

# When the Doc Says ‘Diabetes’

The diagnosis may sound scary. Think of it instead as a chance at a new life By LESLIE GOLDMAN

**I**N 2017, Bruno Graizzaro weighed 298 pounds and was a self-described “massive eater.” Having lived with type 2 diabetes for 11 years, he was on high doses of injectable insulin, took an oral diabetes drug and was haunted by the specters of multiple family members who had struggled with diabetes, including his father, who lost a leg to the disease. “I was so entrenched in poor eating that I just relied on the medicines to control my blood sugar,” he says.

Then he met an endocrinologist at the UMass Diabetes Center of Excellence who suggested a different approach: committing to a combination of healthy nutrition and exercise, which would be jump-started with two newer diabetes drugs that also promote weight loss. Today, at 64, the Boston accounting executive has lost more than 60 pounds, exercises four to five days a week (basketball, squash, yoga and strength training are favorites) and needs only very minimal insulin.

Insulin is the hormone that moves sugar out of the blood and into the body’s cells. With diabetes, the body either can’t create the hormone (type 1) or, more commonly, becomes resistant to its effects (type 2). In both cases, insulin injections are a common treatment. (January marks the 100th anniversary of insulin’s first use in a diabetes patient.)

A type 2 diagnosis is frequently met with a mixture of fear, dread, guilt—and drugs. “People with type 2 diabetes often end up with four or

five medications, including insulin, because people think that’s the only way,” notes Osama Hamdy, M.D., director of the Inpatient Diabetes Program at the Joslin Diabetes Center in Boston. “But many people can manage diabetes solely with lifestyle changes,” including exercise, a carbohydrate-controlled nutrition plan, proper hydration and more.

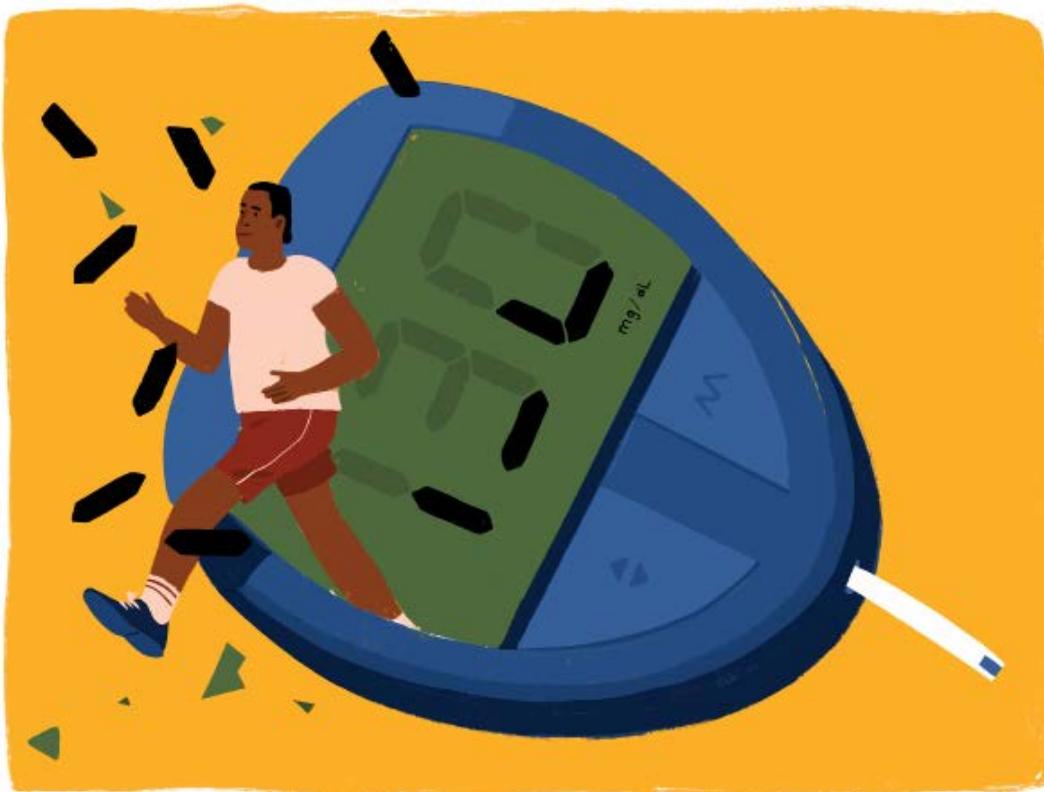
If you’ve received a diagnosis of diabetes within the past five years, now is the time to implement strategic behavioral tactics that may not only improve the condition but possibly even reverse it, Hamdy says. And even long-term diabetes sufferers such as Graizzaro can make major changes. “Don’t start the disease with blame and guilt,” Hamdy adds. “Accept the reality and ask, ‘What will I do now? Will I live with the disease forever, or will I take a chance and turn this into a glorious opportunity?’”

