

What doctors want patients to know about type 2 diabetes prevention

NOV 17, 2023



Sara Berg, MS

News Editor

Type 2 diabetes is striking an ever-growing number of adults, but with rising rates of childhood obesity, it has become more common among youth too. There is good news though—type 2 diabetes is often preventable. In fact, many cases can be avoided by [making appropriate lifestyle changes](#). These changes can also lower your risk for developing heart disease and other conditions. A family physician shares what to keep in mind when preventing type 2 diabetes.

More than 37 million—or one in 10—Americans have diabetes and about 90–95% of them have type 2 diabetes, according to the Centers for Disease Control and Prevention. But one in five people don't know they have diabetes. While type 2 diabetes most often develops in people over 45 years old, more and more [children, teens and young adults](#) are also being diagnosed with it.

The AMA's What Doctors Want Patients to Know™ series provides physicians with a platform to share what they want patients to understand about today's health care headlines.

In this installment, Kate Kirley, MD, a family physician and director of chronic disease prevention at the AMA, took time to discuss what patients need to know about preventing type 2 diabetes.

Type 1 and 2 are different

“They’re two pretty different conditions. Type 1 diabetes is an autoimmune condition, so it’s a condition where our immune system has attacked the cells in our pancreas that create insulin,” Dr. Kirley said. “And so, the body no longer makes enough insulin, and the body can’t process glucose properly because there’s not enough insulin.”

“Type 2 diabetes is a condition when your body does not appropriately respond to your insulin and we do not process our glucose normally because we’re not responding to our insulin properly,” she explained. “That can result in elevated blood glucose levels and other complications down the road.”

“There’s a lot of research into type 1 diabetes prevention now, so there is some emerging evidence that there may be options for prevention in the future, but we don’t know just yet,” Dr. Kirley said, noting “the more obvious form of diabetes that has clear prevention options is type 2.”

You can reduce your risk

“Type 2 diabetes contributes to significant health care problems and costs in our country,” said Dr. Kirley. “It’s a devastating illness that causes heart attacks, strokes, kidney failure, amputations and diminishes the quality of life for the many people in the U.S. who have type 2 diabetes.”

“One of the reasons to raise awareness is that many people can reduce the likelihood that they will develop type 2 diabetes or reduce the likelihood that they’ll get complications from it,” she said. “We want to make sure people are aware of it and know about it so that they can take actions that might be available to them to stay healthy.”

Take prediabetes seriously

“Type 2 diabetes risk isn’t simple and straightforward, but we know that people have a higher risk of developing type 2 diabetes [if they have prediabetes](#),” said Dr. Kirley. That means “they already have somewhat elevated blood-glucose levels, but not yet high enough to have type 2 diabetes.”

“That’s probably the single most predictive risk factor of who could develop type 2 diabetes,” she said. “But prediabetes isn’t the only risk factor. There are other risk factors.”

There’s a health inequity issue

“People who have a strong family history of type 2 diabetes are at much higher risk as well as [people who struggle with obesity](#),” said Dr. Kirley. “And then people who identify as certain races and ethnicities also have a higher risk of developing type 2 diabetes.

“Not because there is anything inherent about their biology, but because of the systemic racism that has created the environments and the circumstances where people are more likely to develop type 2 diabetes,” she added.

Monitor gestational diabetes

“Other people who are at risk include people who had [gestational diabetes](#) when they were pregnant,” said Dr. Kirley. “People who have a history of gestational diabetes are a frequently overlooked group of people and they’re really at high risk for developing type 2 diabetes.”

Such patients really benefit “from more frequent follow up with their physicians, making sure they’re monitoring this over the long term,” she said, adding “they may benefit more from medications for prevention than some of the other people with different risk factors.”

“This is a group that is really important for us to pay attention to,” Dr. Kirley emphasized, noting it is important to keep a [gestational diabetes diagnosis](#) in mind “especially if they were being cared for by an ob-gyn when they were pregnant, but their primary care physician is a different person.”

That is where patients and physicians should “make sure that that information stays top of mind for their whole care team and we don’t forget about their history of gestational diabetes down the road,” she said.

Identify changes you can make

There's not much good that can come out of playing "the blame game" regarding the role of patients' health behaviors, said Dr. Kirley. That having been said, "if a person can [identify that they have prediabetes](#) or some of those other risk factors such as obesity, then we still encourage people to examine whether there are changes that they can make that would help decrease their risk."

"There oftentimes are some things that they really can't change about their lives," she said. "But oftentimes there are some real positive changes that people can make."

Don't feel guilty

"Diabetes risk is really complicated, and there's a genetic component that people have no control over," said Dr. Kirley, adding that "how people's environment influences their risk of type 2 diabetes is an area that is still only partially understood."

"There are plenty of factors in our environment that, as individuals, we have no control over that still influence our risk of developing type 2 diabetes," she said. "So, the solutions for preventing type 2 diabetes do include steps individuals can take, but it's also really important to think about things that communities and systems can change."

That's because "some of a person's risk really is completely out of their individual control," Dr. Kirley said.

