

A sunburst graphic with numerous thin, light gray lines radiating from a central point behind the text.

Healthy Moms Podcast

BY **Wellness Mama**[®]
simple answers for healthier families

Episode 160: What the Heck Should I Actually Eat
With Dr. Mark Hyman

Child: Welcome to my Mommy's podcast.

This podcast is brought to you by Nutrition Genome. This is the most comprehensive genetic analysis on the market. They cover 85-plus clinically relevant genes across all of the major biochemical pathways. And what that means is that they're testing all the important things that can actually make an epigenetic difference for you. The test also includes a 50-plus page report that really goes in-depth and gives feedback on your personal gene function and how to enhance your own gene expression. The analysis also provides foods that are best to emphasize and minimize, talks about toxins you're more likely to be sensitive to, your genetic stress response, and even recommended blood work to optimize your genetic blueprint for long-lasting health and longevity. This testing doesn't have the privacy concerns that some of the other popular genetic tests have, and we just did this with all our children. Their results have been really helpful for customizing their diets and supplements. And basically for our whole family I, kind of, took everybody's results and found the common denominators of food, and we start there now with our shopping list each week. You can check it out and learn more and get the test at wellnessmama.com/go/nutrition-genome. That will also be in the podcast show notes at wellnessmama.fm for this episode. But one more time, that's wellnessmama.com/go/nutrition-genome, G-E-N-O-M-E.

This podcast is brought to you by Four Sigmatic. My kitchen is always stocked with their coffee mushroom blends, their Matcha mix, and their straight mushroom drinks. Four Sigmatic has figured out how to get the benefits of mushrooms like chaga, lions mane, cordyceps and reishi into delicious instant drinks. My current favorite is their adaptogen coffee blend that has torsi and astragalus. But I love all of their products. They have options with or without caffeine so if you're not a caffeine person you can find products that you will love. And I find that even their coffee blends that do contain caffeine have less than a normal cup of coffee. But don't let this fool you. I have found that I get so much more focus and mental clarity from these mushroom blends than I do from regular coffee, and without the jitters. The addition of the mushrooms, which are considered nootropics, meaning that they are good for the brain makes these super food blends more effective and much healthier than just regular old coffee. I love them with a dash of macadamia milk personally. I also love that many of their drink mixes are instant and packaged into individual servings so they are perfect for travel or on the go. If you're listening to this, then you can get a special offer just for listeners of this podcast by going to wellnessmama.com/go/four-sigmatic.

Katie: Hello, and welcome to the Healthy Moms podcast. I'm Katie from wellnessmama.com, and I am here today with someone who I have been looking forward to talking to for a long time. Dr. Mark Hyman is a practicing family physician, a 10-time New York Times bestselling author, an internationally recognized speaker, educator, and advocate in the field of functional medicine. And on top of that, he essentially is a Medical Director at the Cleveland Clinic for Functional Medicine, he's the Founder and Director of the UltraWellness Center, Chairman of The Institute for Functional Medicine, the Medical Editor for the Huffington Post, and a regular medical contributor on "CBS This Morning," "Good Morning America," CNN, "The Dr. Oz Show," and many more.

So Dr. Hyman, your new book is "Food: What the Heck Should I Eat?" And I love this because I feel like there's so much health information that nobody actually knows what they're supposed to actually practically eat anymore and there's so much conflicting research out there and different dietary philosophies. So let's start at the beginning why are we all so confused with this? Where is all this coming from?

Dr. Hyman: Well, it's no wonder that we're confused, right? Because we have, one, complicated science to interpret around attrition. That's hard to do. We can't do studies where we take 10,000 people, lock them up for 30 years, give them a diet, another 10,000 different diet, follow what happens, right? Put half month

paleo, half a month vegan diet, see what happens after 30 years. That's just not gonna happen. So we have to go through other smaller studies, we have to actually look at studies that are, you know, population studies but there's an inherent problems with those, right? We can't prove cause and effect by correlating various patterns in diet which is what we do. We had people fill up a questionnaire every year and we see what happens. The problem is that that is notoriously risky to do because you're drawing conclusions from things where you can't prove cause and effect. Because every day the sun comes up and you wake up, it doesn't mean they're actually related but if there's 100% correlation, right? So I think that's really the issue is that we have, you know, incomplete science.

The second thing is that, you know, the media is always looking for the latest fancy headlines and eggs are good eggs are bad, coconut oil is good, coconut oil is bad. So they're trying to sell clicks and ads and it's just... it's unfortunate because they contribute to the confusion. And then, you know, we have dietary policies that are completely disconnected from science which confuses even more because what the government tells us. We have scientists who are still looking at very outdated science, for example, that all calories are the same, that fats are bad and we end up in, you know, really confused state. So the whole idea of my book, "Food: What the Heck Should I Eat?" is to take the science, to review it all. I've been doing this for 40 years, sad to say I'm that old, but I've been studying nutrition for 40 years and I've been applying it in medical practice for over 30 years. And looking at all the research, thousands and thousands of papers I've read, synthesizing it into just really simple practical principles that answers all the questions and controversies that people have about nutrition.

