

General Laboratory Glucose Tolerance Testing in Pregnancy



A **glucose tolerance test (GTT)** measures your body's ability to use or absorb sugar (glucose) after you've been administered a given amount.

GTT can be used to diagnose pre-diabetes, as well as diabetes. This test is most commonly performed to check for diabetes that occurs with pregnancy (gestational diabetes).

Gestational diabetes can cause pregnancy complications, therefore early detection and prompt treatment are important. If you're pregnant, your doctor will usually recommend this test between the 24th and 28th week of your pregnancy. Also, having gestational diabetes results in increased risk of a mother developing diabetes in later stages of life, if lifestyle changes are not made.

Your doctor may also recommend that you have this test done earlier if you're having pre-diabetic or diabetic symptoms. The 1-hour test is to screen for gestational diabetes. If positive, a confirmatory test is done. Confirmatory tests for gestational diabetes include either a 2-hour GTT (per the American Diabetes Association criteria) or a 3-hour GTT (per the American College of Obstetrics and Gynecology criteria).



Preparing for a GTT

Patients must be fasting at least 8 hours but no more than 14 hours before undergoing a 2-hour GTT or 3-hour GTT. If fasting is not done properly, testing will be cancelled. Fasting is not required for a 1-hour GTT.

For all GTT tests, you may drink water, but must avoid other beverages, like coffee or caffeinated tea. These can interfere with the results.

Day of testing

A blood sample will be collected when you arrive. You will be asked to drink a sweet liquid containing a measured amount of glucose. The entire volume of glucose solution must be ingested within 5 minutes. If not performed properly, testing will be discontinued.

After ingesting the glucose solution, patients are REQUIRED to remain in the LABORATORY waiting area. During a GTT, patients cannot, smoke, eat or drink anything except water because it will invalidate the test.

Risks

Some people's blood glucose levels drop very low toward the end of the test. Symptoms of low blood glucose include:

- Weakness
- Hunger
- Sweating
- Feeling nervous or restless

If you develop these symptoms PLEASE NOTIFY LABORATORY STAFF IMMEDIATELY and we can check your sugar level quickly. If your level is very low, the test will be stopped.

Test results

Test results are typically processed and available within 24 hours. Please be sure to contact your provider and they will walk you through the test results.

References

- American Diabetes Association (2015). Standards of medical care in diabetes-2015. *Diabetes Care*, 38(Suppl 1): S1-S93.
- Fischbach FT, Dunning MB III, eds. (2009). *Manual of Laboratory and Diagnostic Tests*, 8th ed. Philadelphia: Lippincott Williams and Wilkins.
- American Diabetes Association (2012). Diagnosis and classification of diabetes mellitus. *Diabetes Care*, 35(Suppl 1): S64-S71.
- webmd.com/diabetes/gestational

Texas Children's Pavilion for Women
Floor 4 (around the corner from the MFM clinic)
6651 Main Street
Houston, TX 77030
832-826-7400
women.texaschildrens.org



Pavilion
for Women