

Glucose Tolerance



Does this test have other names?

Oral glucose tolerance test, OGTT, GTT

What is this test?

An oral glucose tolerance test is used to screen for diabetes or prediabetes. To start the test, your healthcare provider will draw your blood to check your blood sugar (glucose) level. Then you will drink a liquid with a lot of glucose. Your healthcare provider will draw a sample of your blood every hour for the next 2 hours to check your blood glucose. This will help assess your risk for prediabetes, diabetes, or gestational (pregnancy) diabetes. It will also help diagnose diabetes.

Why do I need this test?

The test is often a first step in diagnosing prediabetes, diabetes, or gestational diabetes.

You may need this test if you have symptoms of diabetes. These include:

- Increased thirst
- Increased urination
- Unexplained weight loss
- Blurred vision
- Tiredness
- Sores that don't heal

You may also need this test if you have risk factors for diabetes. These include:

- Overweight or obesity
- Physical inactivity
- High blood pressure
- High cholesterol
- Family history of diabetes

The American Diabetes Association advises that adults of any age who are obese or overweight and have 1 or more risk factors should be tested. All adults should be tested for diabetes every 3 years starting at age 45. If a person has prediabetes, testing should happen yearly. Adults with diabetes should have their blood tested much more often.

What other tests might I have along with this test?

You may need tests to diagnose diabetes or watch your blood glucose levels. These tests include:

- Blood glucose testing
- A1C blood test

Heart health is closely tied with diabetes. Because of this, you will need regular tests of your:

- Blood pressure
- Cholesterol
- Triglycerides

What do my test results mean?

Test results may vary depending on your age, gender, health history, and other things. Your test results may be different depending on the lab used. They may not mean you have a problem. Ask your healthcare provider what your test results mean for you.

This test can be done several ways. For a common type of glucose tolerance test, a normal glucose level is less than 140 milligrams per deciliter (mg/dL) 2 hours after you drink the glucose fluid. If your level is between 140 to 199 mg/d, you may have prediabetes. If it's 200 mg/dL or above, you might have diabetes, and need more tests. During pregnancy, a result above 153 mg/dL after 2 hours means you may have gestational diabetes.

If you have high blood glucose, your healthcare provider may advise lifestyle changes. These will include changing your diet and getting more exercise. Your healthcare provider may also prescribe medicine to help manage your blood sugar levels.

How is this test done?

This test is done at an outpatient medical facility or lab. A healthcare provider will put an IV into a vein in your arm. This allows the staff to take multiple blood samples more easily.

For a common type of glucose tolerance test, the first blood sample will be drawn and your blood glucose level will be checked. Then you will be asked to drink a liquid that has a lot of glucose. It will contain about 75 grams of sugar dissolved in water.

After that, your blood will be drawn every hour for the next 2 hours. Each sample will be checked to measure the levels of glucose.

Does this test pose any risks?

Having a blood test with a needle carries some risks. These include bleeding, infection, bruising, and feeling lightheaded. When the needle pricks your arm or hand, you may feel a slight sting or pain. Afterward, the site may be sore.

After drinking the sweet liquid used for this test, you may feel nauseated. You may have an upset stomach or headache. These side effects should go away after the test.

What might affect my test results?

A number of factors can affect blood glucose levels. Follow your healthcare provider's directions on how to prepare for the test.

How do I get ready for this test?

Follow your healthcare provider's directions about not eating or drinking before the test. Don't smoke, chew gum, or exercise other than light walking the day before and the morning of the test.

Be sure your healthcare provider knows about all medicines, herbs, vitamins, and supplements you are taking. This includes medicines that don't need a prescription and any illegal drugs you may use.

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