Katie: I love that. I can't wait to read it and I'd love to talk a little about food politics too because I know you've done research here as well. And I get a lot of comments from readers who essentially think that really the government has our best interests at heart and they're like, "No, this is against the government's recommendations." So how do our current food policies kind of support this confusion and this system we have?

Dr. Hyman: The government, the right hand doesn't know what the left hand is doing so they're often making conflicting advice. So a lot of our dietary policies are driven off of the dietary guidelines and they're a little bit corrupt. And the National Academy of Sciences was mandated by Congress to actually review how the guidelines were developed. And they put a report out and I think this October, November which is online, you can look it up, just type in National Academy of Sciences' dietary guidelines and they basically... when you sift through it all, it basically says, "Look, the committee members are in cahoots with the food industry." They're getting paid by them, they're not exactly independent science-based recommendations. And the second they said was they ignored huge amounts of data on things that contradict what their guidelines are, for example, on saturated fat, they completely contradict themselves. So it's very difficult for the average person to understand what to eat if even our own government is not providing science-based guidelines.

The second thing is a lot of our policies are at odds with each other. On one hand, you know, we tell people to cut back on sugar. You know, the other hand we're paying for commodities to be produced like corn syrup and wheat flour and soybean oil through our subsidies that are turned into junk food which then we pay for with food stamp programs which seven billion dollars' worth is basically spent on soda that's 20 billion servings a year for the poor that the government's paying for and on the back end we're paying for Medicare and Medicaid. So we literally... the taxpayers pay three times to support the food industry from the consequences of their food to grow it, to provide it to the poor, and then to pay for the disease that's causing the backend. And then the food labels are so confusing because the food industry is all up in the FDA and can't just have

simple labels like, "This is good for you. This is bad for you. Like stop..." Like they have in many other countries, it's so complicated.

And the policies, for example, in, you know, food marketing to kids. We allow the most awful food to be marketed to kids, you know. And then on top of that all of our public health organizations that are supposed to be protecting us like the American Heart Association and Diabetic Association, Nutrition and Dietetic Association. These are all funded by the food industry if you just look at... follow the money you'll see there's enormous amounts of money paid to these groups. Why is Trix cereal a heart-healthy cereal when it has almost seven teaspoons of sugar in it? Because it's low fat? It has three different kinds of dye in it. This is not a health food and yet the American Heart Association puts a seal of approval right on there.

So I think we have, you know, public health agencies that are corrupting it, I think the science is corrupt because food industry funds science, so if Coca-Cola funds a study in obesity, guess what? It's gonna show that soda has nothing to do with obesity. And we know that studies funded by the food industry are 8 to 50 times more likely to show a positive benefit for their product. So we have confused science, we have confused public health organizations are corrupt, we have confused policies and all that is making it very difficult for people to know what to eat and how to take care of themselves. And actually not only that but take care of the bigger context in which we live. I mean, food is connected to everything, our food system is the number one cause of climate change, the way we factory farm animals is cruel to them, it destroys the environment, it's bad for us and contributes to climate change.

We have educational disparities because kids are eating junk food and can't focus in school. We have economic stress in the country because Medicare Medicaid are buckling under the weight of chronic disease and soon it'll take up our entire federal budget. And, you know, we're just, you know, seeing all these factors that are related to our food system and nobody sort of putting a whole story together. And that's really what I tried to do in my book "Food: What the Heck Shall I Eat?" just put the story together and help you not only, you know, understand the context of food but also actually to also to give you an exact guide on what you should eat in each category. If you want to eat meat, is it okay? Is it not? What kind of meat should you eat? What about dairy, yes or no? Should it be goat or sheep? And what are the problems of dairy? Same thing with grains. Are grains bad or good? What kind of grain should you eat and why? And I go through really, really practical, practical information on all this.

Katie: Yeah, I love it and I 100% agree with everything you just said and I... one thing I just wanna echo is with the kids and having specific foods marketed towards kids, that's a big soapbox for me and an issue I talk about a lot because kids are capable of eating real food just like grownups are and it makes me crazy that all the kids' menus assume that kids will only eat like fried chicken nuggets and French fries.

Dr. Hyman: Well, there's no such thing as kids' menus in most countries. In Japan, kids eat Japanese food and raw fish. And in Indonesia, they eat Indonesian food, right? In Mongolia, they eat Mongolian food, they don't have a kids' menu. And, in fact, in Chile, there's an extraordinary new initiative happening because the doctor who's a pediatrician is the President and the Vice President of the Senate is also a doctor. And they passed sweeping legislation where they got rid of all the cartoon characters on all the kids packaging so there's no more Tony the Tiger on Frosted Flakes and they have funnel label warnings just like cigarettes on the front of the packaging saying it's bad for you. And they prohibit any advertising in TV, radio or in movie theaters for any junk food and they got rid of all the junk food in schools and they taxed sodas 18%. So they had massive sweeping changes. It's kind of stuff that we just never get done here because we know, for example, just on

the farm bill alone there's \$500 million. That's half a billion dollars spent by lobbyists, 600 lobbyists, for this one bill. That's almost, you know, almost two to one ratio a lobbyist to congressmen to actually influence these policies that end up being really, really corrupt.

