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## Glucose screening tests during pregnancy

A glucose screening test is a routine test during pregnancy that checks a pregnant woman's blood glucose (sugar) level.

Gestational diabetes is high blood sugar (diabetes) that starts or is found during pregnancy.

### How the Test is Performed

#### TWO-STEP TESTING

During the first step, you will have a glucose screening test:

- You do not need to prepare or change your diet in any way.
- You will be asked to drink a liquid that contains glucose.
- Your blood will be drawn 1 hour after you drink the glucose solution to check your blood glucose level.

If your blood glucose from the first step is too high, you will need to come back for a 3-hour glucose tolerance test. For this test:

- Do not eat or drink anything (other than sips of water) for 8 to 14 hours before your test. (You also cannot eat during the test.)
- You will be asked to drink a liquid that contains 100 grams (g) of glucose.
- You will have blood drawn before you drink the liquid, and again 3 more times every 60 minutes after you drink it. Each time, your blood glucose level will be checked.
- Allow at least 3 hours for this test.

#### ONE-STEP TESTING

For this test:

- Do not eat or drink anything (other than sips of water) for 8 to 14 hours before your test. (You also cannot eat during the test.)
- You will be asked to drink a liquid that contains 75 grams of glucose.
- You will have blood drawn before you drink the liquid, and again 2 more times every 60 minutes after you drink it. Each time, your blood glucose level will be checked.
- Allow at least 2 hours for this test.

## How to Prepare for the Test

For either the two-step test or one-step test, eat your normal food in the days before your test. Ask your health care provider if any of the medicines you take can affect your test results.

## How the Test will Feel

Most women do not have side effects from the glucose tolerance test. Drinking the glucose solution is similar to drinking a very sweet soda. Some women may feel nauseated, sweaty, or lightheaded after they drink the glucose solution. Serious side effects from this test are very uncommon.

## Why the Test is Performed

This test checks for gestational diabetes. Most pregnant women have a glucose screening test between 24 and 28 weeks of pregnancy. The test may be done earlier if you have a high glucose level in your urine during your routine prenatal visits, or if you have a high risk for diabetes.

Women who have a low risk for diabetes may not need to have the screening test. To be low-risk, all of these statements must be true:

- You have never had a test that showed your blood glucose was higher than normal.
- Your ethnic group has a low risk for diabetes.
- You do not have any first-degree relatives (parent, sibling, or child) with diabetes.
- You are younger than 25 years old and have a normal weight.
- You have not had any bad outcomes during an earlier pregnancy.

## Normal Results

### TWO-STEP TESTING

Most of the time, a normal result for the glucose screening test is a blood sugar that is equal to or less than 140 mg/dL (7.8 mmol/L) 1 hour after drinking the glucose solution. A normal result means you do not have gestational diabetes.

Note: mg/dL means milligrams per deciliter and mmol/L means millimoles per liter. These are two ways to indicate how much glucose is in the blood.

If your blood glucose is higher than 140 mg/dL (7.8 mmol/L), the next step is the oral glucose tolerance test. This test will show if you have gestational diabetes. Most women (about 2 out of 3) who take this test do not have gestational diabetes.

### ONE-STEP TESTING

If your glucose level is lower than the abnormal results described below, you do not have gestational diabetes.

## What Abnormal Results Mean

### TWO-STEP TESTING

Abnormal blood values for a 3-hour 100-gram oral glucose tolerance test are:

- Fasting: greater than or equal to 95 mg/dL (5.3 mmol/L)
- 1 hour: greater than or equal to 180 mg/dL (10.0 mmol/L)
- 2 hour: greater than or equal to 155 mg/dL (8.6 mmol/L)
- 3 hour: greater than or equal to 140 mg/dL (7.8 mmol/L)

### ONE-STEP TESTING

Abnormal blood values for a 2-hour 75-gram oral glucose tolerance test are:

- Fasting: greater than or equal to 92 mg/dL (5.1 mmol/L)
- 1 hour: greater than or equal to 180 mg/dL (10.0 mmol/L)
- 2 hour: greater than or equal to 153 mg/dL (8.5 mmol/L)

If only one of your blood glucose results in the oral glucose tolerance test is higher than normal, your provider may simply suggest you change some of the foods you eat. Then, your provider may test you again after you have changed your diet.

If more than one of your blood glucose results is higher than normal, you have gestational diabetes.

## Risks

You may have some of the symptoms listed above under the heading titled "How the Test will Feel."

There is little risk involved with having your blood taken. Veins and arteries vary in size from one person to another and from one side of the body to the other. Taking a blood sample from some people may be more difficult than from others.

Other risks associated with having blood drawn are slight, but may include:

- Excessive bleeding
- Fainting or feeling lightheaded
- Multiple punctures to locate veins
- Hematoma (blood buildup under the skin)
- Infection (a slight risk any time the skin is broken)

## Alternative Names

Oral glucose tolerance test - pregnancy; OGTT - pregnancy; Glucose challenge test - pregnancy; Gestational diabetes - glucose screening

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