

The Wellness Zone Podcast "Satiety" Transcript 12/5/23

Mary Perry

So, Dr. Sears, today we're going to talk about satiety. I always think of satiety as, you know, being able to eat a meal and kind of feeling satisfied, not to the point of stuffed.

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Dr. Sears

Well, I want to give you a little better definition of satiety. You're not hungry

Mary Perry

Yeah.

Dr. Sears

You're not hungry and you have peak mental acuity. So you have basically the key factors of, say, how do I basically always go through life being totally of mentally acute but never being hungry? And that's the secrets of satiety.

Mary Perry

Hum, Right. Well, that makes sense. I like your definition a lot more. Very simplistic. So let's get into what exactly causes hunger?

Dr. Sears

Well, what causes hunger is basically hormonal signals, or lack of hormonal signals, coming to the brain. So you have sensors throughout the body, in the gut, in the blood, and in the brain itself. And they're sending out hormonal signals all the time to alert the brain, which is really blind, whether you're hungry or not. And if the wrong signals are going to the brain, you're always hungry, no matter how much food you put into your stomach. So the secret of satiety is getting the right hormonal signals from the exterior organs to the brain and basically allowing the body to work its magic.

Mary Perry

Okay. So when we talk about signals, I'm thinking metabolism. So what role does metabolism have in hunger?

Dr. Sears

It is everything because metabolism is signaling. And so you're looking again, making sure the signals from different parts of the body which are in contact with our food are basically being relayed to the brain correctly. And if they are, life is good. If they aren't, life is bad. You're always hungry and you're always grumpy. A bad way to go through life.

Mary Perry

I agree. And so how does the diet play a role in turning on or turning off these satiety hormones?

Dr. Sears

Well, there's three things in our diet. There's carbohydrate, fat and protein. And of those three macronutrients, it's the protein that plays a critical role in terms of turning off hunger and creating satiety. So if you have a meal and it doesn't have adequate protein, you're going to have big problems. You'll be hungry and say, Why am I always hungry?

Because I didn't have enough protein balanced by the right amount of fat, carbohydrate to generate the right signals to the brain saying, stop eating.

Mary Perry

And I know you've talked about this before, but your recommendation is really to get about 30 grams of protein to get these satiety hormones where they need to be after a meal.

Dr. Sears

That's really the sweet spot. If you're taking less protein at a meal, there will not be enough hormones generated by the protein to tell the brain stop eating. Well, should I try eat more protein? Not so quick. Because if I take in too much protein, then I treat other signals that basically cause the brain to be hungry again. So there's a sweet spot about 30 grams of protein. Now, what's 30 grams of protein? About the amount of protein you can fit on the palm of your hand, Not more, not less. And that is really the secret. That's the number one goal. If you can get 30 grams of protein every meal, you're well on the way toward creating satiety for the next 5 hours.

Mary Perry

So let's talk a little bit about weight loss drugs, because do they work through the same mechanisms, you know, to control satiety? Is that how is that how they're functioning?

Dr. Sears

They are trying to. I said proteins critical. There are four hormones the protein creates that maintain satiety. Three are coming from the gut. One of them is GLP-1, one that's the one that the weight loss drugs use. Another one is PYY, and a third one is GIP. So if you're basically getting your signals from the gut using protein, you're getting three times the signals that you can from these weight loss drugs. Plus there's one other protein. It's the hormone glucagon, and that's the hormone that stabilizes blood sugar levels. So what happens when your blood sugar levels are low?

Mary Perry

You obviously need to eat more to be able to increase the levels or you break down something to increase your blood sugar.

Dr. Sears

Well, it says they're low because you did not basically stimulate enough of the hormone glucagon to stabilize them. So the two primary problems with hunger, either the blood sugar levels are too low. The brain says, I'm scared, I'm running out of fuel, feed me! Or you don't have enough protein and the brain signals "I'm okay." But they all emanate from protein. So that's really one of the first secrets of satiety getting adequate protein at every meal.

Now at dinner, easy peasy. In fact, you can probably get too much protein. That's they say back off, bro, back off. But other meals like breakfast, almost impossible and lunch, it's very problematic that you're getting the 30 grams of protein. The secret is treating the protein like a drug, taking at the right dosage at the right time throughout the day. And for what reason? To maintain satiety. Now, there are some other benefits. If you maintain satiety, it means you're also maintaining stable blood sugar levels. So you're thinking more effective for you. You're thinking more clearly, you're performing better. So there's a lots of reasons, many reasons, all controlled by metabolism, but basically initiated by protein.

