Ozempic Outbreak transcript April 19 2024

Mary Perry
Hello and welcome to the Wellness Zone podcast, where we discuss the science of wellness, metabolism and the dietary pathways to maintain them. I'm Mary Perry, and I'm here with Dr. Barry Sears. And today we're going to talk about Ozempic. So Dr. Sears, Ozempic is something we've talked about before, but there's some newer research that goes along with it. So let's recap for our audience. Why is this the new wonder drug?

Dr. Barry Sears
Because a wonder drug does more than one thing. You know, Ozempic was developed for treating diabetes. But now we know it's approved for basically weight loss, for treating heart disease. Say, oh my God, what a wonder drug! So how can you do all these things? Well, the fact is, let's go back and look at the history of Ozempic.

It was originally developed as a treatment for diabetes. It is what is called an incretin. It actually increases the levels of insulin being secreted from the pancreas. Now you might say that does make sense because I have more insulin floating around the bloodstream. I'm going to get fat! Because insulin in the bloodstream will make you fat.

But insulin in the brain, and particularly the hypothalamus makes you thin. You say, "I don't get it!" That's because metabolism is very complex. So, they found out that though it was developed initially for treating diabetes. If they used higher and higher levels. They had something totally unexpected. People weren't hungry because now those lower levels of the active ingredient in Ozempic were good for increasing insulin to basically bring down blood sugar.

But higher levels were now getting the brain to stop eating. So though, though, that's good news, I lost weight. The bad news is I didn't lose that much fat. We've talked about this before. The weight loss is great. but the fat loss was not so great because you're losing a lot of lean body mass.

Whatever. You know, if I could fit better in my clothes, I can, you know, suffer. You know, a little loss of muscle or a loss of the heart tissue, or part of the liver, it'll grow back. So, but now we've seen now, the drug companies say, "What else cold happen?" Well, it says yes, it can reduce fatty liver. This is another epidemic in America. It can reduce addiction. I don't like alcohol as much. It can basically reduce depression. You say, oh my goodness gracious. Three unique diseases, not one. But why?

Mary Perry
Right. Yeah. How are these working to do all these great benefits that they're touting?

Dr. Barry Sears
Because all these chronic diseases and many, many more are related to increased insulin resistance. Now, how Ozemoic works is primarily at high enough concentrations, you're not hungry. And what if you're not hungry? What happens?

Mary Perry
Hunger goes down. You lose weight, right?

Dr. Barry Sears
Well, no. You you you basically, you don't eat as much food. And, now the weight goes down. So, what the the GPL-1 or what agonist that Ozempic is, what it does? It causes calorie

restriction. What's the number one thing you tell all of your patients when they want to lose weight.

Mary Perry
Restrict calories.

Dr. Barry Sears
And it works if they can do it. Or Ozempic says, I'll give you a little helping hand—at a price, of course. Now, one of the consequences when you restrict calories is that AMPK, the master regulator of a metabolism in every cell in your body, goes up. And when AMPK goes up, then you get all these good things happening.

Yes, you will lose weight, but primarily, excess body fat, not lean body mass. Yes, you will treat diabetes because it's AMPK that actually pulls the glucose out of the bloodstream. Yes. You will basically see a decrease in terms of, other diseases like, fatty liver. Why? Because you're burning fat faster in the liver.

You're also basically reducing inflammation, the underlying cause of depression. And you're also effecting the dopamine signaling pathways in the brain that make you more likely to abuse a substance, whether it be alcohol or drug. So when we look at Ozempic, it really kind of a. very high tech, very expensive with some side effects, way of increasing AMPK activity that decreases insulin resistance.

Mary Perry
So now I'm hoping you're going to tell us how we can naturally increase AMPK.

Dr. Bary Sears
Well, that's what you've well, you've already told me the answer. Calorie restriction! But that's not quite the answer. There's more to it, as usual. So what do we want to do if I want to restrict calories? I'd wire my mouth shut. Okay? That's why that's going to work. That's going to work for a little while. But that's not a long term solution.

