CLINICAL ASSESSMENTS IN PREGNANCY

A range of clinical assessments is offered to promote and enhance the physical and emotional wellbeing of a woman and her baby during pregnancy. Recommendations are based on evidence about the accuracy of assessments in predicting complications and the effectiveness of interventions in reducing symptoms.

Summary of advice for women about assessments during pregnancy

<table>
<thead>
<tr>
<th>Clinical assessment</th>
<th>Advice about assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight and body mass index</td>
<td>Healthy weight gain during pregnancy (ie weight gain appropriate to pre-pregnancy BMI) has health benefits for both mother and baby</td>
</tr>
<tr>
<td>Gestational age</td>
<td>Ultrasound scanning is most accurate in determining gestational age between 8 and 14 weeks of pregnancy but can be used in the assessment of gestational age until 24 weeks; after 24 weeks of pregnancy, the date of the last menstrual period is used</td>
</tr>
<tr>
<td>Fetal development and anatomy</td>
<td>Ultrasound scanning at 18–20 weeks of pregnancy detects structural anomalies</td>
</tr>
<tr>
<td>Fetal growth restriction</td>
<td>Fetal growth is assessed at each antenatal visit, usually by fundal height measurement (from 24 weeks)</td>
</tr>
<tr>
<td>Fetal movements</td>
<td>Promoting awareness of the normal pattern of fetal movement assists women in knowing when to seek advice if they perceive alterations in movements, especially if movements are decreased or absent</td>
</tr>
<tr>
<td>Fetal heart rate</td>
<td>Listening to the fetal heart is not predictive of pregnancy outcomes although many women like this as part of antenatal care</td>
</tr>
<tr>
<td>Risk of preterm birth</td>
<td>Discussing risk and protective factors for preterm birth may assist some women to reduce their risk</td>
</tr>
<tr>
<td>Blood pressure</td>
<td>Measuring blood pressure at the first antenatal visit allows identification of women who have chronic hypertension who may require additional monitoring</td>
</tr>
<tr>
<td></td>
<td>Measuring blood pressure at each antenatal visit allows monitoring for new onset hypertension including pre-eclampsia</td>
</tr>
<tr>
<td>Proteinuria</td>
<td>Testing women for proteinuria at the first antenatal visit identifies existing kidney disease or urinary tract infection</td>
</tr>
<tr>
<td></td>
<td>After the first antenatal visit, proteinuria is tested in women with risk factors for, or clinical indications of, pre-eclampsia</td>
</tr>
</tbody>
</table>
Weight and body mass index (see Guideline Chapter 19)

Discussing weight and body mass index (BMI)

Consensus-based recommendations

With women’s consent, measure their weight and height at the first antenatal visit, calculate their pre-pregnancy body mass index (BMI) and give them advice about the benefits of meeting the recommended healthy weight gain for their pre-pregnancy BMI.

Classification of adult underweight, overweight and obesity according to BMI

<table>
<thead>
<tr>
<th>BMI (kg/m²)</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;18.5</td>
<td>Underweight</td>
</tr>
<tr>
<td>18.5-24.9</td>
<td>Healthy weight</td>
</tr>
<tr>
<td>25.0-29.9</td>
<td>Overweight</td>
</tr>
<tr>
<td>≥30.0</td>
<td>Obesity</td>
</tr>
</tbody>
</table>

IOM 2009 recommendations for weight gain in pregnancy

<table>
<thead>
<tr>
<th>Pre-pregnancy BMI (kg/m²)</th>
<th>Recommended weight gain (kg)</th>
<th>Rates of weight gain 2nd and 3rd trimester (kg/wk)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;18.5</td>
<td>12.5–18.0</td>
<td>0.51 (0.44–0.58)</td>
</tr>
<tr>
<td>18.5 to 24.9</td>
<td>11.5–16.0</td>
<td>0.42 (0.35–0.50)</td>
</tr>
<tr>
<td>25.0 to 29.9</td>
<td>7.0–11.5</td>
<td>0.28 (0.23–0.33)</td>
</tr>
<tr>
<td>≥30</td>
<td>5.0–9.0</td>
<td>0.22 (0.17–0.27)</td>
</tr>
</tbody>
</table>

Discussing weight management

Consensus-based recommendations

At every antenatal visit, offer women the opportunity to be weighed so that low or high gestational weight gain is identified and risk of associated adverse outcomes monitored.

