

Mary Perry

Good morning, Dr. Series. Thanks for being with me today.

Dr. Barry Sears

Well, thank you, Mary.

Mary Perry

So, Dr. Sears, today we're going to talk obesity. Clearly, our obesity epidemic is continuing to rise, but there are a lot of theories out there as to what the drivers of obesity are. So today we're going to go a bit through the theories and then we're going to go through what you think the science really supports in terms of what the driver of obesity is.

So let's go through the different theories. I'll let you start with which one you want to tackle first.

Dr. Barry Sears

Well, the old standby is your consuming too many calories. You know, cut back in calories and you'll be has become less obese. Well, the trouble is Americans have tried that to a great extent and it hasn't worked. Obesity is now basically out of control and you as a registered dietitian, you know this you've seen this over the years saying something is wrong out there.

So though it makes sense that if you decrease calories, but it's hard to do if you're always hungry. So there's one theory.

Mary Perry

So that's the energy balance kind of theory.

Dr. Barry Sears

Exactly.

Mary Perry

How many calories out or calories in...

Dr. Barry Sears

Another theory is, you know, it's not calories per say. It's because evil insulin. Insulin is making you fat. And what causes the body to make insulin, excess carbohydrates. Take the carbohydrates out of the diet and basically we'll be thin forever. I think I heard Bob Atkins saying that 40 years ago. And the data is simply saying it doesn't make a lot of sense saying I need some carbohydrates, but not too much. That makes sense. But I think it's has to be more than that.

Mary Perry

So that's like the carbohydrate insulin theory.

Dr. Barry Sears

Exactly.

Mary Perry

Okay.

Dr. Barry Sears

And this has become now at the academic level. It's like the old Miller Lite commercials. Less Filling, tastes great. I'm saying, guys. It's not working.

Mary Perry

What about protein? Where does that fit into this mix? Because hear a lot about that.

Dr. Barry Sears

This is called the protein leveraging theory. Actually, I wrote about it 30 years ago because that's the basis of the Zone diet. It's not saying fat is bad or carbohydrates are bad. Your problem is your probably not getting enough protein. And why? Because it's protein that releases signals from the gut that go directly to the brain, to say stop eating.

That's how drugs like Wegovy work. Instead of basically releasing the signals, you inject the signal. So the protein leveraging hypothesis, if I don't have enough protein at a meal, I'm going to be hungry. And if you're hungry, what are you going to do? You gonna eat more calories. And if you're really hungry, what are you gonna do?

You gonna eat more calories that contain more carbohydrates. So now we're basically looking at, you know, another nuance of the protein leveraging hypothesis, which was all encompassed in the the original Zone diet some 30 years ago.

Mary Perry

What about omega six fats? You've talked a lot about that throughout the years, too.

Dr. Barry Sears

Omega six fats are the drivers of inflammation. You might consider this the inflammation theory of obesity. If your fat cells are inflamed, they don't work very well and you keep on gaining more fat. So if we look at those four aspects, eating too many calories, we talked about in that end zone diet. It's a calorie restricted diet, but it's one that contains some carbohydrates, but not enough to over secrete insulin.

It also has enough protein that you generate the hormonal signals from the gut to go directly to the brain to say stop eating. And finally, it's saying, you know, basically decreasing the inflammation so that now your fat cells are responding as they should. So the first four theories of the obesity epidemic were all incorporated in the classic Zone diet some 30 years ago.

Mary Perry

So sweeteners are often villain-ized. So where do they fit into this obesity epidemic?

Dr. Barry Sears

Well, this is called the fructose hypothesis. Well, fructose, but you find it in fruits. Well, you also find it in basically, you know, high fructose corn syrup and various things like, you know, Diet Coke. Now, why would this be the case? Initially, I really didn't buy into it because when you look at fructose, it never enters the blood.

Yeah, just okay, I suppose this is a non-player, But now there's enough data that says it doesn't enter the blood, but it enters the liver. That's the first place things are absorbed. They're always going through the liver. And in the liver it causes now generation of fat. And so basically, this is was called fat that basically are lipid droplets.

But they cause inflammation and therefore they fall back and say another potential cause. So the only modification to the original Zone diet that you have to make is saying, okay, the first four drivers of obesity, we're all incorporated. The last one, try to decrease your fructose. Now we know eating high carb, high fructose corn syrup is probably not a good idea, but what about fruits?

They're very rich in fructose. Well, it's like one step forward, three quarters of a step behind. They still contain fructose. They're going to cause problems. But why they're not as bad as high fructose corn syrup is because the fruits contain polyphenols. So all the benefits of polyphenols found in fruits are, to a great extent, diminished by the fructose in the fruit.

Mary Perry

And then where does insulin resistance fit in?

Dr. Barry Sears

A much more comprehensive aspect and is saying really insulin resistance is a catch all term for your metabolism is not working very well. So when people gain weight, what's the first thing they say? My metabolism is slowing down. Well, they're right. Your metabolism is slowing down. Your metabolism controls the balance of hunger and satiety. It also controls your immune system.

It controls your ability to heal from injuries. It controls your rate of energy. So, yes, when you have a slow metabolism, everything is going to basically hell in a handbasket. So this becomes now more encompassing because what you have with each of these individual theories, it's like 12 blind men trying to describe an elephant. Each one is partially right.

One says, I'm holding on to the trunk. It's a rope or basically a firehose. I'm holding onto the leg. It's a tree trunk. I'm holding onto the tail. It's a rope. Partially right, but basically doesn't get any clearer. So what becomes now a unifying theory, a unifying theory that takes all of these potential drivers of obesity and puts them into a unified matrix?

