

Gestational Diabetes/Blood Glucose Informed Choice

Gestational Diabetes is an abnormally high blood glucose level diagnosed during pregnancy. Similar to diabetes, the body is unable to utilize glucose due to the lack of or resistance to insulin. In pregnancy, some resistance to insulin is **normal** and is caused by pregnancy hormones, which create a higher level of glucose circulating in the blood so it is available for the baby.

Gestational diabetes testing is a controversial subject. While the actual incidence of gestational diabetes is only 2-3%, as many as 30% of women will be diagnosed with the disorder by the current standard of testing. Between the 26th and 28th week of pregnancy, most obstetricians and midwives have the mother take a screening test for gestational diabetes. The test is given during these weeks because most of the critical hormones that tend to raise blood sugar peak just before this time.

The most common screening test is the 50 g Glucose Challenge Test. In this test, the pregnant woman fasts for 8-12 hours and afterwards is given sweet orange syrup, Glucola, that contains 50 g of glucose to drink. After exactly one hour, blood is drawn and the plasma is tested to check blood sugar levels.

If the mother tests "positive" for gestational diabetes (with one-hour results of more than 140 mg/dl) and actual **diagnostic** test is given. This test is called the three-hour 100 g Glucose Tolerance Test. It is much harder on the body and baby as it requires an overnight fast for 8-12 hours before the test, whereby only water is allowed, and the ingestion of a heavier sugar load. During the GTT, a fasting blood draw is taken. Then the mother is given 100 g of Glucola to drink and blood is drawn at timed intervals, most commonly after 1 hour, 2 hours, and 3 hours. A few labs have variations on this. The plasma is separated from the blood and sent to the lab for testing.

Only 15% or so of the women who have readings above the normal level in the initial one-hour screening test will be labeled as having actual "gestational diabetes." It is important to know that some women can react to either the one-hour or the three-hour test and become ill. The women who react like this usually tend to have hypoglycemia (low blood sugar reactions to lots of carbohydrates). For some women, these tests result in a headache, sleepiness, or vague nausea. Other women will actually vomit. A few who tend to have very strong hypoglycemia reactions may even pass out. If you know you have hypoglycemia reactions please inform your health care provider.

Other concerns about the current gestational diabetes testing include: inconsistencies in testing conditions, reproducibility of the tests, whether one test can adequately sample the changing nature of glucose tolerance during pregnancy, the relationship of the test results to fetal outcomes, whether testing accurately reflects "real life" conditions, and the susceptibility of test results to be influenced by life factors such as stress and illness.

The consequences of true gestational diabetes can be severe. Symptoms include excessive thirst, constant hunger, fruity breath, glucose in the urine, weight loss, and general weakness. If unchecked, gestational diabetes can cause recurrent yeast infections, maternal infection, congenital anomalies, excessive amniotic fluid, a greater risk of developing pre-eclampsia, a greater risk of stillbirth or prematurity, and a baby that is large or too small for gestational age. Due to the large size of the baby, gestational diabetes is also associated with shoulder dystocia, maternal postpartum hemorrhage, and an increased chance of intervention or cesarean section. The baby is at risk for respiratory distress, birth injuries, jaundice, and low blood sugar after birth.

Women who eat a healthy diet and exercise regularly are at an extremely low risk for developing gestational diabetes. However, there are some risk factors that should be considered when deciding whether or not to test for gestational diabetes. They include: obesity, family history of diabetes, previous large baby (more than 9 pounds or 4082 g), diagnosis with gestational diabetes in a previous pregnancy, history of infertility, miscarriages or stillbirth, and exhibiting symptoms of diabetes (see above symptoms).

However, 50% of women diagnosed with gestational diabetes don't have any of these risk factors. For a mother who has no risk factors, we recommend a random postprandial (non-fasting) finger stick. It involves eating a full meal of foods you would normally eat, then one hour later pricking your finger to check your blood-glucose level. This gives an indication if there is truly a problem with your metabolism.

Our recommendations for preparing for and undergoing a postprandial glucose test include:

- Eat a diet heavy in complex carbohydrates (no sugar or white flour) for three days prior to the test.
- Fast overnight – don't eat anything after going to bed for the night.
- Eat a large breakfast including some form of protein and complex carbohydrates.
- After your meal, drink any Odwalla juice of your liking with 50 g of glucose.
- Take a walk between finishing breakfast and testing, if possible.

For a mother who does have risk factors we recommend tracking glucose over three meals: breakfast, lunch and dinner, which may or may not all be on the same day. This involves the client to keep track of her food and drink consumption for the days performing the finger sticks, and a finger stick before each meal and one hour after each meal.

If you do decide to go through some form of glucose testing, it is important to remember that gestational diabetes is rare, and **most women diagnosed with it can maintain blood glucose levels with a modified diet and mild exercise.**

_____ I have read this form and have had questions about gestational diabetes screening and testing answered to my satisfaction.

_____ I choose to do a one-hour postprandial glucose test.

_____ I choose to monitor glucose levels over three meals.

_____ I choose to do a 50 g Glucose Challenge Test.

_____ I decline to do any screening for gestational diabetes.

Client (Please Print)

Signature

Date

Midwife (Please Print)

Signature

Date