Katie: Wow, that's amazing and good for them for making those changes and I think that's a great place to start because I wanna go through some of those specifics and get your opinion and your answers to them. And first of all, I wanna start with sugar because I don't think anyone would consider it a health food but there's definitely people on the spectrum of how bad they think it is. And I've taken a lot of flack in the past for saying that there is no biological need for sugar and that really there's no reason we need to consume it and people get mad at me and say... "No, that's not balanced and kids should have treats and it's fine," but you are one of the top experts on this. You have researched it and written about it in depth. So can you bring clarity to the sugar issue?

Dr. Hyman: Yeah, I mean, first of all, you said something very important. We have no biological need for carbohydrates. Our bodies run perfectly well without them. If we don't eat protein we get protein deficiency and amino acid deficiency because we need them from our diet. If we don't eat fats we get essential fatty acid deficiency but there's no such thing as a carbohydrate deficiency. So humans don't need to eat them. Now they're fun to eat and they're delicious and they can be part of our diet but it's important to understand that. And the second thing is it's the dose that makes the poison, you know, that's what Paracelsus, said.

We have enormous quantities of flour and sugar. And flour, by the way, has a higher glycemic index than sugar, it's in table sugar. So flour, you know, if you have two slices of bread it's like having two tablespoons or more instead of two tablespoons of table sugar so you might as well put the sugar in your sandwich fixings and be better off. So we have no biological need for it and we eat 152 pounds per person of sugar and 133 pounds of flour, that's an enormous amount, these are pharmacologic doses. It's in everything. It's in our breakfast cereal, it's in ketchup, it's in salad dressing, it's in pretty much everything. Why is there more sugar in pasta sauce than it is in Oreo cookies? I mean...

So I think we really have gone overboard on this. And as a recreational drug, it's fine. Having a little sugar or sweet once in a while is fine, it's like having a shot of tequila but you don't wanna have, you know, a litter of tequila every day, that's gonna kill you. And the same thing with sugar, it's the biggest cause of every known major chronic disease, from heart disease, to diabetes, to cancer, to obesity even dementia even...So it's really, really powerful and we really need to understand it as a recreational drug and not as a staple.

Katie: Yeah, I love that comparison and the same with alcohol that's a great comparison. There can be a time and a place to indulge in moderation. But you have to think of it that way, not as a staple of your diet which it is for so many Americans like it's a food group essentially for a lot of people. What about meat? Because obviously, you know, the research. Meat has gotten such a bad rap and some of my most vocal commentaries are vegetarians and vegans insisting that all meat is not only cruel but bad for us and that it causes cancer and diabetes and...

contributes to climate change. So what does the research actually say about that the health and environment effects?

Dr. Hyman: Absolutely, it's great. I was gonna write a blog about how to reverse climate change. And so, "Reversing climate change: eat meat." And I think, you know, as a provocative statement I wanna explain it, but essentially, I want to be up to 120. I don't want to eat meat if it's going to kill me and if it's bad for me. So I

decided I was gonna not listen to all the headlines but I was gonna lock myself away for a week in a room with a pile of the best research papers on meat and I was going to read them and I was gonna look at the fine print and what actually they say and what they don't and as a scientist and doctor, I have the ability to do that. And I realized there are only three are really three issues one was moral.

Now, if you are morally against killing animals I mean, the Jane, the Hindu they won't step on an insect. I mean the Buddhist same thing, like that's a religious moral choice and everybody's entitled to that and I would support that 100%. The second is environmental and it's real. So the way we raise animals is harmful to them, to us and to the environment and both in terms of the amount of pesticides and herbicides, in terms of the runoff of the nitrogen fertilizers in waterways. It's destroying our ecosystems in waterways. We have a dead zone the size of New Jersey in the Gulf of Mexico because of the way we do factory farming. And, of course, it's cruel and inhumane plus they pump them full of hormones, antibiotics, plus they feed them corn and soy which they are not meant to eat which then changes the quality of the meat and has deleterious effects on us. But all that's true. But, what we don't talk about is that actually how we raise the beef matters. There were 60 million buffalo in America in the 1800s. We killed them all off.

But they were grazing and they were eating grass and they were not contributing to climate change, in fact, they were helping reverse climate change by creating soil over 20, I think it was 20 plus feet of topsoil in the Midwest when we first started settling it. Now there's, you know, a few inches, it's pretty bad because we've created soil erosion the way we farm and by tilling and the way we do animal husbandry. But it turns out that there's a whole sort of research field called regenerative agriculture which is showing that we can actually, by proper grazing, and, you know, basically grass-fed meat, it's better for the animals, the quality of the meat is far better for us for many reasons including the kinds of fats that are in there and the nutrients that are in there.

But more importantly that it helps to build soil which is a big problem. We've lost 1.1 billion acres of arable land to desert over the last decades because of how we farm and because of the factory farming of animals and all of these things. So by using traditional grazing practices, moving animals around, we build soil just like the buffalo did, that actually creates, you know, the sequestered carbon in the soil. And if we did this at scale, it will literally bring us back to the pre-industrial time of carbon in the environment. The problem with the way we're doing it now is we deplete soil even organic agriculture. If you eat organic vegetables you're still contributing to climate change because you're killing the soil which then causes soil erosion and the soil can't actually hold the carbon and it can't actually hold the water.

