



Information for you

Why your weight matters during pregnancy and after birth



Royal College of
Obstetricians
and Gynaecologists

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Most women who are overweight have a straightforward pregnancy and birth and deliver healthy babies. However being overweight does increase the risk of complications to both you and your baby. This information is about the extra care you will be offered during your pregnancy and how you can minimise the risks to you and your baby in this pregnancy and in a future pregnancy. Your healthcare professionals will not judge you for being overweight and will give you all the support that you need.

What is BMI?

BMI is your body mass index which is a measure of your weight in relation to your height. A healthy BMI is above 18.5 and less than 25. A person is considered to be overweight if their BMI is between 25 and 29.9 or obese if they have a BMI of 30 or above. Almost one in five (20%) pregnant women have a BMI of 30 or above at the beginning of their pregnancy.

When should my BMI be calculated?

You should have your BMI calculated at your first antenatal booking appointment. If you have a BMI of 30 or above, your midwife should give you information about the additional risks as well as how these can be minimised and about any additional care you may need. If you have any questions or concerns about your BMI or your care, now is a good time to discuss these.

You may be weighed again later in your pregnancy.

What are the risks of a raised BMI during pregnancy?

Being overweight (with a BMI above 25) increases the risk of complications for pregnant women and their babies. With increasing BMI, the additional risks become gradually more likely, the risks being much higher for women with a BMI of 40 or above. The higher your BMI, the higher the risks.

If your BMI is less than 35 and you have no other problems you may still be able to remain under midwifery led care. However if your BMI is more than 35, the risks to you and your baby are higher and you will need to be under the care of a consultant.

Risks for you associated with a raised BMI include:

Thrombosis

Thrombosis is a blood clot in your legs (venous thrombosis) or in your lungs (pulmonary embolism). Pregnant women have a higher risk of developing blood clots compared with women who are not pregnant. If your BMI is 30 or above, the risk of developing blood clots in your legs is additionally increased. For further information see RCOG Patient Information: *Treatment of venous thrombosis during pregnancy and after birth*.

Gestational diabetes

Diabetes which is first diagnosed in pregnancy is known as gestational diabetes. If your BMI is 30 or above, you are three times more likely to develop gestational diabetes than women whose BMI is below 30.

High blood pressure and pre-eclampsia

A BMI of 30 or above increases your risk of developing high blood pressure. Pre-eclampsia is a condition in pregnancy which is associated with high blood pressure (hypertension) and protein in your urine (proteinuria). If you have a BMI of 35 or above at the beginning of your pregnancy, your risk of pre-eclampsia is doubled compared with women who have a BMI under 25. For further information see RCOG patient information: *Pre-eclampsia: what you need to know*.

Risks for your baby associated with a raised BMI include:

- If you have a BMI of 30 or above before pregnancy or in early pregnancy, this can affect the way the baby develops in the uterus (womb). Neural tube defects (problems with the development of the baby's brain and spine) are uncommon. Overall around 1 in 1000 babies are born with neural tube defects in the UK but if your BMI is over 40, your risk is three times that of a woman with a BMI below 30.
- Miscarriage - the overall risk of a miscarriage under 12 weeks is 1 in 5 (20%), but if you have a BMI over 30, your risk increases to 1 in 4 (25%).
- You are more likely to have a baby weighing more than 4 kg (8 lb and 14 ounces). If your BMI is over 30, your risk is doubled from 7 in 100 (7%) to 14 in 100 (14%) compared to women with a BMI of between 20 and 30.
- Stillbirth - the overall risk of stillbirth in the UK is 1 in 200 (0.5%), but if you have a BMI over 30, your risk is doubled to 1 in 100 (1%).
- If you are overweight, your baby will have an increased risk of obesity and diabetes in later life.

What are the risks of a raised BMI during labour and birth?

