Diet Doctor Podcast
with Adele Hite, PhD
Episode 47

Dr. Bret Scher: Welcome back to the Diet Doctor podcast. So you might notice something a little bit different. Now, with the stay-at-home orders, with coronavirus, it's you know, pampered my ability to get out and travel and go to conferences and meet people in person, which is how all our other podcasts have been done. So we're venturing out into the virtual podcast, so please forgive us if there are any technical difficulties in sound and in the video quality.

We do our best to make the best viewing and listening experience for our audiences and hopefully we've succeeded and we'll continue to refine it. But today's guest is Diet Doctor's very own Adele Hite. So, Adele has an MPH and an RD degree from the University of North Carolina, where she also started a PhD program in nutritional epidemiology. But interestingly, as you'll learn, she questions authority, she questions everything.

And her thesis raised a lot of questions about the dietary guidelines and she then found it difficult to find someone to work with to help her continue getting her PhD. So she actually switched gears and instead went to NC State where she got a PhD in communication rhetoric and digital media, still with her thesis about the dietary guidelines. So what it comes down to, though, is she probably has spent more time researching the dietary guidelines and knows more about the dietary guidelines than just about anybody.

But this podcast isn't just about the dietary guidelines, because what I really love about Adele is she questions everything. And as you'll learn, it's not just what she does now, she's done this her whole life. She questions authority, she wants to know why we believe what we believe and what the implications of our beliefs are. And that goes to so much of the mythology that is present in nutrition in general, including low-carb mythology.

So we talk a lot about sort of the different aspects of mythology that we all need to be a little bit more aware of. You know, if you want flashy sound bites, this isn't for you. If you want a deeper, more thoughtful investigation of all the things we believe and talk about, then this is for you, that's Adele's specialty. So whether you see her on DietDoctor.com, on her own website, or on her Twitter feed, you're going to get an in-depth and very cerebral and thorough evaluation.

So be ready to see things from a new perspective and maybe open your eyes a bit more with this podcast with Adele Hite. Adele Hite, thank you so much for joining me on our Diet Doctor podcast today.

Adele Hite, PhD: Thanks, I'm delighted to be here.

Bret: This is a first, because we are both Diet Doctor team members, so a first for me actually interviewing a Diet Doctor team member, but you are so much more than that. And in Diet Doctor I have to say you sort of serve the purpose, and I mean this with all respect, as the "bulldog". Which I love. You are the one who doesn't take any nonsense.

You don't take anything on face value, you question every statement, in your core you know things need to be defensible and we need to be able to back up what we say and I love that about you and I think you make so many wonderful contributions to Diet Doctor from that standpoint. So I have to ask you, have you always been like this? Is this part of your personality? That you always question what people tell you and need to prove it?

Adele: Actually it is. I got in a fair amount of trouble as a child, because this was my personality. I got tossed out of Sunday school when I was about 10 because I kept asking questions that I think made the Sunday school teacher uncomfortable, because she didn't have answers for them or she kept giving the same answer which wasn't satisfying to me.

And I didn't mean to be obnoxious. I actually wanted to know how they knew so that I could know too. And she couldn't give me a satisfactory answer and she told my mother that I probably shouldn't come back.

Bret: That's a great story. So, this clearly is ingrained into who you are. And now this led you through many paths, to an MPH, an RD and then a PhD. And tell us what your PhD thesis was on.

Adele: My PhD thesis was on the dietary guidelines for Americans and how we define healthy diet.

Bret: You know, chances are you spent more time than just about anybody diving into the guidelines to see exactly what's in them and all the specific details and permutations of the guidelines throughout time. Would you say that's pretty accurate?

Adele: I would say that's pretty accurate. Gary Taubes and Nina Teicholz know a great deal about the science aspects of the guidelines like what science was available and the science that wasn't really represented as much in the guidelines as other science, but I don't think that they know as much about the actual guidelines policy as I do. And those are different things, because the guidelines aren't just about the science.

If they were just about the science we would have different guidelines. But they are not; they are about politics. It's in the word - policy involves politics and these guidelines certainly involve a lot of politics.

Bret: So that's interesting. So it's more than science, it's definitely with politics and that can change sort of how we interpret them or what we think they're supposed to be doing I guess is one way to say it.

Adele: Right, and especially those of us in the low-carb community really have this, I think this idea, and it's a good idea, that if we pile up enough science if we just keep piling it up and piling it up, eventually the guidelines will have to change because they will have to recognize that science. But my research says that the biggest influence on any edition of the guidelines is... surprise, the previous edition of the guidelines. And that started with the second edition of the guidelines. I mean, this is not something new.

When the first edition was created in 1980, the second edition-- there were still a lot of pushback

from a lot of scientists and a lot of industry players about the guidelines at that point in time, but even by then, in 1985, the folks who wrote that set of guidelines said, we have to acknowledge the fact that people are already using these guidelines in public health and in, you know, to create menus in public schools.

They are using these guidelines, these are out there and if we change them dramatically, it's going to confuse the public. So already the guidelines were saying we are too conservative to really follow science. That was in 1985.

Bret: So they sort of admitted that they couldn't follow the science in a way.

Adele: Yeah, from the beginning, they did.

Bret: But it sounds that now they don't admit that. Now it sounds like they're trying to claim they're following the science, but they are sort of picking their own science that they want to follow.

