

## Rising Levels of Prediabetes Address Growing Problem: a Q&A with Julie Çelebi, MD

By Yadira Galindo | July 01, 2016

**D**iabetes can occur as an autoimmune disorder, when there is an imbalance between energy intake from food consumption and energy expenditure from physical activity, or when there is a disturbance in metabolism. The body adjusts to this imbalance by changing how it secretes and responds to hormones, like insulin.



Type 2 diabetes occurs when the body can't produce or becomes resistant to insulin — the master regulator of glucose storage and use. This disorder is a public health threat tied to the expanding problem of obesity. The Centers for Disease Control and Prevention recently reported that 40 percent of women and 35 percent of men in the United States are obese.

[Julie Çelebi, MD](#), a primary care physician at UC San Diego Health, says 86 million adults have prediabetes and 29 million have diabetes, which is why health care professionals are increasingly addressing prediabetes before the condition evolves into type 2 diabetes.

**Question:** How do I know if I have prediabetes?

**Answer:** A diagnosis of prediabetes and diabetes occurs through tests that measure a person's blood glucose – the simplest form of sugar created by the body from the consumption of food. Glucose provides cells with energy to do their job, but chronically high levels of blood glucose can result in prediabetes, and ultimately, diabetes. There are a variety of blood tests that inform physicians of a patient's blood glucose: Some that require fasting; others that do not. One of these tests is hemoglobin A1C, a weighted average of blood glucose over a few months' time, which does not require patients to fast. If a person's hemoglobin A1C level is between 5.7 to 6.4 percent, a diagnosis of prediabetes is made. Catching it at this stage means that lifestyle changes can address the problem. At 6.5 percent and higher, a patient has diabetes.

**Q:** Am I at risk?

**A:** These disorders are closely tied to weight, so those most at risk are people who are overweight or obese. But there is more to it. People who don't use sugar efficiently can actually have weight loss. It's important for patients to speak to their physicians about their past medical history because some conditions, like gestational diabetes and polycystic ovarian syndrome, can increase a person's risk, as can certain therapies, such as long-term use of steroids. In addition, individuals who live a sedentary lifestyle, smoke or who have a family history of diabetes are vulnerable. Certain racial and ethnic groups, including Latinos, African Americans, Asian Americans, Native Americans and Pacific Islanders have a higher risk of developing diabetes. People with prediabetes generally don't have any symptoms. If they are exhibiting symptoms, they likely already have diabetes. The best thing for someone to do is to have regular checkups with a primary care physician and discuss risk factors. An early diagnosis, before the body suffers ill effects of high blood sugar, is key.

**Q:** Is prediabetes reversible?

**A:** Yes, with lifestyle changes, patients can return to a healthy blood glucose level and prevent the onset of type 2 diabetes. Patients may be unable to change their genetics or family history, but the focus should be on what can be done to prevent progression from prediabetes to diabetes. Healthy weight loss, increased physical activity and quitting smoking all help to decrease the risk. A person doesn't have to reach the ideal body mass index (BMI) or his or her high school weight – just losing 5 to 10 percent of weight can lead to clinically positive health outcomes. Choosing a healthy diabetic plate model of half veggies, one-quarter carbs and one-quarter protein is one step. Adding 150 minutes of moderate exercise each week is crucial to reduce risk. Doing 30 minutes at a time is great, but even bursts of exercise in 10-minute increments have been shown to be beneficial.

**Q:** What if I need professional help?

**A:** Your primary care physician wants to help guide you to a healthy lifestyle. People should feel empowered to take control of their health. Knowledge truly is power. When a diagnosis occurs, it is an opportunity to look at risks and become proactive. Discuss all health concerns with your physician and ask about support services. At UC San Diego Health, we offer consultations with nutritionists and health coaches to promote positive lifestyle changes. Our [Diabetes Self-Management Clinic](#) provides in-depth instruction at three locations for patients who have prediabetes, type 1 diabetes or type 2 diabetes. [Our website](#) offers free online videos addressing different aspects of diabetes management. We can also refer patients to a diabetes prevention program with coaching sessions and nutrition counseling that provides a structured program and additional support. As your primary care providers, we are dedicated to giving you the support you need to reach your health goals and help you be well.

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