

TRANSCRIPT: Michael Pollan Lecture (Edited)

EVENT DATE: September 24, 2009

Chancellor Bidy Martin:

Good evening and welcome to all of you. It's been a long time since I saw this many people excited about reading. (Applause) I'm really delighted to see so many people from so many different communities at the, at this event. This is the first year at what will be an annual "Go Big Read" project. I hope we'll always be able to pick a book that creates this much excitement, but I doubt it seriously. The purpose of the book project is to generate interest in reading, which is the heart of education, and to build intellectual community by focusing on issues that matter to people. It's hard to imagine an issue that matters more to people than food and the food supply. What could be more fundamental, indeed more elemental, than food: its production, distribution, availability and safety? It's elemental obviously because it's essential to life. It's fundamental because much of what we consider culture has its roots in the growing and sharing of food. As individuals, we learn about love and trust from our earliest experiences of nourishment. Cultures, their very formations and their well being, their identities, are built to a large extent on the choices that agriculture and a safe food supply offer up. These choices are denied far too many people around the world.

When I was given a short list of possible book choices and told there was significant interest in the issues raised by "In Defense of Food," I could not imagine a more appropriate topic for this campus. Any one of us could walk from Memorial Union on the east of the campus to the School of Medicine and Public Health on the west and find faculty, staff and students all along the way who are studying or thinking about food-related issues. From the cultural significance of food and eating to questions about hunger and poverty, trade and international relations, environmental sustainability and the impact of climate change all the way to nutrition, plants, dairy and animal science and at the far west of the campus animal and human health. And that's only part of the story.

We live in a state with a proud history and a promising future in agriculture. A state that has helped feed the world far beyond the boundaries of Wisconsin. Our state makes a significant share of its living growing and distributing food. Combined, these industries have a 60 billion dollar impact on our state's economy and they create jobs for hundreds of thousands of people. Indeed, 1 in 10 state citizens works in a job related to agriculture and 9% of Wisconsin's total income is derived from agriculture. Every one of us in this room benefits from food choices that Wisconsin has made possible because of the diversity of our agricultural system. It's one of the most diverse and vibrant in the country.

People tend to think of Wisconsin as America's Dairyland, unless you are from upstate New York as I was until recently, where they think they are America's Dairyland. But Wisconsin is demonstrably America's Dairyland and our agriculture system is a leader in many other categories: number one nationally in cheese

production with a 25% market share. (Applause) Wisconsin leads the nation in cranberry production. (Applause) Wisconsin leads the nation in the production of snap beans for processing. (Applause) Wisconsin leads the nation in milk goats and in the production of dry whey. (Applause) Wisconsin leads the nation in organic dairy and organically raised livestock. (Applause)

So I ask you all, what better place to engage in a thoughtful, wide-ranging discussion about food? Here where our well-being depends on a vibrant agricultural sector, where that sector represents so much diversity and success even as it faces huge challenges and where the campus and the agricultural communities have been working hand-in-hand for over a hundred years. Here, our students have the benefit of being challenged and taught by a Michael Pollan and also learning directly from the many different kinds of farmers and food processors in whose midst we teach and learn. Finally, what better place to raise controversial ideas than Wisconsin with its much heralded pride in independent thinking, its commitment to open, honest debate and its history of sifting and winnowing and not just at the University. This is the Badger State. (Applause) Thank you.

This is the Badger State. This is the state where we dig into things. We chew on ideas. We can even tear them up. We digest them also carefully and thoughtfully. We don't spit them out without tasting them, and we don't swallow them whole. (Audience laughter) You know, if you look up the history of thinking, you'll see that the metaphors of food and eating are really salient in philosophy, not that what I just gave you was philosophy. I don't mean to suggest that. (Audience laughter)

