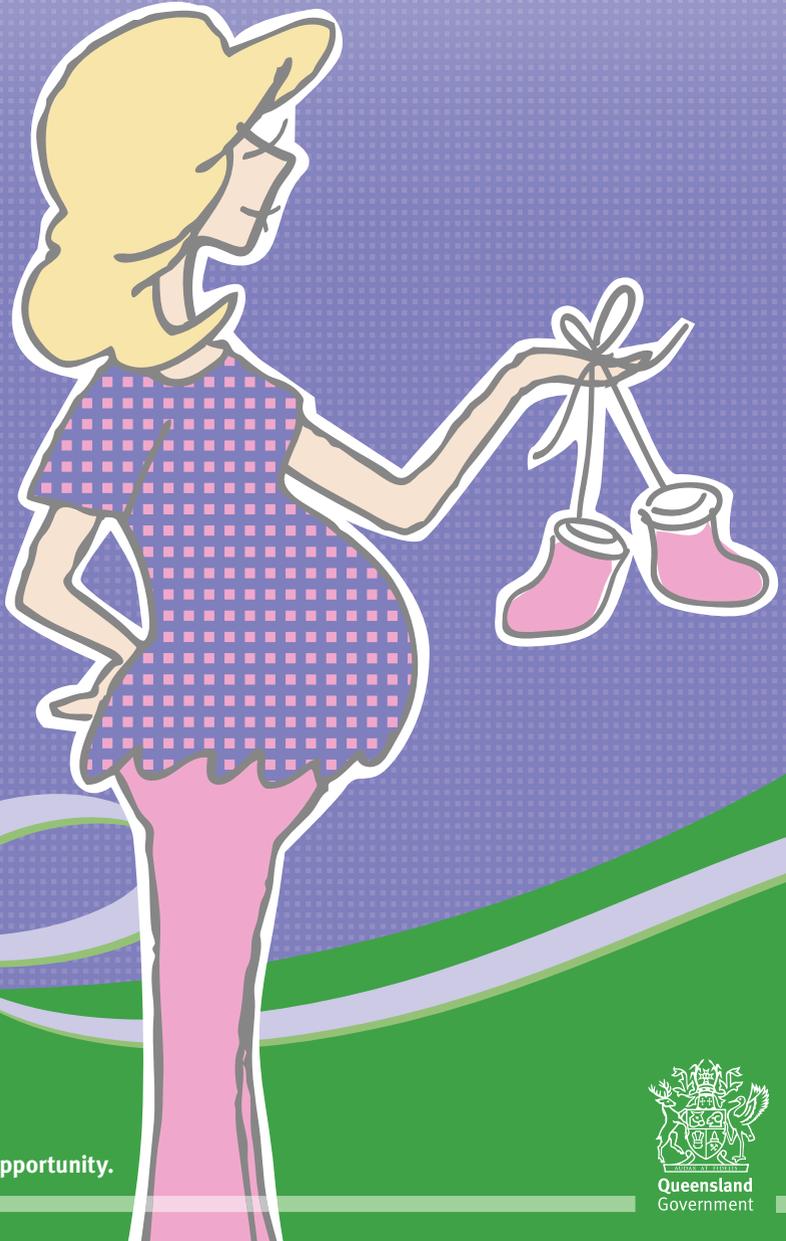


Gestational diabetes mellitus



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What is diabetes?

Diabetes refers to a group of disorders, all of which have abnormally high levels of glucose in the blood. It is associated with a lack of insulin or problems that prevent insulin working properly. Insulin is a hormone produced in the pancreas that helps convert glucose to energy and lowers blood glucose levels. Many foods contain glucose or other sugars that are absorbed into the blood stream. It is normal for blood glucose levels to rise after eating and insulin helps glucose to enter the cells to provide energy. Lack of insulin or inability of insulin to work properly causes blood sugar to rise to abnormally high levels.

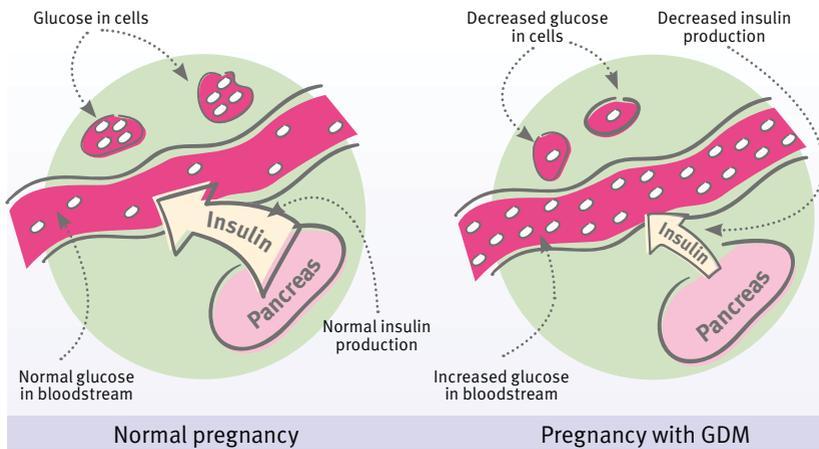


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Gestational diabetes mellitus

What is gestational diabetes mellitus?

Gestational diabetes mellitus (GDM) is a form of diabetes that occurs during pregnancy. The placenta produces hormones which are essential to keeping the pregnancy progressing and which steadily rise as the pregnancy progresses. These hormones also partly stop insulin working. Usually pregnant women naturally increase their insulin levels to overcome this block but approximately four to nine per cent of women pregnancy have difficulty doing this and develop GDM at about 24–28 weeks of pregnancy.



Diagnosis is based on the following results of a glucose tolerance test (GTT):
Your health care team will discuss your results with you.