There is an increased risk of complications during labour and birth, particularly if you have a BMI of more than 40. These include:

- your baby being born early (before 37 weeks)
- a long labour
- the baby's shoulder becoming 'stuck' during birth. For further information see RCOG Patient Information: *A difficult birth: what is shoulder dystocia?*
- an emergency caesarean birth
- a more difficult operation if you need a caesarean section and a higher risk of complications afterward, for example your wound becoming infected
- anaesthetic complications, especially with general anaesthesia
- heavy bleeding after birth (postpartum haemorrhage) or at the time of caesarean section.

How can the risks during pregnancy be reduced?

By working together with your healthcare professionals, the risks to you and your baby can be reduced by:

Healthy eating

The amount of weight women may gain during pregnancy can vary greatly. A healthy diet will benefit both you and your baby during pregnancy. It will also help you to maintain a healthy weight after you have had your baby. You may be referred to a dietician for specialist advice about healthy eating. You should aim to:

- Base your meals on starchy foods such as potatoes, bread, rice and pasta, choosing wholegrain where possible.
- Watch the portion size of your meals and snacks and how often you eat. Do not 'eat for two'.
- Eat a low-fat diet. Avoid increasing your fat and/or calorie intake. Eat as little as possible of the following: fried food, drinks and confectionary high in added sugars, and other foods high in fat and sugar.
- Eat fibre-rich foods such as oats, beans, lentils, grains, seeds, fruit and vegetables as well as wholegrain bread, brown rice and pasta.
- Eat at least five portions of a variety of fruit and vegetables each day, in place of foods higher in fat and calories.
- Always eat breakfast.

In general you do not need extra calories for the first two-thirds of pregnancy and it is only in the last 12 weeks that women need an extra 200 kilocalories a day.

Trying to lose weight by dieting during pregnancy is not recommended even if you are obese, as it may harm the health of your unborn baby. However, by making healthy changes to your diet you may not gain any weight during pregnancy and you may even lose a small amount. This is not harmful.

Exercise

Your midwife should ask you about how physically active you are. You may be given information and advice about being physically active as this will be a benefit to your unborn child.

- Make activities such as walking, cycling, swimming, low impact aerobics and gardening part of everyday life and build activity into daily life by taking the stairs instead of the lift or going for a walk at lunchtime.
- Minimise sedentary activities, such as sitting for long periods watching television or at a computer.
- Physical activity will not harm you or your unborn baby. However, if you have not exercised routinely you should begin with no more than 15 minutes of continuous exercise, three times per week, increasing gradually to 30 minute sessions every day. A good guide that you are not overdoing it is that you should still be able to have a conversation while exercising.

An increased dose of folic acid

Folic acid helps to reduce the risks of your baby having a neural tube defect. If your BMI is 30 or above you should take a daily dose of 5 mg of folic acid. This is a higher dose than the usual pregnancy dose, and it needs to be prescribed by a doctor. Ideally you should start taking this a month before you conceive and continue to take it until you reach your 13th week of pregnancy. However, if you have not started taking it early, there is still a benefit from taking it when you realise you are pregnant.

Vitamin D supplements

All pregnant women are advised to take a daily dose of 10 micrograms of vitamin D supplements. However, this is particularly important if you are obese as you are at increased risk of vitamin D deficiency.

Venous thrombosis

Your risk for thrombosis (blood clots in your legs or lungs) should be assessed at your first antenatal appointment and monitored during your pregnancy. You may need to have injections of low molecular weight heparin to reduce your risk of blood clots. This is safe to take during pregnancy. For more information, see RCOG Patient Information: *Reducing the risk of venous thrombosis in pregnancy and after birth*.

Gestational diabetes

You should be tested for gestational diabetes between 24 and 28 weeks. If your BMI is more than 40 you may also have the test earlier in pregnancy. If the test indicates you have gestational diabetes, you will be referred to a specialist to discuss this further.

Monitoring for pre-eclampsia

Your blood pressure will be monitored at each of your appointments. Your risk of pre-eclampsia may be additionally increased if you are over 40 years old, if you had pre-eclampsia in a previous pregnancy or if your blood pressure is high before pregnancy.