So we can tear things apart, and we do, and we should do it courageously and thoughtfully and with civility and in the interest of the kind of healthy interaction that allows us all to grow. Wide ranging, year-long discussions have already started in our classrooms, our lecture halls, libraries, off campus. I want to thank the book selection committee for making this possible. It was chaired by Ken Frazier, the University Librarian. Thank you, Ken. (Applause) I want to thank Sarah McDaniel, who is the coordinator for Library and Information Literacy Instruction and Project Manager for "Go Big Read." (Audience applause) I'd like to thank Sara Guyer, the Director of the Center for the Humanities, who brought Michael Pollan to campus. (Audience applause) There are thousands of other people to thank. I want to thank all the volunteers here in their green shirts and also all of the people in the green shirts "In Defense of Farming." Thank you all. (Audience applause)

There are a lot more events to come. I'm going to mention only two so we can get along with the program. Tomorrow at 3:30 in Memorial Union on the campus Mr. Pollan will join in a panel discussion with John Vrieze of Baldwin Dairy, whom I told is known as the manure entrepreneur. (Audience laughter) I did not make it up. I believe that's how he refers to himself. Susan Lampert Smith of Blue Valley Gardens, and Andrea Blume, who is a student at UW Madison and also an employee

of Vita Plus. The panel discussion will be streamed live for those of you who are unable to attend.

On October 1st there will be another panel organized by the College of Agriculture and Life Sciences, and speakers at that panel include Bill Bruins, Wisconsin Farm Bureau and a dairy farmer in Wisconsin, Richard Katz from the Department of Agriculture, Trade and Consumer Protection and a pasture-based beef farmer, Louise Hemstead of Organic Valley Coop and organic dairy farmer, and Tom Lochner, Wisconsin Cranberry Growers Association. That event will not be streamed live because it's not possible, but it will be taped and it will be available the next day on the web and usable by all of our faculty, staff, students and anyone in the community who cares to tune in.

At this point, I simply want to turn the mic over to Sara Guyer, who as I just told you is the director of the Center of Humanities at UW Madison. She organized Michael Pollan's visit to Madison and is at the forefront of a series of events over the course of this year in celebration of the humanities. She's an associate professor in the Department of English. She's affiliated with the Department of Comparative Literature, the Mosse/Weinstein Center for Jewish Studies as well and her research interests focus on British and continental romantic literature and theory. Sara Guyer. (Applause)

Sara Guyer:

Thank you Chancellor and I hope before we go any further you could all join me in thanking Chancellor Martin for really making this possible. We wouldn't be in the room if it weren't for her. (Applause)

Two years ago the Center for the Humanities, together with several units on and beyond campus, invited Michael Pollan to speak in our Humanities without Boundaries series. In fact, you're here today at a Humanities without Boundaries lecture, whether you know it or not. Our series brings to Madison the most exciting authors, thinkers, and scholars working in the world today, and Michael Pollan was at the very top of our list. From the outset, we knew this lecture would be a big event, and one that would generate interest from all quarters: from the medical school to the ag school to my own English Department. But we never expected that we have to turn a hockey rink into a lecture hall for this lecture. (Applause)

I'm thrilled to stand before an audience in which first-year students reading "In Defense of Food," faculty and graduate students who are leaders in our thinking about the culture and the science of food, alumni, food lovers, local growers, and farmers of all types are brought together to think about ideas. I hope that tonight's lecture is only one moment within an ongoing dialogue about the questions and issues that matter to us most as individuals, as citizens of the state and of the world. I hope that you will continue to join with us at the Center for the Humanities as we undertake to examine the meaning, value, and function of culture and all of its manifestations. So please join me now in welcoming one of UW Madison's great Humanities professors, William Cronon, Frederick Jackson Turner and Vilas Research Professor of History, Geography and Environment Studies, Director of the Center for Culture, History and Environment at the Nelson Institute for Environmental Studies, former McArthur Fellow, renowned author and UW alum who will introduce Michael Pollan. (Applause)

William Cronon:

Thanks. I'm the last person who stands between you and Michael Pollan, so I will try to be brief here. I want to follow Sara in saying I've been associated now with the University of Wisconsin for, I think, almost 40 years and I cannot remember a moment when 7,000 people were gathered in a room like this to talk about a book, an author, and the cascade of ideas associated with all the issues that that book relates to. It's an amazing thing that you're all here. Again, I once again want to thank Bidy Martin for making this possible. It's a wonderful new tradition.
(Applause)