Take care of your heart

"One of the main reasons we are so concerned about people who get type 2 diabetes is it is a really difficult illness on your cardiovascular system," Dr. Kirley said. "Diabetes causes damage to your blood vessels throughout your body—within your heart, brain, legs and kidneys."

"Having diabetes and having that long-term damage to your blood vessels increases that risk for heart attack and stroke," she added. "Diabetes, for many people, is actually a

cardiovascular disease, substantially increasing a person’s risk for having a heart attack or stroke.”

Cardiovascular disease is the number one cause of death in people living with diabetes, resulting in two-thirds of deaths in people with type 2 diabetes. On top of that, people with diabetes are twice as likely to have heart disease or a stroke than people without diabetes, according to the American Diabetes Association. That’s why it is important to keep your heart health in mind by [lowering high blood pressure](#), [addressing high cholesterol](#), [maintaining a healthy weight](#) and more.

Change doesn’t have to be dramatic

“In terms of individual actions that people can take, they may not be as dramatic as people think that they need to be,” said Dr. Kirley. “For [people who are struggling with obesity](#), they might be focused on losing 50 pounds, but losing five to 10 pounds could really decrease their likelihood of developing type 2 diabetes.

“That’s another reason why talking with a physician can be really helpful because it helps you do some goal setting and figure out what a realistic or appropriate goal is to actually reduce your risk,” she added, noting “it may not be as ambitious or as intimidating as a lot of people tend to think it is.”

Obesity treatments can help

A person’s risk of developing type 2 diabetes greatly increases with obesity. But there are obesity treatments that can help: [bariatric surgery](#) and [anti-obesity medication](#).

Bariatric surgery is done when diet and exercise have not worked or if you have serious health problems because of obesity. This form of treatment helps to reduce hunger and normalize metabolism, including blood glucose, blood pressure and cholesterol.

Anti-obesity medications are approved by the Food and Drug Administration (FDA) to help people achieve and sustain a healthier weight. There are two categories of anti-obesity medications: oral and injectable.

The newer medications are injectable and include semaglutide, marketed as Ozempic to treat type 2 diabetes and as Wegovy for weight loss. The FDA has added a new [warning label for both](#) semaglutide medications regarding potential intestinal blockage.

Another medication that has been making headlines is tirzepatide (marketed as Mounjaro). Use of tirzepatide resulted in more than 20% weight reduction in those with obesity. But this has not been approved by the FDA for use as an anti-obesity medication. It is approved for the treatment of type 2 diabetes.

Older, oral anti-obesity medications work as mild appetite-suppressing medications. For example, naltrexone/bupropion (marketed as Contrave) is an oral anti-obesity medication that has an antidepressant and an anti-addiction medication in it. Additionally, it is important to note that anti-obesity medications are for long-term use because obesity is a chronic illness.

Get your entire family involved

“Diabetes tends to run in families, so interventions that help the entire family are the way to think about preventing type 2 diabetes,” said Dr. Kirley, noting that “family members can support each other by working together to make healthy behavior changes.

“For example, a lot of times we’ll see that the patient we’re focused on isn’t the person who prepares the meals in the home,” she added. That’s why “we need to have the involvement of the whole family to make sure that everybody’s getting good nutrition, thinking about [how they can get physical activity](#) and people are more likely to do physical activity if they’re doing it together with people.”

“The family has a lot of opportunities to work together to make similar healthy behavior changes,” Dr. Kirley said.

Reach out for guidance

Patients “have a couple places that they can go for resources and help to reduce their risk,” said Dr. Kirley. “They can certainly go to their physician’s office and talk to the team there. Your physician can help connect you to preventive interventions such as the [Diabetes Prevention Program](#).

“That can help you implement healthy behavior changes like improving your nutrition, getting more physical activity, achieving some weight loss and really figuring out how to create long term strategies that support those positive behavior changes,” she added. “Your physician and care team can also help you figure out if taking a medication might be helpful to reduce your risk of developing type 2 diabetes.”

“They can help you consider comprehensive approach to manage obesity that also can include potentially taking some medications or using some other behavioral interventions or surgery to help treat your obesity,” Dr. Kirley said. “Then the other place you can look for assistance is out in the community. There are often chronic disease prevention programs available from community organizations like YMCAs.

“Sometimes faith-based organizations offer different types of support to people who are particularly focused on making those healthy behavior changes,” she added.

Take the risk test

“If you do not know your own risk for type 2 diabetes, then a health maintenance visit with a physician is a good time to discuss that and figure that out,” said Dr. Kirley. “But really you can bring it up at any time when you see your doctor—it’s always an appropriate question.”

Additionally, “you can go to [DoIHavePrediabetes.org](#) to do your own risk assessment before going to visit your doctor,” she said. “Taking the risk test will help assess your risk for prediabetes and type 2 diabetes, and it can also help you figure out how to talk to your physician about this issue.”

“For people who have prediabetes, we do want to make sure that they are talking with their physician and getting a blood test at least once a year so that they can see what their status is,” Dr. Kirley said. “For people who don’t have that diagnosis, but might have risk

factors, they do want to get a blood test from their physician at least every three years to know what their status is.”