Here are seven ways to flip the script—or to prevent getting diabetes in the first place.

## LOSE (JUST A LITTLE) WEIGHT

As a person gains weight—even a few pounds—the body can have more difficulty regulating blood sugar levels via insulin. The result:

a condition called insulin resistance, in which the pancreas has to pump out more and more insulin in an effort to move sugar from the blood and into the cells.



Insulin resistance is at the heart of most type 2 diabetes.

Insulin—whether made by the body or taken as a medication—promotes fat storage and weight gain. So, gaining weight can force the body to make more insulin, which causes more weight gain, and on and on. But even modest weight loss—5 to 10 percent of one’s body weight—can lead to huge improvements, Hamdy observes. His own research has shown that a 7 percent loss can improve insulin sensitivity by approximately 57 percent.

## WATER DOWN BLOOD SUGAR

The more dehydrated you are, the more concentrated the sugars in your blood become, like a prune versus a juicy plum, says Jessica Crandall Snyder, a certified diabetes care and education specialist in Denver. A study in *Diabetes Care* followed subjects for nine years. Those who drank less

than a half liter of water per day had a higher risk of developing elevated blood sugar levels compared with those who drank more. Water, herbal tea and milk all count. Coffee lovers should limit their intake to three cups a day; caffeine is dehydrating.

## TRY EXERCISE SNACKING

“Exercise snacking” means spreading short bouts of activity—for instance, a 10- to 15-minute walk after dinner—throughout the day. Research suggests that these bite-size bits of activity can help control blood sugar better than one longer workout.

But make sure you’re doing various types of exercise, including strength training. Adults naturally lose 8 percent of their muscle mass every 10 years between ages 40 and 70. “Diabetes doubles that,” Hamdy points out. Try spending 10 minutes a day building strength by using weights, resistance bands or body-weight moves; 10 minutes doing aerobic activity such as fast walking, swimming,

jogging or tennis; and 10 minutes doing stretching, which improves joint movement and reduces chances of injury. Walking as much as possible throughout the day matters, too. A 2018 study in the *British Journal of General Practice* linked 10,000 steps a day with improved diabetes control.

## MUSCLE UP WITH PROTEIN

Protein is important for maintaining muscle and stimulating several hormones that contribute to blood sugar regulation. Focus on fish, white-meat chicken, plant-based sources (beans, nuts and tofu) and lean cuts of beef, and make sure you’re eating protein at breakfast and lunch as well as at dinner.

## GET VACCINATED AGAINST COVID-19

People with diabetes, obesity or both are at increased risk for severe illness and death from COVID-19. And emerging research suggests that COVID can worsen diabetes by causing damage to the pancreas and system-wide inflammation that increases insulin resistance.

Because vaccination leads to milder COVID, if infected, it should indirectly result in less COVID impact for preexisting diabetes, says Nitin Kapoor, M.D., a professor of endocrinology at Christian Medical College in Vellore, India. Also, his research is among several studies that link COVID to new cases of diabetes.

## DON’T FOCUS ON SUGAR

After hearing “You have type 2” for the first time, people often go to extremes, drastically limiting carbs (with diets such as keto) or trying to live without sugar. But too few carbs can result in fatigue, nutritional deficiencies and dangerously low blood sugar. Avoid the trap of focusing on sugars and instead read labels for “Total Carbohydrate”; this term incorporates sugars (both naturally occurring and added) as well as

other types of carbs, says Crandall Snyder. Women should aim for 30 to 45 grams of total carbs per meal; men, 60 to 75.

Because proper nutrition is so important after a diabetes diagnosis, she advises consulting with a registered dietitian (RD) or certified diabetes care and education specialist (CDCES) to get your eating plan on the right track. (Medicare covers three hours of nutritional counseling if you’ve been diagnosed with diabetes, and 10 hours of diabetes self-management education.)



## AND LET THE MEDS COME AS NEEDED

It’s common for people who are trying to control their diabetes to feel like failures if they can’t get off their medications, says Phyllisa Deroze, a global diabetes patient advocate and diabetes lifestyle blogger. “A year after my diagnosis, I was managing with just diet and exercise. There was a big ‘Woo-hoo!’ with every medication I dropped,” she notes. But her health care provider explained that medications could still play an occasional role in her life—and, indeed, Deroze ended up needing insulin while she was pregnant. “Insulin gets a bad rap, but it helps many people,” she says. ■

*Science journalist Leslie Goldman holds a master’s degree in public health.*

Illustrations by Ryan Johnson