I've known Michael Pollan, I think, for about 20 years now. I first encountered him walking into a bookstore at a university on the east coast looking at that counter books that usually greet you as you enter a book store, and there was a book with the title "Second Nature: A Gardener's Education" and anyone who knows my personal obsession with human interactions with the natural food and the environment would know that I could not look at a book like that without picking it up and browsing through it. And I browsed through it; I bought it; I fell in love with it. I thought it was one of the most remarkable books I had ever read on the theme of people's relationship to land, to plants, to gardens, to foods, and in the broadest sense to the natural world. I actually wrote the author a fan letter within a week of buying it. A month later I had lunch with him and we have been in dialogue with each other in many different ways ever since. In fact, he's been to this campus before. When we opened Chadbourne Residential College in the late 1990's (applause), Michael was the first writer-in-residence at Chadbourne Residential College, very generously coming almost for a full week to talk with Chadbourne students, to read their writing, to critique their prose, to suggest ways in which they could become better writers. Because in a way you all know that Michael Pollan has written very profound, provocative, controversial books about food and agriculture. Many of you in this room have read "In Defense of Food." A number of you have read "Omnivore's Dilemma." They are wonderful books, but what I want to celebrate for you, the reason I so admire Michael Pollan, is he is one of the most extraordinary minds and questioners, conversationalists, and writers that I know. No matter what the subject he writes about, whether it's the garden in his backyard or a shed that he built with his own two hands that for him became a tool for talking about the entire history of architecture and how buildings are built or not built, how they work or don't work or the very curious book "Botany of Desire" which enters its topic with the curious inversion of the usual theme we have of human beings domesticating certain species to serve us; the plants and animals that provide us with food that we think of as having been something that we domesticated. And the "Botany of Desire" says, "Well, what if we thought about it in the opposite way? What if those plants domesticated us? What if they have been using us all these millennia to make the habitats that they want to do the things they want to do on this planet?" It's a very quirky, kind of curious backward kind of question, but if you read the "Botany of Desire" you see that it produces cascading unexpected insights that you wouldn't have ever reached if you didn't approach the question in that kind of way. Michael is really good at that.

He was born in 1955. He grew up on Long Island. His father was a lawyer. His mother was an editor for magazines in the New York publishing world. He was educated at Bennington, at Oxford and at Columbia. Those of you in the room who are graduate students will be happy to know that Michael Pollan is ABD at the Columbia, deciding in 1981 that, in fact, it made more sense to move into the world of journalism than to finish a PhD in English Literature, though if you read his work you know how heavily he's been influenced by the work of the Academy. And ever since then he has been one of the most able translators of complicated academic ideas out to the realm of the public of anyone I know. He was the executive editor of "Harper's Magazine" for much of the 1980's and then went on to this meteoric career as a writer, which is the reason you're here to hear him speak tonight.

I'll say just a few more things and then stop. What do I so admire about him? At "Harper's" he invented certain features of that magazine that those of you who have ever read "Harper's" know well; he's the originator of "Harper's Index," that very curious, eclectic collection of statistics framed and posed in just such a way that you would never imagine numbers could be put together in that way to reveal insights both comic and profound. And he also, and this is especially important for tonight, brilliantly organized what was called "Harper's Forum" where he would bring together people of radically different points of view; people who really could not possibly agree about a subject of profound importance to all of us and then he would facilitate a conversation among these people who disagreed with each other, so each had the opportunity to offer the most profound insights that their perspective enabled them to see in ways that other people could not see. It seems to me that that is what "Go Big Read," that's what the University of Wisconsin Madison at its best is and should be about. It's about not one point of view being right. It's about many many points of view making sense of the world by being in conversation with each other. Sifting and winnowing, that famous phrase from the plaque on Bascom Hill as we seek to know the truth, knowing that none of us can know the truth entire but that only by talking with each other can we make progress. No one does that better than Michael Pollan. If you read his journalism carefully you will see that he is a man who asks people questions. He gathers wisdom by asking questions. And then, and this is one of his second skills which I dearly wish more of us had in the Academy; he manages to make complicated ideas come alive by attaching them to real people. And his third quality that will be, I think, much in evidence tonight is being uproariously funny. One thing the Academy lacks pretty bad at is being funny. We are not usually humorous. Michael Pollan is one of the only writers I know who can use humor not decoratively but at the heart of the argument, the heart of the insight he wants to share; not by poking fun at people, not by poking fun at things that he agrees or disagrees with but because humor is often a way of helping people understand things, by breaking open things that we take too seriously and saying "What if we looked at it differently? What if the world were organized differently? What would we learn by laughing at the world in that way?"