How to discuss weight management

Adopting a respectful, positive and supportive approach and providing information about healthy eating and physical activity in an appropriate format may assist discussion of weight management. This should be informed by appropriate education for health professionals.

Practice summary

When: At all antenatal visits

Who: Midwife; GP; obstetrician; Aboriginal and Torres Strait Islander Health Practitioner, Aboriginal and Torres Strait Islander Health Worker; multicultural health worker

- Explain the purpose of assessing weight and weight gain during pregnancy: Discuss the benefits of having weight within the healthy range before, during and in between pregnancies. For women with a BMI outside the healthy range, explain that assessing weight gain during pregnancy is helpful in identifying women whose weight gain is below or above recommendations.

- Engage women in discussions about weight gain: Offer women the opportunity to be weighed and to discuss their weight gain since the last antenatal visit. Use the IOM recommendations to give women advice about the risks of inadequate or excessive weight gain. Provide advice on nutrition and exercise based on the Australian dietary and physical activity guidelines (see Guidelines Chapter 11).

- Consider referral: Women with a BMI above or below the healthy range or who are gaining weight at a rate below or above recommendations may benefit from referral for nutrition advice from an accredited practising dietitian.

- Take a holistic approach: Provide women with culturally appropriate advice on the benefits of a healthy diet and regular physical activity. When making referrals, consider access to and costs of care and develop alternative care pathways for women who experience health inequalities as a result of social and cultural barriers.
Gestational age (see Guideline Chapter 20)

Assessing gestational age

### Recommendations

**Provide information and offer pregnant women who are unsure of their conception date an ultrasound scan between 8 weeks 0 days and 13 weeks 6 days to determine gestational age, detect multiple pregnancies and accurately time fetal anomaly screening.**

**Use crown–rump length (CRL) measurement to determine gestational age. If the CRL is above 84 mm, estimate the gestational age using head circumference.**

### Can a single ultrasound be used to assess gestational age and nuchal translucency thickness?

The timeframe for ultrasound assessment of gestational age overlaps with that for assessment of nuchal translucency thickness as part of screening for fetal chromosomal abnormalities (11 weeks to 13 weeks 6 days), which may enable some women to have both screens in a single scan. This should only occur if women have been provided with an explanation of the purpose and implications of the screens and have given their informed consent to both.

### Selecting the better estimate of the date of birth

If the LMP was certain and menstruation regular, compare the LMP estimate to the ultrasound estimate:

- **ultrasound performed between 6 and 13 weeks pregnancy:** if the two dates differ by 5 days or less, use the LMP estimate; if the dates differ by more than 5 days, use the ultrasound estimate
- **ultrasound performed between 13 and 24 weeks pregnancy:** if the two dates differ by 10 days or less, use the LMP estimate; if the dates differ by more than 10 days, use the ultrasound estimate

If the ultrasound was performed between 6 and 24 weeks pregnancy and the LMP was not certain or menstruation irregular, use the ultrasound estimate

If the LMP was certain and menstruation regular and no ultrasound was performed between 6 and 24 weeks pregnancy (or none with a heartbeat), use the LMP estimate

### Can the agreed due date be adjusted?

The agreed due date should not be changed without advice from another health professional with experience in antenatal care.

### Who should conduct the gestational age assessment?

Ultrasound assessment of gestational age should only be performed by a person who has had specific training.

### Should ultrasound assessment be repeated?

Repeated ultrasound assessments should only be used when clinically indicated.

### Practice summary

**When:** At the first antenatal visit

**Who:** Midwife; GP; obstetrician; Aboriginal and Torres Strait Islander health worker; multicultural health worker

- **Discuss the purpose of the ultrasound:** Explain that it is intended to assess the gestational age of the baby (when the conception date is not known).

- **If a woman chooses to have an ultrasound, arrange an appointment or referral:** Whether providing the ultrasound or arranging referral, ensure that the ultrasound takes place between 8 weeks 0 days and 13 weeks 6 days of pregnancy.
Fetal development and anatomy (see Guideline Chapter 21)

Offering the 18–20 week ultrasound assessment

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Grade B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offer pregnant women ultrasound screening to assess fetal development and anatomy between 18 and 20 weeks gestation.</td>
<td></td>
</tr>
</tbody>
</table>

What are considerations in timing of ultrasound assessment of fetal development and anatomy?
Timing of the ultrasound will be guided by the individual situation (e.g., for women who are obese, visualisation may improve as the pregnancy progresses).