Mary Perry

Well, and the nice thing about protein is it's natural, you know, whereas I imagine there's a bunch of side effects that go along with these weight loss drugs that people, you know, while you're losing weight, there's so much more that goes with it.

Dr. Sears

You mean side effects? You mean drugs have side effects? Tell me it's not true! Yes, There are a lot of side effects. Now, let's look at the the weight loss drugs—the Ozempics and their weightless cousin, Wegovy. How do they work? Well, they're not basically consumed. Why? Because they're proteins, they need to be basically broken down. So they're injected. You inject those weight loss drugs into your brain? No. What you inject them into is the fat tissue. I say that's not the natural way. Yeah, you're right. So what they take these weight loss drugs, they take the hormones and make them fat soluble.

So when you inject them into the fat tissue, they stick around for a long time. Now, where they go, nobody knows because your primary receptors are in the brain. And when you naturally eat protein, you're sending signals from the gut through the vagal nerve directly to the brain saying stop eating. Well, those signals don't enter the blood. Now, if you're basically injecting one of these fat soluble weight loss drugs, the hormones are being released slowly from the fat stores, but oftentimes going all the wrong places because you have other receptors for that protein that have nothing to do with hunger suppression, but basically have to do with side effects. So you have that problem.

Second problem, by injecting the hormones, you're causing the stomach to stop moving. It's paralysis. And that's also true of the small intestine. So you basically are finding it almost impossible to eat enough food because if I eat food, I get nausea and I throw up. That's not a very good weight loss program. Though it has worked well in the past! So, what you're looking at is the side effects of basically administering these natural hormones in an unnatural way can come back and cause significant problems.

And here's one of the significant problems. If you're not hungry and yet you're too nauseous to eat, you don't get enough protein. And that's why you need protein. You need protein to basically replenish and repair damaged tissue. And so what happens when you look at these weight loss drugs, you do lose weight. But about 40% of the weight loss is what's called lean body mass. And what's lean body mass? It's things like your heart tissue, your muscle, your kidney, your liver, your brain. Those are things you don't want to be losing.

Mary Perry

Hundred percent.

Dr. Sears

Or so. So that's another side effect. And we'll only find out how bad that side effect is with long term studies. So there's a natural way that we have evolved for hundreds of millions of years that works. And then we have the unnatural drug way who says we can do it better. I think not.

Mary Perry

So we've talked about the natural way and then the drug. So where does supplements fit in this? Do they have any role in satiety?

Dr. Sears

Frankly, no. They have a role in marketing. They say, it's too hard. I had to think all the time. Can I just take a pill like a drug saying, no, you can't. So you hype these drugs or hype these pills. I think a supplement say it's just like, well, it's not. The data just isn't there.

So you also have to basically realize that a protein works better in combination with one other nutrient. It's called fiber, and that's the reason why you always take fiber or protein. Why?

Because the fiber is now basically metabolized in the colon, to short chain fatty acids that enhance the satiety signals. And so by having the combination of fiber and protein, you basically now have a 1-2 punch to maintain satiety. So where do you find fiber, Mary?

Mary Perry

Veggies, non-starchy vegetables.

Dr. Sears

Exactly. So now here, here is your one two dietary punch to basically stop hunger. I get my 30 grams of protein at every meal. Not more, not less. But I make sure I'm eating lots of vegetables rich in fiber. One it's hard to over-consume vegetables. It's very easy to over-consume Twinkies and that basically drives down the hormone glucagon and you get hungry again. So by having a combination of 30 grams of protein and as many vegetables as you can, you have a very powerful, scientifically based way of stopping hunger from meal to meal to meal. Now the good news is it works. There's no side effects. It's natural. The body says, Thank you, thank you very much. The bad news is the hormonal effects only lasts about 5 hours, which means you had to repeat the game every 5 hours.

So how do you do this? A good rule of thumb, if you want to lose weight, first of all, get your 30 grams of protein at each meal. Make sure you have some fiber to go with that and try to eat all your meals while the sun is still up. Why? Because our body runs on circadian rhythms, not an Apple Watch. People say I'm doing intermittent fasting. I said, You know what? You know, you're basically, you know, barking up the wrong tree. So say, okay, I might have 12 hours a day when the sun is up on average. Okay? It means if I eat every 5 hours, I can consume all my meals with the right balance of fiber and, you know, protein. So I'm never hungry. Easy peasy. Now, repeat over and over again. It's called a habit. So you get in the habit to say, I want to go through life never being hungry. I want to have peak mental acuity because I have stable blood sugar levels. And if I do, my life is a lot easier.