Adele: Well, yes because something happened between 1980 and say about 1990. And I bet you know what it is. We discovered that Americans were not getting healthier, that they were actually becoming more obese and we were seeing these rapid rises in metabolic diseases and that began to dawn on us as a nation. The public health community knew about it first and probably the biggest paper on it got published in 1994.

But there were hints of it before then and so there was already some warning in the early 1990s that there was instead of a healthy America, an obesity crisis. And this really changed things. And I think that we have to recognize that the guidelines, as they are enacted from about 1990 on, are different guidelines from the first two editions, 1980 and 1985.

So one of the things that people don't know about the history of the dietary guidelines is that the first couple of editions of the dietary guidelines should be considered very differently from later editions. And there's a couple of reasons for that. One is there wasn't even a mandate for the guidelines to exist until the third-- I'll correct that, the fourth edition of the guidelines.

So the first three editions of the guidelines were written sort of out of organizational or institutional inertia. They created some in 1980, they'll create some again in 85 and they created some again in 1990. The ones that were created in 1995 were the ones that were fully created under an actual mandate or an actual law.

Bret: But by that point it was already kind of clear that the guidelines had not achieved what they were set out to achieve.

Adele: This is true and we started to discover that in the early 1990s. It was sort of interesting because-- So my PhD is in communication rhetoric and digital media. And that means that I look at how these guidelines are portrayed across different mediums.

So when the newspapers are talking about America and diets and helpfulness and people taking up healthy habits, from about 1975 till the 1990s all of the headlines and stories talk about Americans getting healthy and eating healthy and exercising and it really sounds as if Americans have taken up this diet, and they've taken up the idea of managing your health through eating right and exercising right and then our national health surveys for eating start to go through the populations and actually measure people and they are finding... the National Institutes of Health, I think the survey-- I'm sorry, Center for Disease Control...

The big survey came out in 1994, Catherine Fliegel was there along with some other folks whose names I can't remember right now, but it showed that Americans were not getting healthier. They were getting fatter and sicker.

Bret: Which brings us to a big point-- I need to interrupt you there, because that's such an important point, because that brings us to the point that so many people make that the dietary guidelines made us fat and made us sick. We hear that time and time again. Now how do you respond to that type of statement?

Adele: I'll tell you the typical response that you would get from a dietitian is they can't have made us fat and sick; nobody followed them. So however what you really need to know is that both statements are ecological fallacies.

Bret: Okay. Explain.

Adele: And that's a big fancy word that means you're looking at a population level exposure, which is a policy and then you're trying to fallaciously tie it to individual behaviors. So it would be hard to say that the level of rainfall that a country gets makes people more sedentary, although it might because you don't want to go outside. But that's not-- that's trying to take a population level exposure and tie it to whether or not an individual is willing to go outside in the rain. Do you see the problems with that?

Bret: I do.

Adele: So, whenever somebody either blames the guidelines or lets the guidelines off the hook for this, they're not looking at the right thing. They're trying to tie this to an individual behavior. You either followed the guidelines and you got fat or you didn't follow the guidelines and you got fat and both statements are probably not true. Now for any-- go ahead.

Bret: Yes, so I guess the first question is, did the country as a whole follow the guidelines? And depending on who you listen to, the answer is yes, they clearly did, because the percents of fat that Americans ate went down or they clearly didn't because the total calories went up and the total calories of fat did not go down even though the percent went down. So is there a right answer or are they both sort of right?

Adele: It's a numbers game. It depends on what you want to say. If you want to say, well Americans were eating a low-fat diet, and you point to the percentages, sure that's going to look like a low-fat diet because it's lower in fat percentagewise than what we were eating before. But if you want to say the words, Americans were eating less fat, you can't say that.

Bret: So that's a very interesting differentiation. That most people don't care to think sort of in that degree. And then I guess the other part though, to say whether it was the guidelines that worked or didn't work, was the guidelines also did ask for reduced sugar intake, which of course the country did not do. So the other part is, did the guidelines create an atmosphere that promoted obesity and diabetes and weight gain?

Because they created an atmosphere of promoting a diet that didn't work for most people, simply because they couldn't stick to it and because it opened the door for industry to rush in and promote so-called healthy foods that were full of carbohydrates and full of calories. So that's the other take on these guidelines.

Adele: Okay, so that was a whole lot in there. Let me see if I can pull that apart. So yeah the di-

etary guidelines definitely gave some sectors of the food industry a leg up. Absolutely, and this is why you see when the dietary goals were created by the McGovern committee. The meat people and the egg people had special hearings to push back against these goals.

Because they knew that though corn people and the wheat people and the vegetable oil people were going to have a marketplace advantage that they were not going to have. And they realized that they were not going to be able to advertise their foods that were healthy in the same way as these other sectors of the marketplace.

Now, by the time 1985 and 1990 rolled around, many of those other sectors of the marketplace realized that they actually could market food as "healthy" that they couldn't market that way, in the previous years. The beef people started creating leaner cattle and ground beef was made in the lean varieties and fattier varieties and the lean varieties were more expensive. Do you remember that big uproar about pink slime a few years back?

Pink slime was actually-- at the time it was invented a benefit to the consumer because it made meat leaner. It was a way of taking the trimmings of beef and using them to make leaner meat and that's what consumers wanted. They wanted lean beef, they wanted lean poultry, they wanted lean pigs and we were able to breed those pigs so that you got pork chops that had no fat on them.

