

National University Centre for Women & Children

Gestational Diabetes Mellitus (GDM)

What is Gestational Diabetes Mellitus (GDM)?

Diabetes is a condition where the glucose (sugar) levels in the blood are higher than recommended. Gestational diabetes mellitus (GDM) is a category of diabetes that affects women during pregnancy.

In most cases, GDM develops in the middle or towards the end of pregnancy and resolves after giving birth. It is very common and affects about one in five pregnant women in Singapore.



Should I get myself screened for GDM?

Screening is recommended and is usually done at 24 to 28 weeks of gestation.

Earlier testing is recommended for women who are deemed to be at higher risk, such as those who:

- Have a body mass index (BMI) of above 25kg/m².
- Had previously given birth to a baby weighing above 4kg.
- Were diagnosed with GDM in the previous pregnancy.
- Have a family history of diabetes.
- Had poor obstetric outcomes usually associated with diabetes.

If the result of the test is negative, a repeat test is recommended at 24 to 28 weeks of gestation.



How will I be tested?

GDM is detected via an oral glucose tolerance test (OGTT). It involves fasting for at least 10 hours. Upon arrival at the clinic, you will be asked to:

- 1. Have your blood drawn to check for fasting blood glucose levels.
- 2. Drink a glucose drink within 5 minutes.
- 3. Have your blood taken at one and two hour intervals.



How does GDM affect my baby and me?

Women with GDM can have healthy pregnancies and babies if their blood glucose levels are well-controlled during pregnancy. Otherwise, certain complications can occur if your blood glucose levels are too high:

- Your baby may grow bigger than normal. This increases the chance of injury to mother and baby during delivery as the baby's shoulder may get stuck in the pelvis.
- You may have increased risks of;
- » pre-term birth
- » having your labour induced
- » caesarean section
- » serious birth problems
- » stillbirth, in the worst-case scenario
- Your baby may have low sugar levels after birth and require additional care in the neonatal unit.
- You may be at a higher risk of developing diabetes later on in life.
- Your baby may be at greater risk of developing obesity and/or diabetes in the future.



How is GDM treated?

In most situations, a well-balanced diet and an exercise plan would be enough to control your GDM and support your pregnancy. A dietitian will work with you on an individualised healthy eating plan. You would be advised on controlling meal portion sizes and eating at regular times to promote better blood glucose control. It is also recommended that you keep active with regular exercise (i.e. walking) during pregnancy. You may wish to discuss this further with your doctor.



Do I need medication for GDM?

You may need medication if:

- Your blood glucose levels are not controlled even with diet and exercise.
- The ultrasound scan shows that your baby is larger than expected.

The medication is usually given as injectable insulin. This will be explained at your next appointment with your obstetrician and/or endocrinologist.



How do I monitor my blood sugar?

A specialty nurse will teach you how to monitor your blood glucose at home and inform you about the ideal glucose levels. He/she will show you how to do a finger prick test and you will be given a chart to note down your readings.

Do monitor your blood glucose levels at least two days a week, seven times a day (before and two hours after each main meal, and before bedtime). You will be informed if you need more frequent monitoring.



How will my blood glucose be controlled during delivery?

Your blood glucose levels will be closely monitored during labour. You may be administered intravenous insulin infusion during your labour.

What happens after delivery?

- As your baby is at risk of low blood glucose levels, he/she will be taken for testing. If his/her blood glucose levels are low, it will be treated until it is in the normal range.
- You will be advised to repeat the OGTT 6 to 12 weeks after delivery. It is important that you go for the test as a small number of women continue to have abnormal glucose tolerance after pregnancy.

Women who have GDM are more likely to develop diabetes later on in life. You can reduce this risk by adopting a healthy lifestyle including healthy diet, exercise and weight loss (if you are overweight).

You should also be screened for diabetes once every one to three years. Lastly, you should let your doctor know about your condition when planning for future pregnancies as GDM may recur.



About the National University Centre for Women and Children

National University Centre for Women and Children (NUWoC) is a national university specialist centre that aims to empower women, children and their families to lead healthier lives. We provide comprehensive medical and surgical services ranging from pre-conception to child and maternal health.

