



THE FAT SUMMIT

Separating Fat From Fiction

Transcript:

Interview with Vani Hari
foodbabe.com

Interview by Mark Hyman, MD
drhyman.com

Dr. Hyman: Hey, everybody. This is Dr. Mark Hyman. Welcome to the Fat Summit, your chance to separate fat from fiction. And we're here with Vani Hari, one of my good friends, an amazing food activist who's helping literally, single-handedly changed the food industry. She's a food activist and ingredient specialist and is basically trying to create transparency in our food system by holding companies accountable to what they put in their food and its harmful effects on us.

And she's gotten a lot of flak. Of course, she would because she's trying to take down the giants, but she's the kind of person who when she calls Kraft or Chipotle or Taco Bell, the CEO picks up the phone, they're scared of her, and that's a good thing. You want to see the power of one person to change the world – it's Vani Hari.

So, thank you for joining us, Vani. You're an amazing activist and thinker. You authored "The Food Babe Way" which is a great book to help educate people about what's in their food and how to eat healthy. And I was lucky enough to be invited to write the foreword for your book which I don't do very often, so I have to really believe in someone and something to do that. And you should check out her website, FoodBabe.com and she's just a great, great resource for everything you want to know about what you put in your mouth.

So welcome, Vani.

Vani: Thank you so much, Dr. Mark Hyman. You know, I've been a fan of you for years. Actually "Ultrametabolism" was one of the first books that I read of yours, and it was when I was reading it and I was discovering how to heal my body and I was reading your words, I was like, "This guy is amazing. He thinks exactly like I think, and he's putting all the pieces together for me and all the puzzle pieces and everything to try to lead through what we've been told about how to eat and how to live."

Anyways, I'm just thrilled that we've become friends, and you've joined my advisory council, which is incredible to have your knowledge and expertise to be able to share that with my audience as well. Thank you so much for letting me be here.

Dr. Hyman: Of course. So I'm going to start out with a story you've told many times which is how you got into all of this, because most of us have a story. I was sick with chronic fatigue and had mercury poisoning, my whole system broke down, and I begin to understand the relationship between food and health and so many other things.

And you had your own story which got you passionate about what's in our food. Because most of us have no clue. We just go about eating what we eat, we put stuff on our skins, we don't know what's in it, and we just think, "It's all okay." But you've somehow figured it out that it wasn't okay. So what happened?

Vani: Yeah. I grew up with two immigrant Indian parents that knew nothing about the American food system. Actually when my dad brought my mom here after they had an arranged marriage in India, he said to her, "Here's a McDonald's hamburger. Here's an Arby's roast beef sandwich. If we're going to live in America, we're going to eat like Americans."

And so for a while, my mom started eating that way when she came here, but then she quickly realized it didn't really fit with her lifestyle in terms of what she had been eating from most of her life, which was a vegetarian-based diet, full of vegetables, a lot of medicinal spices in Indian cooking. And so she learned how to cook Indian while she was living in America, learned from other Indian friends that she met that also immigrated.

And so every night, actually growing up, she would cook Indian food from scratch, but because me and my brother, we're only the Indian children growing up in our school and on our street, we wanted to fit in with everybody else. And our parents really wanted us to fit in too so they didn't require us to eat the Indian food my mom was cooking for herself and my dad. They really let us eat whatever we wanted.

And because my mom didn't really know how to cook American food, she just took the help of Betty Crocker and all the Salisbury steak dinners that you put in a microwave and the stuff that you put in the Fry Daddy, and then we would get takeout or fast food like, I would say, maybe five times a week.

Dr. Hyman: Oh, my God.

Vani: I mean, a lot.

Dr. Hyman: Wow.

Vani: Growing up. And anything I wanted to eat I could order from one of those fast food restaurants, whether it be Burger King, McDonald's, Wendy's, you name it. And because it was cheap, my dad thought it was a good value.

And again, coming from India, they're living around a lot of poverty-stricken people, and so getting this kind of food cheap was like a gold mine almost for my dad and for my family, so they didn't really think about in terms of how we

think now as cheap food means really cheap nutritionally now. Back then, it's cheap, it could feed my family, it could feed my kids and they'll be full and they'll be happy and won't complain, and grow and all the other stuff.

Dr. Hyman: But you got sick from it, right? You tell us how you got really sick. And I've seen pictures, you were really overweight, you didn't look very good at all. And now you look awesome. And it was like a whole transformation that you underwent. I'm amazed that you actually shared that picture. It's really frightening, but...

Vani: Yeah, I know. It's so bizarre because I didn't really even come across those photos until the last year when my mom dropped me off like a bunch of boxes from the house where I used to live. She's like, "Finally, I cleaned out your closet," and I couldn't believe really.

I remember how I felt which was I was very inflamed. I had eczema all over my face, on every crease of my body, I had lack of energy, my stomach always hurt. I mean, I would make every excuse in the world not to go to school because I just didn't feel well. And I didn't have a sickness that they could diagnose me with. When I went to the doctors and when my parents took me there, they'd put me on steroids and prescription drugs, and I was on several prescription drugs for most of my life.

Dr. Hyman: And as a teenager?

Vani: Yeah. And the thing is you remember how you feel, but, man, when I was looking at those old photos, I couldn't believe how bad I looked.

