



Screening for Type 2 Diabetes

WHAT ARE TYPE 2 DIABETES AND PREDIABETES?

Both type 2 diabetes and prediabetes are conditions in which blood glucose (sugar) levels are higher than normal. The pancreas, an organ located just behind the stomach, produces insulin. Insulin is a hormone that helps to move glucose from the bloodstream into your body's cells where it is used for energy. This process controls the amount of glucose in your blood, keeping it from getting too low or too high.

Type 2 diabetes and prediabetes occur when the body doesn't make enough insulin or can't use it properly. As a result, glucose levels build up in the bloodstream. Prediabetes occurs when glucose levels are higher than normal, but not as high as in diabetes. Having prediabetes puts you at risk for developing type 2 diabetes.

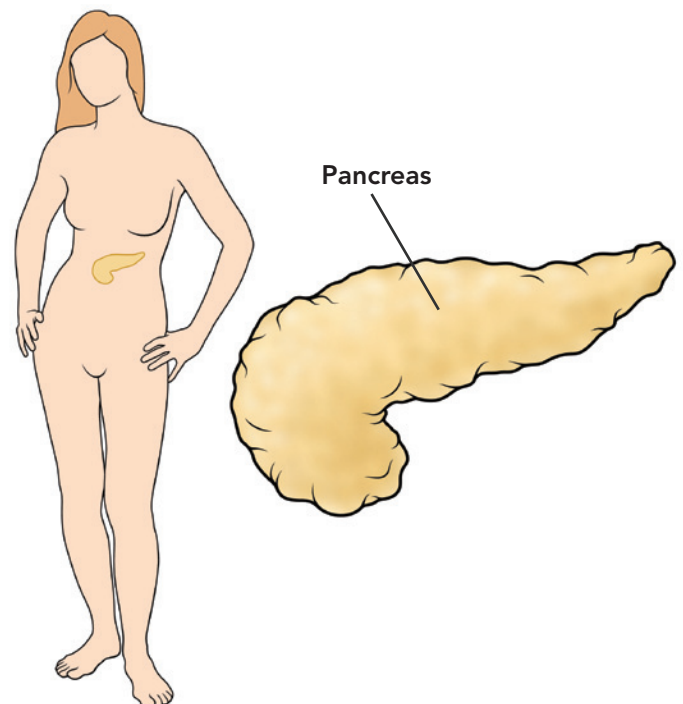
DID YOU KNOW?

You can have prediabetes or type 2 diabetes and not know it.

WHY IS SCREENING FOR DIABETES IMPORTANT?

People can have prediabetes or type 2 diabetes for years and not have any obvious signs or symptoms. Type 2 diabetes is often not diagnosed until health problems appear as a result of high blood glucose. These can include vision problems, kidney disease, or nerve damage. If left untreated, diabetes can cause more serious problems like blindness, kidney failure, leg amputation, heart attacks, and stroke.

It's important to know if you have prediabetes or diabetes, so you can make lifestyle changes or take medication to manage your condition. People at risk should be screened (tested) for diabetes and prediabetes.



WHO IS AT RISK OF DEVELOPING PREDIABETES OR TYPE 2 DIABETES?

Being older (over 45) and overweight are the greatest risk factors for developing diabetes. Other factors that increase your chances of developing high blood glucose include

- Having a parent or sibling with diabetes
- Having an African American, Latino/Hispanic, or American Indian family background
- Having had gestational diabetes (diabetes during pregnancy) or giving birth to a baby weighing more than 9 pounds
- Having high blood pressure (140/90 mm Hg or higher)
- Having low levels of HDL (good) cholesterol (below 35 mg/dL in men or 45 mg/dL in women) or high levels of triglycerides (above 250 mg/dL)
- Having polycystic ovary syndrome (PCOS)
- Being physically inactive

HOW DO YOU GET SCREENED FOR DIABETES?

There are three blood tests that can be used to check the levels of glucose in your blood and diagnose prediabetes or diabetes:

- Fasting blood glucose test (FBG). Blood is drawn in the morning after you go without food overnight or for at least 8 hours.
- Oral glucose tolerance test (OGTT). This test is also done in the morning after going without food overnight or for at least 8 hours. Blood is drawn before you drink 8 ounces of a sugar solution and 2 hours after. This test is more precise but less convenient than the FBG test.
- Hemoglobin A1C test (A1C). This test shows what your average blood glucose levels have been over the past two to three months. You can eat and drink normally before the test.

WHAT SHOULD YOU DO IF SCREENING SHOWS YOU HAVE PREDIABETES OR TYPE 2 DIABETES?

If tests show you have high blood glucose, you should talk with your doctor about the best way to manage your condition. The choice of treatment depends on whether you have diabetes or prediabetes and how well you respond to treatment. For many people, weight loss through diet and exercise is enough to bring blood glucose levels back to normal. If diet and exercise alone don't work, several medications are available to manage the disease. Getting screened is an important first step. Knowing your blood glucose levels and working with your doctor to keep your levels as close to normal as possible will help you to enjoy a long and healthy life.

TEST RESULTS

Normal

FBG: 70-99 mg/dL
OGTT: Less than 140 mg/dL
A1C: 4% to 5.6%

Prediabetes

FBG: 100-125 mg/dL
OGTT: 140-199 mg/dL
A1C: 5.7%–6.4%

Diabetes

FBG: 126 mg/dL and higher
OGTT: 200 mg/dL or higher
A1C: 6.5% and higher

Questions to ask your doctor

- Should I have my blood glucose level tested?
- What are the results of my testing and what do they mean?
- What can I do to bring my glucose levels back to normal?
- Should I see a diabetes educator?
- Should I see an endocrinologist for my care?

RESOURCES

- Find-an-Endocrinologist: www.hormone.org or call 1-800-HORMONE (1-800-467-6663)
- Find a diabetes educator (American Association of Diabetes Educators): www.diabeteseducator.org/DiabetesEducation/Find.html
- Hormone Health Network diabetes information: www.hormone.org/diabetes
- National Diabetes Information Clearinghouse (National Institutes of Health-NIH): <http://diabetes.niddk.nih.gov/dm/pubs/riskfortype2/index.aspx>
- National Diabetes Education Program (NIH): <http://ndep.nih.gov/publications/PublicationDetail.aspx?PubId=71>
- The American Diabetes Association: www.diabetes.org/diabetes-basics/type-2/?loc=DropDownDB-type2
- Mayo Clinic: www.mayoclinic.com/health/prediabetes/DS00624

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The Hormone Health Network offers free, online resources based on the most advanced clinical and scientific knowledge from The Endocrine Society (www.endo-society.org). The Network's goal is to move patients from educated to engaged, from informed to active partners in their health care. This fact sheet is also available in Spanish at www.hormone.org/Spanish.