So you are in for a real treat tonight hearing from one of America's greatest nonfiction writers, one of the greatest interpreters we have of people's relationship to the land and to the environment, a wonderful speaker for the beginning of "Go Big Read" – Michael Pollan. (Applause)

Michael Pollan:

Thank you. Thank you. I brought some snacks. (Audience laughter) I don't think I have enough for everybody though. (Audience laughter)

I'm humbled by those introductions and I want to thank Bidy, Sara and Bill for that. You know Bill has been one of my great teachers. His book "Changes in the Land" really was the beginning of my understanding of my relationship to my garden and agriculture and so many other things.

Boy, looking around, though, you'd have to conclude that the book is not dead. (Audience laughter and applause) It's great you're all here. Thank you. Let me just put these out. I'll be just a minute. You're welcome to this when I'm done. (Audience laughter)

Anyway, I want to not just thank the introducers though but to thank all of you who came tonight; all of you who have read my books and engaged with the work. It is deeply humbling, umm, to see so many people who want to engage in this conversation. It's a great opportunity for me to be here and to speak here in Madison in particular, which has long been one of the leading edges among communities in the movement to reinvent our food system.

I'm well aware that not everybody in this audience is sympathetic to my work or even my presence here. I thank you too for coming to listen and for participating in what is shaping up to be a really crucial conversation, national conversation about the future of food and farming in America. We need many different voices in that conversation if it is to have any meaning or impact. But I think to those of you who came here assuming you don't agree with me, umm, that you're going to be a little bit surprised to find perhaps more common ground than you're expecting, at least based on some of the accounts of my work that have been floating around the local papers.

For instance, I would have no problem wearing the green t-shirt that I see around here, and would be very happy to use its slogan as the title of my talk - "Eat Food, Be Healthy, and Thank a Farmer." There is nothing there that I can disagree with. (Applause) I happen to believe that America's farmers hold the key, the key, to solving three of our most important crises in this country: the health care crisis, the climate change crisis and the energy crisis. But I'll leave to you how much common ground there is to your judgment, and will look forward to your questions. And by the way, I'm going to take questions after. Bidy is going to come back up and ask me questions that have been written in to the website. I also look forward to the chance to engage with all of you in the next couple of days while I'm here.

What I want to do in this talk today is try to connect the dots between a couple things that aren't always connected. Between the problems of health and the American diet, which I think is really a catastrophe at the moment and the problem

of health and the whole food system, and see if we can't expand tonight our definition, our working definition, of that beautiful word "health."

I will get to the farm in my talk eventually but I want to start tonight at the other end of the food chain – in the supermarket. That is why I brought these props. As I said, when I'm done you are welcome to whatever you'd like. Although, when I'm done, you may not want whatever I have. As these products suggest, eating has gotten really complicated. I mean, you look at a product like this, Fruit Loops. This is essentially a sugary cereal. In fact, it's 44% sugar by weight. Okay? It's mostly sugar and it's being sold as a health food. There is information about the fiber, and there's something really curious here. You can't quite see it, but the Smart Choices checkmark. Now this is very interesting. This is a new program that was started by 12 giant food conglomerates and the American Nutrition Association with the goal of trying to help us with our confusion when we walk down the aisles and are assaulted by health claims on unhealthy food. So they got together and they tried to come up with some standards that would help us to navigate the treacherous landscape of the modern American supermarket.