Dr. Hyman: Yeah. You looked like you were 50 pounds heavier in those pictures.

Vani: Yeah. I think I gained probably the highest amount was around 40-45 pounds at one point, and that was right out of school where I got a really fancy job working for a big six consulting firm, traveling on the road, being on the expense account. And again, outsourcing my food to these corporations who were bringing in these big spreads of breakfast and lunch and dinner every evening so that we would work and bill hours to the client.

And so I found myself in this position where I kept outsourcing my food to other people and other decisions, and I wasn't really taking the time or the know-how to really learn how to eat. And what really let me hit rock bottom is just ending up in the hospital over the Christmas season. Where everybody's out

partying and having fun, I was recovering from surgery of getting my appendix taken out.

And I was overweight, I was sick, I was in my early 20s and I just had enough. And so I finally made a decision when I started to recover from that surgery that I was going to figure this out. I was going to figure out how to eat, how to get healthy, how to lose this weight. And I never thought in a million years that when I started to do that, every ailment that I had as a child, all the eczema, the asthma, the allergies would suddenly vanish.

Dr. Hyman: Right. Because we think those things are permanent. When you have allergies, you have asthma, you have eczema, you just think these are things you have to live with or manage, right?

Vani: Right. You think they're genetic and you're born with them, especially when your siblings have it too. But your siblings are having it too because they're eating the same way as you do. And so I always thought, I was born with these problems, that I was destined to always have them.

And when I started figuring out that everything that I was putting in my body was some type of chemical invented by the food industry to improve their bottom line and had no nutritional value, or was some type of food that wasn't really providing the vitamins and minerals and nutrients that my body needed...

Like as soon as I started figuring out like every time I eat, I need to make sure that the food that I'm eating is providing some type of nutrition. If it's some filler, or some artificial ingredient, or if it's some other thing, then it's not going to provide my body any benefit. It only provides really benefit to the food industry. And I was just kind of pissed off by...

Dr. Hyman: You got mad.

Vani: Yes, supporting these corporations who I trusted with my body for so long and what they did to it. And when I figured out that you go back to whole fruits, plants, vegetables, nuts, seed, lean meats that are raised appropriately on grass, and like they're supposed to be, not in a factory farm, when you start doing that, things start dramatically changing in your body. And when I figured this out, everyone around me started to see this transformation, and so they're like, "What are you having? What are you doing?"

Dr. Hyman: What are you eating?

Vani: And they wanted to know. And I just couldn't shut up about it. So, at first, I became the food police in my family and they weren't really happy about it. I was becoming like this person who was really outspoken about the food people were eating.

And I realized that's not the right way, to shove it down people's throats, so I started a blog and at first I wanted to call it EatHealthyLiveForever.com and thankfully my husband, who's smart, said, "No one's going to remember that name. Why don't you call it Food Babe?" And he came up with the name, and I think he found it on auction for like \$15 or something.

Dr. Hyman: I love that. FoodBabe.com. It's great.

Vani: But I tell you, from most of my life, Mark...

Dr. Hyman: Better than food police.

Vani: I didn't feel like a babe though. And so for even for me to call the blog Food Babe was really hard. It was like, "Okay, well, I'm going to teach other people to become a food babe, and that's what it's going to be about."

Dr. Hyman: Great. You said something just now that was really powerful, I want to come back to it, which is that you outsourced your food to corporations. And I think most people don't think about it that way. That we actually out-source most of our cooking and most of our food to the food industry, and we expect that we're going to be able to live well.

And the truth is, like you said, they're producing food, it's mostly food-like substances, and it looks like food, but it's not really food. I say there's no such thing as junk food, there's just junk and there's food. And it's really not that complicated, right? You've really made it really tangible by pointing out certain companies doing certain things that are putting ingredients in our food that aren't good for us, or that really shouldn't be there, or they're only there so their products can be more stable and more shelf-stable and not go bad. But I always say, you want to eat foods that rot.

Vani: Yeah.

Dr. Hyman: You want to eat foods that rot. If it doesn't rot, if it's a Twinkie that stays on the shelf for 30 years and it's fine, you should worry. I think there was that article that came out a few years ago, some guy had left a Big Mac in his pocket for 20 years, or 10 years, and it was like still fine. That should worry you.

So when you started looking at this, you were looking at not only at how to eat healthy food, but you're beginning to understand the other things in food that weren't really food. Could you talk about some of the insights you had and some of the initiatives you've had that had really been powerful around Subway and Kraft and Chipotle where you kind of dug under the hood a little bit and found that there was some kind of corporate mischief going on around what they're feeding us and pretending that it was okay?

Vani: Yeah, so one of the first things I started to do was to look at the foods that I was eating and I was trusting. And one of the first corporations that I did that with was Chipotle. Chipotle had this really fancy marketing many years ago and they still have the same marketing, but now they're actually living by it. But before, they were saying their food was with integrity.

And when I would call the corporation and ask, "What are the ingredients in your food?" They wouldn't tell me. When I emailed them, they wouldn't tell me. And so what I decided to do, and I guess this is what has made me the investigator and infamous is that I'll take it the next level.

Dr. Hyman: You're like the Sherlock Holmes of food.

