

Weight Gain and Diabetes

Diabetes is a common disorder in which the body has difficulty controlling levels of sugar in the bloodstream. Normally, the hormone **insulin** made by the **pancreas** (an organ in the abdomen) regulates blood sugar levels. The bodies of individuals with **type 1 diabetes**, which usually starts by the early teen years, do not make enough insulin to control blood sugar, so they must receive insulin injections. The bodies of persons with **type 2 diabetes** are resistant to the effects of insulin. **Type 2 diabetes**, also known as "adult-onset" diabetes, usually develops in adulthood but can also occur in overweight children. Family history of diabetes and excess weight, especially weight carried around the middle, are strong risk factors for developing type 2 diabetes. Losing weight greatly reduces your chances for type 2 diabetes and can help bring your blood sugar under control if you already have type 2 diabetes. Type 2 diabetes can be treated with diet, exercise, and oral prescription medications but may require insulin shots.

The August 25, 2004, issue of JAMA includes an article reporting that women who increased drinking sugar-sweetened beverages to 1 or more drinks per day were more likely to gain weight and that a high consumption of these beverages was also related to a higher risk of type 2 diabetes.



TO LOSE OR CONTROL WEIGHT

- Get regular exercise—at least 30 minutes per day of brisk walking, sports, or active* games.
- Eat a healthful diet rich in vegetables, fruits, and whole grains and low in refined carbohydrates, such as sweets and white bread.
- Limit the amount of high-sugar beverages you drink, such as soft drinks and fruit punches.
- Avoid high-fat foods like ice cream, butter, and high-fat meats.
- Limit alcohol to no more than 1 drink per day for women, 2 per day for men, and none if you have any difficulty controlling alcohol intake.
- Eat several small meals throughout the day instead of 3 large meals.
- Always eat a balanced breakfast.
- If you are overweight, aim to lose no more than 2 pounds per week—losing more than that can be unhealthy and often leads to rebound weight gain.
- Get your family and friends involved by encouraging them to eat healthful foods and exercise together.

Realize that your diet and exercise regimen are lifestyle changes that must be maintained in the long term to keep weight off.

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

FOR MORE INFORMATION

- American Diabetes Association
800/DIABETES (800/342-2383)
www.diabetes.org
- National Institute of Diabetes & Digestive & Kidney Diseases
800/860-8747
www.niddk.nih.gov

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To find this and other JAMA Patient Pages, go to the Patient Page link on JAMA's Web site at www.jama.com. A Patient Page on losing weight was published in the June 14, 2000, issue; one on type 2 diabetes in children was published in the September 26, 2001, issue; one on the ABC's of diabetes was published in the May 15, 2002, issue; and one on type 1 diabetes was published in the October 22/29, 2003, issue.

Sharon Parmet, MS, Writer

Cassio Lynn, MA, Illustrator

Richard M. Glass, MD, Editor

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