Now I don't know how exactly they worked out these standards. I mean I can guess about these meetings, but when Fruit Loops qualified, you know it's just astounding. Someone asked the head nutritionist, an academic nutritionist, a man who should treasure his self respect, how could they possibly justify calling Fruit Loops in effect a healthy food. And his answer was, "Well they're better for you than donuts." (Audience laughter) I don't disagree, but what that suggests to me is a better labeling scheme, a more honest labeling scheme, and that was simply on any food that qualifies put "better than donuts." Let's be honest about this. (Audience laughter) I look at the supermarket differently perhaps than some of us do, but I am constantly amazed.

The last thing I saw was just introduced and now here's a perplexing, well I don't know what to call it; it's not a food; but Splenda with fiber. What are we to make of that? Is that food? Does it represent progress? Then at the other end of the nutritional or the caloric spectrum have you seen the new KFC Double Down sandwich? You may not have. It's just been introduced in a few markets. It's coming your way. KFC has reinvented the very concept of a sandwich, feeling there's no way to get quite enough calories in two slices of bread. They have replaced the bread with two slabs of fried chicken that are kept apart by several slices of bacon, two kinds of cheese, and a big dollop of secret sauce.

So it really is challenging out there. Umm, and we are, umm; so we are assaulted by this kind of marketing. And I think it is part of our problem with health. We are forced to kind of try to make ourselves experts on this subject of nutrition. You know it's kind of amazing to think how much biochemistry we're all carrying around in our heads right now to help us navigate. Everybody knows what saturated fat is, what antioxidants are; or we think we do. We don't really know what these things are about. Biochemicals, polyphenols, resveritrol; you know, where else in your life

do you need so much science to make a simple purchase? We obsess about nutrition and yet have really lousy nutritional health. I call that “the American paradox.” People that worry constantly about their nutritional health but nevertheless have very high levels of obesity, Type II diabetes and heart disease. You know it’s a little like the French paradox except that’s the one you want to have. The French paradox, of course, are people who eat all sorts of, you know, supposedly lethal foods, lots of saturated fats, Foie gras, triple crème cheeses washed down with red wine and they’re healthier than we are. But we’re stuck with the American paradox. And I want to try and figure out how we got here. How we got to this deep confusion about food, because I think it has implications for our health and it has implications for our agriculture.

I’ve spent, and if you’ve read “In Defense of Food” you kind of know some of this history. But I spent some time trying to understand where the confusion comes from. I came to the conclusion that it is the American ideology of food that really is at the root of our problem. Now ideology is a fancy word for really just the unexamined assumptions that control our thinking about something, without us even being aware of it. The ideology that we bring to food I call “nutritionism.” Now it sounds like a science. It has the word nutrition in it, but it’s not a science. It’s an ism. It’s an ideology. Let me lay out to you what I see as the four premises of nutritionism and you tell me if they don’t pretty well reflect your unspoken assumptions about food and how to think about it.

First premise of nutritionism – that the key to understanding any food is the nutrients it contains. So that when you look at milk, say, you are (you know) milk is just sort of a rough delivery system for a certain amount of proteins, and certain kinds of proteins and fats and water, and that you understand food by breaking through that category called food and looking at the nutrients. Essentially, foods are the sum of their nutrient parts – that’s the first premise. Now that doesn’t seem very controversial, but as soon as you accept that you find yourself on a train taking you to three other premises.

The next premise is that since, I mean who among us except for the chemists, have ever seen a nutrient? Nutrients are invisible. They are not available to our senses. As soon as you accept that nutrients are what matters, you find yourself dependent on experts to tell you how to eat. You can’t do it yourself because you don’t understand nutrients and you can’t see them. It’s a little like a religion. If in your religion God is not available to your senses, you can’t see him or her, you can’t feel or hear, you then become reliant on a priesthood. We have become reliant on a priesthood to tell us how to eat. That’s quite a remarkable development when you consider how many other people, indeed how many other species manage to eat without expert advice.