Bret: So, this is really an important point because it shows how the guidelines have affected much more than just what an individual puts in their mouth. It affects how we grow our foods, how we raise our cattle, how we raise our animals. It affects-- sorry?

Adele: How we breed them.

Bret: How we breed them, right. And what our kids eat in school and what grandma eats in her retirement home and what the military eat. So, it filtered down and it filtered to nutritionists and physicians. I mean at no point you could say, does it say physicians and nutritionists have to recommend a low-fat diet, but at the same time it seemed like there's been a lot of pushback for those who don't in certain situations and the major governing bodies of cardiology and endocrinology that have said this is the right diet to follow.

So in a way, if the dietary guidelines were not-- How to say this? The dietary guidelines were meant for the healthy population, right? That's one point that frequently is made but it got extrapolated to everybody, to all nutritionists and all physicians, by this top-down effect and every aspect of our society. But yet, they didn't work and so how do we phrase--?

Adele: Hold on. You have to acknowledge a step before then, which is that the dietary guidelines as we see them now were initially meant for a clinical population. So the American Heart Association had some views about what type of diet was best for people who were at high risk for heart disease or had already been diagnosed with heart disease and that was—

Bret: You're talking about like back in the 60s.

Adele: In the 60s, right. That was a high carbohydrate, low-fat, low-cholesterol diet. At the same time other physicians were using low carb higher fat diets to treat obesity and diabetes. Those were already in circulation and being used. At the time you know Ancel Keys had already distanced himself from the idea that dietary cholesterol had anything to do with heart disease. So the fact that we blame low-cholesterol diets on Ancel Keys is sort of silly because he was not sup-

porting that theory at all, but there were a number of people, Mark Hegsted and William Connor, who were.

Bret: How did I get so misunderstood, because what Ancel Keys clearly did is the Seven Countries study and at that point he was promoting the connection between dietary fat dietary cholesterol and heart disease.

Adele: No, dietary fat, particularly saturated fat. But he did not think that obesity had anything to do with chronic disease. He did not think that dietary cholesterol had anything to do with it. And of course he didn't think that dietary sugar levels had anything to do with heart disease.

Bret: But saturated fat he did.

Adele: Saturated fat was the bad guy. But what McGovern's committee did was that they listened to all of these experts with all of these competing theories and they sort of mashed them together in a big pile and the biggest reason that the low-carb diet sort of didn't get represented in this has to do with politics not with science. It wasn't that the science-- And everybody in the low-carb world knows this.

It wasn't that Ancel Keys' science was stronger than, say, the science by Pennington. It had to do with the fact that at that time America was going to an energy crisis. We had also been warned about global famine and there were all of these other political things going on. Meat was extremely expensive.

The first Meatless Monday boycotts were about the price of meat, not to save the animals or for health or anything like that. It was about meat being expensive. So this is apart from the government work on the guidelines in popular America, in the in the populace people were already beginning to eat less fat in terms of animal products. Because one, they were expensive, and two, it was just sort of-- it was-- what could I say? It gave you a kind of popular mystique to eat like the Beatles and go vegetarian.

We had Frances Moore Lappé's Diet for Small Planet and there was this sort of cachet to eating in this way that ended up as the dietary goals and then as the dietary guidelines. And let me just make this very, very clear this was very much a white, well-educated upper middle class population that was taking up these habits. And it was a white professional upper-middle-class population that created both the goals and the guidelines.

The poor people in America, low income populations, minority populations, were considered targets for these goals and guidelines. Because the white educated professional folks already "knew" how to eat. So, you have to recognize that something else happened in 1980 besides the dietary guidelines. Something very important happened in 1980 and it was called the election of Ronald Reagan.

And the institution of global economics that focused on marketplace solutions. So what we had in America, we called it the trickle-down economics and in America we also have trickle-down nutrition, which is a diet that wealthy white people can manage to stay healthier on and I use that term in a relative way. It's not a diet that you can give or expect people who don't have as much money to spend on food, don't have as much resources to challenge the way of thinking that's coming from doctors or dietitians, who don't have access to free time to exercise off all those extra calories that you get from eating a high carb diet.

Do you see what I'm saying? It wasn't this switch and how we thought about what was healthy. It was also a switch in the economics in the US. And there's still a health divide. All of the repercussions that we see as coming out of the guidelines and there are plenty of negative ones, I am not going to deny that at all, but a lot of them have to do with economic circumstances.

If you are wealthier, if you are better educated in America, you can almost pick your own diet. But if you're not, if you're one of those people who has to rely on government to programs or you're in the military or your kids get their lunches and their breakfast at school, you are imprisoned by those choices.

And because you already have less resources for joining a gym, for having extra time to cook farm fresh meals and whatnot, you are already on a worse diet than a lot of other Americans. Whether you are following the guidelines or not. So it's a lot more complicated.

Bret: So, this is so interesting. I don't think many people-- I don't think anybody really understands it at the level that you understand this. But is it important that people understand it at that level? Because people want an answer. People want to know, what should I eat? So I guess one question is, one, should we even look into the government for that? And two, if we are, how do we summarize what the guidelines have and haven't done and what they should be doing?