Vani: Yeah, and the thing is I went down and I marched down to my local Chipotle location and I kept going from location to location until I could convince an employee to actually show me the back of the packages to see what I was eating. And when I found out that the majority of food at Chipotle was the same similar oils that they were using at McDonald's, Wendy's, like all the genetically-engineered soybean oil, the corn oil, as well as like their tortillas, the prized food that they are famous for, their burritos, had trans-fat, I was floored. I was like, "How can they say this is food with integrity?"

And so when I wrote about this a few years ago, Chipotle immediately responded and I've now become buds with the communication director, but they admitted that, "Yes, we want to make these changes and we will post the ingredients online." And not only did they do that within, I'd say, eight months of that piece, but they went a step further and they started labeling what foods that they had were genetically-engineered or not.

And that led to a huge change this year which they decided to go completely GMO-free for all of their food, except for the meats. It's still raised on some GMO and they still serve Coca-Cola. But, of course, activists like me were pressuring them to get rid of that as well.

Dr. Hyman: Did they change the trans-fats and the wraps? Did they change the oil they were using? Like what are they doing?

Vani: Yeah, they're actually transforming the entire burrito shell to be like four ingredients, like wheat, yeast, water and salt, or something like that, so it's like super, super clean. And that's the kind of food that we want to eat is that's really simple, that's real ingredients, that's something our grandmothers would've recognized.

And it's really inspiring to watch how far a corporation can come when somebody opens the eyes of the public on what's actually in their food. Because I can tell you, I wasn't the only one that was floored at this revelation. When I wrote about it, the article was shared so many times, and that's really what's creating this change, is this amazing movement that's happening, a revolution. You see it every day, Mark.

Dr. Hyman: There's a food revolution going on, that's true.

Vani: People are caring about what they eat more than ever, and they're paying attention to ingredients more than ever. And before, they were paying attention to the calories, the fat grams which we're going to talk about here, and the carb grams, and now they're paying attention to ingredients. And that's really what I'd realized is when you pay attention to the ingredients you put in your body, nothing else really matters as long as you're getting the nutrition your body deserves.

Dr. Hyman: That's true. So talk us through the whole concern you have about GMOs, soybean oil and corn oil, and why you think that's an issue. Because I think it is an issue, and most people don't realize it, and yet it's pretty much almost 10% of our calories in America today are soybean oil.

Vani: Yeah, they say that...I think the statistic, and you can look it up, but I think the statistic is something like 40% of the American diet, it comes from one of those oils. Like 40% of the calories that we consume on average. So one of the things about oils that people don't really know is that oils, these industrial vegetable oils, either coming from corn, canola, soy, cotton seed which is not even a food, it's regulated like a textile crop but we're putting it in our foods. There's many more other toxic pesticides sprayed on it.

Dr. Hyman: Right because you can use different pesticides on things that are not considered a food, then you can on a food product. So that's when they sneak in the cotton seed oil, it's a little scary.

Vani: Yeah, that's one of the most toxic oils that I can't even believe that we even consume. I think recently Fruit Roll-Ups finally took out cotton seed as one of the ingredients because I pointed it out.

Dr. Hyman: And parents give that to their kids thinking it's a healthy alternative to candy.

Vani: Yeah, and it's absolutely horrible. It also has partially hydrogenated fats, it has artificial food dyes, so many other things in there. But the thing is, is that these...

Dr. Hyman: They're marketing Fruit Roll-Ups, it sounds good.

Vani: Yeah. Hey, I used to eat the hell out of them.

Dr. Hyman: Well, hey, that's the key. They make it sound healthy, but it's often the smokescreen for what's really in there. That's the key.

Vani: Yeah, but you eat a piece of dried fruit and it tastes just like a Fruit Roll-Up. It's delicious. And it's like fruit, one ingredient. So these oils have really been only part of the American diet for the last, I'd say, 75-80 years, and in abundance probably the last 50 years, or even the last 30 years. So this is a massive experiment on our waistlines, on our body, the introduction of all of these oils.

Well, these oils have very little nutrition; they're high in omega-6 fatty acids which disrupts our omega-3 fatty acid balance. You, Mark, are an expert at this. And also, not only that, a lot of these oils, in order to get the oil out of these vegetables, they're using hexane, a very carcinogenic gas to actually extract these oils. And there are actually no studies and no FDA mandatory testing to see if hexane stays in the oil, but some people are saying that there is residues that stay. That's a carcinogen that we're consuming, and if that's 40% of the American diet, that's a problem.

And so the oils are this massive experiment. They don't provide a lot of nutrition. And so when I think about what I want to cook with, I want to go back to the traditional foods. I want to go back to butter. I want to go back to ghee, which is really popular in India and is becoming more popular here in America as well.

Dr. Hyman: That's where they take out the milk solids and casein and it's just the pure fat, right?

Vani: Exactly. And it's really great for people who may have a dairy sensitivity and it's a lot more digestible. And so ghee is awesome, and it tastes – amazing. And it's, oh, so good. And coconut oil and adding fats to your diet that are like avocado and nuts, those are the types of fats that our bodies have evolved to really consume and really get the nutrition from and actually thrive off of.

These invented industrial oils have been really there as a by-product to all the other things they're making with these genetically-engineered crops, which end up being those different food industry concoction ingredients that you see on most processed food labels.