Now that's too easy. I want to take an injection of a drug that basically causes tremendous side effects and I lose my lean body mass. That doesn't make sense. But people are desperate, and rightfully so, because our obesity epidemic has rapidly increased and that's not a good sign. And the reason is because if you're obese, it means you have insulin resistance, and that's the driver of every chronic disease state. So they're saying, well, lose weight. You've been in the diet business for many years at the research level. What do you tell your patients in studies?

Mary Perry

Yeah, well, even if you lose 5 to 10%, you see a lot of benefits, right? But it's hard to comply.

Dr. Sears

Yeah, because the thing is, I had to think too much. So the secret is saying once we understand the secrets of society, how we make it easier to comply, right. Of telling people to eat less and exercise more has not worked in the last century, and it won't work in the next century. But what can work, I believe, is basically a drug or a supplement that doesn't work.

Take food that has the right balance of protein, carbohydrate, fat and fiber, and in a format that people like to eat. What do people like to eat? Usually the three Ps: pizza, pasta and pastries. So the real challenge of going forward is not to basically get drugs to basically cause disturbances in our hormonal balancing in the brain, but food products that are desirable, they're more desirable than what you're consuming.

Dr. Sears

If they're less desirable, that's not going to last. But if they're more desirable? Hey, count me in! What are desirable things in the breakfast they could be, muffins. Who doesn't like muffins?

But they better taste like muffins. But you can now basically build muffins and to basically give that 30 grams of protein with the right amount of fiber. You simply aren't hungry next 5 hours.

Mary Perry

Right. And just to be clear, these are not these are not all kinds of muffins. These are specialized.

Dr. Sears

They are specialized but they should be viewed as almost drugs. They're constructed to basically use the body's natural hormonal mechanisms to basically cause satiety. Now, the food industry, they're biggest goal is to make money. And how do you make money? Well, one, protein is expensive. So you take the protein out of food products to take everything else out of food products like fiber and vitamins and minerals.

Now it basically has all the taste of cardboard. No problem. Add back sugar and say, that food tastes so great and so inexpensive. It's probably the most expensive thing you're consuming because nothing can basically accelerate the loss of wellness faster than ultra processed food.

Mary Perry

I agree.

Dr. Sears

So now we're on this new verge. We do see these weight loss drugs do work. They have significant side effects, but they've allowed us to basically delve more into understanding the biochemistry, the complex biochemistry and endocrinology of how our food can basically relay messages to our brain to say stop eating and what are the benefits. Yes, you will lose weight.

Not really. You actually lose fat and you maintain your muscle mass. Two, you think more clearly throughout the day. And most important thing, you live longer. The only proven way to live longer is to restrict calories. But that is only going to work if it's done without hunger or fatigue. And now in the 21st century, we have to add one more thing without hunger or fatigue and be very hedonically pleasing.

So we go back to our three P's, the pizza, the pasta and the pastry. And the technology does exist to make such products that basically, rather than creating hunger, stop hunger.

Mary Perry

I'm with you all the way. It's just a little bit hard to eat at 4:30 in winter in New England, but.

Dr. Sears

Well, it is. But a good rule of thumb is that try to eat your last meal at least 4 hours before you go to bed. So that's more doable. But yeah, I better be done eating that meal by 7:00, not 8:30. But again, you're trying to make your diet work in concert with your metabolism as opposed to against it.

Mary Perry

Yeah, no, that makes total sense. And I also think that once you sort of get these proteins in your diet and figure out your routine and like you said, become a habit, and even with fibrous vegetables, you know, it's much easier to to establish healthier habits and then not have to worry about some of the side effects that come with these weight loss drugs and supplements.

Dr. Sears

Healthier habits only come when basically it's a pleasurable task to use them. And so, again, the three Ps, the pizza, pasta and pastry say, I can do that. You're already halfway there to a longer and better life without hunger.

Mary Perry

Well, definitely a really compelling points on the benefits of, you know, improving your diet, the protein and the carbs and just even just being able to get that level of satiation to get through your meals without hunger makes it so much more sustainable in the long term.

Dr. Sears

That's called science.

Mary Perry

Well, thanks, Dr. Series, for your time today. It's always a pleasure.

Dr. Sears

Thank you.