Adele: So what the guidelines did, I think that the most insidious thing that the guidelines did, was that they shifted our attention away from population health being the responsibility of institutions, organizations and corporations. And they made your health your responsibility. And that ideology fits with both low-fat diets, vegan diets, vegetarian diets, carnivore diets, low-carb diets, keto diets, any of these kinds of named diets that you can think of.

Who is responsible for your health outcomes? You are. And that's what the dietary guidelines did that has been the most insidious and problematic aspect of the whole thing. It has nothing to do with the amount of fat that they recommended. It has to do with the fact that they said if you do this thing you can avoid ever getting half a dozen chronic diseases that we can name. And that made that your responsibility.

Bret: But isn't that the way it also make it now the government's responsibility? Because they're saying, we're going to tell you how to eat to be healthy, so it's our responsibility to tell you and it's your responsibility to do it.

Adele: Right, right but you notice that that gives them that out. Well, if you didn't, then you must-- if I look at you and you have a chronic disease, well, you must not have followed the guidelines. If I look at you and you're obese, you must not have followed the guidelines. And if you say, well I did follow the guidelines and I still got diabetes, you know what you'll get back in response? You are an unreliable narrator of your experience. So there's always an out because they've made it the individual's responsibility.

Now what that means is that for those of us who are white, who are educated, who are upper-middle-class, who have some resources we can take our efforts into our own hands and find the diet that works best for us. And that's what we can and we should do, but in terms of the government telling the rest of the folks who are sort of handcuffed to those guidelines-- the guidelines need to be eliminated, they need to be completely removed.

There needs to be a law written that says, here's what you should do in terms of eating. Go see a nutritionist, go see a doctor, go see someone who can help you find the way to eat that's right

for you. And there should be money that pays for that in Medicare and Medicaid and in private health insurance.

But we will never get rid of that gap between poor people, between the health outcomes of poor people and wealthier people through diet. It has to do with so much more. So we do need to start with getting rid of the guidelines and letting everyone find the path that works best for them.

Bret: Yeah, I think that's a great conclusion. That's the one thing we can hopefully all agree on about these guidelines is that they're not doing anybody any good, whether we fall them, whether we didn't, whether the low-fat was the culprit or the guidelines were the culprit. Whatever the details.

The conclusion sort of always leads to the same road; that they didn't work and it's probably best to get rid of them and leave it to individual practitioners without other bodies like the American Heart Association trying to dictate what they're supposed to say too.

Because there are programs out there that won't promote low-carb, because they're afraid of losing funding or they're afraid of losing a certain certification. And even if they may personally believe in it. So that type of thing has to go away and I think the guidelines as long as they exist promote that type of thinking unfortunately.

Adele: Right, and they also promote thinking that individuals are responsible for their own health outcomes. Which means that the people in Flint, Michigan, got lousy water because our government didn't take it upon themselves to ensure that those people have what they need. Our government is still not taking it upon itself to make sure that everybody gets adequate essential nutrition, which is my bandwagon.

You know, before we worry about whether or not somebody is going to develop heart disease or diabetes in 30 years, we should first be making sure that they get adequate protein and adequate essential vitamins and minerals every single day. But we don't do that because we're so focused on these other things.

And it really gets in the way of feeding our population adequately in terms of essential nutrition, because we don't let WIC families, that's women, infants and children, so we won't let them spend that money on eggs for instance at the farmer's market, which would be a great thing for a pregnant mommy or a little child to have that protein in their diet. Instead we worry about the fat or the cholesterol that's in the eggs and instead we insist that they spend their WIC dollars on produce.

Now I don't have anything against produce, but if you're trying to raise small children or if you're a pregnant mommy, those eggs are going to be better for you. There's just no way around it.

So that is a problem and we've just taken our focus so much over to this idea that fruits and vegetables are magical and we're going to prevent every disease known to mankind by just stuffing America full of fruits and vegetables, that we forget that we need these other things as well, especially adequate protein and probably more than what the guidance says right now.

Bret: And don't forget the healthy whole grains, of course too with the fruits and vegetables. So to me that speaks for, we need to promote more that you are in charge of your health. We're not going to tell you what to do that you are in charge. But I can see your point that for those who need assistance from the government, they need to be assisted in the correct way, I guess.

Whereas it's sort of an upper class benefit to be able to say I'm in charge and I don't need anybody else's assistance. And I should be in charge, everybody should be in charge, except if you need help, you need to be able to find the right help and that's what the government is not providing.

Adele: That's exactly right.

Bret: By the way, I have like 10 things on my list to talk about that were not guidelines related, but it's rare to talk to somebody who knows so much about the guidelines in this type of depth. Now one of the things that came out recently that was this fact fiction documentary, which I was in, in full disclosure, and I think was wonderful, but you had-- and you wrote a great review of it talking about all the wonderful things about it.

So I mean there are a lot of amazing things in this documentary. But one of the issues you had was the way the dietary guidelines was portrayed. And personally I don't think it was anything specifically in this documentary, because it's just how everybody believes about the dietary guidelines.

And I don't want to rehash it all here; people can go read the post and I'm going to interview Jen Eisenhardt, who was the creator of the film as well, to talk about her research and what she came up with, but the point being when something gets passed down so often, that it just becomes believed and it becomes mythology... It seems like that you feel like that really starts to hurt our message and our cause or anybody's message and anybody's cause in terms of what they're trying to promote. And the dietary guidelines kind of play in the central role in that, doesn't it?

