

Screening for Gestational Diabetes

Gestational Diabetes Mellitus (GDM):

GDM is a dysfunction of insulin during pregnancy. Insulin is a hormone that regulates blood. In pregnancy a placental hormone decreases the effect of insulin to keep sugar levels slightly higher than non-pregnant states to help with fetal growth. In GDM this insulin resistance happens to an abnormal degree. GDM affects 10-15% of pregnancies in Canada.

Risk factors: *Anyone can have GDM, even without risk factors*

- Previous baby with birth weight > 4000g
- Pre-pregnancy insulin control problems
- GDM in a past pregnancy
- Close family history of any type of diabetes
- Sedentary lifestyle, or little cardiovascular exercise
- High sugar diet
- Pre-pregnancy obesity
- Age over 35
- Measuring large for gestational age in current pregnancy or excessive weight gain in current pregnancy

Treatment for GDM decreases its risks of:

- Babies large for gestational age – with associated risks of labour dystocia, instrumental or surgical delivery, birth injury to parent and/or baby, post partum hemorrhage
- Hypoglycemia in the newborn
- Type II diabetes onset following pregnancy for the parent and in childhood for the baby
- Recurrence of GDM in future pregnancy
- Placental dysfunction, a higher risk in insulin-treated GDM

Testing:

- Done between 24 and 28 weeks
- Options are to either use start with a screening or diagnostic test. If a screening result were high or “positive”, the diagnostic test would be indicated to determine if GDM is present. The diagnostic test requires more time and fasting, so depending on preferences, some people opt to start with the screening, and others prefer to do one test only and elect the diagnostic test. Both are evidence-based tests.
- Screening: at a lab a 50g sweet drink is given, one hour later one blood sample is collected.

- Diagnostic test: fasting for 9 hours (we recommend overnight), in the morning at a lab the first blood sample is taken to measure fasting blood sugar, a 75g sweet drink is given, and 2 blood tests are done one and two hours later to measure metabolism of the sugar over time.

GDM Diagnosis:

- clients with GDM are referred to the GDM clinic at BC Women's Hospital where they have several visits
- clients monitor blood sugar levels at home
- most cases of GDM can be managed with changes to diet and exercise; this is called "diet-controlled GDM"
- if diet and exercise modifications cannot normalize blood sugar, the GDM clinic doctors will start insulin treatment, "IT-GDM"
- IT-GDM increases risks to placental function, so management is different and includes consultation with an obstetrician, extra ultrasounds and fetal monitoring in third trimester, labour and birth in hospital, and induction of labour at 38 to 39 weeks.
- With diet-controlled GDM families can choose to birth at home.
- With any type of GDM diagnosis clients can remain in Midwifery care