So restricting calories is the direct way of increasing AMPK. But there's also two other aspects. One, what is it? The balance, the calories. Now you have to balance protein to carbohydrate, to make sure you're getting a balance of hormones in the bloodstream. So you're now not losing lean body mass. You also have to have indirect activators of AMPK working with it, like their little partners. One of them would be the omega-3 fatty acids.

They decrease inflammation, but they also increase AMPK activity. And also polyphenols. These are the chemicals that give fruits and vegetables their color. They reduce oxidative stress that increases insulin resistance, but they also activate AMPK. So it's really basically a three component system. It’s calorie restriction, but following the Zone diet. Having omega-3 fatty acids and adding polyphenols.

And now what you have is now what I call Metabolic Engineering. You're now using your food as a powerful drug, more powerful than Ozempic, to get all the benefits you hear about. You want to treat diabetes, okay. Metabolic Engineering. You want to lose fat? Metabolic Engineering. You want to reduce fatty liver disease? Metabolic Engineering. You want to reduce heart disease? Metabolic Engineering. You get the picture here.

Mary Perry
So Dr. Sears, a way to gauge success here is one, your clothes are going to start fitting better. But beyond that, what are the blood markers that you're going to start to see change? You

know, because I know there's so many other markers and conditions that you're going to impact by following this way of life.

Dr. Barry Sears
It'd be nice to see, a blood marker for AMPK, but you can't because it's inside the cell. It doesn't travel through the blood. But there is a marker. A marker called HOMA-IR. It's a marker that's easily measured. And as HOMA-IR goes down, it means insulin resistance is going down, which means AMPK activity is going up in every one of your 30 trillion cells in the body.

So this becomes a very good marker besides the fit of your clothes. And the fact is you're not hungry and you have more mental acuity that you are reprograming your metabolism. Now, why do you want to do that? Three reasons. One, you want to stay well. So what's my definition of wellness? It's basically is the absence of insulin resistance.

Great. Now eventually as we get older, you're not that point yet. But old people like me, we get older. We may start developing certain types of long term chronic diseases. So now why do you want to follow Metabolic Engineering? If you're taking a drug for any type of chronic disease, then AMPK activation makes that drug work better at lower concentrations. Now who doesn't want to take fewer drugs.

Mary Perry
Right? Especially as you age.

Dr. Barry Sears
But everybody said I don't want to take more drugs. However, there's one a group of people say, no, I want you to take more drugs and more expensive drugs. Yes. Those are the drug companies. Most people say great news, except for the drug companies. Say, you mean I can buy cheaper drugs that basically don't cost very much?

Say, yeah, I want stick it to you, but you've got some skin in the game. You're controlling your metabolism to make those drugs work better. But the final reason that you want to follow Metabolic Engineering is you want to slow down the aging process. Whether you're perfectly well or basically you have some chronic disease state. You really want to slow down aging.

And that's the key of AMPK. It basically goes in there and removes cells called senescent cells, also known as zombies cells, which are the underlying cause of developing chronic disease and speeding up the aging process. So you have an opportunity to say, I want to lose weight by using Ozempic, or I want to slow down the aging process and basically take fewer drugs the rest of my life by following Metabolic Engineering.

Mary Perry
Seems like a no brainer. So Dr. Sears, the science on Metabolic Engineering is complex. So if people want to learn more about this, where should they go?

Dr. Barry Sears
Well, this is why we have our site DrSears.com. Why? Because as you said, metabolism is complex. And how to reprogram it is even more complex. But we try to break it down into simple steps, bite sized steps, as you might say. Say, I can do this. I just have o have the right balance of protein to carbohydrate using the zone diet. Add some omega three fatty acids like your great grandmother told you, when she said “You can't leave the house until you have your cod liver oil!” And you basically take your polyphenols. And where do you find polyphenols?

Mary Perry
Fruits and veggies!

Dr. Sears
That's right. So grandma was right. She's at the cutting edge of 21st century biotechnology.