Adele: Well, we become incredibly hypocritical when we do that, because what we complain about is the fact that this low-fat diet has been accepted and ideas about it, like Ancel Keys promoting a low-cholesterol diet. They've been passed along and passed along, in fact we've accepted that I think. And so these ideas get passed along and nobody takes time to go back and actually look at what happened or what was said or what the data says.

And it does hurt our message because there are people who do know and they will use that opportunity of us being wrong about what we say about the dietary guidelines- You know, the low-fat diet made us fat. Or that implies that we actually lowered our fat. Well, we didn't. So people will say that. It's just like when we say the dietary guidelines made us fat, dietitians and others will come back and say no it didn't, because nobody followed them.

And there is evidence that there were many things that were in the dietary guidelines that we didn't actually do. So, we have to be accurate. So if we want to accomplish what we really want to accomplish, which is for those people who are handcuffed to the dietary guidelines to have better options.

So my dream is when anybody walks into a doctor's office with one of the chronic diseases that we know it can be addressed through dietary change as an option, that they are given dietary change. A food first opportunity as an option. But in order to do that, we can't replicate the mistakes that they made in 1977 and 1980. Does that make sense?

Bret: That does yes, that does. So part of that though it is thinking that there's any one right diet for somebody, that there's one way for everybody to eat, and that's sort of the number one mistake. So if you say in the low-carb sphere that everybody should be eating low-carb, you're sort of making the same mistake.

And instead need to focus more on the individualization, which unfortunately means it's so important who that person is consulting with you, who that person is advising you and you have to get the right person or someone who is at least willing to work with you, with different experiments and different versions of nutrition to find the right one for you. And I think that's what's really lacking out there because right now people are too busy following a cookbook style of what to tell people. But I think we--

Adele: Right, but it goes beyond that even in the low-carb world we have a default to the idea that what you eat today-- we know if you eat "right" today, you can prevent certain health outcomes 20 or 30 years down the road. And we are very good at criticizing the fact that the low-fat proponents don't have that evidence. You don't have any evidence that eating a low-fat diet is going to prevent heart disease or prevent obesity or prevent diabetes.

Well, guess what, neither do we have that evidence for low-carb. We don't have evidence for either of those diets, acting as long-term preventative health ways of eating. We do have evidence for low-carb as a really, really strong and a really, really important intervention for pre-diabetes and a bunch of other metabolic conditions that we know can be reversed or improved with carbohydrate reduction.

But if we walk around saying that we know that low-carb can prevent somebody who doesn't even have any family history of diabetes, we don't know that.

Bret: Right.

Adele: And the reason we don't know that is the intervention is not always the same thing as the cause. So when somebody has an infection, you give them in antibiotics, but it wasn't the lack of antibiotics that caused the infection. So there are lots and lots of situations like that, we can't just jump to those conclusions and say-- I mean I think it looks really good for future research that maybe one day we can prove this and I think that we might be able to, but we can't right now say that if you eat a low-carb diet today, that 20 years from now you won't get heart disease or diabetes or any other chronic disease.

Bret: Which is that the words we use, the language we use matters and our recommendation has to be in line, the strength of our recommendation has to be in line with the strength of the evidence.

So like you said, we can say we don't have that evidence for low-fat and we can say it makes sense that low-carb may provide us that evidence because of sort of the shorter-term evidence, so it should be something that people recommend and talk about and explore, but we cannot say with certainty that it has been proven for long-term outcomes as an intervention. So that makes a lot of sense. It's not that we can't recommend it, is that we have to recommend it with the appropriate strength of recommendation I guess to back what is known.

Adele: Right, and I would say that there are diets that are more likely to give you your adequate essential nutrition and I think a low-carb diet or a lower-carb diet is more likely to do that because carbohydrates are simply not essential. And we are filling people's plates with calories that don't provide other kinds of nutrition. Then they're getting a lot of calories which we know people probably don't need and they're not getting the nutrition, especially protein that they really do need. And I think that there's one other factor in there, which actually goes back to the early history of the guidelines.

So we have this mistaken belief that there was the dietary goals and then three years later, boom, boom, boom, the dietary guidelines came out and that was it. But we forget that in 1980 there was another powerful document written by the most prestigious nutrition group in our country, the Food Nutrition Board of the Institute of Medicine and they came out with a document called Toward Healthful Diets. And it was in competition with the dietary guidelines and those two kind of went head-to-head in a cage match for which was going to be our national dietary policy.

And Toward Healthful Diets basically said two things: eat a variety of foods, so that's the adequate essential nutrition part, and the other thing that they said was, you know, eat a diet that doesn't make you gain weight. Now for some people that might be a low-fat, low-calorie diet, for other people that might be a low-carb diet. They didn't say which was better. They just said eat a diet that doesn't make you gain weight.

So the dietary guidelines actually ended up winning that contest for a number of reasons, none of which had to do with science. But I think those two factors and Toward Healthful Diets are still important. You need adequate essential nutrition and you need a diet that doesn't make you gain weight.

And if you find that you're gaining weight eating a low-fat, low-calorie, high-carb diet like I did, like many other people who visit the Diet Doctor site did, who did experience that and we know that we're not crazy, it did happen to us, then that diet is just simply not the right one for us.

So there are two things that we have to pay attention to in terms of a diet. One, adequate essential nutrition, two, metabolic health. That's the don't gain weight part. And your diet, whatever your diet is, should give you both of those things. I think that's all we need to say.

