The Rosie Hospital
Patient Information

Information for pregnant women with a body mass index (BMI) of 30 or more

Other formats:
If you would like this information in another language, large print or audio, please ask the department where you are being treated, to contact the patient information team: patient.information@addenbrookes.nhs.uk.
Please note: We do not currently hold many leaflets in other languages; written translation requests are funded and agreed by the department who has authored the leaflet.

We are now a smoke-free site: smoking will not be allowed anywhere on the hospital site.
For advice and support in quitting, contact your GP or the free NHS stop smoking helpline on 0800 169 0 169.

Document history
Authors The Rosie Hospital
Pharmacist Ebraheem Junaid
Department Cambridge University Hospitals NHS Foundation Trust, Hills Road, Cambridge, CB2 0QQ
www.cuh.org.uk
Contact number 01223 245151
Publish/Review date December 2017/December 2020
File name BMI_30_more.doc
Version number/Ref 2/PIN3343/29551

Innovation and excellence in health and care
Addenbrooke’s Hospital | Rosie Hospital
What is Body Mass Index (BMI)?

Body Mass Index or BMI is calculated by your weight to height ratio and is a practical estimation, used by health professionals, of weight range.

At your booking visit with your midwife, your height and weight will be noted and your BMI will be calculated, measured in kg/m².

Most women who are overweight have a straightforward pregnancy and birth and deliver healthy babies. However, research shows that women with a raised BMI of 30kg/m² or more (i.e. obese) at the start of pregnancy are at increased risk of complications during pregnancy and labour and the higher your BMI, the greater the risk of complications.

One of the aims of maternity care is to identify those women who are at increased risk of complications, in order to offer the best care throughout their pregnancy, to suit their individual needs and reduce the risks where possible.

BMI Classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>BMI (kg/m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underweight</td>
<td>&lt;18.5</td>
</tr>
<tr>
<td>Normal Range</td>
<td>18.5 – 24.9</td>
</tr>
<tr>
<td>Overweight</td>
<td>25.0 – 29.9</td>
</tr>
<tr>
<td>Obese</td>
<td>30.0 or more</td>
</tr>
<tr>
<td>Obesity can then be broken down further into classes:</td>
<td></td>
</tr>
<tr>
<td>- Class I</td>
<td>30.0 – 34.9</td>
</tr>
<tr>
<td>- Class II</td>
<td>35.0 – 39.9</td>
</tr>
<tr>
<td>- Class III</td>
<td>40.0 or more</td>
</tr>
</tbody>
</table>

Key messages

- The majority of women with a raised BMI have a straightforward pregnancy and birth.
- Enjoy a normal healthy diet and keep your weight gain to a minimum.
- Keep active and take regular, moderate intensity exercise.
- Take a high dose folic acid supplement of 5mg daily for the first 12 weeks of pregnancy to reduce the risk of neural tube defects.
- Take 10 micrograms (400IU) of vitamin D throughout pregnancy and during breastfeeding.
- Women with a raised BMI are at a higher risk of complications during pregnancy and labour, therefore appropriate place of birth and antenatal discussions with your midwives and doctors is essential.
- Following delivery mobilise as soon as possible especially if you have a caesarean section.
- Breastfeeding your baby can aid weight loss and is recommended to prevent the risk of obesity for your baby in later life.
- Reducing your BMI by 5 will reduce your chances of gestational diabetes in your next pregnancy by 80%.

You may also find the following websites helpful:

- [www.nice.org.uk](http://www.nice.org.uk)
- [www.healthychoices.co.uk](http://www.healthychoices.co.uk)
- [www.healthystart.nhs.uk](http://www.healthystart.nhs.uk)

References

• Assisted delivery - increased risk of needing help with the
delivery of your baby either a ventouse (suction cup),
forceps or caesarean may be required.

• Bigger babies - which may lead to difficulties delivering your
baby’s shoulders. This is called a shoulder dystocia and is
an emergency situation.

• Increased risk of bleeding - the risk of bleeding is increased
following the birth, particularly if your baby is large. To
reduce this risk, we will recommend ‘active management’
for the delivery of the placenta which is when we offer an
injection of syntometrine shortly after birth.

Because of these increased risks, there are recommendations on
place of birth:

Delivery Unit
This is the recommended place of birth for women with a BMI of 35
or more.

Rosie Birth Centre
If your BMI is between 30 and 34.9 and you would like to use the
Rosie Birth Centre, please discuss this with your community
midwife.

