

Gestational Diabetes

Diabetes Found in Pregnancy

DIABETES AND PREGNANCY



What is Gestational Diabetes Mellitus (GDM)?

- Diabetes found during pregnancy
- Temporary high blood glucose levels during pregnancy

What is Diabetes Mellitus?

Diabetes is a disease where glucose levels are raised in the blood.

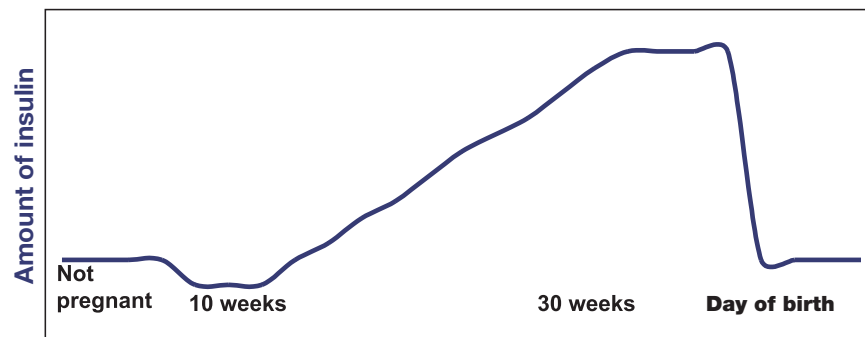
There are two main causes of diabetes. The pancreas (organ) may decrease or stop producing insulin (type 1). Insulin is needed to convert glucose to energy for working cells in the body. More commonly, the body is unable to use insulin as quickly as it should. This is known as 'insulin resistance' diabetes (type 2).

How does insulin work?

Your body requires energy to work. This energy comes from the foods you eat. One food group called carbohydrates, becomes glucose in our blood stream.

Insulin is a hormone produced in the pancreas. After a meal containing carbohydrate (glucose) foods, the blood glucose level rises and stimulates the pancreas to release insulin to carry the glucose into the body cells.

Insulin requirements during pregnancy



What should I be concerned about with GDM?

- Future risk of type 2 diabetes, requiring lifelong management
- Future risk of childhood obesity for your unborn child

If blood glucose levels are not controlled you may have a baby that is big, causing problems at birth and then feeding and breathing difficulties after birth.

A diagnosis of GDM is an opportunity to self review lifestyle habits and reduce your family's future risk of diabetes.

How common is GDM?

Five to eight percent of all pregnant women develop GDM.

Why would I get GDM?

- Genetic (family) risk factors
- Placental hormones may interfere with the work of insulin

During pregnancy, all women make two to three times more insulin than non-pregnant women.

What increases my risk of getting GDM?

- A family history of diabetes
- Ancestors of Aboriginal, Asian or Mediterranean descent
- An unhealthy body weight
- Age over 30 years
- GDM in a previous pregnancy
- Undiagnosed diabetes before pregnancy without symptoms

How is GDM diagnosed?

Pregnant women are screened for GDM at 26 to 32 weeks routinely by a Glucose Challenge Test (GCT) or Glucose Tolerance Test (GTT). Your doctor may arrange for you to have a test if you have signs of GDM earlier in pregnancy.

You have gestational diabetes if your blood glucose results are greater than 11mmol/L after the 50g glucose drink (GCT) or are equal to or above:

- 5.5mmol/L before the 75g glucose drink, and/or
- 8mmol/L two hours after

How will GDM affect my baby?

Your baby also requires glucose for energy, which passes from your blood stream through the placenta. A high amount of glucose from a mother with diabetes enables the baby to grow bigger. The extra fatty layer may increase the risk of short-term breathing and feeding problems for your baby.

Your newborn baby is watched closely for signs of these problems. In the first few days, as a result of high glucose in pregnancy, your baby may produce too much insulin which will make blood glucose levels fall at birth.

Your baby will soon adjust his/her own insulin production to match the amount of (breast) milk glucose.

The best ways to avoid low blood glucose levels in your baby are to:

- control your own blood glucose levels during pregnancy
- feed baby within one hour of birth or have skin to skin contact
- continue to feed baby every three hours until lactation is established.

Your baby's glucose level or PGL (plasma glucose level) will be tested before the second feed and repeated before feeds until the glucose level remains within normal range.* A small amount of blood is taken from your baby's heel for each test.

Will my baby have diabetes?

No, your baby will not be born with diabetes.

However, your baby may inherit the gene for diabetes and have a higher risk of obesity and developing diabetes in later life.

Setting a good example of eating low fat, healthy food and being active every day will reduce the risk of your children becoming overweight and developing diabetes.



How is GDM managed in pregnancy?

Activity will keep you fit and help control your blood glucose levels. Regular activity such as walking or swimming three to four days a week is recommended.

Healthy low-fat eating is recommended. Ask to talk to the hospital dietitian about meal plans and good food choices.

Maintain the same blood glucose levels as women without GDM. Test your blood glucose at home using a blood glucose meter.

A midwife diabetes educator will teach you how to use the meter, explain when and how often you should test and what the blood glucose results mean for you.

**Urine tests are not a reliable guide for diabetes.
Blood glucose tests are more accurate.**

³ *World Health Organisation: Normal range - above 2.6 mmol/L.

What blood glucose goals should I aim for during pregnancy?

Test times	Blood glucose goals
Before breakfast	4.0 - 5.5 mmol/L
Two hours after a meal	4.0 - 7.0 mmol/L

Bring your blood glucose meter to each visit with your doctor or whenever at the Hospital, including admission.

If your blood glucose levels are often or unexpectedly above these goals, contact the Diabetes Service.

Tel: (08) 9340 2163 or email: kemh.diabetes@health.wa.gov.au

Will I need medication during the pregnancy?

As your baby grows, you need more energy. Your body makes extra insulin to supply your body cells with the energy required.

Blood glucose levels rise when insulin is slow to move glucose into body cells. When body cells are unable to get enough glucose for energy, you may feel more tired and lethargic.

About one in four women with GDM need insulin injections or tablets during pregnancy to keep blood glucose levels within the normal range which is 4.0 - 7.0 mmol/L.

Will I get diabetes again?

- In another pregnancy, your chance of having GDM is 40%
- Women who have had GDM have a 50% risk of developing type 2 diabetes within the next 20 years

Lifestyle changes, being active every day and eating a healthy, well balanced diet can reduce this risk!

How can I reduce my risk of future diabetes?

Talk to your general practitioner GP about regular tests for diabetes and reduce your future risk by following these guidelines:

- Keep within your healthy weight range
- Maintain regular activity of moderate intensity
- Eat healthy, low fat foods in three meals and three snacks a day

Reduce the risk of diabetes - your future is in your control!



References:

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Produced by: Women and Newborn Health Service

Website: <http://wnhs.health.wa.gov.au>

© July 2003 WNHS 0015 Rev 3

Revised April 2010

This information is available in
alternative formats upon request

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