Bret: Yeah, that's a great summary. Now, you mentioned weight gain and metabolic health in sort of the same statement. So this is another issue that comes up time and time again that is the problem the weight gain or is the problem the metabolic health? Are they always related and does it help us or hurt us to focus on one or the other? So what's your take on that?

Adele: Yeah, this is a very, very tangled web. And we like to focus on obesity and I would say that we like to focus on obesity for some reasons that are very superficial; it's easy to measure. But also we can look at people and we can tell that they have not been eating right by looking at them. So it allows people-- So this goes back to that idea of you are responsible for your own health.

I can tell by looking at someone who has a high body mass and I can think with my superior brain, you didn't eat the way you were supposed to and noticed that both low-fat folks and low-carb folks who do that, you'll hear the low-fat folks going... See? Look, eating your low-carb diet and look at you. You are BMI is over 40. But you'll also hear people who are low-carbers go, well, if you just cut out those carbs, you would lose all that weight.

Neither of those statements is true. You cannot look at people and tell how they eat, how much they exercise or what their metabolic health is. Although if somebody is carrying a lot of excess adipose tissue, it's a pretty safe bet, simply because there's a lot of correlation that they have poor metabolic health. It doesn't necessarily mean they do.

But it's a good bet. But then the question is did the obesity cause the metabolic health or did the poor metabolic health cause the obesity? Well I think we actually do know the answer to that and

that's poor metabolic health causes obesity. It precedes obesity, it precedes sedentary behavior. People don't get fat and then develop metabolic disease. And we know this from the Virta trials, I think are one of the best experience.

But any low-carb nutritionist or doctor knows that they can put their patient on a reduced carb diet, get the carbs out of their system and start taking them off of medications and the patient will report feeling better before they've lost any significant amount of weight.

Bret: Yeah, the was... There was an intervention trial with Dr. Krause and Dr. Phinney and Volek that showed without any weight loss low-carb still improve metabolic health. Part of the problem though is when we look at older studies about this is how you define metabolic health.

Because usually it's the presence or absence of diabetes which is far too superficial and not even close to how we should be defining metabolic health, which makes it much harder I think to say we know for sure which one precedes the other.

But I think we can say it makes sense which one we should target first as an intervention, that weight loss without metabolic health improvement is not winning any goals. But metabolic health improvement without weight loss is still likely improving your overall outlook. It seems like a fair statement that most people shouldn't be able to argue with... would you agree?

Adele: Yes and obesity was problematic before it became associated with metabolic health, but it was problematic for orthopedic reasons. And I remember seeing these folks in clinic too. In terms of their metabolism they usually had fairly normal blood pressure, normal blood sugars etc. but they had hip problems, knee problems, joint problems in their feet and they needed to lose weight for orthopedic reasons.

So obesity has always been problematic for that reason, but it wasn't until, you know, since the, I think, mid-century of the previous century that we started associating obesity with poor health. And that had a lot to do with those insurance actuarial studies, but again there's no causal arrow.

And this is another thing, I think, that isn't well understood that predictive risk factors and causal risk factors aren't the same thing. So just because a risk factor predicts that a person has a certain condition does not mean that that risk factor is causal.

Bret: Right, association is not causation for sure. That's something that we need to hammer home again and again and again.

Adele: Well, the word risk factor, because it has the word risk in it, I think that we think, oh, you are taking a risk if you're obese. I mean maybe, but not necessarily. It's like with pellagra, poverty was a risk factor for getting pellagra. But some people thought that was because of the poor sanitation conditions and other people thought it was because of the poor diet.

But poor sanitation was also predictive of getting pellagra. But you could wash your hands all you wanted and you'd still get pellagra if you had a bad diet. So just because poor sanitation was a risk factor, doesn't mean it was a causal risk factor and we need to keep that in mind.

Bret: And so now though during the coronavirus and the Covid 19 pandemic this has become a very important topic because obesity has been linked to worsening outcomes, type 2 diabetes and hyperglycemia linked to worsening outcomes. Does it cause the worsening outcomes? Is there something else? We don't know, but when is all the information you have, you sort of feel obligated to act upon it to say, let's try and control these things as much as possible.

But we don't have evidence saying if you control your blood sugar, if you lower your weight you're going to reduce your risk of complications of Covid 19. But could you fault anybody for saying you should try to reduce your risk?

Adele: Well, I like the way you said it, Bret. You should try and reduce your risk for overall good health, not because of Covid. It just makes sense to, but the idea of insisting that somebody should go on a strict diet whether it's a low-calorie or a low-carb one in the middle of what might be the most stressful event of their lives, I think it's a very privileged and very narrow perspective.

Bret: But to say that this time in our country's history shows the importance of metabolic health over the long run and hopefully will help us focus on that maybe the next set of infections or the next even influenza or the next pandemic or whatever the case may be, that we as a country can be in better shape to withstand it, if our metabolic health is better. And that's just one example of how metabolic health can help you.

Adele: Exactly.

Bret: But it shows how sometimes the line is blurred between association and causation. It's important to differentiate between them, but sometimes if it's all you have, you have to act upon it. Which is a slippery slope, because that's also what sort of got a lot of the low-fat message propagated, which we now have evidence to show is not the case.

