

# The ABCs of Diabetes

When we eat food, part of it is turned into **glucose** (sugar), which helps provide energy to the cells in our bodies. **Insulin**, a hormone made by the **pancreas** (an organ in the abdomen), helps glucose get into cells. When a person has **diabetes mellitus** (the term literally means “excessive sweet urine”), his or her body either does not make enough insulin or is unable to properly use the insulin it makes.

Diabetes is a serious disease that affects approximately 16 million individuals in the United States and can lead to disability and even death. The May 15, 2002, issue of *JAMA* is dedicated to articles about diabetes.

## TYPES OF DIABETES

- **Type 1 diabetes mellitus** (sometimes called insulin-dependent diabetes) accounts for 5% to 10% of all diabetes and may be caused by genetic, immune system, or environmental factors. People appear to be born with a tendency for this type of diabetes, which usually appears by the early teen years.
- **Type 2 diabetes mellitus** (sometimes called adult-onset diabetes) is the most common type, accounting for 90% to 95% of all cases. Risk factors include being overweight, being physically inactive, and having family members with diabetes.
- **Gestational diabetes** occurs in pregnant women and often disappears after pregnancy. This type can pose risks to the unborn fetus and needs to be managed throughout pregnancy.

## PREVENTING AND TREATING DIABETES

At present, there is no way to cure or prevent type 1 diabetes. However, recent research has shown that type 2 diabetes can be controlled and possibly prevented by weight loss and regular exercise. For both types of diabetes, maintaining good control of blood sugar can reduce serious complications that affect the heart, kidneys, eyes, and blood vessels.

- **Weight:** Keep your weight to a recommended range in proportion to your height. Your physician can tell you what a good weight is for you.
- **Healthy eating:** Plan meals ahead and balance food intake with insulin intake as directed by your doctor. Keep your diet low in fatty foods and high in foods that contain fiber, such as whole grains, fruits, and vegetables.
- **Physical activity:** Stay physically active and be sure to exercise regularly—for example, walking briskly for 30 to 60 minutes at least 3 times a week. Check with your doctor before starting a new exercise program.
- **Medications:** If you have diabetes, take all medications, including insulin, as prescribed by your doctor, and check your glucose levels regularly, as advised by your doctor.
- **Tobacco:** Don't smoke. If you already use tobacco, consult your doctor for help in quitting.

Although diabetes is a serious disease, patients who take good care of themselves and follow their doctor's orders can lead long, healthy lives.

## FOR MORE INFORMATION

- American Diabetes Association  
800/342-2383  
[www.diabetes.org](http://www.diabetes.org)
- National Institute of Diabetes and Digestive and Kidney Diseases (National Diabetes Information Clearinghouse)  
800/860-8747  
[www.niddk.nih.gov](http://www.niddk.nih.gov)
- American Association of Diabetes Educators  
800/338-3633  
[www.aadenet.org](http://www.aadenet.org)

## INFORM YOURSELF

To find this and previous JAMA Patient Pages, go to the Patient Page Index on JAMA's Web site at [www.jama.com](http://www.jama.com). A Patient Page on managing type 2 diabetes was published in the January 12, 2000, issue, one on type 2 diabetes mellitus in children in the September 26, 2001, issue, one on safe driving for people with diabetes in the August 25, 1999, issue, one on the benefits of regular physical activity in the June 14, 2000, issue, and one on the benefits of eating more fruits and vegetables in the October 6, 1999, issue.

Sources: American Association of Diabetes Educators, American Diabetes Association, Centers for Disease Control and Prevention, National Institute of Diabetes and Digestive and Kidney Diseases

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