Dr. Hyman: So the GMO issue, like glyphosate has got in the news lately which is the Roundup. Roundup is the chemical that's used on Roundup Ready soybeans, primarily, which comprised most of the soybeans grown in the world, and they're using more and more of these because they're less and less effective, and they seem to be getting in our food supply and getting into humans causing cancers. So when you have like GMO soy, is there glyphosate in the soybean oil?

Vani: Yes, and actually they're testing things like mothers' breast milk to see if glyphosate is actually getting into our bodies, and it is. I don't know exactly whether it's getting in from...there's been tests even on certain foods like Fruit Loops, Doritos, all have glyphosate in them. They know they're made from genetically-engineered corn or soy. So even baby formula, a lot of it is made from soy protein.

And so you've got this abundance of all of these foods that have been genetically-engineered to withstand these high doses of glyphosate and Roundup, and then it's getting in our bodies, and we're wondering why the cancer rates and other autoimmune disorders continue to increase.

And so everything that I had learned about the precautionary principle and about really taking care of your body, you don't want to go near this type of food, right? You don't want to expose your body to these high-level doses of pesticides in this type of food.

Dr. Hyman: So it's sort of better safe than sorry, right?

Vani: Yeah, absolutely. And the thing is, Mark, you know the GMO debate is really volatile, right?

Dr. Hyman: Yeah, it's huge.

Vani: It evokes a lot of passion from both sides. And the thing that, I think, is so important to remember is that – and I know you're not – we're not against biotechnology itself. We're not against the genetic engineering type of science. What we're concerned about is the coupling of these very controversial, and now linked to cancer type of chemicals, that are being sprayed on these genetically-modified crops, and the introduction of new organisms that don't go through mandatory safety assessments in this country, and they're introduced with no labeling so nobody can even figure it out. It's this big massive experiment with our bodies.

And I tell you, when I dropped the GMOs and the artificial ingredients, my body healed. There's no way I would ever go back to allowing those chemical corporations to control my body anymore.

Dr. Hyman: Yeah, it's pretty interesting. Like we found this with trans-fats, we have them in the marketplace for decades and decades, and they were grandfathered in and everybody thought they were safe. Margarine was a health food, right? I grew up on Fleischmann's Margarine because that was the thing to eat instead of butter. And my mom would deny giving it to me, but she did. And then we found out, "Oops, it's a problem."

And, finally, after over 60 years since Fred Kummerow, in 1957, said, "Hey, there's a problem with this stuff. It's not all it's cracked up to be," it took like almost 60 years for the FDA to finally...and this was after a lawsuit, right? After a lawsuit, finally they say, "Okay, this is not a safe food additive. It's called not GRAS, or not generally recognized as safe."

Because what happens is a lot of these things come in the marketplace, they don't have adequate testing, they don't have adequate regulation and they're just grandfathered in and say, "Oh, I guess it doesn't seem to cause any problem." So the burden of proof is on the people who are saying it might be harmful instead of the burden of proof being on the manufacturers to prove it's actually safe in the first place.

So, as consumers, we're trusting the government to protect us, but the fact is that often they don't or they don't have the capacity to, or they don't understand the science, or there's a gap, or there's food lobby and pressure. So it's really challenging for the average person to know what's what because we're just waiting around until we find out trouble.

Like glyphosate. Glyphosate has been used for decades by Monsanto for their Roundup Ready soybeans. They produce bulked up glyphosate in the soybeans, so they produce the pesticide and the soybean that it's used on. I mean, they

were the ones who brought us dioxin and PCBs and Agent Orange, not exactly a benign company in the sense that they don't have the best ethics. And yet we actually continue to use these products without adequate regulation or understanding. And now we're finding, after decades, that they actually cause cancer, and this is from the World Health Organization. So what do we do about that?

Vani: Yeah, you say Monsanto, they have a track record of hiding the effects of their products. They have a track record. It has been documented that they have hid from the public the effects of their chemicals that they are producing.

And when it comes to major corporations in America, food corporations like Kraft and Subway, General Mills, they've all learned that there are certain chemicals and ingredients that they're putting in their products here in the United States that they are not allowed to put in in other countries across the globe because of stricter regulations, because of science studies that have shown some harm or effect. A perfect example is artificial food dyes. In Europe, it says it may cause adverse effects on activity and attention in children if there is a product with artificial food dyes.

Here, in the United States, we don't have that label so instead of putting that warning label on their products, companies like Kraft and General Mills and others took out artificial food dyes and other very controversial preservatives, and reformulated their products to be safer for citizens overseas, but not their own American citizens. So you see this huge double standard and hypocrisy when it comes to ingredients in food, and that's been really the basis for a lot of my campaigns, and to get the American people riled up about this.

Because I tell you, once you find out that a corporation could make their food healthier for citizens overseas and not their own, people get mad and they rise up. And that's why we have this amazing movement happening, and people are, hopefully, we hope, are going to start paying more attention and really getting healthier as a result.

But the thing that is really scary and alarming to me, Mark, is I read this study, just when we were talking about chemicals, I read this study that was published, I don't know exactly where it's posted, but the article was in The Atlantic, and it was just recent, at the end of September. And it said that millennials will weigh more than baby boomers even if they eat the same amount of food, even if they have the exact same number of calories and the same type of diet.

