

What is Gestational diabetes mellitus?

Gestational diabetes mellitus (GDM) is a type of diabetes that starts during pregnancy. In some women, the hormones that are produced by the placenta, that are essential for a healthy pregnancy, can inhibit the function of insulin in your body. This is referred to as insulin resistance. Insulin resistance means that your body's insulin cannot function effectively and regulate your blood glucose, therefore, you will have high levels glucose in your blood which can have adverse effects on you and your baby.

Who is at risk of gestational diabetes?

Women at increased risk of developing GDM include:

- Previous history of GDM
- >40 years of age
- Family history of type 2 diabetes or women whose mother or sister has had gestational diabetes
- BMI >30
- Previous elevated blood glucose levels
- Women with PCOS
- Women who have had a previous baby weighing >4.5kg
- Women of aboriginal, Torres strait islander, African, Asian, Middle Eastern, Hispanic and South American backgrounds.

If you have any of the above risk factors, our midwives will discuss at your first visit, and you will have an early GDM screen at 16 weeks gestation.

However, GDM can affect any women, regardless of whether or not they have increased risk factors.

What are the complication of gestational diabetes?

If high blood glucose levels remain high during pregnancy, complications for yourself and baby may arise. Well controlled gestational diabetes will lower the risk of these complications, that is why our midwives will be reviewing your blood glucose levels and adapting your diabetes management on a weekly basis.

Possible complications include:

- Large for gestational age babies
- Increase admission to special care nursery due to low glucose levels and respiratory distress
- Increase birth complications due to large babies, such as increase in shoulder dystocia, perineal trauma and increase in interventions such as forceps, ventouse and caesarean birth.
- Placental insufficiency
- Increased risk of type 2 diabetes in future

How is gestational diabetes diagnosed?

Most women with GDM will have no symptoms and therefore, most GDM is diagnosed as part of your routine blood tests at 26 weeks gestation. GDM is diagnosed through an oral glucose tolerance test. This test requires you the fast overnight (nothing to eat or drink, except water). A blood test will be performed on arrival to pathology lab which will test your fasting blood glucose level. You are then required to consume a sugary drink and two blood tests will follow (one hour and two-hour post glucose load). You are diagnosed with GDM if any of these Blood glucose levels are elevated.

What happens if I have gestational diabetes?

One of our midwives will call you and inform you of your diagnosis. They will book you for an appointment which we call GDM set up. Prior to this, midwives will email you some information for you to read in preparation for your GDM set up. At this appointment, our midwives will provide you will all the education to assist you on your GDM journey.

How is gestational diabetes managed?

Management of gestational diabetes includes:

- Healthy eating
- Physical exercise
- Monitoring blood glucose levels
- Medication if required

At your GDM set up, our midwives will discuss in length healthy eating and exercise requirement. Queensland Health's *Healthy eating for gestational diabetes* booklet is a fantastic resource for you to use to assist in diet changes. INSERT LINK????

Exercise plays an important role in the control of blood glucose levels. Women with GDM should aim to complete 30 minutes of physical activity daily.

Maintaining blood glucose levels in a normal range is important in reducing GDM complications in pregnancy and for your baby. At your GDM set up appointment, the midwives will provide all resources and education to enable you to monitor your blood glucose levels at home.

Blood glucose levels will be tested four times a day.

- 1. Fasting blood glucose level (before breakfast)
- 2. Two hours post breakfast
- 3. Two hours post lunch
- 4. Two hours post dinner

Target blood glucose levels:

- Fasting <5.1mmol/L
- 2 hours post meals <6.8mmol/L

You are required to email you blood glucose levels to our midwives every Monday for review.

For some women healthy diet and exercise may not be enough to control their blood glucose levels. If blood glucose levels remain high, metformin or insulin may be required. Our midwives will call you to discuss these medications if they are required.