That's how we're seeing droughts and floods and all these weird weather patterns because we're not actually take care the soil. So it turns out animals are a critical part of the cycle and if we don't use them we're not been able to reverse climate change. So that's sort of what I meant by in a reverse climate change eat meat but it has to be grass-fed and there's much research on this. Then there's health issues and the health issues are real. I think what does meat do? Is it bad for us? Well, here's the deal we have data from observational studies. Now observational studies are basically where they give thousands of people a questionnaire every year, "What did you eat? What did you eat? What did you eat?" And then they follow their health for a long period of time and they see what they died off or what they got sick from? And then they correlate it.

Now, many of these studies are hard to do but what we can see from these studies like the National Institute of Health ARP study was that there was an increase in the risk of diabetes and heart disease and cancer with those who ate a lot of meat in that study, but you have to take into account how the studies were done and

when they were done. They were done in a period where everybody thought meat was bad. So if you ate meat you didn't care about your health and when you look at the characteristics of the meat eaters in those studies it was true. They were more overweight, they ate more calories a day, they didn't eat any fruits and vegetables, they drank more, they smoke more, they didn't exercise, they didn't eat fruits and veggies, they didn't take their supplements, of course, they had more disease.

When you look at studies, for example, where they compared 11,000 meat eaters and vegetarians who shopped at health food stores both have their risk reduced in half because they were eating meat in the context of a healthy diet. And many, many other studies contradicted and the effect isn't that great. So, for example, when you look at it an effect size for those studies, observational studies, it should be like smoking. Smoking was like 20 to one or 10 to one, meaning 1,000 or 2,000 percent increase in the risk which is a pretty strong correlation. The studies we see around meat are like 20%, so the recent one on cancer and colon cancer said the risk increased on processed meat, not regular meat, but processed meat like bacon from 5% background risk to 6% risk so it's a 1% absolute increase in risk.

The way they phrase it, it's a 20% reduction in risk if you don't eat processed meat that sounds great but the truth is it's actually a 1% absolute reduction. And it's only if you're eating four pieces of bacon every day your whole life then you have a 1% risk. So they kinda...the statistics are challenging and at 20% correlation and observational study is not very impressive. So that's the challenge and when you look at interventional studies using meat, then like, for example, paleo studies you can reverse diabetes it's very impressive and the numbers get better, muscle mass increases, the cholesterol improves.

So I think from my view looking at the fact that we've been eating meat for since we've evolved, this has been a huge part of our diet. When you look at the centenarians at the turn of century that the most centenarians were the Plains Indians, they basically lived on buffalo almost entirely and they lived to have the highest rates of 100-year-old people on the planet. So, yes, you know, you can look at all the data and you can make any argument you want and there are countries and societies that live more on beans and they do fine but it's really in the context of an overall healthy diet. So in my view after looking at all the research, you know, and I go through this in depth in the book "Food: What the Heck Should I Eat?" I do not think meat is a problem, it's the way we eat it. It's not the meat itself. It's the factory farmed meat and we should be eating grass-fed.

It's more expensive for sure but there are ways and I talk about in the book to get it cheaper. There's online distributors that cut out the middleman. There's ways you can buy a cow share where you join up with a bunch of people and they send you frozen grass-fed cows for your freezer that you can buy with other people so it's cheaper, so there's a lot of ways to do it that are not gonna break the bank. And I think it's important that we sort of realize what the truth is about this and get into the real analysis of the details so I really think it's an area that...And then I also wrote about this in "Eat Fat Get Thin," I wrote about it here and I think, you know, we need to kinda move on from this view.

Katie: Yeah, I think that makes sense and hopefully it seems to be more mainstream now that nobody thinks processed meat is healthy for you. And it seems to be that's the key. Eating meat as part of our healthy diet, lots of vegetables, moderate amounts of meat and making sure it's sourced well. And that's I think that's the key and definitely we'll show links to your books so they can find that. I feel like the other issue that goes hand in hand here is the cholesterol issue because I have relatives, older relatives who still avoid meat and eggs and so many things because of the cholesterol because it was so bad. But from what I know, the latest guidelines actually overturned some of the cholesterol recommendations. Is that right and how did that happen and

what are the actual current recommendations now for cholesterol?

Dr. Hyman: Well, there's two things, one is dietary cholesterol and there is blood cholesterol. So it turns out that this is a complicated story as well and I talk about this whole fat issue. First of all, the government in 2015, even though the guidelines are a little bit corrupt, they couldn't avoid the fact that there was no data that dietary cholesterol is a problem or the total fat is a problem. So they reversed 35 years of bad advice saying we should limit our dietary cholesterol. And they actually said, "Dietary cholesterol is no longer a nutrient concern, so you don't have to worry about egg white omelets anymore or anything like that." The second thing they said is, "Total fats is not a problem," they still say saturated fat is an issue and I think that's gonna change in the next dietary guidelines because they were called out for ignoring huge amounts of data around this.