NUWoC comprises the Department of Obstetrics & Gynaecology (0&G) and Khoo Teck Puat – National University Children's Medical Institute (KTP-NUCMI) of National University Hospital. It focuses on the right-siting of appropriate services in the community and builds complementary services in National University Health System's (NUHS) centres of excellence – Ng Teng Fong General Hospital and Alexandra Hospital.

Through a generous gift from the Estate of Khoo Teck Puat, KTP-NUCMI established an integrated outpatient facility with medical, diagnostic and rehabilitation services for children. We are also the only public specialist centre in Singapore that offers paediatric kidney and liver transplant programmes.

For more information about us, visit www.nuh.com.sg/NUWoC

Emergency (24-hr)

Location NUH Main Building, Zone F, Level 1 Contact +65 6772 5000

Women's Clinic – Emerald/Ruby

Location Operating Hours Email

NUH Kent Ridge Wing, Zone D, Level 3, D03-06 Irs 8.30am – 6pm (Mon to Thu), 8.30am – 5.30pm (Fri), 8.30am – 12.30pm (Sat) appointment@nuhs.edu.sg

Women's Clinic - Sapphire

LocationNUH Kent Ridge Wing, Zone D, Level 3, D03-03Operating Hours8.30am - 6pm (Mon to Thu), 8.30am - 5.30pm (Fri), 8.30am - 12.30pm (Sat)Emailappointment@nuhs.edu.sg

Women's Clinic – Jade [Former Clinic G]

Location Operating Hours Email

NUH Kent Ridge Wing, Zone C, Level 3, C03-02 5 8.30am – 6pm (Mon to Thu), 8.30am – 5.30pm (Fri) appointment@nuhs.edu.sg

Fetal Care Centre

Location Operating Hours Email

NUH Kent Ridge Wing, Zone D, Level 3, D03-04 8am – 5.30pm (Mon to Thu), 8am – 5pm (Fri) appointment@nuhs.edu.sg

Clinic for Human Reproduction

LocationNUH Kent Ridge Wing, Zone D, Level 4, D04-02Operating Hours8am – 5pm (Mon to Fri), 8.30am – 12.30pm (Sat)

Women's Clinic @ JMC

Location Operating Hours

Jurong Medical Centre, Level 2 8.50am – 11.30pm (Tue & Thu), 2pm – 5pm (Mon & Fri)

Jurong Clinic for Women

Location Operating Hours General Enquiry Appointment Line Email

130 Jurong Gateway, #01-231 9am – 12pm, 2pm – 5pm (Mon to Sat), 6pm – 9pm (Mon to Thu) +65 6665 4277 +65 6908 2222 appointment@nuhs.edu.sg

GS @ NTFGH

Location Operating Hours Appointment Line Email Ng Teng Fong General Hospital, Tower A – Specialist Outpatient Clinics, Level 7 8.30am – 5.30pm (Mon to Fri), 8.30am – 12.30pm (Sat) +65 6908 2222 appointment@nuhs.edu.sq

Our Patient Care Institutions

National University Hospital Ng Teng Fong General Hospital & Jurong Community Hospital Alexandra Hospital National University Polyclinics Jurong Medical Centre National University Cancer Institute, Singapore National University Heart Centre, Singapore National University Centre for Oral Health, Singapore NUHS Diagnostics NUHS Pharmacy



Scan the QR code for more information on our patient care institutions.



Scan QR code for more information on NUWoC facilities.

OneNUHS Hotline: (65) 6908 2222 OneNUHS General Enquiries: contactus@nuhs.edu.sg OneNUHS Appointments: appointment@nuhs.edu.sg www.nuhs.edu.sg

Take charge of your health and access health information and services across NUHS institutions. Download the NUHS App now!

The information in this brochure is meant for educational purposes and should not be used as a substitute for medical diagnosis or treatment. Please seek your doctor's advice before starting any treatment, or if you have any questions related to your health, physical fitness or medical condition.

©2024, National University Hospital. All rights reserved. No part of this publication may be reproduced or shared without prior permission from National University Hospital.

Information is correct at time of printing (Apr 2024) and subject to revision without prior notice.