And it's because of the chemicals in our environment disrupting our hormone, it's because of the pharmaceuticals, the heavy reliance on pharmaceuticals and a

lot of them have side effects of weight gain, and on the types of processed industrial food that we're eating.

Dr. Hyman: I think it's true. I think we're just beginning to understand that and I've written a lot about the way that environmental toxins make us gain weight. I first wrote about this in 2005 in "Ultrametabolism" and before there was a lot of evidence, but the evidence was starting to point to that direction, and it just seemed to me to be true.

And I saw it in my patients who ate fine...and I saw it in animal studies where they would give toxins to animals, and independent of their calorie intake, they will actually gain weight. So, it's true. And I think it's linked to type 2 diabetes, it's linked to obesity, and it's linked to also obviously cancer, heart disease. And yet they're everywhere.

So how do people avoid them? I know you've come up within your book a great list of how to get rid of chemicals in your diet. What are the top ones we should be concerned about? You've talked about the yoga mat ingredients that are in Subway sandwiches, which is such a great thing.

And I'll just say, Vani, there are governments who can't get corporations to change their behavior. And yet you show the power of one person who's committed and passionate, telling the right story to change the conversation and to change behavior and to change actions by large corporations that we think are immune to that influence, but they care.

Vani: Yeah, I know. And I think that's the thing, that's the kind of light that we want to turn on in people is we want to get them to care. You mentioned the yoga mat chemical, and it was just such a great example of what is this ingredient doing in our food, it's called azodicarbonamide? I tell you, I couldn't say it many years ago when I first discovered it in Subway's bread, but I looked at that...

Dr. Hyman: Yeah, that's one of my rules. If you can't pronounce it you shouldn't eat it, right?

Vani: Yeah, exactly. And the thing is, is that the majority of food on a processed food label, you should be able to pronounce, and if you can't...

Dr. Hyman: Or recognize.

Vani: Or recognize, right?

Dr. Hyman: What is Xanthan gum or maltodextrin or...?

Vani: Or even take it a step further, like what's it going to do for my body? Is it going to do anything for my body? If it's only going to like emulsify and make something better for the look and feel, or cosmetics, or preserve it longer for the food industry, I don't want it in my body. That's their benefit, that's not my benefit, right?

And so with this chemical, azodicarbonamide which is so interesting to me is when I started to research other Subway bread across the world, in Europe, in Australia, in parts of Asia, they didn't use this chemical. And I was like, "Why aren't they using it?" And I found out that the World Health Organization had deemed it an asthmatic trigger. It's not something you want there in there for factory workers. When you get exposed to it via skin, it can cause reactions. And then I found out in Singapore...

Dr. Hyman: So you need gloves to hold your sandwich when you eat it, you mean?

Vani: Yes, exactly. And then I found out that in Singapore, they'll put you in prison and fine you \$450,000. I'm like, "This must be a really toxic chemical."

Dr. Hyman: In Singapore, they put you in prison if you spit on the street though.

Vani: That's true. But I mean, goodness gracious, 15 years in prison for that. And it was just such interesting fact. And then I found out this is not even necessary for bread. The only reason food corporations were using it is to cut corners and save money. And it was just a highlight how processed something can be, even by a corporation that has been hoodwinking us for so many years, by telling us we're eating fresh.

And it was such a slap in the face to them and to people who didn't know that we all rose up. I mean, over 100,000 signatures now in that petition. Subway announced that they would remove that chemical. But what's so beautiful about that campaign, it had really...I'm letting you in to my "strategery" here, and that's not even a word, but my strategic plans here.

But the thing is, is when you do these campaigns that increase awareness about food ingredients so broadly and so worldwide, because this was a worldwide campaign. Even China was calling me for interviews and saying, "Do we have this in our bread?" They were concerned.

And what happened was there's such an amazing snowball effect from that that Subway, because so many other people were asking questions about what's in their meat, what's in the rest of their bread, that they decided to remove all artificial ingredients earlier this year.

Dr. Hyman: Unbelievable.

Vani: And then we did another campaign to get them to stop using the routine use of antibiotics, which also worked. So it's like we've been able to transform the largest food, fast food chain in the world, they have more stores than even McDonald's, just by doing these campaigns and getting them to realize this is what the public wants, like, "You will not be able to survive unless you start to make these changes because the awareness about what we're eating is growing so dramatically," that they can't hide any longer.

Dr. Hyman: You know, it's true. And you brought up antibiotics, which is another big issue, and I think it's used in large amounts. I think there's like 25 million pounds of antibiotics used every year in America, and I think 19 million are used in animals for prevention of disease, like putting it in the water. And actually it's also used for animals, I'm not sure if you know this, is to actually make them fat.

Vani: Yeah.

Dr. Hyman: It actually changes their gut bacteria in a way that causes obesity, which is what's great if you're a meat producer. You want to have more fatty animals which sells more. But it's frightening. And then those antibiotics get in us and our water supply and has a big impact on drug-resistant bacteria, which is killing thousands and thousands of people every year, traced directly to factory farming, and they can actually genetically type the bugs or resistant bugs from the animals, and find the same genetic bugs in humans causing disease. That's where the dots are all connecting. And having simple things like that can make a huge difference.

I don't know if you're working on the antibiotic campaign enough, but I think if we can get antibiotics out of our industrial food production, it's going to change the way everything gets produced.

