





Dr. David Cavan

The word "prediabetes" makes Dr. Donna Polk's patients pay attention.

She can tell them about their risk of a heart attack, a stroke—"they don't care," she said.

"But when I say 'prediabetic,' they say, 'What? I don't want to be diabetic,'" explained Polk, medical director for cardiac rehab at Brigham and Women's Hospital, a nonprofit teaching affiliate of Harvard Medical School.

The word, she explained, indicates where on the spectrum a epidemic." person's health lies.

"It's a continuum," said Polk, also director of the hospital's cardiovascular fellowship training program. "It's not like one day someone wakes up and they're diabetic."

"It's not like one day someone wakes up and they're diabetic."

—Dr. Donna Polk

Specifically, a person is considered prediabetic in the United States when his or her fasting blood glucose falls between 100 and 125 milligrams per deciliter of blood, Polk said.

Half of U.S. adults had diabetes or prediabetes in 2012, according to The Journal of the American Medical Association. The American Diabetes Association puts the number of Americans 20 and older with prediabetes at 86 million—nearly a 9 percent increase from two years earlier.

"It's huge. It's ever growing," Polk said. "People will call it an epidemic."

The Mayo Clinic—said to be the first and largest integrated nonprofit medical group practice in the world—lists "prediabetes" on its website's Diseases and Conditions page, saying it constitutes a blood sugar higher than normal but not yet high enough to be classified as Type 2 diabetes.

"Without intervention, prediabetes is likely to become type 2 diabetes in 10 years or less. If you have prediabetes, the long-term damage of diabetes—especially to your heart and circulatory system—may already be starting," according to the Mayo Clinic, whose yearly research budget exceeds US\$500 million.

Untreated, many cases of prediabetes progress to Type 2 diabetes, which can lead to high blood pressure, high cholesterol, heart disease, stroke, kidney disease, even blindness and limb amputation.

"It's a valid concept because it means that you have moved further up the curve to having diabetes," noted Dr. David Cavan, director of policy and programs at the International Diabetes Federation in Belgium. Before holding his current position, Cavan was a

diabetes physician in the U.K. for more than two decades.

But, Polk and Cavan said, lifestyle changes—specifically diet and exercise—are the most effective at lowering blood sugar to a healthy level.

"Whether you go up or down that curve is very closely related to lifestyle," Cavan said.

While medication can mitigate some of the effects, a diet high in sugar or carbohydrates will "outwork" the benefit, he continued.

"It is actually a very helpful thing ... to be able to identify someone as being at risk of developing diabetes and therefore be able to motivate them to make lifestyle changes ... that, at best, reverse them back down to normal metabolism," Cavan said.

Even a modest lifestyle change can make a significant difference, Polk noted. A mere 7 percent weight loss and only 150 minutes of exercise per week, for example, is all it takes to make a significant change, she said.

"It doesn't take much, and that's what I often tell my patients. Even 10 or 15 pounds can make a huge difference, can normalize a lot of those numbers."

Polk added: "It's really about little changes. Little changes that will make a huge difference that will prevent diabetes and its subsequent complications."

About the Author: Andréa Maria Cecil is assistant managing editor and head writer of the CrossFit Journal.