In terms of blood cholesterol, it turns out that... guess what raises your blood cholesterol? It's actually, it makes you have a cholesterol that's the bad kind which is I would call iatrogenic cholesterol which is the kind that causes heart disease which is small particles, low HDL, high triglycerides. It's not fat that causes it, it's sugar and we literally have a cholesterol production factory in our liver that is stimulated by the increase in carbohydrate and sugar in our diet. So this is really a critical aspect of biology, this is just basic biochemistry, it can be any physiology, buy a chemistry textbook. When you eat starch and sugar there's a process called lipogenesis that turns on in the liver that ends up producing the wrong kinds of cholesterol. And as you look at the research it's sugar, not fat that's causing heart disease, that's causing diabetes, that's causing cancer, that's causing dementia. And so when we try to fix your cholesterol the best thing is to actually to eat more fat and to eat less carbs.

Now, certain types of fat like saturated fat, some people may have issues with, they may actually need to eat less saturated fat genetically but for most of us eating saturated fats improves the quality of our cholesterol. And if you look at these large studies there's a pure study which just came out recently, it was I think of 135,000 people, 18 countries, five continents, found over a long period of time that those who ate animal protein fat had far less heart disease and disease than those who had cereal grains. Another huge study, 42 countries study, looking at food consumption patterns in 42 countries over many years found that people eat animal fat and protein have far less cardiovascular disease than people who ate cereal grains and potatoes. Another study, 245,000 people looking at vegans, vegetarians and omnivores had no difference in their outcomes.

So we just have to look at the weight of the evidence here and I think that this is really the important thing to understand that it's not the numbers, the absolute numbers of cholesterol, it's actually what quality they are. And the quality of your cholesterol gets better eating the right fats and it gets worse eating starch and sugar. And we've got to focus on LDL cholesterol because the statin drug which treats that but that's not the be all and end all. It's really, you know, 75% of people who walk into the emergency room with a heart attack have normal LDL cholesterol and not because they're taking the statin. So we have to kind of rethink this a little bit and review it and I do talk about all this in my book "Food: What the Heck Should I Eat?" so it's confusing but it's so easy to sort through once you understand the biology of it.

Katie: And that makes sense and, yeah, I've even seen some of the data that for women at least like higher cholesterol was correlated again not causation but correlated with a longer lifespan. So I'm glad that we're looking at this again and not just assuming all cholesterol is bad cholesterol at this point.

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Katie: Another thing that I get a lot of questions about and I'm really curious to your take is the whole paleo idea of we should avoid grains and beans and eat more like our ancestors did apparently. And I'd love to hear what you think on this and where you fall because I know I do feel better when I avoid certain things and that is my own dietary variation. Like you mentioned with cholesterol, like I have the FTO genes so I am one of the ones that has to avoid large amounts of saturated fats ironically because I think saturated fats are healthy for you but I'm curious. So where do you fall on the grains and beans issue?

Dr. Hyman: I guess individual, first of all, it's like what grains are we eating? You know, what beans are we eating? And I think you know, we recently just started eating these about 10,000 years ago with the agricultural revolution. We never had these before so they're kinda new and when you look at some of the archaeological records we do see that the skull structure and other things change and our brain changes when we switch from hunting and gathering to eating, you know, mono crops and grains. And we used to eat 800 species of plants as hunters-gatherers. So there's that and then the second thing is that for some people they can be a problem and we have whole grains, we had heirloom grains for millennia and then all over sudden in the 1800s we started to refine grains.

We started to mill them and then we started to feed them to prisoners and chickens even and they were all getting sick because they were all so nutritionally deficient from having these refined grains like refined rice or refined flour. Now, we each consume about 133 pounds of flour a year and it's mostly from wheat and it's mostly from dwarf wheat which is problematic because it has a super starch in it called amylopectin A which raises your blood sugar more than table sugar. It has much higher levels of gliadin proteins which are super inflammatory and lead to much more issues around celiac disease or gluten sensitivity.

And they're also sprayed with glyphosate which is at the end of their cycle which is a powerful herbicide called Roundup that is left on the plants and we consume that which is harmful to us. And lastly, once the flour is milled they put in calcium propionate which is a preservative that really turns out to be a neurotoxin and in animal models can create autism by creating this neurotoxic effect. So for many reasons eating wheat we eat in this country is pretty bad none GMO wheat, heirloom wheat, you know, none preserved, in the way we preserve it. Those can be okay for some people, like they can probably tolerate rye, they can tolerate barley, they might be able to tolerate corn wheat. I don't think we should be eating a lot of the modern wheat to tell you the truth and I think that that's really the main grain people eat in pasta, bread, cereals, baked goods. And that's really a huge issue.

Now there are other grains that can be part of a diet and still be healthful things, like Tef and Amaranth and quinoa and buckwheat, black rice one of my favorite. These are all ancient grains, some of them are non-grains, wild rice is a seed, for example, so we can consume these. Again, if you're diabetic if you're overweight which is 75% of Americans, if you have gut issues, if you have autoimmune issues you might not tolerate it as well.