Should repeat assessments be offered?
Repeated ultrasound assessment may be appropriate for specific indications but should not be used as part of routine monitoring.

Who should conduct the fetal development and anatomy assessment?
Ultrasound assessment should only be performed by healthcare professionals with appropriate training and qualifications, within their appropriate scope of practice (e.g., diagnostic or point of care).

Practice summary

- **When:** Between 18 and 20 weeks
- **Who:** Midwife; GP; obstetrician; Aboriginal and Torres Strait Islander Health Practitioner; Aboriginal and Torres Strait Islander Health Worker; multicultural health worker
- Discuss the purpose of the ultrasound: Explain that ultrasound assessment is offered to all women to check the anatomy and growth of the baby and can also be used to estimate gestational age.
- If a woman chooses to have an ultrasound, arrange an appointment or referral: When arranging referral, ensure that the ultrasound takes place before 20 weeks of pregnancy.
- Take a holistic approach: Provide advice to assist women in accessing services (e.g., availability of bulk-billed services and interpreters). For women who need to travel for assessment, explain the need to plan early and organise travel and accommodation. Provide information on available funding.
- Arrive follow-up: Routinely make sure that women are informed of the results of the scan and document these in her antenatal record. If an anomaly is suspected or identified, offer women access to appropriate counselling and ongoing support by trained health professionals.
Fetal growth restriction (see Guideline Chapter 22)

Assessing risk of fetal growth restriction

<table>
<thead>
<tr>
<th>Major risk factors</th>
<th>Other risk factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renal impairment, chronic hypertension, antiphospholipid syndrome, maternal diabetes with vascular disease</td>
<td>Maternal diet (eg low fruit intake pre-pregnancy)</td>
</tr>
<tr>
<td>Previous small-for-gestational age baby or stillbirth</td>
<td>Nulliparity</td>
</tr>
<tr>
<td>Vigorous daily exercise (leading to being very out of breath)</td>
<td>In vitro fertilisation singleton pregnancy</td>
</tr>
<tr>
<td>Maternal age &gt;40 years</td>
<td>BMI ≥30</td>
</tr>
<tr>
<td>Pregnancy-associated placental protein-A &lt;0.4 multiple of median</td>
<td>Smoking up to 10 cigarettes a day</td>
</tr>
<tr>
<td>Smoking ≥11 cigarettes a day in pregnancy</td>
<td>History of pre-eclampsia</td>
</tr>
<tr>
<td>Cocaine use in pregnancy</td>
<td>Pregnancy interval of &lt;6 months or ≥60 months</td>
</tr>
<tr>
<td>Maternal or paternal history of being a small-for-gestation-age baby</td>
<td></td>
</tr>
</tbody>
</table>

When should risk factors for fetal growth restriction be assessed?

Early in pregnancy, assess women for risk factors for having a small-for-gestational-age fetus/newborn.

Consensus-based recommendations

When women are identified as being at risk of having a small-for-gestational-age fetus or newborn, provide advice about modifiable risk factors.

Refer women with a major risk factor or multiple other factors associated with having a small-for-gestational-age fetus/newborn for ultrasound assessment of fetal size and wellbeing at 28-30 and 34-36 weeks gestation.

Assessing fetal growth

Consensus-based recommendations

Do not assess fetal growth based solely on abdominal palpation.

At each antenatal visit from 24 weeks, measure fundal height in centimetres.

When is referral appropriate?

Refer women after 24 weeks with a fundal height ≥3cm less than expected, a single fundal height which plots below the 10th centile or serial measurements that demonstrate slow or static growth by crossing centiles for ultrasound measurement of fetal size.

Refer women in whom measurement of fundal height is potentially inaccurate (for example: BMI >35, large fibroids, polyhydramnios) for serial assessment of fetal size using ultrasound.

Practice summary

When: At all antenatal visits

Who: Midwife; GP; obstetrician; Aboriginal and Torres Strait Islander Health Practitioner; Aboriginal and Torres Strait Islander Health Worker; multicultural health worker

☐ Discuss fetal growth: Early in pregnancy, give all women appropriate written information about the measurement of fetal growth and an opportunity to discuss the procedure with a health professional.