If this is your second or subsequent birth and your BMI is between
35 and 39.9, you may be suitable to use the birth centre following
an antenatal discussion and individualised plan of care made with
your obstetric doctor.

Please note the birth centre cannot be used by first time mums
with a BMI over 35.

Home Birth
This is not recommended for women with a BMI of 35 or more,
therefore if you choose to birth at home you should have an
individualised plan of care made with your community midwife,
consultant obstetrician and/or consultant midwife.

Pregnancy risks associated with a raised BMI

A raised BMI of 30 or more increases the risk of the following:

Diabetes
The higher the BMI the greater the risk of developing
diabetes in pregnancy. You will therefore be offered an oral
glucose tolerance test (OGTT) to check for diabetes at 24 weeks
of pregnancy.

Raised blood pressure
Women with a BMI of 35 or more are at increased risk of
developing a serious pregnancy-related disease called pre-
eclampsia. One of the signs of this is raised blood pressure. You
will therefore be offered a blood pressure check.

Blood clots
Women with higher BMIs have an increased risk of blood clots.
Therefore you will be assessed in early pregnancy and after
delivery and you may be offered anti coagulant therapy (blood
thinning injections) and support stockings to reduce the risks.

Less accurate ultrasound scans
All women are offered a scan in their pregnancy to check the
baby’s major organs, size and physical characteristics. If there is a
lot of excess body fat around the mother’s tummy, ultrasound scan
pictures can be unclear. This can limit our ability to identify any
problems, completely exclude abnormalities or see how well the
baby is growing.

It may also be more difficult to feel your baby’s position and size
during routine antenatal checks, so a scan may be required or
offered at around 36 weeks to check whether your baby is head
down before you go into labour.
Recommendations for care in pregnancy

All women with a BMI of 30 or more:

- A glucose tolerance (OGGT) blood test at 24 weeks to check for diabetes.
- Re-measurement of your weight at 34-36 weeks to allow for appropriate assessment of needs and drug doses at delivery.

All women with a BMI of 35 or more:

- Take a high dose folic acid supplement of 5mg (milligrams) daily for the first 12 weeks of pregnancy to reduce the risk of neural tube defects. This will need to be prescribed by your GP.
- Take 10 micrograms of Vitamin D throughout pregnancy and during breastfeeding (this is advised to all pregnant women).
- You will be referred to see a consultant obstetrician to discuss your antenatal care and your plans for the birth.
- You may be offered or you can request a referral to a dietician.
- You will be offered extra blood pressure checks – every 3 weeks from 24-32 weeks and then every 2 weeks until birth. If you have additional risk factors for pre-eclampsia you may also be advised to take 75mgs of aspirin daily. This will be assessed by your midwife at your booking appointment.
- If you have a raised BMI it may be difficult to accurately feel the size or position of your baby, therefore you will be offered an additional scan at 36 weeks of pregnancy to check the growth and position of your baby. Women pregnant with their first baby who have a BMI of 40 or more will also be advised to have an additional scan at 30 weeks.

- Your weight and BMI calculation will be repeated in the third trimester of pregnancy.
- If your BMI is 40 or more, you will also be offered an antenatal appointment to see an obstetric anaesthetist to undertake an assessment and discuss specific risks in relation to any analgesia and/or operative procedures which may be required.

Risks during labour and giving birth associated with a raised BMI

It is worth remembering that most women with a BMI of 30 kg/m2 or more have straightforward births. However, we know that women who have a high BMI have more chance of having:

- Monitoring difficulties - your baby’s heart rate can be more difficult to monitor (especially in labour). Therefore it may be recommended that a small clip is put on your baby’s head (attached by passing a small lead through the vagina and cervix) in order to accurately monitor your baby’s heart rate if continuous monitoring is required. This might mean that we need to break your waters first.
- Restricted mobilisation - this may be restricted during your labour due to monitoring difficulties. This can lead to an increased risk of needing an assisted delivery. If your BMI is over 40 you will also be assessed during pregnancy for the best way to help you move from bed to chair etc and to assess any extra risks to your skin of pressure sores.
- Difficulty carrying out procedures - taking blood or putting a drip in can be more difficult, so will tend to be offered early in labour, particularly if your BMI is 40 or more.
- Difficulties with epidural/spinal analgesia - it can be more difficult and take longer to give epidurals and spinals than in women with a lower BMI and effective epidural analgesia may not be possible.