As far as beans go I think that again so it's personalized. As far as beans go I think, you know, beans are okay but they do have some issues and a lot of people have they digestive struggles with them. They can cause fermentation and overgrowth of bacteria and, you know, we say that the best source of plant protein which is true but, you know, you have to eat three cups of beans to equal one six-ounce piece of chicken or steak or salmon. That's a lot of beans and the truth is as we get older we need more and more protein in order to maintain our muscle mass and we lose muscle mass, we age fast, we get weak. And we get all these chronic diseases that come with low muscle mass like diabetes and heart disease and cancer so I think it's important that we actually look intelligently at what we should be eating.

Katie: Yeah, that seems like a really balanced approach and I think you're so right. That there's a big difference between eating like a whole grain like oatmeal or rice versus most people when they say they only eat grain, it's really just processed flour most of the time. What about dairy? Because that's another one that seems to be problematic. I get a lot of moms writing in with kids having reactions to dairy or their faces getting red or getting rashes. But the guidelines currently I think still recommend a couple glasses of milk a day for kids so what's the truth about dairy these days?

Dr. Hyman: Well, the dairy we eat isn't dairy we ate, you know, I think there are populations that live on dairy like the Massai but these are, you know, grass-fed cows, they're heirloom cows, they're not the way we have them now. So dairy is something that is unusual for animals to consume after weaning. We're the only animal that consumes dairy after weaning. Now, the problem is that the dairy we are eating is also a huge issue. It's mostly cow dairy. It comes from hybridized cows that have high levels, also called A1 casein which is super-inflammatory. It has been linked to everything from cancer, to osteoporosis, to digestive disorders, to

autoimmune disease. Even skim milk causes weight gain, believe it or not, because you're hungry and there's no fat. So there's a lot of data that questions the benefits of humans consuming milk and a lot of people get ear infections and eczema and allergies and all sorts of stuff from it and it's real.

Now, the A1 casein is bad. A2 casein from, for example, goats may not be as bad, it might be better tolerated. If you're eating dairy it should be grass-fed and not grass finished but grass-fed. And there's not that much out there. Grass-fed butter maybe okay, it's not the fat that's the problem in it, it's more of the casein that can be the problem in a way. If you want to get none, you can eat ghee which is a form of dairy that has no casein or whey, it's just actual fat which is sort of clarified butter. But I'm not a big fan of dairy. I think there's, you know, is a lot a lot of recommendations that we eat if. We're supposed to have three glass of milk a day according to the government. The problem is that there's no evidence for that and two of the top nutritionists in the world, at Harvard, Dr. Willett and Dr. Ludwig wrote an editorial saying, "Now, where's the proof?" You know, three glass of milk a day there's no evidence for that and this is part of why the National Academy of Sciences came down hard on the dietary guidelines committee because they say we should drink three glass of milk a day and there's no evidence.

So I think I'm not a big fan of dairy. I think some can be okay. I think if you're gonna have it, it should be sheep or goat, should be grass-fed, it should be, you know, the fats are fine, it's not low fat, we should be eating it's problematic. And I think, you know, again I wrote a lot about this in my book "Food: What the Heck Should I Eat?" but there is, you know, the issue around dairy farming. I mean there's a whole series of issues. But, bottom line, I don't think we should be consuming much dairy. It contributes a lot of issues. Some people can tolerate some amounts of it but I stick with grass-fed or sheep or goat.

Katie: Yeah, that seems like an area where there's definitely some lobbying dollars behind it as well. Because I definitely see a lot of commercials for, you know, cheese and dairy and "Got Milk" and all that stuff.

Dr. Hyman: Do you know, this was a problem is how this started was that this was really a recommendation for eating dairy in the first dietary guidelines in 1980. And the Dairy Council got furious and they lobbied the government and they formed this dairy promotion National Dairy Promotion Board which was the government-funded taxpayer-funded promotion for dairy. So all the "Got Milk" ads guess who paid for those? It was us and, you know, yeah, and so a lot of the propaganda around dairy in the ads actually come from taxpayer money so. It's a huge problem and I think we don't understand why we're seeing so much of it but it's really so corrupt.

Katie: That's crazy and I know that became its own like food group in that original food pyramid the whole dairy. And I know a lot of people who still think eggs are actually dairy because they ended up in the same part of the food group as the dairy on the original food pyramid which is crazy. So another question I wanted to make sure I ask you because I get a lot of questions and these are super popular right now. All of the smoothie diets and juicing diets and juicing cleanses that are all so popular. Do you see a time and a place for these and are there any concerns with like, for instance, just consuming juices?

Dr. Hyman: For sure, I mean, dairy is one topic but, you know, people think, "Oh, I'm gonna have green juices." But, you know, two of the biggest companies that are out there promoting these drinks are like called Odwalla and what is it, Nature something. And they're Pepsi and Coke basically and they have more sugar than mostly even a can of Coke or soda which is pretty frightening. So I think we really need to sort of be careful about what we're eating. If we're having green juices, look at the bottle. If it says, you know, carbohydrates, sugars,

because they put a lot of fruit in there, it can have more than a soda. So I think green juices are awesome but that means, you know, not a lot of fruit or very little or none.

