societal standing is terrible. And that to me is unacceptable. We have the safest, we have the most nutritious food in the world grown by a professional agricultural workforce.

Dr. Frank Mitloehner:

The way that we view them as society is terrible. And I do my very best to support those farmers, to continue on their journey, to produce that food that we all cherish and that we should really attributed to those people who grow it. So you asked me a question and I know I gave you a long answer. So traditional media is one thing and unfortunately not very balanced these days. I find a lot of use in social media for example, I'm on Twitter. My handle is GHG, that stands for greenhouse gas, GHGguru. And and I put a lot of useful information and many of my colleagues do as well. I think that many people in agriculture are not making use of social media and that's a problem because they should. Because the other side, the one that's so critical of agriculture is all over social media, and that's why it always appears as if there's a massive movement going on countering traditional agriculture. But indeed it's just very vocal people painting that picture.

Bryan Schaaf:

Excellent. From here, you're heading just down the state in, we're in Amelia Island here near the Georgia border, you're heading down to Orlando for another speaking engagement. What does, I guess, a typical week, typical time for you look like? I mean, if folks aren't following you on your Twitter, are you doing a lot of engagement speaking, trying to spread this message yourself?

Dr. Frank Mitloehner:

I do. Over the last two weeks, I went on crazy trips from Mexico to Hawaii, to Spain, to Florida. I mean, that's not a typical kind of month, but it's not atypical either. So I do give about 50, 60, 70 talks a year. Most of them are at conferences, academic conferences, or like this one here, stakeholder conferences. I do teach. I teach large classes at UC Davis. We have 1,500 students in my department. And of course, I have over six PhD students. I have a large lab. I'm also director of the center, the so-called Clear Center at UC Davis, which does research on the one hand, but communication on the other. So I have hired not just postdoctoral fellows, so PhD level scientists to work on scientific issues, but I've also hired journalists to work with me on the communication side, because it is so important that agriculture, the way we produce food, we consume food, we waste food, the externalities around food is shared with the public, that seems to be more and more interested yet drastically uninformed so far.

Bryan Schaaf:

Yeah. Do you think really just people just don't know where to look to get accurate information anymore?

Dr. Frank Mitloehner:

That's true. And the vast majority of people when asked... If you were to go and ask the vast majority of people in this country, what they base their food buying decisions on, they will tell you, 95% of them will tell you it is taste, price, nutrition and brand. Taste, price, nutrition, and brand that drives their food buying decision. 4%, want organic food, or luxury food, or local food, and so on, 4%. And then there's 1%, the so-called fringe. And that fringe, not French, fringe, the reason why I emphasize that is because of my German accent, I don't want to upset the French. It's the fringe. And these are people who are disruptors. And what I mean by that is they are in favor of Mitacs and propositions to Outlaws certain practices. They want meatless Monday and so forth.

Dr. Frank Mitloehner:

And it is that 1%, maybe 2, of the total population that we spend an unbelievable amount of time with in agriculture, trying to educate them of their way as being wrong. And I can tell you one thing that attempt is futile. These people will not be swayed in one way or another. Okay. They have a belief system that's almost religious and they will not change that. And if I were you, if I were a farmer, I would not even attempt that. Instead, I would work with the vast majority of people that do enjoy the food that we grow, they do enjoy their bacon or their barbecue, they do enjoy their eggs or their dairy products, but they want to be assured that these things are produced in a responsible way. Responsible with respect to environmentally sustainable animal welfare friendly, safe to eat, affordable and so forth.

Dr. Frank Mitloehner:

And people in agriculture do a terrible job getting their story out. I couldn't tell you how many people tell me, "How come that our story doesn't get told?" That's what they say to me. And I say, no, I ask them, "So do you have a Twitter account?" They all say, no, they all say no. And then they complain that nobody tells their story. It is your story. It is you legacy. Okay. If you don't talk about your legacy, then don't complain that somebody's taken it away from you.

Bryan Schaaf:

Yeah. Because somebody's always out there telling me another story, the other side of it. You know what, one last thing, and I apologize for not jumping to it earlier, but I thought an important point that you made was, especially when you look at things like the methane production in cattle belching or

livestock, livestock belching, and things like that. The reality is, is we're producing more beef worldwide, or more protein period and we're doing with fewer animals, which, I'm no scientist, but that's also fewer animals contributing to the methane. Can you talk about those numbers again? Because it almost seems as a country, especially here in the United States, we've gotten much more efficient at producing protein with fewer animals.

Dr. Frank Mitloehner:

There's no question about that. I'll give you a statistics for beef and one for dairy and then a global one. So on the beef side, in the United States, we used to have 140 million beef cattle back in 1970, 140. Today we have 90 million. So 50 million, fewer beef cattle today than we did in 1970, 50 million fewer, but we are producing the same amount of beef. On the dairy side, we used to have 25 million dairy cows. Today we have nine. We went from 25 to nine. So we've shrunk there a drastically-

Bryan Schaaf:

More that half.

