

Understanding Diabetes



THE OHIO STATE UNIVERSITY

WEXNER MEDICAL CENTER

Whether you have had diabetes for many years or have just been told you have diabetes, you are not alone. More than 29 million people in the United States (9.3%) have diabetes. The information in this handout will help you understand more about diabetes and how to live successfully with it.

About diabetes

Diabetes is a disease in which your blood glucose, or blood sugar, levels are too high. Glucose comes from the foods you eat. Insulin is a hormone, produced by the pancreas, that helps the glucose get into your cells to give them energy.

- With **type 1 diabetes**, your body does not make insulin.
- With **type 2 diabetes**, the more common type, your body does not make enough insulin, or your body is not able to use the insulin it makes. Without enough insulin, the glucose stays in your blood.
- With **prediabetes**, your blood glucose is higher than normal but not high enough to be called diabetes. Having prediabetes puts you at a higher risk of getting type 2 diabetes.

Over time, having too much glucose in your blood can cause serious problems. It can damage your eyes, kidneys, and nerves. Diabetes can also cause heart disease, stroke, and even the need to remove a limb. Women can also get diabetes during pregnancy, called **gestational diabetes**.

Warning signs of diabetes

Everyone responds differently to diabetes. Some of the common warning signs are:

- Having to go to the bathroom often to pass urine.
- Feeling thirsty, even though you are drinking fluids.
- Losing weight.
- Blurry vision.
- Healing is slow for cuts or scrapes on your skin.
- Feeling tired.
- Feeling hungry.
- Being irritable or grumpy.

Often people may not notice any signs of diabetes. One in four people with diabetes doesn't know he or she has it.

Resources

- **Ohio State's Diabetes Research Center**, www.diabetesresearch.osu.edu, 614-685-3333
- **American Diabetes Association**, www.diabetes.org
- **Academy of Nutrition and Dietetics**, www.eatright.org
- **American Heart Association**, www.heart.org - select "Conditions" and then "Diabetes"
- **Centers for Disease Control and Prevention**, www.cdc.gov/diabetes
- **Central Ohio Diabetes Association**, <http://diabetesohio.org>
- **U.S. National Library of Medicine's MedlinePlus**, www.nlm.nih.gov/medlineplus - select "Health Topics" and then "Diabetes Mellitus"
- **National Diabetes Education Program**, <http://ndep.nih.gov>
- **National Institute of Diabetes and Digestive and Kidney Diseases**, www.niddk.nih.gov

Diagnosing diabetes

Your doctor will do a physical exam and ask you about your signs. Blood tests will be done to check for diabetes:

- An **A1C test**, also called the hemoglobin A1C, HbA1c or glycohemoglobin test, measures blood glucose over the last 2 to 3 months. You do not need to fast for this test. An A1C of 6.5% or above indicates diabetes.
- A **fasting plasma glucose (FPG) test** measures blood glucose. You will need to fast for at least 8 hours before the test. A FPG of 126 mg/dl or above on two testing occasions indicates diabetes.
- A **glucose tolerance test (GTT)** measures blood glucose. You will need to fast for at least 8 hours before the test and for 2 or 3 hours after drinking a sweet tasting orange drink. A blood glucose level of 200 mg/dl or above indicates diabetes.

Prediabetes

If you have blood glucose levels that are higher than normal, but not high enough to be diabetes, you have prediabetes. 86 million adults, more than one in three U.S. adults, have prediabetes. Without weight loss and moderate physical activity, 15 to 30 percent of people with prediabetes will develop type 2 diabetes within five years.

How to prevent or delay type 2 diabetes:

- Lose weight. Losing just 5 to 10 percent of your body weight can reduce your diabetes risk.
- Eat a healthy diet that is low in fat and calories.

- Increase your physical activity. Exercise most days of the week, such as walking briskly for 30 minutes, 5 days a week.
- See your doctor regularly for wellness checkups.

Treating diabetes

If your blood glucose level indicates diabetes, your doctor, nurse and dietitian will work with you to control your diabetes. The goal of treatment is to keep your blood glucose level as near to normal as possible (80 to 130 mg/dl fasting). To do this, a balance of food, medicine, and exercise is needed.

How to control your diabetes:

- Follow your meal plan.
- Take your insulin or other diabetes medicines as ordered.
- Exercise most days of the week, such as walking briskly for 30 minutes, 5 days a week.
- Maintain a healthy weight.
- Learn how to check and record your blood glucose levels.
- Learn how to recognize when your blood glucose level is too high or too low.
- Keep all of your appointments with your doctors, nurses and dietitians.
- Attend diabetes education classes.

Learn as much as you can about diabetes. The more you know about your diabetes, the better you will be able to control it.

Talk to your doctor or health care team if you have any questions about your care.

For more health information, contact the Library for Health Information at **614-293-3707** or e-mail **health-info@osu.edu**.