

Testing for Gestational Diabetes

What to expect

This handout explains what gestational diabetes is and the 2 tests that are used to diagnose it. Instructions are included for these tests: the glucola test and the 3-hour glucose tolerance test.

What is gestational diabetes?

Gestational diabetes is a special type of diabetes that is first diagnosed during pregnancy. It causes a woman's blood sugar (glucose) to be higher than normal at times. Women are at risk for developing gestational diabetes during pregnancy because hormone changes make it harder for a woman's body to process carbohydrates (starches and sugars) from food.

Gestational diabetes affects 3% to 5% of all pregnant women (3 to 5 out of 100). It is one of the most common complications in pregnancy.

What happens if I have gestational diabetes?

Half of all women who have gestational diabetes will develop another form of diabetes in the next 20 years. Making some nutrition and lifestyle changes now may help lower this risk. And, it is important to get tested for diabetes once a year.

Gestational diabetes that is not treated can cause problems in pregnancy. The main problem is that the baby may grow to be very large because of the extra sugar in your blood. This can make birth more difficult or make a Cesarean section necessary. For many women, changing their diet is all that is needed to control blood sugars.

When will I be tested for gestational diabetes?

Normal pregnancy care in the United States involves testing for gestational diabetes between 24 and 28 weeks. The test is called a *glucola test* (see page 2). Women who are at higher risk for developing gestational diabetes should also have a *glucola test* in the first trimester.



Hormone changes during pregnancy make it harder for a woman's body to process carbohydrates.

Some conditions that can put women at higher risk are:

- Family history of diabetes
- Obesity
- Non-Caucasian ethnicity, such as Asian/Pacific Islander, Hispanic, and African-American
- History of *polycystic ovarian syndrome* (PCOS), a condition of unbalanced sex hormones. PCOS can lead to problems with your period or getting pregnant. It can also cause ovarian cysts to form.

Your doctor will make a plan with you for gestational diabetes testing during pregnancy.

At UWMC, we test women who are at a higher risk for gestational diabetes early in pregnancy. Then we test all women at 24 to 28 weeks gestation, even if they had an earlier test. We prefer to test women closer to 27 to 28 weeks gestation. That is because at this time in pregnancy, the placenta is making even more hormones that can make it more difficult for the mother's body to process blood sugar.

Which tests are used?

At UWMC, we use 2 different tests for gestational diabetes: the *glucola test* and the *3-hour glucose tolerance test*.

Glucola Test

The screening test for gestational diabetes in early pregnancy involves drinking a sugary liquid called glucola. This drink contains 50 grams of sugar. Exactly 1 hour after you drink the glucola, your blood will be drawn and tested for glucose (sugar). You do not need to fast before this test.

If your glucola test result is:

- **Higher than 140 mg/dl**, your doctor will ask you to do another test called a *3-hour glucose tolerance test* (GTT). Some health care providers will recommend the 3-hour GTT if your glucola result is higher than 135 mg/dl. (See "3-hour Glucose Tolerance Test" on page 3.)
- **Higher than 180mg/dl**, the diagnosis of gestational diabetes can be made without doing another test.

Instructions for the Glucola Test

- Go to the lab on the main floor of the UWMC-Roosevelt Clinic, 4245 Roosevelt Way N.E. They will give you the glucola to drink.
- Drink the entire portion (50 grams of sugar), and note the **exact** time. Your blood draw must occur exactly 1 hour later. Try to drink the liquid within 1 to 2 minutes.

- Do not eat or drink anything else for the next hour. You do not need to stay in the lab area during your testing time, but do not do any exercise while you are waiting. Do not even walk around the block.
- Go to the lab window about 45 minutes after you drink the glucola so that you are there 15 minutes before your scheduled blood draw. Tell lab staff the time that you must have your blood draw.

3-Hour Glucose Tolerance Test

The 3-hour GTT is a longer test and involves 4 blood draws. For this test, you must not eat for 8 hours before your first blood draw. After the first blood draw, you will drink a liquid that contains 100 grams of sugar. You will then have a blood draw exactly 1 hour, 2 hours, and 3 hours later. The glucose level in each blood sample will be measured.

Gestational diabetes is diagnosed if 2 or more of the blood tests show high glucose levels. These are the glucose levels for each test that indicate an abnormal result:

- Fasting: 95 mg/dl or higher
- 1 hour: 180 mg/dl or higher
- 2 hours: 155 mg/dl or higher
- 3 hours: 140 mg/dl or higher

Instructions for Your 3-hour GTT

- On the morning of your test, do not eat or drink anything for at least 8 hours before your first blood draw. Do not fast for longer than 14 hours before the test.
- Go to the lab on the main floor of the UWMC-Roosevelt Clinic, 4245 Roosevelt Way N.E. The lab will do the first blood draw (the *fasting sample*), then give you the sugary drink. Drink the entire portion (100 grams of sugar), and note the **exact** time. Try to drink all of the liquid within 1 to 2 minutes.
- Your other blood draws must occur exactly 1, 2, and 3 hours later.
- Do **not** eat or drink anything for the next 3 hours.
- Go to the lab window about 10 to 15 minutes before each of your next 3 blood draws. Tell lab staff the time that you must have your blood draw.
- Please stay in the area near the lab area for the entire testing time. Do **not** exercise (or even walk around the block) during the test. Bring a book, your laptop, or other electronic device, or a quiet project to pass the time. The Roosevelt Clinic has free Wi-Fi.

Questions?

Your questions are important. Call your health care provider if you have questions or concerns.

Women's Health Care Center: 206-598-5500 (press 4 when the greeting begins)