Third premise of nutritionism – like almost every other ideology I can think of, nutritionism divides the world into good and evil. So at any given point in our

dietary history, there is a satanic nutrient we are trying to drive from the food supply. Give me some examples of some satanic nutrients.

Audience Member: Trans fats.

Michael Pollan:
Trans fats – yes. What else.

Audience Member: Cholesterol.

Michael Pollan:
Cholesterol. Saturated fats.

Audience Member: PCB's.

Michael Pollan:
PCB's are not a nutrient; come on! (Audience laughter) You don't want that. It's true. It's satanic. You know, there are a couple others; sugar, high fructose corn syrup – definitely a satanic nutrient at the moment. Then, on the other side, every one of these evil nutrients has its doppelganger, its companion nutrient, the blessed nutrient, that, if we could just get enough of these in our diet, we would be healthy and quite possibly live forever. So what are some blessed nutrients at the moment?

Audience Member: Antioxidants.

Michael Pollan:
Antioxidants, Omega 3 fatty acids. What else?

Audience Member: Fiber.

Michael Pollan:
Fiber – yeah. What?

Audience Member: Olive oil.

Michael Pollan:
Olive oil; not a nutrient but the monounsaturated fats in olive oil. Close enough. So we have these good nutrients and these evil nutrients. The secret to health, supposedly, is navigating between the Scylla and Charybdis of these nutrients. That's actually not quite the right metaphor, but if you stay away from the bad ones and you go toward the good ones, that's the key to health. And that's how many of us are eating today. We have this in our heads, plus our calorie count, and we try to navigate the supermarket that way.

The fourth premise, and the one that will seem least controversial but I think is in a way the most outrageous, is that the whole point of eating is health. That is why we

do it and that anytime we are eating we are doing one of two things. We are either ruining our health or redeeming our health. That's the spectrum on which that activity takes place. You have meals where you are redeeming your health and you have meals where you are ruining it.

Now as Americans this seems kind of normal, but I hasten to point out that there are many cultures who regard this as bizarre. There have been many other perfectly legitimate reasons to eat throughout history and around the world. Let's see if we can remember a couple.

Audience Member: Pleasure.

Michael Pollan:

Pleasure – remember that? (Applause) That's one. People eat for pleasure. People eat for community, for what happens at the table when you eat with your family, with your friends or even with your enemies. Remarkable things happen when you eat together. Eating is a communal act, or once upon time was a communal act. That's a reason people do it; for its social dimension. A third reason, and there are more than these but these are the three I want to focus on, is we use food to construct our identity to one degree or another. We are the people who eat this. We are the people who don't eat that. This becomes part of our identity. You see this especially in teenagers who, you know, become vegetarians, or vegans, or omnivores even, but seldom omnivores. Umm, that by declaring what you don't eat, you assert your identity. This goes back, I think, to our earliest days in the highchair when our mother or father is coming in with the spoon loaded with food that we're supposed to eat and we go and we nod our head no. I understand that in almost every culture that is the way you do for no and that's where it comes from; the rejection of food which is the beginning of identity and in a sense of politics; that rejection. We'll talk more about the politics later. There are other reasons to eat besides this obsession with health. I just want to remind you of that. When we broaden our understanding of health, I'm hoping we can get back to those definitions.

Now the question is how did we get this ideology? Where did it come from? I thought it was kind of a recent creation. It seems kind of 70's/80's but, in fact, it goes back further in American history. You find back in the 1850's and 60's a lot of talk about scientific eating, that eating according to your tradition, culture or pleasure was not good enough. You should eat according to the best knowledge of nutrition science. I think it has roots in our Puritan background, actually, this discomfort with taking pleasure in food. As people descended from Puritans, we have trouble doing all the things that animals also do. (Audience laughter) You should be faster than that! Food, sex, all these things that animals participate in; we have a little trouble taking pleasure in. I think that, you know, is in the DNA of our difficulty of enjoying food.