Your results	
Fasting	
1 hour	
2 hours	

GDM usually goes away after the baby is born.

Once a diagnosis of GDM is made, careful planning for the ongoing management of your pregnancy is important.

Why is control of blood glucose important?

The mother's excess glucose crosses the placenta into the baby's bloodstream. If the levels are too high the baby will make large amounts of its own insulin as it tries to lower its blood glucose. This can result in complications for your baby.

Your baby may:

- ✿ grow larger and fatter
- ✿ have low blood glucose after birth
- ✿ have breathing problems.

These problems can result in the baby needing to be admitted to a special care nursery.

You can help reduce the chance of your baby having these problems by:

- ✿ keeping your own blood glucose levels normal during pregnancy
- ✿ feeding your baby soon after birth, e.g. within one hour
- ✿ continuing to feed your baby regularly.

Your baby will be observed closely after birth for signs of low blood glucose levels and tested using a small sample of blood from a heel prick.



Treatment

The best way to keep your blood sugar levels normal during pregnancy is for you to have the help of a team including your family, doctor, diabetes educator, dietitian and midwife.

The key components of your care involve:

- ✿ a healthy eating pattern
- ✿ physical activity
- ✿ measuring your own blood glucose levels
- ✿ medication – if needed.

A balanced nutritious diet is essential during pregnancy to help your baby grow and develop normally. You may need to make some changes in your diet to help with your blood glucose control. Consultation with a dietitian is a vital part of your management of GDM. Keeping a food diary also helps track what you are eating and what effect a particular food may have on your blood glucose levels.



Regular exercise and activity also helps in controlling your blood glucose. Walking, swimming, water aerobics, pilates and yoga are all good forms of exercise for pregnancy. Thirty minutes of physical activity on most days of the week is recommended. Discuss your choice of activity with your health care team to ensure it is appropriate for you to begin or continue with your exercise.

Home blood glucose monitoring

Self blood glucose monitoring (SBGM) is a valuable tool in helping manage GDM. These simple finger prick blood tests will give you an indication on what your blood glucose levels are.

Your diabetes educator will teach you how to perform home blood glucose monitoring.

You will require:

- ✿ a blood glucose meter
- ✿ lancet device – for pricking finger
- ✿ testing strips
- ✿ diary to record blood glucose levels.

Registration with the National Diabetes Services Scheme (NDSS) for Medicare card holders allows access to products at a reduced cost. Your doctor or credentialed diabetes educator can arrange this.

Blood glucose meters may be purchased at your local pharmacy, hired at your clinic or provided by your diabetes educator.

Glucose meter



Technique

How to test your blood glucose level

1. Wash hands.
2. Insert testing strip into meter.
3. Using lancet, obtain a small drop of blood from your finger.
(It is preferable to use the side of your finger rather than the tip.)
4. Direct a drop of blood onto testing strip.
5. Wait for result.
6. Record result in your diary.
7. Dispose of lancet into sharps container.



When to test:

- ✿ before breakfast (fasting)
- ✿ two hours after the start of each main meal – breakfast, lunch and dinner.

Some hospitals may instruct you to test your levels one hour after each main meal. Follow the instructions of your health care team.

Results should be in the following range: *Please fill in target range*

Before breakfast	
1 hour post meals	
2 hours post meals	

**Bring your blood glucose meter and diary
to your appointments with your health care team.**

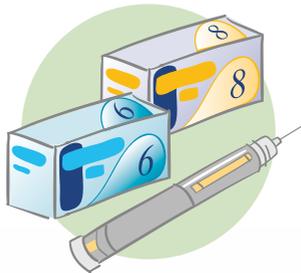


Disposal of sharps

The lancets/needles used to prick your finger must be disposed of in an appropriate sharps container. These can be purchased from a pharmacy or Diabetes Australia.

Some councils or shires permit you to use a hard, puncture proof container e.g. plastic milk bottle. Check with your local council on their regulations.

Do not dispose of needles into your general rubbish bin at home as this puts others at risk of a needle stick injury with a used sharp needle.



Other treatment options may need to be considered when blood glucose levels are not controlled by dietary changes and physical activity.

Insulin injections or tablets are sometimes needed to reduce your blood glucose levels to a normal range. You will be taught how to give yourself the injections by a diabetes educator if required. Treatment best suited to managing your BGLs will be discussed with you.

The birth

When GDM is well controlled the risks of complications are greatly reduced.

Unless clinically indicated, your labour and birth will be managed as any normal pregnancy. Your blood glucose levels will be monitored during labour.

After the birth

It is usual to stop monitoring your blood glucose levels after the birth of your baby. Breastfeeding soon after the birth will help maintain normal blood glucose levels in your baby.

Your baby will have blood glucose levels checked by a heel prick.

If the baby's glucose levels are low (hypoglycaemia), they may need to be cared for in the special care nursery for closer supervision.

GDM usually goes away after the baby is born. To make sure, your doctor or midwife will order a special glucose test, the oral glucose tolerance test (OGTT), which is performed 6–8 weeks after delivery. This test will show whether your blood glucose levels are back to normal.

The evidence shows women who have had GDM:

- ✿ are at risk of developing GDM again in future pregnancies
- ✿ have up to a 50 per cent increased risk of developing type 2 diabetes later in life.

You can reduce this risk by continuing a healthy lifestyle after your pregnancy through healthy eating, exercise and maintaining a healthy weight range.



Useful information

Australasian Diabetes in Pregnancy Society – www.adips.org

National Diabetes Services Scheme – www.ndss.com.au

You2 Program – www.you2.org.au

Diabetes Queensland – www.diabetesqld.org.au

Diabetes Australia – www.diabetesaustralia.com.au

Australian Dietary Guidelines – www.eatforhealth.gov.au