So I have like, you know, kale, collard, spinach, celery, cucumber. You can put in maybe a tiny little apple, ginger, lemon, those are fine. But when you start getting all these juices that are so sugary, the juice is bad and maybe even worse than we think for us. So I'm not a big fan of that. Smoothies are better. You can throw in whole foods, so I make a vegetable smoothie. I have a recipe in my book. But, you know, I put in greens and celery and lemon, avocado, it's creamy and it's a great vegetable smoothie to have in the morning but I think these huge amounts of fruit smoothies with tons of fruit also is just another form of sugar that I worry about.

Katie: Right. And with the smoothie, it seems like at least it keeps the fibers, is that right? And it helps slow down the insulin response?

Dr. Hyman: For sure, yeah, I mean if you have an apple juice how many apples will it take to get that maybe five apples? You are not gonna eat five apples, you're gonna be too full. So also the same thing with smoothies if you put the whole fruit in there you're pulverizing it a little bit and it's a little bit a better but you know.

Katie: Yeah, so you don't wanna make that your whole diet. So I wanna get practical. So basically, we've gone through all these different foods and I wanna talk a little bit about weight loss because you said 75% of America is overweight. And all the recommendations coming out of the government are pretty much just like eat less and move more and I know you've broken this down in several of your books that I have read over the past two years. But basically, you say that it's not about how much you eat but what you eat. So talk about that more and in light of all that we've just talked about, how can people like lose weight in today's world?

Dr. Hyman: Well, this is a huge problem. We've all been brainwashed to believe that it's calories and calories out, eat less, exercise more. It's what the government tells us, it's what scientists tell us, nutritionists, doctors, it's what the food industry tells us. And if the food industry is on board you got to wonder about that and they create something called the Global Energy Balance Network which was a basic front group where they paid scientists, Coca-Cola paid scientists, started this website. And basically, are telling people it's all about energy balance, all about moderation that, you know, Coca-Cola can be part of a healthy diet as long as it's in moderation. This is just nonsense. The quality of the food you eat matters and this is not my option, but this is basic biology. When you eat sugar and starch you increase insulin, it starts a cycle of cravings, fats storage, slows metabolism and locks the fat in the fat cell. When you eat fat in a low sugar carb diet it does the opposite, it actually stimulates fat to be released from your fat cells, it cuts your hunger and speeds your metabolism. There's a randomized control trial where they gave people unrestricted diet, they can eat as much as they wanted of a high-fat low-carb diet. And another group they gave very calorie-restricted diet which was low-fat high-carb and healthy carbs.

And after a year they found that the people who could eat as much as they want but just ate more fat and less carbs did far better in every way, more weight loss, more blood sugar normalization, better cholesterol. So it's not about the calories and they also done studies with people with exactly the same calories but from let's say 60% carbs 10% fat or 60% fat 10% carbs and the high-fat group burned 330 calories more a day which is like running for an hour. So it's very possible by eating the right food and choosing what to eat you would do far better than trying to limit calories or count calories which is impossible anyway.

So I think this is one of the biggest miss on the population because it blames the fat person. If you are

overweight it's because you're overeating too much and not exercising enough, in other words, you're a lazy glutton, and it's your fault, you're fat. Oh, that's just so far from the scientific truth which is why I sort of write about this. And Dr. Ludwig, from Harvard, is really one of the leading scientists in this area and he's talked about this as well. So it's really, really impressive when you look at the data and we have to change our thinking. There's now studies that are being published in the Journal of The American Medical Association showing that, in fact, people who are eating ketogenic diets can reverse diabetes, get off their medication. It's really, really impressive.

Katie: That was actually gonna be my next question for you is in light of not eating carbohydrates what do you think about keto? Because I've experimented with it and cycling it, but my take at least is that I think it's great but people do it wrong. I think a lot of people think it's like a bacon and pork rind diet and they just eat all the cheese because it's keto. And to me like keto should be like half green veggies at least, but I love to get your take. What do you think of keto right now?

Dr. Hyman: Yeah, well, I think ketogenic diets have been around for a while, they've been used to treat epilepsy that doesn't respond to medications. But increasingly being looked at as treatment for cancer, for reversing diabetes, for Alzheimer's, for autism, for many, many conditions. It's impressive when you see the data on this. Now, this is not for everybody. We're talking about a 70% fat diet and it's key that you have to eat enough real food and it's not about just, you know, pounding down the cream. It's really about understanding how to eat a really healthy diet with a lot of good fat, so lots of plant foods, lots of vegetables, good quality animal protein and lots of fats. And you can do it in a healthy way or you can do it unhealthy way and I think a lot of people do.

Katie: Yeah, for sure. I think people don't realize too when you're talking about keto which could be like up to 60% or even 80% fat that volume-wise that's still a small amount of fat compared to the vegetables you can eat on that. Like there's 80% of your plate is olive oil that means you have a ton of vegetables with some olive oil.

Dr. Hyman: Exactly, so by volume probably 70% of your diet is plants and by calories, 70% of your diet is fat, right?

Katie: Yeah, exactly. So okay, let's...I wanna talk about what you talk about in the book which is awesome which you called the Pegan diet which I love because it's not really a diet it's a philosophy but I find...

Dr. Hyman: It's kind of joke, it's a spoof, right? It's a spoof. You need to get on paleo and the extremism that everybody has and, you know, listen, if you believe what the paleo folks say and you eat like a vegan you're gonna die. If you believe what the vegan folks say, if you eat it like a paleo person you're gonna die, so they can't both be right.