The modern history of nutritionism and you do find by the way this kind of discourse going on, even at the turn of the last century. John Harvey Kellogg and Dr. Horace Fletcher; they had this sanitarium in Battle Creek. This was around 1900 and this was the leading thought about nutrition at the time. One of the things to know about; I don't know if you know about that history but "The Road to Wellville" has it. The wealthy and the elites of that time would come to the sanitarium and subject themselves to yogurt enemas and all grape diets all in the interest of ridding their body of protein. That's an interesting thing to keep in mind because you see how the identity of good and evil nutrients changes over time. Back then protein was the evil nutrient and carbohydrates, even refined carbohydrates, were the blessed nutrients. That's why we have breakfast cereal. The history of this product goes back to John Harvey Kellogg's desire to get meat, animal protein, out of the morning meal. So you see the identity of these good and evil nutrients is constantly changing, and it's changing now. We're in the midst of a switch from lipiphobia to carbophobia, and that's where I think we're going.

The next evil nutrient, see if I'm right about this, but I predict within the next couple of years, if not months, you'll hear a lot about the Omega 6, the evil Omega 6 fatty acid. While it's true that it's an essential fatty acid, we get way too much of it in our diet and it competes with the blessed Omega 3 and it pushes it out of the cell membranes. You will see products boasting about not having a lot of Omega 6.

That's the old history of nutritionism. The modern history really dates to the 1970's and the low fat campaign that really begins then. There is a moment, a signal event, I think, that I want to dwell on for a second where this way of thinking about food is enshrined as the official language of talking about food. That was, and I tell this story in the book, in 1977 when Senator George McGovern chaired a Senate Select Committee on nutrition. He held hearings on the epidemic of heart disease. Rates of heart disease in America had skyrocketed after World War II. They were quite low during World War II. He was trying to figure out why. He held two days of hearings. The scientific consensus at the time was that animal fats, saturated fats in the diet, were responsible. They elevated your cholesterol and gave you heart attacks. So he issued a set of dietary goals for the United States. This is the first time our government endeavored to change the eating habits of the entire population. These goals said things like this, and I'll just dwell on this one sentence: "Eat less red meat." Very simple; whether you agree with it or not, whether it's a good idea or not; that was the idea based on the science that they had heard. Well, the food industry was up in arms that the Senate of the United States would dare to tell people to eat less American beef, any food. This was just not permissible. The industry came after McGovern, came down on him with all their lobbying power. The National Cattleman's Beef Association, grocery manufacturers and they actually forced him to withdraw the dietary goals of the United States and rewrite them in consultation with the industry. That sentence "Eat less red meat;" simple declarative language. Evie White would have been proud of that sentence. George Orwell could have stood behind that sentence. It was rewritten as follows "Choose meats that will reduce your saturated fat intake." Now this is 1977. Nobody really

knows what a saturated fat is. So this sentence had the considerable virtue of being really obscure and mushy to most people. That is the first thing about official dietary advice. It should not be clear. It should not be written in simple English.

The second is the message to eat less, eat less red meat, has been replaced. It's a negative message with an affirmative message. Choose meats that will reduce your saturated fat intake. It's a very different message. It's basically saying eat more chicken, eat more whatever, as long as it has less saturated, eat more lean beef (you know) hamburger meat with less fat in it. But it's an "eat more" message. So that's point number two. Since that date, the government has never been permitted to tell us to eat less of anything. It's simply not allowed; even sugar.