Vani: Yeah, I'm actually working with a lot of amazing non-profits. We have a coalition, everyone from NRDC, to Friends of the Earth, to Consumers Union, to U.S. PIRG. We're all working together and it's this kind of collaboration that's really being able to make sweeping changes like this.

It is absolutely horrendous that we're giving perfectly healthy animals antibiotics, not only to fatten them up but also to prevent disease, and that needs to stop. Yes, antibiotics should be given to animals that get sick and they need to be treated.

Dr. Hyman: Of course.

Vani: But the amount, the overwhelming amount is being used for the first part, which is the prevention and the fattening up. And I think what was so interesting to me, I read Martin Blaser's book, I'm sure you know him. Dr. Martin Blaser, his book "Missing Microbes" on how our overuse of antibiotics, like if we take a lot of antibiotics as children, destroy our gut bacteria, and then that could lead to obesity as well. Not only are they making the animals fat, it's making us fat too.

Dr. Hyman: Absolutely. So let's go back to that list of ingredients, azodicarbonamide, which is if you want to say three times fast to everybody, there's a good one.

Vani: Well, actually, I don't think a lot of people have to worry about that anymore. Ever since that campaign, groups like the Environmental Working Group and Center of Science in Public Interest put so much pressure on the food industry, I think most of the bread manufacturers have removed that chemical, which is really exciting.

So the ones that I would be, again, concerned about are the ones that aren't providing any nutrition to your body, and that could be basically almost everything on a label that isn't real food. And the most concerning ones to me, when it comes to obesity and gaining weight, is MSG or hidden MSG triggers. And this can come in the form of yeast extract, autolyzed yeast, hydrolyzed protein, obviously monosodium glutamate. But the food...

Dr. Hyman: Yeah, and I encourage everybody to google "hidden names for MSG," there's about 50 different names. Natural flavorings are all in the products that we eat, and we don't realize it. So tell us what they do.

Vani: Yeah, so these artificial-based...well, some of them are natural, so they can put them in even organic and natural products, but these taste, what they do is they stimulate the taste buds. And so the food companies have actually used the research from the tobacco companies on how to create addiction in food.

And so they've realized that when you combine these umami flavor triggers in food, you can't stop. So the reason why you can't only one Dorito is because

they've figured out and engineered that food with monosodium glutamate and yeast extract and other flavorings combined with salt to make you just keep eating it continuously without even thinking about it.

And it's not really your fault because it's tricking your brain into thinking you haven't had enough, you need more. And that's the problem where I really have a problem with when it comes to these types of ingredients because they're hijacking, again, your body, your taste buds. They're hijacking your ability to stop eating based on how full you are. And so that's what I really hate about MSG and hidden MSG ingredients.

And I think what's really interesting too is a lot of people blame the combination of sugar, salt and fat. Well, if you take sugar, salt and fat, maybe like a dough and you fry it in some oil, and you add a little bit of sugar to it, maybe make a little donut, you get full after a couple of them, right?

But as soon as you add that flavoring component to it, and you add the artificial or even the engineered flavoring where they're coming up with the most, best myriad of taste of whatever they want you to taste, you can't stop. And that's a problem when it comes to obesity and gaining weight.

Dr. Hyman: Do you know about what MSG actually is used for in animal studies? Do you know how they actually induce animal models of obesity when they want to create a fat mouse to study obesity or something on obesity? They actually give the mice MSG to induce obesity, that's actually how they give them obesity basically.

Vani: Yeah.

Dr. Hyman: And it also triples, or even more, the level of insulin in your blood, so it actually will jack up insulin. And the most obese population in the world are the Samoans, in the South Pacific. They have 90% diabetes rates. And I worked with a nutritionist once who studied them and who was over there, and she said, "You know what they have for breakfast?" I said, "No." She said, "They have ramen noodles with Kool-Aid powder topped with MSG powder, on top of that. It's a killer."

Vani: So what do you say to the critics out there, they're like, "You know, these cultures have been using MSG forever, it's not unhealthy." You've seen the articles, right? They are constantly trying to make MSG be like not harmful, there's no problems with it, nothing is going to happen if you eat it, right?

Dr. Hyman: It's true. I say, if you can get rid of three ingredients from your diet, you can dramatically change your health, instantly you'll eliminate most junk foods – high fructose corn syrup, trans-fats and MSG.

Vani: Yup.

Dr. Hyman: And if you just look at those three, and are religious about that, and also be religious about understanding the different names for them, because they're all hidden and they're all subtly stuck in our food so we don't know they're there. And if you do that, and that's it, you will radically change your health because you will only be able to eat foods that are actually good for you because none of those foods that are bad for you can be made without those ingredients.

Vani: Right. Right.

Dr. Hyman: So let's talk about how you've mobilized action in the community, how you actually found the ability to actually get people going on these issues. Because it's astounding what you've done. Most people feel disempowered, frustrated, big government, big food, big ag[riculture] "It's hopeless. We can't make a change. We can't stop this." We really have to rethink what we're doing.

Vani: Yeah, I guess the first thing I would say is I've focused on what appeals most to the consumer. And so when you think about something you want to change, think about how an everyday person would react to information, or they would get information. The thing with chemicals in our food is that there's no specific company that people recognize behind trans-fats, or behind azodicarbonamide, or behind artificial food dyes, or high fructose corn syrup. All of them are using it, right?