☐ Take a consistent approach to assessment: When measuring fundal height, use a non-elastic tape with numbers facing downwards so that an objective measurement is taken. Measure from the variable point (the fundus) and continue to the fixed point (the symphysis pubis) or vice versa. Take and document measurements in a consistent manner.

☐ Take a holistic approach: Abdominal palpation provides a point of engagement between the health professional and mother and baby.
Fetal movements (see Guideline Chapter 22)

Discussing fetal movements

Most women are aware of fetal movements by 20 weeks and (although fetal movements tend to plateau at 32 weeks) there is no reduction in the frequency of fetal movements in the late third trimester.

Patterns of movement change as the baby develops, and wake/sleep cycles and other factors (e.g., maternal weight and position of the placenta) may modify the woman’s perception of movements.

Taking a short amount of time each day to be aware of the baby’s movements is a good way for women to ‘check on’ the baby.

If a woman does report altered or decreased fetal movements, tests can be undertaken to assess the baby’s wellbeing.

Consensus-based recommendations

Early in pregnancy provide women with verbal and written information about normal fetal movements. This information should include a description of the changing patterns of movement as the fetus develops, normal wake/sleep cycles and factors that may modify the mother’s perception of fetal movements.

Advise women with a concern about altered or decreased fetal movements to contact their health professional immediately.

When should fetal movements be discussed?

Emphasise the importance of maternal awareness of fetal movements at every antenatal visit.

Monitoring fetal movements

Consensus-based recommendation

Do not advise the use of kick charts as part of routine antenatal care.

Should fetal movements be counted?

Maternal concern about decreased fetal movements overrides any definition of decreased fetal movements based on numbers of fetal movements.

Practice summary

When: At antenatal visits from 20 weeks

Who: Midwife; GP; obstetrician; Aboriginal and Torres Strait Islander Health Practitioner; Aboriginal and Torres Strait Islander Health Worker; multicultural health worker

Discuss fetal movement patterns: Emphasise the importance of the woman’s awareness of the pattern of movement for her baby and factors that might affect her perception of the movements.

Advise early reporting: Women should report perceived altered or decreased fetal movement on the same day rather than wait until the next day.

Take a holistic approach: Support information given with appropriate resources (e.g., written materials suitable to the woman’s level of literacy, audio or video) and details of whom the woman should contact if decreased fetal movements are perceived.
**Fetal heart rate** (see Guideline Chapter 22)

**Assessing fetal heart rate**

The sensitivity of Doppler auscultation in detecting the fetal heart is 80% at 12 weeks + 1 day gestation and 90% after 13 weeks.

Attempts to listen to the fetal heart before this time may be unsuccessful, and lead to maternal anxiety and additional investigations (eg ultrasound) in pregnancies that are actually uncomplicated.

It is unlikely that a fetal heart rate will be audible before 28 weeks if a Pinard stethoscope is used.

**Consensus-based recommendations**

If auscultation of the fetal heart rate is performed, a Doppler may be used from 12 weeks and either Doppler or a Pinard stethoscope from 28 weeks.

Do not routinely use electronic fetal heart rate monitoring (cardiotocography) for fetal assessment in women with an uncomplicated pregnancy.

**Practice summary**

**When**: At antenatal visits between 12 and 26 weeks gestation

**Who**: Midwife; GP; obstetrician; Aboriginal and Torres Strait Islander Health Practitioner; Aboriginal and Torres Strait Islander Health Worker; multicultural health worker

- **Discuss fetal heart rate**: Explain that listening to the fetal heart does not generally provide any information about the health of the baby and that other tests (such as ultrasound) are relied upon for identification of any problems with the pregnancy.

- **Take a holistic approach**: Some women may be reassured by hearing the fetal heart beat.