Katie: Yeah, exactly. So I'm curious like if you could wave a magic wand and have everybody eating a much more healthy diet, what would that look like practically speaking like how would people be eating then?

Dr. Hyman: Well, you know, follow some basic simple principles, you know, the way I talk about eating is a kind of a couple things. One of them and bigger context is like the food, right? What should I eat? But and then there's how it affects everything, right? So I think I just wanna share a little bit about that because it's something that nobody's gonna disagree with. I mean the things that whether you're paleo or vegan, these

principles I think everybody's on board with them. Let me kind of share with you some of it because it's really not that hard. The first few things is how do you eat at a high level to affect the environment around you? Because what you are basically eating affects not only you but affects the environment, affects climate, affects the economy effects pretty much everything.

So first is, you know, avoid processed foods, avoid junk food obviously, refined sugars, carbohydrates, and refined oils. Avoid factory farmed animals, avoid foods that contribute to climate change and environmental degradation, minimizes the use of fossil fuels, avoid foods that affects the kid's ability to learn or threats to national security because kids are too fat to fight or leads to violent behavior and poverty. Nobody's gonna argue with any of these principals. Avoid additives, artificial ingredients, hormones, pesticides, antibiotics, GMOs. Nobody is going to say, "Oh, we should be eating more additives and chemicals. We should be eating more factory farm animals, we should be eating more processed food." Nobody is gonna say that, right?

So everybody believes in these principles. And the second is, you know, more on what we should eat. We should be eating whole foods, mostly plants, a low glycemic diet. Nobody agrees that we should be eating a high-carb low-fat diet anymore. I mean, there are a few holdouts and a few dinosaurs out there who are still believing this and promoting this but it is just overwhelming evidence to the opposite. Healthy fats, a lot of good fats, avocados, virgin olive oil, nuts, seeds, omega-3 fats, some saturated fat. If you're gonna eat animal foods they should be sustainably humanely raised and harvested. We should support regenerate agriculture, soil health, water resources and farm workers' rights. Nobody's gonna say, "Oh, we should we should be eating food from places where they abuse the farm workers," like these are just basic principles that no one is gonna disagree with this.

And then I go into, you know, the principles of what I call the Pegan diet which again was kind of a joke but essentially, it's pretty simple, no one is really gonna disagree with this. One, very low glycemic low diet, very high in non-starchy rainbow-colored vegetables. If you're eating fruit, lower glycemic fruit. If you're eating fats I mean, eat good quality fats, omega-3 fats, olive oil, nuts and seeds, avocados, those kinds of things. Low and refined vegetable oils that are potentially harmful, avoid or limit dairy and stick with grass-fed goat or sheep. Eat organic when possible, whole, fresh, even local and possible.

If you're gonna eat animal foods make sure they're sustainable and humanely raised and they support regenerative culture. Fish, eat low-mercury fish from sustainable fisheries and farm fish that are sustainable and non-toxic. Avoid gluten grains for the most part, moderate amounts of none gluten grains. Beans, okay, but as a side dish not six cups of beans a day. And eat smaller lower glycemic beans and avoid all the junk, no pesticides, herbicides, antibiotics, hormones, chemicals, additives, preservatives, GMO foods. These are just simple principles that I don't think anybody can disagree with.

Katie: Yeah, super common sense and I definitely would encourage everyone to grab your book to get more information. And I want to wrap up with a really practical question that I get a lot and I'm guessing you might have some great insight which is how can parents help get kids on board with this way of eating? Because I'm guessing you have people come into the Cleveland Clinic, who the child has a health problem and needs to eat this way and there's probably some resistance there. So any tips for parents to get kids on board?

Dr. Hyman: I think, you know, it starts young, right? It starts young. So, you know, I saw this great YouTube video once of this kid who the first time is like had sugar it was like he just had crack or heroin. And I think the more we can demonstrate in our homes how to eat and cooks that's real food will do better. My mom always

cooked fresh food. We had a vegetable garden on the back. I used to go in the back and eat from the garden. Those kinds of things make a difference for kids. I had that with my kids and it was really, really great and I think it's really important for us to actually look at how do we change this in a way that makes our health better, that makes the planet better and that isn't feeding our kids foods that's gonna kill them. I don't think we should be having kids' menus, I don't think we should have things in the home that aren't safe. Kids will get into it and there's peer pressure but, you know, we need to start thinking about how do we change those policies that make this into a problem?

Katie: Exactly, and I think if parents start from the ground up and just don't have that stuff in the house the kids can't eat it at least at home which will minimize a lot of the damage. And I think there's a lot of moms that are moving in that direction thanks to people like you who are on the front lines talking about that. And I wanna respect your time, I know you're busy practicing doctor but thank you so, so much for being here. This is such a fun interview. And again, please everybody check out his book. It's like, I'm sure like all your other books will be amazing. So thank you, Dr. Hyman, for your time.

Dr. Hyman: Of course, thank you so much.

Katie: And thanks, to all of you for listening and I hope to see you again on the "Healthy Moms" podcast.

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