So the goal now says, what I have to do, I've got to get my metabolism straight. I've got to basically reprogram my metabolism. So it's working at peak efficiency. So I'm not hungry between meals. So I'm basically controlling the intake of calories not to see accumulation of body fat. Now, how do we might describe it? I describe it as metabolic engineering.

It's like when your car isn't working, who do you take it to? The local doctor? No, because they have no idea what they're doing. You take it to the local automotive engineer as the mechanic, He says, Okay, we'll make an adjustment here. Adjustment here. All sudden, the car is running again. And that's what metabolic engineering does. It takes into account each of those prevailing theories of obesity and say, What do we have to do to adjust it at the individual personal level to basically reprogram the person's metabolism.

So it's working at peak efficiency, and when it works at peak efficiency, you lose excess body fat, you're not hungry between meals, you slow down the rate of aging. You're thinking more effectively. You have more energy, both physical and mental. Like, I want that! So you have the possibility. All you do is basically follow the basic tenets of metabolic engineering, and they're easy to do. But you have to make it a lifetime habit.

Mary Perry

So really, there's some truth in all of these different theories between energy balance, carbohydrate, insulin. You talk about protein leverage. The omega six, fructose insulin. So but then you have this unifying approach. And what I have to say is I've always loved about the zone is that it's very moderate. And even just you talking about fructose, you're still evolving with the science.

So you're willing to say, Hey, at that time I didn't think that maybe fructose was so bad. But now that I've seen some of the implications for the liver, I'm willing to sort of change sort of my thought process on that, which I think shows that we're evolving with the science too.

Dr. Barry Sears
So that's very hard for me to say.

Mary Perry
I know! I know!

Dr. Barry Sears
Again, that's what the thing about science. When we have new data, we have to have the ability to make adjustments. And that's why we call metabolic engineering evidence based wellness. Show me the data and, more importantly, clinical trials that show that this approach is superior to other approaches.

Dr. Barry Sears
Until we do the science, until we have evidence, everybody's right. But once we have the science that says, okay, you're partially right. You're not wrong, but you're partially right.

Mary Perry
So just to kind of put it together, if someone wants to follow this metabolic engineering program, like what does a day look like for them or how do they start following this?

Dr. Barry Sears
Well, the first thing is you have to get adequate protein at each meal, and that starts with breakfast. You know, getting adequate protein, is that meaning, you know, 2 pound steak? No! Adequate protein is about 30 grams of protein. That's the amount you can put on the palm of your hand. Every dietitian says consume that amount, but no more. Well, they're right.

But not knowing why they're right, that's the amount of protein you need to generate the hormonal signals from the gut to stop eating. But if you eat more, you inhibit AMPK, the controller of metabolism, and all of a sudden you're back in the same boat. So number one goal, try to get 30 grams of protein at every meal. Now, two: balance it with what are called low glycemic load carbohydrates, what are those?

They're called vegetables. Ugh! I don't like vegetables. Get used to it. Because the vegetables, it's very hard to overconsume them and therefore it's hard to overproduce insulin. But the vegetables also contain fiber and the fiber is broken down in the gut by microbes to make short chain fatty acids that enhance the hormonal signals coming from the protein. So the fiber and protein are working together.

And finally, you add a dash of fat. Not no fat, not eat fat until they're basically it's the cows come home. A dash. Just make sure it's monounsaturated fat, which is non inflammatory fat. Things like extra virgin olive oil. Things like almonds and things like guacamole. And what do you do? You say I get into a system like a taking a drug.

I've got a chronic disease. The doctor says take the drug three times a day. Why? I'm too busy. He says, Hey, I'm the doctor. You're a nitty. You need the drug three times a day to maintain constant blood levels. Okay, I'll do that. The food is no different to the food. The hormonal effects are far greater than the drug.

Mary Perry
So let me ask you one more question, Dr. Sears. We often have people that will come to us, and I think there's still a lot of people out there that think that metabolism is tied to weight loss. So, you know, I do intermittent fasting or on doing keto and I've lost weight. Just because you've lost weight on those programs doesn't mean you've optimized your metabolism.

So can you talk a little bit about that and some of the downside.

Dr. Barry Sears

And this leads to the question, how do you know if your metabolism is working? I think it is. Well, that's not science. That's guessing. So there is a blood test, a simple blood test that is called HOMA-IR. And it consists of your fasting glucose and your fasting insulin, you put into a simple equation and out comes, a number.

If the number is less than one, your metabolism is working like a like a Ferrari. Now, if there's more than one, you're no longer well and it gets up to two. You've got insulin resistance. It gets more than two. Basically you've got trouble. Now you can't look at a person and say, Do you have insulin resistance because of 16% of the U.S. population who have severe insulin resistance are normal weight. And yet most people, our first sign, we have insulin resistance is the appearance of visceral fat. The common name is belly fat. You don't look good in a swimsuit and say, okay, I'll just wear a muumuu. Okay, that solves the problem temporarily. But the fact that you have insulin resistance. This is the basically the gateway, the gateway to a number of chronic disease states.

Let's start with type two diabetes, because once you get type two diabetes, you're now four times more likely to get heart disease. And if you have type two diabetes, you're twice as likely to get Alzheimer's. These are just different manifestations of insulin resistance. And the whole goal of metabolic programming is to reverse, to eliminate insulin resistance. And once you have a pathway, this is the pathway for a longer and better life and one without obesity.

Mary Perry

Excellent. Well, Dr. Sears, thanks for bringing us through the drivers of obesity. Your unifying theory and really some practical tips that everybody can take home from this if they're looking to lose weight yet optimize their metabolism.

Dr. Barry Sears

And live longer.

Mary Perry

Yes, that's our whole bonus. And so. Well, thanks for your time today, Dr. Sears.

Dr. Barry Sears

Thank you, Mary.