

Gestational Diabetes Screening

What is gestational diabetes?

Every client's body changes how insulin is utilized to metabolize glucose (sugar), in order to make glucose available to the growing baby. For 3-5% of clients, this normal change is exaggerated and results in a significantly higher amount of glucose circulating in the bloodstream, therefore available to the baby. Gestational diabetes mellitus (GDM) is the term given this condition. This type of diabetes occurs only during pregnancy and goes away after the birth, which is different than Type I or Type II diabetes.

What are the risks of gestational diabetes?

Clients with gestational diabetes are at increased risk of developing Type II diabetes later in life, as well as an increased risk of developing high blood pressure in pregnancy. Later in life, clients who have previously had GDM are also at risk of developing macro- & micro-vascular disease which can lead to coronary heart disease, peripheral arterial disease, kidney disease, loss of vision, and nerve damage.

Babies of clients with GDM are at risk of growing larger than average because more sugar passes to the fetus. This increased size may cause a more difficult delivery, and can lead to increased incidence of instrumental delivery (forceps or vacuum). Large babies can be difficult give birth to, which may lead to increased C-section rates, shoulder dystocia (where the shoulder gets stuck behind the maternal pubic bone) and birth injuries like brachial plexus palsy (an injury of the nerve center in the baby's neck and shoulder). However, it should be noted that only 30% of mothers with GDM have large babies, and the majority of large babies are born to clients who do not test positive for GDM. There is also evidence showing that long-term effects on the baby include increased risk of the development of diabetes and obesity later in life. After birth, babies born to clients with GDM can develop low blood sugar which can cause temperature instability, trouble breathing, or possibly seizures. These babies require close monitoring of their blood sugar in the first few hours of life. Frequent and early feeding soon after birth helps these babies stabilize their blood sugar.

Am I at risk for developing gestational diabetes?

It is our community standard to offer screening for gestational diabetes to all pregnant clients. However, there is some evidence to show that only testing clients with risk factors (compared to screening all pregnant clients) may result in the same number of diagnoses of gestational diabetes while reducing the number of screening tests overall. While screening by risk factors alone may miss some clients who do in fact develop gestational diabetes, it is believed that screening those who have any of the following risk factors will pick up most cases:

- Family history of diabetes in a relative (parent, sibling, grandparent)
- Ethnic predisposition
- Obesity prior to pregnancy (BMI >27)
- History of gestational diabetes in a previous pregnancy
- History of adverse pregnancy outcomes associated with GDM (stillbirth, large baby)
- Age over 25 (or age over 30 without other risk factors)

It is important to note that there is no way to know for certain if you have GDM without a lab test.

How do we test for gestational diabetes?

Most clients will be offered a screening Glucose Challenge Test at 24-26 weeks of pregnancy. It is designed to challenge your body with a high volume of glucose to see how your body responds. To take this test, you will drink a sweet drink which has 50 grams of glucose in it. One hour after drinking it, your blood will be drawn to measure the amount of sugar in your blood. If the result is abnormal, in most cases you will be offered a diagnostic test to confirm whether you have gestational diabetes.

What is the diagnostic test?

The Glucose Tolerance Test is done over a two-hour period. You must book an appointment at the lab in advance. The test requires three blood draws, the first after fasting for 10-12 hours (usually overnight), then two more blood tests at hourly intervals after drinking a 75-gram glucose drink. If any of these glucose levels are abnormal, the test is positive for gestational diabetes. If you have multiple risk factors for gestational diabetes, your care provider may recommend this test without first doing the 50-gram screening test.

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Are there options other than the glucose tests?

If you do not want to take one of the glucose tests, your care provider can order an alternative test called a Hemoglobin A1c (Hb A1c). This test result provides information about your blood glucose levels over the previous 2-3 months. *This is not the recommended screening test for gestational diabetes.* However, it is a reasonable screening method for clients who are at low risk for developing gestational diabetes and who do not wish to take a glucose test. If the result is abnormal, we would recommend that you take the Glucose Tolerance Test in order to confirm the results.

How is gestational diabetes treated?

Clients diagnosed with gestational diabetes will be seen by an interdisciplinary team that specializes in gestational diabetes. Clients will see a specialist (endocrinologist) and will be taught to test blood sugar levels, as well as provided with information regarding how to control blood sugar via diet and exercise. Most clients are able to successfully control their blood with diet and exercise. They go on to have healthy pregnancies and babies. However, for those few clients who require insulin to control blood sugar levels, your care provider will arrange for more specialized follow-up that includes non-stress tests, a third-trimester ultrasound, and in some cases, induction at 39-40 weeks' gestation. All clients with GDM will be offered testing at 8-12 weeks postpartum to detect any pre-existing diabetes outside of pregnancy.

How can I prevent gestational diabetes?

Good nutrition and exercise! Eat a variety of foods, including fresh fruits and vegetables, whole grains, and legumes. Carbohydrates such as potatoes, rice, and pasta should make up no more than 1/4 of each meal. Eat 3 small meals and 3 snacks daily, instead of 3 large meals. Drink plenty of water and other fluids each day, at least 8 glasses. Avoid extra sugars like soda, juice, and sweet treats. Enjoy moderate exercise 4 or 5 times per week, and get additional exercise whenever you can. A short period of light activity immediately after eating a meal will help to stabilize blood glucose levels.

INFORMED CONSENT

I have read and understand the above information and have had my questions answered.

- I choose to be screened for gestational diabetes with the 1-hour Glucose Challenge Test.
- I choose to take the 75g Glucose Tolerance Test.
- I choose to take a Hb A1c test instead of the glucose screen. I understand I am refusing recommended care. If the result of this test is abnormal, I understand that further testing will be recommended.
- I refuse testing for gestational diabetes. I understand I am refusing recommended care.

Client's signature: _____

Date: _____

Care provider's signature: _____

Date: _____

References:

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