**Risk of preterm birth** (see Guideline Chapter 23)

**Assessing risk of giving birth preterm**

<table>
<thead>
<tr>
<th>Significant risk factors</th>
<th>Other factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social disadvantage and lower levels of maternal education</td>
<td>Obesity and gestational weight gain higher than recommendations</td>
</tr>
<tr>
<td>Previous preterm birth</td>
<td>Low social support, stress, depression, anxiety</td>
</tr>
<tr>
<td>Pre-existing or gestational diabetes</td>
<td>Exposure to antidepressants</td>
</tr>
<tr>
<td>Current urogenital infections – eg chlamydia, bacterial vaginosis</td>
<td>Exposure to passive smoke</td>
</tr>
<tr>
<td>Alcohol consumption, in a dose-response fashion</td>
<td>Hepatitis C, human papilloma virus, thyroid dysfunction</td>
</tr>
<tr>
<td>Smoking at the first antenatal visit and active smoking during pregnancy</td>
<td></td>
</tr>
</tbody>
</table>

**Protective factors**

Aerobic exercise (30–60 minutes, 3-7 times per week) among women who are overweight or obese

**Consensus-based recommendation**

When women are identified as being at risk of giving birth preterm based on the presence of risk factors, provide advice about modifiable risk factors.

If a woman’s cervical length is measured at the 18–20 week ultrasound and is <25 mm, assess other risk factors for preterm birth and seek expert advice if her risk of preterm birth appears to be high.
Practice summary

When: A woman has identified risk factors for giving birth preterm

Who: Midwife; GP; obstetrician; Aboriginal and Torres Strait Islander Health Practitioner; Aboriginal and Torres Strait Islander Health Worker; multicultural health worker

Discuss lifestyle factors associated with preterm birth: Explain that smoking during pregnancy makes it more likely that the baby will be born preterm and causes other serious risks to the pregnancy. Advise women that not drinking alcohol during pregnancy is the safest option. Offer testing for urogenital infection if the woman has risk factors for preterm birth.

Discuss protective factors: Explain that moderate physical activity during pregnancy has a range of health benefits, particularly for women who are overweight or obese.

Take a holistic approach: Provide information on relevant community supports (e.g., smoking cessation programs, drug and alcohol services, physical activity groups). Consider whether a woman may be at increased risk if she has recently arrived from a country with a high prevalence of preterm birth (i.e., East African or African American). Provide social and emotional support and access to midwifery continuity of care, where possible.

Blood pressure (see Guideline Chapter 24)

Measuring blood pressure

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Grade B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measure blood pressure at a woman's first antenatal visit to identify existing high blood pressure.</td>
<td></td>
</tr>
</tbody>
</table>

Using the woman’s right arm, remove tight clothing and ensure her arm is relaxed and supported at heart level

Use appropriate cuff size (e.g., use a large cuff if arm circumference is >33 cm and a thigh cuff if it is >42 cm)

Inflate cuff to 20-30 mmHg above palpated systolic blood pressure

Lower column slowly, by 2 mmHg per second or per beat

Read blood pressure to the nearest 2 mmHg

Measure diastolic blood pressure as disappearance of sounds (phase V; or IV if phase V is absent)

If automated devices are used, use only devices that have been validated for use in pregnancy and calibrate these against mercury sphygmomanometers

Responding to blood pressure measurements

Increase monitoring and consider treatment for women with:

- a single diastolic blood pressure reading of ≥110 mmHg, or two consecutive readings of ≥90 mmHg at least 4 hours apart and/or significant proteinuria (1+)
- women with a systolic blood pressure ≥140 mmHg on two consecutive readings at least 4 hours apart

Women presenting for antenatal care currently on medication for hypertension should have their medicines reviewed to ensure their safety in pregnancy

Assess women presenting with new hypertension after 20 weeks pregnancy for pre-eclampsia

Increase surveillance for women with hypertension and/or proteinuria

Be aware that white coat hypertension also occurs in pregnancy

Practice summary

When: At first antenatal visit

Who: Midwife; GP; obstetrician; Aboriginal and Torres Strait Islander health worker; multicultural health worker

☐ Explain the risks associated with high blood pressure in pregnancy: Discuss the importance of identifying high blood pressure early in pregnancy.

☐ Offer lifestyle advice: Highlight to women who experience raised blood pressure in pregnancy the benefits of not smoking, maintaining a healthy weight, regular physical activity and a healthy diet.

☐ Arrange treatment or referral if required: For women with chronic hypertension, further testing may be required to exclude white coat hypertension or kidney disease and treatment may be needed.
Proteinuria (see Guideline Chapter 25)

Testing for proteinuria

Consensus-based recommendation

Routinely offer testing for proteinuria at the first antenatal visit, regardless of stage of pregnancy.

