

Obesity in pregnancy

Clinical Guideline Presentation v4.0



45 minutes

Towards your CPD Hours

References:

The Queensland Clinical Guideline: *Obesity in pregnancy* is the primary reference for this package.

Recommended citation:

Queensland Clinical Guidelines. *Obesity in pregnancy*: Clinical guideline education presentation E15.14-1-V4-R20. Queensland Health. 2015.

Disclaimer:

This presentation is an implementation tool and should be used in conjunction with the published guideline. This information does not supersede or replace the guideline. Consult the guideline for further information and references.

Feedback and contact details:

M: GPO Box 48 Brisbane QLD 4001 | **E:** Guidelines@health.qld.gov.au | **URL:** www.health.qld.gov.au/qcg

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Body Mass Index (BMI)

- Weight in kilograms divided by the square of the height in metres (kg/m^2)
- Calculate BMI at entry to care
 - Use pre-pregnancy weight if known
 - Use first weight if unknown
- Ethnic variations on health risk
 - Asian: at lower BMI
 - Polynesian at higher BMI



Classification of BMI

Classification	BMI (kg/m ²)
Underweight	<18.5
Normal	18.5–24.9
Overweight	25–29.9
Obese I	30–34.9
Obese II	35–39.9
Obese III	≥ 40
Extreme (as per QCG guideline)	≥ 50

Referral and transfer

- Plan care in consultation with the woman
- Use local criteria for transfer based on BMI
- Ideally, determine the need for transfer prior to onset of labour

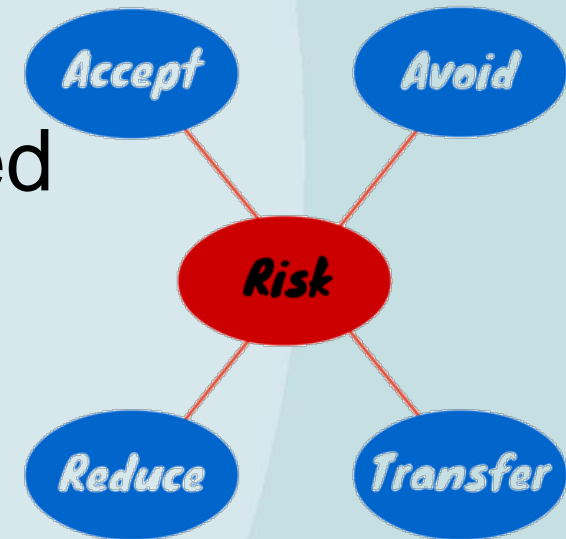


If recommendations declined

- If transfer or other care recommendations declined:
 - Ensure the woman understands the risks, concerns and possible scenarios
 - Conduct an individual risk assessment and formulate a risk management plan
 - Document clear and detailed record of all conversations

Risks in pregnancy

- Obese women more likely to be single, of lower socio-economic status and to smoke
- Obesity is more prevalent in Indigenous women
- The higher the pre-pregnancy BMI, the greater the associated risk of maternal and neonatal complications



Risks

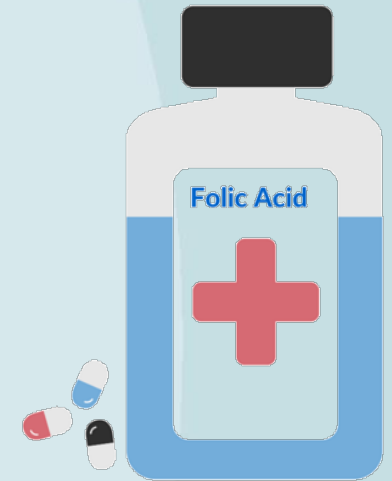
Antenatal	Intra/postpartum and neonatal
Preeclampsia	Anaesthetic difficulties
Thromboembolic disease	VBAC less likely
Diagnosis of congenital abnormalities	Operative /caesarean birth more likely
Diabetes	Reduced breastfeeding
Maternal mortality	Wound infections
Obstructive sleep disorder	Postpartum haemorrhage
Preterm birth	Thromboembolic disease
Depression	Macrosomia
Difficulties with abdominal assessment	Neurodevelopmental disorders

