GDM Screening and diagnosis

**Risk factors for GDM**
- BMI > 30 kg/m² (pre-pregnancy or on entry to care)
- Ethnicity (Asian, Indian subcontinent, Aboriginal, Torres Strait Islander, Pacific Islander, Maori, Middle Eastern, non-white African)
- Previous GDM
- Previous elevated BGL
- Maternal age ≥ 40 years
- Family history DM (1st degree relative or sister with GDM)
- Previous macrosomia (birth weight > 4500 g or > 90th percentile)
- Previous perinatal loss
- Polycystic ovarian syndrome
- Medications (corticosteroids, antipsychotics)
- Multiple pregnancy

**Assess all women for risk factors**

**Post bariatric surgery?**

- No
  - Risk factors?
  - Yes:
    - Risk factors for GDM
    - BMI > 30 kg/m² (pre-pregnancy or on entry to care)
    - Ethnicity (Asian, Indian subcontinent, Aboriginal, Torres Strait Islander, Pacific Islander, Maori, Middle Eastern, non-white African)
    - Previous GDM
    - Previous elevated BGL
    - Maternal age ≥ 40 years
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    - Previous perinatal loss
    - Polycystic ovarian syndrome
    - Medications (corticosteroids, antipsychotics)
    - Multiple pregnancy

- No
  - First trimester
    - 2 hour 75 g OGTT (or HbA1c)
    - OGGT normal?
      - Yes
        - Routine antenatal care
      - No
        - OGGT abnormal?
          - Yes:
            - GDM diagnosis
              - HbA1c first trimester only
                - ≥ 41 mmol/mol (or 5.9%)
              - OGTT one or more of:
                - Fasting ≥ 5.1 mmol/L
                - 1 hour post prandial ≤ 7.4 mmol/L
                - 2 hours post prandial ≤ 6.7 mmol/L
            - GDM care
          - No:
            - OGGT not suitable/tolerated
              - First trimester
                - If diabetes history or risk factors—fasting BGL or HbA1c
              - Second trimester
                - 24–28 weeks fasting BGL
                - If BGL 4.6–5 mmol/L, commence fasting and postprandial capillary BGL self monitoring for 1-2 weeks
                - Suggested targets:
                  - Fasting < 5 mmol/L
                  - 1 hour post prandial ≤ 7.4 mmol/L
                  - 2 hours post prandial ≤ 6.7 mmol/L
              - Third trimester
                - If clinical suspicion of diabetes (e.g. evidence of excess fetal growth/adiposity on growth USS), repeat testing
              - 24-28 weeks gestation
                - 2 hour 75 g OGTT (or HbA1c)

- Yes:
  - OGGT normal?
    - Yes
      - Routine antenatal care
    - No
      - OGGT abnormal?
        - Yes:
          - GDM diagnosis
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              - 24-28 weeks gestation
                - 2 hour 75 g OGTT (or HbA1c)


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Post malabsorptive bariatric surgery includes e.g. Roux-en-Y, laparoscopic sleeve gastrectomy, bilio-pancreatic diversion with duodenal switch; does not include adjustable gastric banding.

BGL: blood glucose level  
BMI: body mass index  
DM: diabetes mellitus  
GDM: gestational diabetes mellitus  
HbA1c: glycated haemoglobin  
OGTT: Oral glucose tolerance test  
≥: greater than or equal to  
>: greater than  
≤: less than or equal to