Adele: Absolutely and this is I think my worst nightmare. Is that, you know, 50 years from now people will look at our era and go, you know, these low-carb folks, they just re-capitulated the mistakes of the low-fat people and they made things worse instead of better. And I really do have a fear of that. I mean do I want low-carb guidelines? I do not.

Because I don't want them to be misused the same way that the low-fat guidelines were misused. And they were misused. So I want low-carb to belong to clinicians, I want it to belong to Diet Doctor, I want it to belong to the people. I don't want it to be defined by or administered by the government and I certainly don't want it to be defined by and administered by food corporations.

Which is, you know, extremely problematic because who knows-- Our food system works like this - anytime you tug on one part of the food system, you get reactions throughout it. One of my favorite stories about the low-fat diet is the-- you've heard of Buffalo wings, right? Everybody heard of buffalo wings, low-carb folks love them; you know, you got lots of fat and stuff and dip them in blue cheese and they're great.

Well, the folks who invented buffalo wings tried to create like a national snack fad back in the early 70s, but they couldn't get wings off of chickens, the producers wouldn't give them to them, because when you sold the chicken, you would either sell the whole, with the wings attached, or you sold it in quarters with a leg and a thigh and a breast and a wing attached.

When the low-fat craze came through we started selling boneless, skinless chicken breast, because those were enclosed in fat. And all of a sudden what happened? There was the excess of wings. So all of a sudden these folks who wanted to have these fatty wing outlets, these buffalo wing joints, could do them.

So when you look at the food system you go, there didn't use to be these fried wings on every corner. Well, those were created, literally created by boneless skinless chicken breasts by the low-fat craze. So the low-fat diet created a bunch of high-fat products. Premium ice cream, extra

cheesy, cheesy pizza... that's the fat that gets skimmed off of milk and then sold through another production line.

So what's going happen, I wonder sometimes, if that happens with low-carb, if it becomes part of mass-produced foods and it tugs on those strings in the food system? I really like the fact that when I see low-carb products being sold, I look for those tiny producers people like I think it's Tro's wife... she has a little baked goods line that you can, you know--

And it's very small, it's very family centered, you know what's going into those packages and it's not a great big corporate monster just, you know, moving the parts of the food around. And I would like to see more of that. And I don't want it to be part of what the government is telling us how to eat.

Bret: Yeah, that's another big lesson I think of the whole Covid 19 pandemic, is the importance of local food supply rather than a few big national producers, because once they weaken, then the chain and the whole system can fall apart and our system, our food system cannot be reliant on that, but if we could be reliant more on the mom-and-pop, on the local butcher and local farmer, that makes a huge difference. And hopefully they'll be more of a push for that, a decentralization of the whole food atmosphere, I guess.

Adele: And you know, believe it or not McGovern's committee was pushing for that too. Right along with the dietary goals, yeah. I happen to have this because I was looking something up, but it's guidelines for food purchasing in the United States. This was the sister volume that was supposed to be released after the dietary goals.

Was written by Nick Mottern, who is always just, you know, badmouth because he created the dietary goals. And it's about the smaller circles and buying locally and buying from a food co-op and buying from local farms. So a lot of what was politically in the dietary goals was really pushing for that kind of food system. But it got co-opted, there's just no doubt about it. And that report never got released, unfortunately.

Bret: I loved that story about the buffalo wings. And what was Super Bowl Sunday like before there were buffalo wings? I don't know what it possibly could have been.

Adele: Had roast chicken, I guess.

Bret: So there are other myths that you have been vocal about saying that we have to stand up against, and I wanted to just touch on a couple of those if we can and one is vegetable oils. Vegetable oils, studies clearly show mechanistically that vegetable oils under extreme heat can become oxidative and rancid and cause mutations in cell cultures from a mechanistic standpoint.

So because of that, there is a big push to avoid all vegetable oils. But when you look at the clinical data on humans, whether it's epidemiological or randomized controlled trials, it doesn't seem to replicate what the mechanistic studies are. So Diet Doctor had a little bit of pushback by basically saying the evidence of vegetable oils kind of isn't there for being harmful. So how do you help people understand that message when the mechanism say one thing but other evidence maybe doesn't back that up?

Adele: Well, you know, I'm a biochem fan and I love mechanistic studies and I actually think that they are far more informative than a lot of epidemiological studies, because those just tell us what people think it's healthy. They don't really tell us-- and we don't know what people are

actually eating since it's a food survey anyway. So I think mechanistic studies are actually really important, but it doesn't help us put things in perspective in terms of our physiology.

And what you end up doing I think-- so I think about this from a dietitian's point of view; are you creating unnecessary food fears and are you making things difficult for people by telling them completely avoid vegetable oils because they are very scary? I know that when I went on a low-carb diet this wasn't something that was talked about.

And I also know that when I went on a low-carb diet I had three young children and if somebody had told me that I had to make my salad dressing at home and I couldn't use the stuff in the grocery store because it had corn oil or soybean oil in it, I wouldn't have bothered going on low-carb diet to begin with. I would've just said, this is not the diet for me, I won't do it, I'll have to find some other ways to lose weight.

So I think we have to really be careful with generating food fear. In fact I think this is another one of the really pernicious outcomes of the dietary guidelines. It's made us afraid of the things in our food, whether it's fats or whether it's carbs. We've learned to just be afraid of things.

We see it on a label... the gluten of thing a couple years back was so informative, because people stopped buying things that said... I mean started buying things that said gluten-free.