Dr. Frank Mitloehner:

-but with this much smaller herd, we are now producing 60%, six zero, 60% more milk. Meaning we have shrunk the carbon footprint of dairy by two thirds of the last 70 years. Globally, going back to beef, globally, the United States produces 18%. That's one eight, 18% of all beef globally, with 8% of all beef cattle globally. So what we have done here in this country is nothing short of phenomenal over the last few decades. And that's not just true for cattle, it's also true for pork, for poultry. What we have done in the agricultural enterprise in this country is phenomenal yet we have not really gotten the story out. And so I thank people like you for changing that.

Bryan Schaaf:

It almost seems here in America, we're almost vilified for it. When numbers would certainly suggest that we were doing something right. I mean, what other industry period has been able to decrease their carbon footprint like the agricultural industry has? I mean, I can't think of any off the top of my head.

Dr. Frank Mitloehner:

Well, let me frame it in the following way. So I'm 50 years old. When I was a little boy with three billion people in the world. Today we have over seven, and by the time I'm an old man we'll have nine and a half billion people. In other words, throughout my lifetime and yours human population on our planet will have tripled, tripled. But we will not have three times more resources to feed these people. And what that means is we have to become a whole lot more efficient in producing food. Because if we don't, these people will not have food. And guess what? We are the world champion in producing food efficiently. Now that comes with the use of technologies with advanced techniques and so forth. And some people are critical of that. They want us to go back to the 1950s, 1960s.

Dr. Frank Mitloehner:

I have news for you that will not happen because if we were to go back to the 1950s, 60s, we would have millions of people starving throughout the world. But even people starving or being malnourished in a country like ours. Those days are over. And I have another take home message that I like to share. When I walk my dogs in the morning in Davis, California, almost every morning, I see a truck driving by, a dairy truck driving by. And what I see, what do I see on that truck? A depiction of some happy California

cows grazing, and in the background a red barn. That's the 1950 image. Okay. So I want to challenge this industry, whether or not that depiction of the 1950 dairy as the gold standard in the minds of people, whether that's a smart thing to do? Was the 1950 red barn dairy really more sustainable than today's modern dairies. I would argue it was not.

Dr. Frank Mitloehner:

These were a tie stall barns with a cow attached to a pole, they could stand up, lie down, not walk around freely. They were hand milked by stoop labor, not a very worker friendly way of milking a cow. The milk went into the bucket where stood for, I don't know how many hours, certainly not very food safety friendly. And the financial viability of this enterprise was terrible, not to speak of the environmental impact. Because the manure went into the next creek and was transported off to wherever it went. So can we please stop? Can we please stop depicting 70 year old dairies and other livestock operations as the gold standard, when they have nothing to do with the way we really produce food today?

Bryan Schaaf:

It's the feel good factor, right? I think there's a lot of people out there who've never been on a farm period. So it is that nostalgic, like, yeah.

Dr. Frank Mitloehner:

So if you romanticize agriculture, and if you humanize animals, then you put in their heads that, that calf, or that pig should be treated like that dog. But I have news for you. These are not your buddies, they're your food. If you depict a calf, almost you would a baby, then you must not be surprised when people develop a mother instinct over those animals or a buddy instinct. We must be very careful with that because I feel that this is misleading the public and it's really triggering emotions that they have around their animals. I teach a class at UC Davis with 300 students. Most of them want to become veterinarians. Most of them have experiences with animals, and the animals they have experiences with are their dogs and cats.

Dr. Frank Mitloehner:

But you know what, they don't view the dogs and cats as animals. They don't even view them as pets. They view them as family members. And when that little fluff ball there has whatever cancer or so they do not hesitate for a second to have a \$10,000 surgery done on that animal. So people with that mindset, when they now see a fluffy calf or piglet on a poster, looking so cute, or even talking to one another and so on, then that sets them up to not wanting to eat that animal or consume any product coming from it. We are our own worst enemies at times.

Bryan Schaaf:

Yeah. Well, sir, I appreciate you taking time to join us on the Meat Speak Podcast. Again Dr. Frank Mitloehner from UC Davis in California, tell us one more time how people can follow you on Twitter.

Dr. Frank Mitloehner:

It's GHGguru

Bryan Schaaf:

GHGguru on Twitter, sir. Thank you so much for joining us.

Dr. Frank Mitloehner:

Thank you for having me.

Bryan Schaaf:

(Music) [inaudible 00:42:16] Meat Speak Podcast powered by the Certified Angus Beef Brand, Brian Schaaf back here via Zoom with Nicole Erceg coming to us all the way from a... It's a fine office you've got there in the world headquarters of...

