



Informed Choice for Gestational Diabetes Screening (aka blood sugar or Glucose Tolerance Testing)

What is Diabetes?

Diabetes is a serious disease that impairs the body's use of glucose, taxes the pancreas, and causes long-term damage to tiny capillaries in the body. Diabetes begins when there is too much glucose, the energy molecule that comes from our food, has been ingested too often. The pancreas is required to produce insulin, the hormone responsible for making sure cells get glucose when they need it and for balancing the amount of glucose in the blood, in great quantities and in irregular spurts. Basically, this wears the pancreas out and makes the cells less responsive to insulin over time. Additionally, the extra circulating glucose causes capillaries to burst, impeding blood flow and tissue repair. Type II diabetes is the most common today and is largely caused by a combination of poor eating and exercise habits.

What is Gestational Diabetes?

Gestational Diabetes Mellitus (GDM) has become a greater concern as our diets and lifestyles have changed. During pregnancy, glucose is absorbed into the blood and used up by cells differently than before. The body is required to change its normal glucose metabolism a little bit so that the baby is constantly supplied with adequate levels of glucose. This is a normal and healthy physiological reaction. However, when a mother has pre-existing glucose metabolism problems, this normal physiological change can be too much for her body. Her pancreas is forced to produce insulin too often, her glucose levels fluctuate widely, and, over time, her body "resets" itself to this irregular glucose/insulin level.

GDM can cause problems for both the mother and the baby, during and after pregnancy. The mother's risk of developing Type II diabetes in the years after pregnancy increases substantially, thus causing all the health problems associated with diabetes. The mother increases her risk of preeclampsia, hypertension, and polyhydramnios (too much amniotic fluid) with GDM. After a whole nine months of having lots of energy molecules floating around, the baby is at risk of birth injury or trauma due to being larger than normal. The baby may also suffer from low blood sugar (hypoglycemia) just after birth, increasing the likelihood of breathing difficulties, resuscitation, and hospitalization.

A very important but minimally understood negative effect of GDM is the "resetting" of the baby's own metabolism that occurs as the baby's pancreas, brain chemicals and body cells react to the high levels of glucose during pregnancy. The child is pre-programmed to crave sugar, have radical swings in insulin levels and gain weight. This vastly increases risk of the baby developing Type II as a *child, teenager, or adult*. Diabetes can be intergenerational; that is, if your baby is a girl and you have GDM, the risk of *her children* developing diabetes is increased.

What are the risk factors for GDM?

Pregnancy itself is not a cause of GDM, but rather a situation in which a metabolic problem may be seen sooner than it would have otherwise. GDM is largely associated with certain lifestyle and genetic factors:

- Overweight, obesity and/or high body mass index;
- Older than 25-years-old, and especially older than 45-years-old;
- Family members with diabetes, especially parents or siblings;
- GDM or a large baby in a previous pregnancy;
- Member of a high-risk ethnic group, including Native American, Asian, Hispanic, and Pacific Islander.

While a person cannot change her ethnic group or family members, each mother can positively impact her glucose metabolism with education and changes in diet and exercise patterns.

Can we test for GDM?

Currently, the standard of care is to provide a glucose load and then take blood samples to test a woman’s ability to metabolize glucose. This is called the Glucose Tolerance Test (GTT). In the US, we do this between 24-28 weeks in order to identify which mothers are at risk of GDM and then have time to positively affect the pregnancy with diet and exercise counseling and/or medication. In our practice, all mothers receive extensive diet, nutrition and exercise counseling, but especially those with abnormal GTT results. A mother may also be referred to a dietician for additional diet counseling and a glucometer to measure blood sugars on a daily basis at home.

Unfortunately, the testing process is only partially effective in identifying those mothers who are at risk of developing GDM and it tends to over-diagnose the problem. Additionally, there is the concern that testing all women for GDM does not take into account the individual woman’s diet and lifestyle, it moves the focus of therapy from effective diet and exercise management to numbers on a lab report, and it causes an overall view of pregnancy as one of pathology rather than health. The studies upon which the standard guidelines were based did not differentiate between mothers with good or bad diets or glucose metabolism problems before pregnancy; did not differentiate between different degrees of glucose intolerance; and did not take into account women who had normal tests after a previous abnormal test.

How can I avoid developing GDM in the first place?!?

The key to overall health and to dealing with problems in glucose metabolism is, not so surprisingly, NUTRITIONAL DENSITY OF FOODS, EXERCISE and FOOD CHOICES! Of course, the longer you have done this prior to pregnancy the better your general health will be. During your care with us, we discuss how a healthy balanced diet and exercise plan, prenatal vitamins, customized herbal or nutritional supplements and lifestyle changes can be incorporated into your pregnancy and family life. Some women will develop GDM regardless of risk factors or lifestyle choices, however.

How does my midwife treat GDM?

First, pregnancy is normal and it normally progresses in a state of health. The key to a healthy pregnancy is a healthy diet full of nutrients, exercise and adequate rest. From your first visit with us, we assess these aspects of your lifestyle and provide counseling; we continue this throughout your pregnancy. We’re not out to be “diet police” but to offer a careful assessment of how you can help yourself make healthier choices. We offer GTT testing in our office according to standard recommendations. After an abnormal result, intensive diet counseling is done and clients have the option of trying to maintain normal blood sugars through diet alone. However, we will refer clients to dieticians, CNMs or MDs as necessary. Clients diagnosed with GDM need to be transferred from our care during pregnancy, according to our homebirth protocols.

Informed choice

I, _____, understand that I have choices regarding GDM testing, testing is not 100% accurate, diet and exercise may not manage my blood sugars, and my midwife may determine that hospital is safer for me. I also understand that by not testing, I am not following the standard recommendations for achieving a healthy pregnancy outcome. I have had an opportunity to ask questions of my midwife and have had them adequately answered.

I CHOOSE / REFUSE glucose tolerance testing in pregnancy.

Signatures

Client

Date

Midwife

Date