Gestational Diabetes Mellitus – diabetes in pregnancy

This information answers some commonly asked questions about gestational diabetes and why we recommend having an oral glucose tolerance test (OGTT).

Please talk with your midwife or doctor about your situation and what matters to you. We encourage you to ask questions and take time to consider our recommendations.

What is Gestational Diabetes?

Gestational diabetes mellitus is a type of diabetes you can have when you are pregnant (gestation). It is often called GDM for short.

Diabetes is complicated, but most simply, it makes your blood sugar (glucose) higher than usual. When you eat, food is broken down into a type of sugar called glucose. The glucose enters your bloodstream and with the help of insulin (a hormone made by your pancreas), your body cells can then use the glucose for energy.

If your body doesn’t produce enough insulin or your cells don’t respond to the insulin, the glucose can’t move into the cells to be used for energy, so too much glucose stays in your blood.

When you are pregnant, hormonal changes can make your cells less responsive to insulin. This is not usually a problem. When your body needs extra insulin your pancreas makes more of it. But if your pancreas can’t keep up with the increased insulin demand during pregnancy, your blood glucose levels rise too high. We call this gestational diabetes.

Around 1 in 7 women in Australia have gestational diabetes during their pregnancy. It is one of the most common health conditions in pregnancy.

Am I at risk for developing GDM?

Any pregnant woman can develop GDM. Some people have an increased chance, including those who:

- are aged 40, or older
- have close family relative who has diabetes or GDM
- are above a healthy weight range
- have had GDM in another pregnancy
- have had high blood glucose before
- have given birth to a baby over 4.5kg (9lb9oz)
- are from Aboriginal or Torres Strait Islander backgrounds
- are from a Mediterranean, Middle Eastern, Indian or Asian background
- have polycystic ovarian syndrome (PCOS)
- are taking steroid or antipsychotic medicine

How is GDM diagnosed?

GDM can only be detected by a blood test called an oral glucose tolerance test (OGTT). The OGTT is recommended between the 24th and 28th week of pregnancy. If you have had GDM in a previous pregnancy or have some of the risk factors listed above, we will recommend that you also have an OGTT early in your pregnancy.

If your blood tests show your glucose level is above the target range, it means you have gestational diabetes.

You need to give your permission (consent) to have the test. We recommend all pregnant women have the test.

What happens if I have gestational diabetes?

Knowing you have diabetes and learning how to help manage your blood glucose levels will reduce the chance of complications for you and your baby. Healthy eating as well as staying
active can help to keep your blood glucose levels on target. Some women may need to take tablets or have insulin injections.

Treating GDM improves health outcomes for both women and their babies. If you are diagnosed with GDM we will talk with you about who are the best professionals to care for you during pregnancy, labour and birth. This might be a combination of your midwife, share-care with your GP, obstetrician, a dietitian, diabetes educator and a specialist endocrinologist.

Blood glucose usually returns to target range soon after birth but once you’ve had gestational diabetes, you are more likely to get it again in another pregnancy. You are also more likely to develop Type 2 diabetes later in life. We recommended you have a repeat blood test with your GP 6-12 weeks after your baby is born to check your blood glucose levels.

How can GDM affect me?
High blood glucose during pregnancy may increase your chance of experiencing complications. Many women with GDM have straightforward pregnancies and healthy babies. Knowing you have diabetes and managing it well during pregnancy can decrease the chance of:

- Developing high blood pressure
- Induction of labour
- Having an instrumental birth (vacuum or forceps)
- Having significant perineal trauma (tearing)
- Having a Caesarean Section operation

What happens after my baby is born?
Babies of mothers with gestational diabetes have a high chance of experiencing low blood glucose after birth because these babies can continue to make extra insulin after birth. This is more likely if your blood glucose levels were high in pregnancy or during labour.

Feeding your baby as soon as possible after birth can help prevent or treat low blood sugar. When your baby is born we recommend that you:

- Keep your baby skin-to-skin from birth
- Start breastfeeding within the first hour
- Stay in hospital with your baby for at least 24 hours

How can GDM affect my baby?
If blood glucose levels are high during pregnancy, the baby also gets too much glucose. The extra glucose is stored as energy and can cause your baby to put on extra weight. This impacts the baby’s growth and can cause other problems.

The chance of complications is lowered when your blood glucose stays within a target range during pregnancy. Well managed GDM can decrease the chance of your baby:

- being born prematurely (too early)
- having difficulty breathing (respiratory distress)
- growing too big (macrosomia) which may cause difficulties during labour and birth
- having low blood glucose levels (hypoglycaemia)
- developing jaundice
- needing admission to the Special Care Nursery
- being stillborn

What about tests for my baby?
Glucose is the main energy source for the brain and very low blood glucose can cause brain damage. For this reason, we closely watch all babies of women with diabetes.

We will ask your permission to check your baby’s blood glucose by taking some blood from their heel (called a heel prick). We recommend testing your baby’s blood regularly for at least their first day of life. If your baby has low blood sugar they may need admission to Special Care Nursery for extra care. We will talk to you about this.

Would you like more information?
Please speak to your doctor or midwife. You can also find more detailed information and resources at these websites:

- Breastfeeding and gestational diabetes Breastfeeding and Gestational Diabetes | Australian Breastfeeding Association