Dr. Hyman: Yeah.

Vani: So what I found is if you target one company, and you target maybe the one that deserves it the most, and then determine what is the favorite product or what is the brand product that people most recognize, that is actually a really effective way because people relate to...

Dr. Hyman: It's got to be personal, specific and direct, yeah.

Vani: Yeah, everyone has had a bowl of Kraft Mac and Cheese in their life.

Dr. Hyman: I used to live on it.

Vani: Yeah, exactly. Or everyone's had a Subway sandwich thinking...

Dr. Hyman: And I would put my Fleischmann's Margarine as the butter in my Kraft Macaroni and Cheese. Because you're supposed to have butter and you put some milk, right?

Vani: Yeah, in the little packet.

Dr. Hyman: Yeah, little packet. Yeah, that was my first thing I learned to cook was basically Kraft Macaroni and Cheese. I was so proud of myself. I can boil the water; cook the macaroni, heat up the sauce. It was like, I thought it was cooking.

Vani: Yeah, I know. Absolutely. And so everyone's had a Subway sandwich thinking they're going to lose weight or that was a healthier option on the road or whatever. And so I think those type of campaigns where people can really identify with the impact that they can make when they change these corporations, because I think what has happened now is people realize that signing petitions, calling companies, leaving messages on their Facebook pages really does work, and the companies really do listen.

Because at the end of the day, we're their customers, right? They're going to listen to us if we either, one, boycott them and stop eating them and choose something else, or also just rise up and educate enough people to the point where they start asking customer service enough about a certain ingredient or something that's happening, and they realize that they're not going to be able to survive without making these changes.

And so what I've realized is that, you know, I had my mom, six of my friends starting to read my blog four years ago, right? So I was nobody. It wasn't an army of millions of people by far. But what worked is showing my personal story, telling my personal experience, and really doing it in a personal way to the point where people really related to that, and then they were able to share that information on social media.

The thing is people say to me all the time, they're like, "Vani, will you teach us how to get a lot of fans on your Facebook page?" Or, "Will you teach us how to do social media?" And I tell them like, "Listen, I'm not a social media expert. I had nobody. I wasn't even on Facebook personally before I started the blog, so I had to learn all this stuff from scratch. I tell you, if you have enough passion and you're willing to share your voice and not be afraid of what other people think, then people are going to really relate to that."

They're going to say, "Man, she's saying all that stuff that I was saying all along." Or, "Man, she's really telling them like it is. Yeah, I resonate with that." Or, "Wow, man, she read my mind. That's exactly what I'm thinking. I had been too scared to say anything about it." And that is really how you create a movement.

Dr. Hyman: That's amazing. I want to ask you one last question, which is a little frightening to me because I see the power of the food industry when it gets mad. I know, like my friend, David Ludwig, who's a Harvard professor, who's also on the Fat Summit, published a study over a decade ago showing that sugar, sweetened beverages were linked to obesity in children. And he had a smear campaign against him by the food industry. They spent a million dollars trying to discredit him.

Tom Brady recently came out and said, "Hey, Coke is poison for our kids. Fruit Loops is not a healthy breakfast. This is bad for our children. Why are we doing this?" And he got lambasted by the food industry. How have you dealt with that? And how has it affected you? And what are some of the scarier things that have happened and then you worried for your life?

Vani: Yeah. So at first I had a hard time dealing with this because it was all of a sudden. It was right after winning many different campaigns to get food corporations to change ingredients or become more transparent. And we've changed now dozens of corporations through our campaigns and through activism, just writing now. Sometimes I'll just write about something and it'll be shared a million times, and the corporation within the next couple of months will announce that they're changing that. So the effectiveness of our army and all of our work together, Mark...

Dr. Hyman: You call it The Food Babe Army, I love that.

Vani: Yeah, you're part of it. Really it's the people out there that are willing to make their voice heard. At first, it was really difficult for me to even handle this. I never thought in my life that I will become a public figure, so just dealing with that part of it was really tough. But then dealing with the paid misinformation campaign where they've got...and I look back at what really started it is when I started targeting Starbucks for asking them to go organic milk and stop serving Monsanto milk, which is basically dairy-fed cows being fed a lot of GMOs to try to change the GMO food supply in this country.

And I realized right then, when I started doing that, is when it really started to get really crazy. And Monsanto and their PR firm, Ketchum, had been known to go after activists and non-profit groups very, very dramatically and intensely.

And so that's really what started happening to me, and it's been really interesting...

Dr. Hyman: Was that who funded the Science Babe?

Vani: Yeah, they've come up with all sorts of arch enemies to go after me. And what's really interesting is the university professors that have publicly tried to act as independent but are truly being paid by these corporations, and one just recently, Dr. Kevin Folta, from the University of Florida, who was in every article that would come out, that would talk about critiques of my work, he would be there right away in NPR, in The Atlantic, in The New York Times, saying that, "She doesn't know what she's talking about. These chemicals are safe. There's nothing wrong with the food supply." These are the types of things he was saying, "There's nothing wrong with GMOs."

And what was so frightening is that the press and these major journalists believed him when he said he had no ties to corporations. And then, thankfully, US Right to Know, a non-profit group, buoyed, basically did a Freedom of Information request act to his university to see the correlation and the interaction and emails between him and the biotech companies, and they found out he was being paid to go on a communications tour, so basically to go after activists like myself, and my face is like in his slide deck of people to go after. So no wonder...