Bret: Right.

Adele: Before they even knew what gluten was. We did the same thing with cholesterol. People started buying food that said cholesterol free before they even knew what cholesterol was. We could make a food and say asbestos free and people would buy it without even wondering what asbestos is.

Of course is not in there, it's never been in there. And we do this with sugar, we do this with carbs, we do this with everything because we taught people to be afraid of food. And what we need to do is to teach people how to think critically about what they're being told about food. Is the 2 tablespoons of vegetable oil in your salad dressing going to cause you long-term harm? We have no idea. Is it going to cause you temporary harm?

To have to make your salad and make your salad dressing from scratch every time you eat it? Does that mean you'll eat less vegetables if you have to make your own homemade salad dressing? Yeah, maybe. So to me that's a real concern. You know, am I going to get in the way of somebody eating a healthy food, because in order for them to eat a healthy food like--?

If you pour some vegetable oil salad dressing on your salad, does it suck all the rest of the healthy ingredients out? You know, it doesn't. So, let it be. I think we really have to help people not be afraid of food.

Bret: Yeah, it's one thing to say, eat whole foods, eat natural foods, make it as minimally processed as simple as possible. That's a great policy that everybody should follow as much as they can follow it and then you get into the specifics of what works in your life and what doesn't and what the logistics work.

Adele: Exactly.

Bret: So one last thing then for mechanisms versus clinical practice and clinical experience... too much protein is going to kick you out of ketosis. We hear that not infrequently, that people have

this personal experience, but the science doesn't seem to back up that that is a true phenomenon that happens for most people. Is that right?

Adele: Yeah and first of all you have to say, well, why are you tracking your ketone levels that closely. Do you have a specific reason for doing that? Like if you're trying to prevent seizures, yeah, that's probably really important for you and maybe you need to follow a classic ketogenic diet that's used for epilepsy. And absolutely you want to watch the amount of protein because you have to balance that off with a certain amount of fat.

But I think in most cases we're talking about people who want to lose weight and who think that they are eating too much protein and I think it's a very complicated scenario when you get into those details, because we know, in fact we were talking about this just recently, that women often prefer diets that have more fat and more carbs in them.

They're not big protein eaters to begin with. And also women have trouble losing weight. And women who are postmenopausal especially have trouble losing weight. So we're talking about a bunch of things sort of piling up there. But if you tell a postmenopausal woman, guess what, you can eat all the fat you want.

Just add artificial sweetener to it, but "natural" artificial sweetener, you know monk fruit or erythritol, or one of the approved keto sweeteners to it. You can have all the fat you want and make it as sweet as you need with one of these natural sweeteners and just eat all of that and don't worry about eating a yucky pork chop. And then the woman wonders why she's not losing weight. Well, you know, she's not going to lose weight.

One, her body is going to be starved for protein, it's going to be scavenging muscle, she's going to, eventually over time, begin to lose muscle mass. If she keeps it up, she will lose bone mass because muscles tugging on bone is what keeps bone healthy. Protein also is a matrix for bone. And if she's eating a low-protein diet because she thinks that all she needs to eat to lose weight is fat, fat, fat, fat, fat, fat, fat, it's going to be counterproductive in the long run, but it'll taste better maybe, I don't know, it'll be more fun. But it won't be good for her health.

Bret: Yeah, another good example, how an experimental study clearly shows that a lot of protein, excess of protein, can raise insulin and raise glucose. But then the harder part is translating that to clinical science, translating that to the person you're working with in front of you, we're not eating enough protein, especially as we age, is likely a much bigger issue for most people.

Adele: Right. And we do know that people who are overweight or obese, who are in poor metabolic health benefit from larger amounts of protein rather than smaller amounts. There are studies that show that, there are RCTs that show that. So it's not like that's really a question.

But if somebody eats a steak for dinner and then measures their ketone levels an hour later and it goes, no, I am not in ketosis anymore, you can't deny that experience either. But the question is, is that experience meaningful in terms of their overall health? And I think it depends on the how low that protein gets and how much they're avoiding it.

Bret: Another great example of how you analyze things so well and so critically to make sure we're understanding what it means and not to accept things at face value. And I appreciate that you have been the voice for that, which is not always a popular voice, like you've gotten some pushback because of it.

And you're a very important part of the low-carb message in the low-carb world, but yet sometimes you're seen critically because you're that voice. And it doesn't faze you, brushes right off your shoulders, because what's more important is getting the message right to you and I really appreciate that. Your integrity of your message is so clear and that speaks a lot to who you are. So thank you for making your voice heard.

Adele: Well, thanks for giving me this opportunity, because it is my dream that everyone is offered the option of low-carb diet when they need it. And I do think that if we want to be accepted into the mainstream, which is the only path through which people who are disenfranchised, people who don't have the resources that other folks do, it's the only way that they are going to get this option; is to have low-carb accepted as a therapy in mainstream.

And if we want that to happen, we need to have all of our ducks in a row. And if I have to be unpopular to do that, so be it, it's not for me, it's for them.

Bret: Very good. Where can people hear more about you and learn more about what you've read and learn more about you?

Adele: Well you can find my much neglected blog site eathropology.com or you can just look me up on Diet Doctor, I'm pretty busy there too.

Bret: Very good, thank you Adele.

Adele: Thanks so much for having me, Bret, this was fun.