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Grade B</th>
</tr>
</thead>
<tbody>
<tr>
<td>For point-of-care testing, use an automated analyser if available, as visual inspection of a urinary dipstick is the least accurate method to detect true proteinuria.</td>
<td></td>
</tr>
</tbody>
</table>

Responding to test results

- A protein:creatinine ratio of 30 mg/mmol of creatinine is regarded as significant.
- Women with abnormal dipstick urine test results (including the presence of leukocytes, nitrites or blood) should have a midstream urine sample sent for microscopic examination, culture and sensitivity testing.
- Women found to have true proteinuria and/or haematuria at their first antenatal visit may have underlying kidney disease, which should be investigated.

Practice summary

When: At first antenatal visit

Who: Midwife; GP; obstetrician; Aboriginal and Torres Strait Islander health worker; multicultural health worker

- Explain the risks associated with proteinuria in pregnancy: Discuss the importance of identifying underlying kidney disease or urinary tract infection early in pregnancy.
- Arrange treatment or referral if required: For women with proteinuria, further testing may be required to exclude urinary tract infection or kidney disease and monitoring for pre-eclampsia may be needed.

Risk of pre-eclampsia (see Guideline Chapter 26)

Assessing risk of pre-eclampsia

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Evidence-based recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early in pregnancy, assess all women for clinical risk factors for pre-eclampsia.</td>
<td></td>
</tr>
</tbody>
</table>

Established risk factors

- History of pre-eclampsia
- Chronic hypertension
- Pre-existing diabetes
- Autoimmune disease (eg systemic lupus erythematosus or antiphospholipid syndrome)
- Pre-existing kidney disease
- Nulliparity
- BMI >30

Other risk factors

- Maternal family history of pre-eclampsia
- Gestational diabetes

Preventing pre-eclampsia

Recommendation Grade A

Advising women at high risk of developing pre-eclampsia that calcium supplementation is beneficial if dietary intake is low.

Recommendations Grade B

Advising women at moderate-high risk of pre-eclampsia that low-dose aspirin from early pregnancy may be of benefit in preventing pre-eclampsia.

Advising women that vitamins C and E are not of benefit in preventing pre-eclampsia.

How can calcium intake be increased?

If a woman has a low dietary calcium intake, advise her to increase her intake of calcium-rich foods.
Clinical signs of pre-eclampsia

**Consensus-based recommendations**

Routinely measure **blood pressure** at each antenatal visit to identify new onset hypertension.

Recommend testing for **proteinuria** at each antenatal visit if a woman has risk factors for or clinical indications of pre-eclampsia, in particular, raised blood pressure.

**When should women seek advice?**

Give women information about the urgency of seeking advice from a health professional if they experience: headache, visual disturbance, such as blurring or flashing before the eyes, epigastric pain (just below the ribs), vomiting and/or rapid swelling of the face, hands or feet.

**Practice summary**

**When:** Early in pregnancy

**Who:** Midwife; GP; obstetrician; Aboriginal and Torres Strait Islander Health Practitioner; Aboriginal and Torres Strait Islander Health Worker; multicultural health worker

- Discuss risk factors for pre-eclampsia early in pregnancy: Explain that the likelihood of pre-eclampsia is increased if a woman has certain risk factors.

- Discuss pre-eclampsia screening: Explain that if a woman has high blood pressure and/or proteinuria, she will require additional care during the rest of her pregnancy.

- Discuss symptoms of pre-eclampsia with women at high risk: Explain the importance of seeking medical advice immediately if symptoms occur.

- Take a holistic approach: Ask women at risk of pre-eclampsia about how many serves of calcium-rich foods they eat each day. Discuss low cost and culturally appropriate strategies for increasing calcium intake. Advise women who develop pre-eclampsia of the need for ongoing surveillance due to their increased risk of developing hypertension.

- Consider referral: Women at risk of pre-eclampsia who have a low dietary calcium intake may benefit from referral to an accredited practising dietitian.

- Document and follow-up: Note risk factors and the results of blood pressure measurement and proteinuria testing in the woman’s antenatal record. Further investigations may be warranted if increases in blood pressure or new proteinuria are identified at subsequent visits.