Dr. Hyman: He's like a shill for the food industry.

Vani: Exactly. And this is actually the case with the majority of critics that go against me. But the thing is is that...

Dr. Hyman: And the media, the media is so caught up there. If you think of The New York Times, The Atlantic Bureau, they're investigative journalists, they will dig under the hood and find the facts. It was astounding to me when Dr. Oz got criticized by a group of 10 doctors basically said he should not be on the staff of Columbia University because he's a quack. It was really because he said, "We should label GMOs."

And when you look under the hood, the guy who was running up those 10 doctors and heading them up was part of the American Council of Science and Health, which is funded by Monsanto and the food industry. And he's the guy who got \$30 million as part of this campaign to end GMO-labeling in California, he wanted to defeat that. And one other guy was in jail for Medicare fraud for like \$7 million of Medicare, \$8 million of Medicare fraud.

It was just one after the other were questionable, shady characters who are paid or put up to do this, or were pushing the agenda. It was just so frightening. And they sound so smart, they sound so credible, their organizations sound good. For the average person, it's really hard to figure it out, but for a journalist, all you need to do is Google these people, it's not that hard to figure it out.

Vani: Yeah, and they have a very sophisticated PR game. And thankfully this FOIA request and seeing the interaction between these PR firms that are hired by Monsanto and other biotech firms and food companies, and their interaction with university professors has really helped us and the public understand like, "Wait a minute. You need to really learn this information for yourself. You really need to investigate this stuff. You need to question even some of the journalistic prize, journalists that you've trusted for all of your life. You really need to take a look and start to learn this information for yourself."

And the thing is like when you become remarkable, people are going to remark. And one of my favorite quotes is from Marianne Williamson, and she says that, "If the only thing you're doing is getting applause, you're probably not doing the right thing."

Dr. Hyman: That's right.

Vani: And the thing is is going up against these mega multi-billion dollar corporations. I should've known better that, of course, they're going to come after me and I should've been more prepared, but now I know what's happening and I know the reason for this, and it's really helped me deal with it personally.

But also one thing that I think is so interesting is when you're on the right side of history, you don't quit. You don't quit. You don't lose that passion, because this passion for a safer, better food system, and to get people really healthy runs so deep within me that no type of attack could ever really penetrate that. Yes, it'll make me upset and angry and I'll scream, but thankfully I've learned how to deal with that.

And I tell you, I've been in really horrible situations. People driving by my house taking photos, posting my address on the internet, sending me death threats, all sorts of things that happen. And now I shield myself from that and just realize that I'm willing to take one for the team and get this work done. And, thankfully, I have an army of millions of people that are supporting me and it's incredible to watch.

And the thing is this type of attack, the same type of attack that happened on Dr. Oz, the same types of attacks that happen on me and other activists and

other non-profit groups are meant to take your eye off the ball, right? They want you to lose focus. But you can't lose focus. Keep your eye on the ball. And you also need to remember to focus on the willing because there's enough people out there that are smart, that see through this, that are going to see what your passion is and where your passion lies, and that's really what I'm counting on.

And it's incredible to have an advocate like you, Dr. Mark Hyman, because I tell you, we need more doctors like you that are willing to stand up to these corporations and really tell people the truth.

Dr. Hyman: It's true. I think doctors actually need and the health professionals need to work upstream in the health system, instead of just waiting for people to show up in their office sick. We need to look at why they're sick. And it's often what they're eating. Obesity now kills more people, which is food-related, diet-related disease. It kills more people than smoking, and alcoholism, and being sedentary, together combined.

So food is the biggest driver of disease and we have to clean up our food supply, we have to change the food industry, we have to actually empower people with the knowledge and information that lets them make the right choices, which is so great about what you do. And it's brilliant, it's specific and it's getting attention because it's actually doing something. It's like you found the one missing scale on the dragon, and you put the arrow in and you shot it, and it landed. And it's just astounding to me how it's making such a difference.

And I think we have to do that in every area where we see injustice or lack of integrity, because the media, unfortunately, is part of the problem. They're not really doing investigative journalism anymore, it's all sound bites. And many of the media companies are actually owned by large corporations so that the messages are co-opted.

Think about the ads you see on television. The ads you see on television are mostly pharma ads because that's who can pay for the ads. You think about Viagra, and this drug, and that drug, and the other drug. And the media is not going to come out anti-drug even if the drugs aren't doing the thing that they should be.

And there are people like you. I just talked to Dr. Aseem Malhotra in London who's an activist, a cardiologist who's become a food activist because he understands that the problem is our diet and sugar, and he's creating a coalition of people in the U.K. to change food policy. And this is actually what has to hap-

pen. We all have to become food activists in this country to change the landscape of America. So thank you, Vani. Thank you for your work. Thank you for joining us.

Vani: Thank you.

Dr. Hyman: I encourage everybody to read her book, "The Food Babe Way." I wrote the foreword, which is not the best part of the book, but it's in there. And also to check out her website, FoodBabe.com, her blog, her newsletter and all of her resources. It's really an invaluable service to everybody. Thank you so much, Vani.

Vani: Thank you, Mark.