Third point, and this is really the key. When you go from eat less meat to choose meats that will reduce your saturated fat intake, you are no longer talking about food. You are talking about a nutrient. This becomes the acceptable way to do it. Because it all came down to these seven simple words; eat food, not too much, mostly plants. It's really simple. The hard part, of course, as you know, is distinguishing the food from the edible food-like substances. That's where these rules come in. You've read some of them, and I'm still collecting them. If you have some, I would love for you to send them to me. Things you heard from your parents or your grandparents; because I have now a big collection. I'm winnowing it down to a list that I want to publish as a pamphlet. The ones in the book, you know, don't eat anything that your great-grandmother wouldn't recognize as food. Try that little algorithm, especially when it comes to something like this. Imagine your grandmother or your great-grandmother, depending on your age; she's rolling down with the cart in the supermarket. She picks up this box; Gogurt, portable low-fat yogurt. She pulls one out. She thinks "How do you get this in your body? Is this a food or is it toothpaste?" Then she reads the ingredients. Now your grandmother is a pretty smart cookie. She knows that yogurt is a pretty simple food. All you need to make it is milk and a bacterial culture, heat; that's it. So what are these 17 other ingredients doing here? What's the corn starch for? What's the Carrageenan for? What's the potassium sorbate, the kosher gelatin, the high fructose corn syrup? This isn't food and that suggested another rule. She wouldn't recognize this or the ingredients in it as food. Another rule is, if it has more than 5 ingredients it's not food. It's an edible food-like substance. It's not going to kill you, but sticking to the food is going to do a lot for your health. I'm collecting those rules.

The challenge, I find, is that as soon as I can promulgate one, the industry finds a very clever marketing ploy that kind of neuters it. For example, I and a lot of other people have been saying avoid foods that have high fructose corn syrup. Now the argument was never that high fructose corn syrup is worse for you than sugar; it may not be. The argument was that it was a marker for a highly processed food. I mean who do you know who cooks with high fructose corn syrup? Normal people don't have it in their pantry. So it tells you this is cooked by a corporation and in general corporations cook with lots of sugar, lots of salt, and lots of fat. Now the industry is rolling out all these new high fructose corn syrup free products. They're

boasting about the fact that they are real cane sugar. You see what they've done is they've actually created an implicit health claim for sugar. That's quite an achievement. I have to hand it to them.

Now we have all these products about how few ingredients they have. Have you seen the new Hagan Dazs ice cream? It's called Five. It only has five ingredients. That's what it's called – Five. Now if you have an older container of Hagan Dazs, look how many ingredients it had – five. (Audience laughter) Nothing changed, but they're boasting about the fact that it only has five ingredients. Hey, it's still ice cream. There's a Tostitos ad that does the same thing; only three ingredients.

So how do you stay ahead of an industry that is so clever that they can turn any criticism into a way to sell more food? I think I've hit on it. Try this out. Don't buy any foods you've seen advertised on television. (Audience laughter and applause) It turns out that captures a lot of what you want to capture. Not all of it. You still have the prune growers who get caught in that net and the almond growers, and you may have the Wisconsin cheese makers; I'm not sure. Common sense will prevent you from discriminating against those products. Basically 94% of ad budgets for food in this country, television ad budgets, go to highly processed foods. So it's a pretty good metric to keep that stuff out of your cart.

I also, of course, came up with rules, and I'm not going to dwell on these because I want to get to the agriculture piece of this. It's not just what we eat but how we eat. It matters profoundly. Are we eating together? Are we eating at tables? Are we eating in the car? These things matter. The portion sizes matter. The fact that Americans eat until we're full, and we think this is how it's done. It's interesting to go around the world and see that there are a great many cultures that have rules to encourage you to stop before you're full. The Japanese say "Hara Hachi Bu;" eat until you're 80% full. The Chinese say "eat until you're 7/10 full." The Prophet Mohamed even had a saying "A full stomach was 1/3 food, 1/3 liquid, 1/3 air;" nothing. There's that range from 67% to 80%. The French, you know, when they say they're hungry they say, "I have hunger;" "j'ai faim." But when they're full they don't say, "I'm full;" or when they stop they don't say, "I'm full;" they say "I no longer have hunger." Think about that. When do you no longer have hunger? If you stop there, it would be a whole lot sooner than when you're full.

That's why I'm trying to restore culture to a position of prominence in helping us navigate our food landscape.