Nicole Erceg:

You like my pictures of cows in the background?

Bryan Schaaf:

It's very nice, right? You are committed to what you're doing here. I see dinosaurs on your shelves behind you. One of the things that Dr. Mitloehner really touched upon was... And I think one of the things that sort of at least caught my ear a little bit as to what makes him different is, it seems like the whole debate about climate change and whatnot, it seems there's a very black and white viewpoint to it. Either it's happening and the world is going to end, or it's not happening at all and everybody's just overblowing things. Dr. Mitloehner has a unique approach, at least that I think where he says, no, there's definitely some stuff going on, but what we are blaming isn't really what the issue is. And from your standpoint, you spend a lot of time out West on the farms. You actually just got back from a trip to Oregon, right?

Nicole Erceg:

Yup.

Bryan Schaaf:

I'm a little jealous, because I'm a little cooped up here in Ohio still. But can you give a lot of our listeners who they don't get the opportunity to go out and see what is actually happening on the farm? We always try and tell people the stereotypical image of the old farmer with the bib overalls and the straw hanging out of the mouth. I mean, that is so far from reality. What we see a lot, these guys are mechanical engineers and some of the most inventive people who care about preserving the land that you'll ever meet, right?

Nicole Erceg:

Yeah, absolutely. So I got to go out and visit a ranch and visit a feed yard last week. And I got to chat with Zach Wilson, at Wilson Cattle Company. And as you talk about the stereotypical farmer nature, those people definitely exist to sometimes with those stereotypes. But Zach is a 33 year old millennial farmer who is... We see innovation and in any other piece of our lives, there's a lot of innovation in agriculture too. And it was very cool to ride around the ranch with him. And he's the sixth generation to ranch this land. And him talk about sequestering carbon, or talking about strategic water use things like that, that I just think a lot of us don't think about. Or we talked a lot about, and I was actually able to get pictures of it, but we don't think about the natural resources side of it and the fact that farms and ranches actually provide about 70% of our nation's wildlife habitat.

Nicole Erceg:

And so whether that is a wetlands projects that Zach was working on or bird boxes that they put up on their ranch, I got to see some [inaudible 00:45:24] while I was out there. This is something that, because those cattle are there in that Baker Valley, that land is getting better. And that was so cool to see. Zach actually drove us up to a road on their ranch, and on one side of the road is a pasture where they are producing cattle and they've got cattle grazing and they have some strategic waterways so that they can irrigate that ground. And then on the other side is some land that's not being grazed. And it was so vivid because on one side of the road was green lush pasture that looked beautiful, and you could tell the land was healthier just visually.

Nicole Erceg:

When you turned and looked at the other side of the road, it looked like the land was thirsty. It was dry. There was a lot of sage brush and weeds. And it was such a visual, for me, to see how much better our land gets because we're producing beef on it. And it was so cool to see that that stark difference on one side of the road that looks great, and on the other side of the road, it's wow, by simply grazing cattle here and taking care of the land, we can make this land better.

Bryan Schaaf:

That's all right. What's the thing, cows are the original ups cyclers, right? Because they take grass that I can't, or don't want to eat and turn it into delicious brisket.

Nicole Erceg:

Yes. I grew up in [inaudible 00:46:48] Country and I just feel that's not a salad bar I ever want to participate. But you can put a Black Angus cow on it, and man, are they going to turn it into something tasty?

Bryan Schaaf:

They grow rib eye steaks from grass. That's magic. Oh, I'll stay what Nicole Erceg, thank you. Thank you. Thank you for taking time out of your really, and I say busy schedule, you have an insanely busy schedule. So you put the rest of us to shame here. But we do appreciate you taking time to join us here on the Meat Speak Podcast, powered by the Certified Angus Beef Brand. If this is your first time tuning in know that you can catch all of our back episodes, I think this is actually number 27 since we launched in October, at certifiedangusbeef.com/podcast, or you can find it on all your major podcasting platforms, Apple, Google Play, Spotify, probably some others that I'm not up to speed because I have not a millennial farmer or a millennial anything. I don't get on the TikTok like the kids these days.

Bryan Schaaf:

That said, if you did find today's topic pretty riveting, and I'll tell you what, this is one of those things, it'll bounce around in your brain for a long time. Seriously, a simple Google search Frank Mitloehner and you will find a wealth of info knowledge and Twitter is GHGguru. I mean, what a fascinating, fascinating guy and we just appreciate that he took time. So between that Nicole Erceg, we appreciate you for taking time and for all you do for the farmers and ranches across the United States of America in the world in general, and until next week, thanks for listening to the Meat Speak Podcast powered by the Certified Angus Beef Brand. (Music)