Planning pregnancy

- Provide pre-conceptual counselling about:
 - The benefits of weight optimisation before and between pregnancies
 - Risks associated with obesity in pregnancy
 - Stabilising weight loss prior to conception to avoid impact of weight loss on fetus
- Routinely offer referral to dietitian services
- Screen for hypertension and Type 2 diabetes (especially if previous GDM)

Supplements

- Recommend Folic Acid 5 mg daily until end of the first trimester
 - Obese women have lower levels of folate
- Obese women are at increased risk of Vitamin D deficiency



Antenatal care

- Develop an individual care plan that identifies:
 - Schedule of visits
 - Referrals required (dietician, anaesthetist, lactation consultant, mobility assessment, other specialist/s)
 - Intended place of birth



Previous bariatric surgery

- Ascertain and document the type of bariatric surgery
- Routinely use a multi-disciplinary health care approach (refer to dietitian)
- High index of suspicion for complications which may present as common pregnancy complaints
- Continue nutritional supplements and consider evaluation of deficiencies

Assessment

- Comprehensive history
- Assess for risk factors of preeclampsia
- Test for diabetes at the initial visit
- Establish baseline renal and liver function
- Actively assess risk of VTE
- Early anaesthetic assessment if BMI $> 40 \text{ kg/m}^2$

Weight measurement



- Weigh at each antenatal visit
- Review the pattern and rate of gain relative to desired GWG

Pre-pregnancy BMI	Gain/week trimester 2+3	Total gain (kg)
< 18.5	0.45 kg	12.5 to 18
18.5 to 24.9	0.45 kg	11.5 to 16
25.0 to 29.9	0.28 kg	7 to 11.5
≥ 30.0	0.22 kg	5 to 9

Psychosocial support



- Provide information about impact of obesity on pregnancy
- Offer referral and support for adoption of a healthy lifestyle
- Maintain awareness that depression is a key determinant for weight gain/obesity
- Reflect on own attitudes to the care of obese women

Fetal surveillance

- Obesity can limit the accuracy and effectiveness of clinical and ultrasound examinations
- Growth scan at 28-32 weeks gestation to aid detection of late onset fetal growth restriction
- Consider serial scanning if growth issues

Nutrition

- Follow nutritional advice as per Australian Dietary Guidelines
- Routinely offer nutritional consultation (ideally with a dietitian)
- Encourage adherence to target weight gains



Physical activity

- Recommend 30 minutes of physical activity on most days of the week
- Individually assess and discuss contraindications and indications to stop physical activity
- Discuss modifications to physical activity as pregnancy progresses



Mode and timing of birth

- Successful VBAC less likely
- Early anaesthetic involvement needed
- Higher incidence of induction of labour (IOL) and failed IOL
- Obesity alone is not an indication for elective caesarean section or IOL, but a lower threshold for IOL at term due to the increased risk of stillbirth may be appropriate

Intrapartum care

- Use a team approach with frequent communication between care providers
- Early notification of anaesthetist and theatre staff when obese women in labour
- Ensure bariatric equipment available



Intrapartum

- Continuous fetal monitoring if BMI $> 40 \text{ kg/m}^2$
- Consider internal fetal monitoring if external monitoring trace unsatisfactory
- Water immersion is not recommended if BMI $> 35 \text{ kg/m}^2$
- Maintain an awareness for increased risk of PPH

Caesarean section

- Ensure sufficiently skilled, experienced and credentialed staff available
- Consider:
 - Requirement for procedures and devices to elevate the panniculus
 - Use of negative pressure dressings on closure
 - Suturing of the subcutaneous tissue space
 - Higher dose antibiotics for routine prophylaxis

Postpartum care

- More frequent clinical observation due to increased risk of:
 - Aspiration from airway compromise and/or obstructive sleep apnoea
 - Infection (chest, urinary, wound or breast)
- Actively assess requirement for VTE prophylaxis
- Encourage early mobilisation
 - Consider pressure area care

Breastfeeding

- Less likely to initiate with reduced duration and exclusivity
- Refer to lactation consultant
- Provide early postpartum feeding support
- Time discharge to assist establishment of breastfeeding



Discharge

- Encourage postpartum weight management
- Provide information about the benefits of inter-pregnancy weight loss
- If hormonal contraception used, conduct a risk assessment for VTE