If you have these or other risk factors, you may need to attend hospital for your appointments and your doctor may recommend a low dose of aspirin to reduce the risk of developing high blood pressure.

Additional ultrasound scanning

Having a BMI of more than 30 can affect the way the baby develops in the uterus (womb) so you may need additional ultrasound scans. You may also need further scans because it can be more difficult to check that your baby is growing properly or feel which way round your baby is.

Planning for labour and birth

Because of these possible complications, you should have a discussion with your obstetrician and/or midwife about the safest way and place for you to give birth. If you have a BMI of 40 or more, arrangements should be made for you to see an anaesthetist to discuss a specific plan for pain relief during labour and birth.

These discussions may include:

Where you give birth

There is an increased chance of your baby needing to be cared for in a special care baby unit (SCBU) after birth. If your BMI is 35 or above, you will be recommended to give birth in a consultant-led obstetric unit with a SCBU. If your BMI is between 30 and 35, your healthcare professional will discuss with you the safest place for you to give birth depending on your specific health needs.

What happens in early labour

If your BMI is over 40, it may be more difficult for your doctors to insert a cannula (a fine plastic tube which is inserted into the vein to allow drugs and/or fluid to be given directly into your blood stream) into your arm. Your doctors will usually insert this early in labour in case it is needed in an emergency situation.

Pain relief

All types of pain relief are available to you. However, having an epidural (a regional anaesthetic injection given into the space around the nerves in your back to numb the lower body) can be more difficult if you have a BMI over 30. Your anaesthetist should have a discussion with you about the anticipated difficulties. He or she may recommend that you have an epidural early in the course of labour.

Delivering the placenta (afterbirth)

An injection is normally recommended to help with the delivery of the placenta (afterbirth) to reduce the risk of postpartum haemorrhage (heavy bleeding).

What happens after birth?

After birth some of your risks continue. By working together with your healthcare professionals, you can minimise the risks in the following ways:

Monitoring blood pressure

You are at increased risk of high blood pressure for a few weeks after the birth of your baby and this will be monitored.

Prevention of thrombosis

You are at increased risk of thrombosis for a few weeks after the birth of your baby. Your risk will be re-assessed. To reduce the risk of a blood clot developing after your baby is born:

- Try to be active – avoid sitting still for long periods.
- Wear special compression stockings, if you have been advised you need them.
- If you have a BMI of 40 or above, you should have low molecular weight heparin treatment for at least a week after the birth of your baby - regardless of whether you deliver vaginally or by caesarean section. It may be necessary to continue taking this for 6 weeks.

Test for diabetes

For many women who have had gestational diabetes, blood sugar levels return to normal after birth and medication is no longer required, but you should be re-tested for diabetes about 6 weeks after giving birth. Your risk of developing diabetes in later years is increased if you have had gestational diabetes. You should be tested for diabetes by your GP once a year.

Information and support about breastfeeding

Breastfeeding is best for your baby. It is possible to breastfeed successfully if you have a BMI of 30 or above. Extra help should be available if you need it.

Vitamin D supplements

You should continue to take vitamin D supplements whilst you are breastfeeding.

Healthy eating and exercise

Continue to follow the advice on healthy eating and exercise. If you want to lose weight once you have had your baby, you can discuss this with your GP.

Planning for a future pregnancy

Reducing your weight to reach the healthy range

If you have a BMI of 30 or above, whether you are planning your first pregnancy or are between pregnancies, it is advisable to lose weight. If you lose weight, you:

- increase your ability to conceive and have a healthy pregnancy
- reduce the additional risks to you and your baby during pregnancy
- reduce your risk of developing diabetes in further pregnancies and in later life.

If you have fertility problems it is also advisable to lose weight, since having a BMI of more than 30 may mean you would not be eligible for fertility treatments such as IVF.

Your healthcare professional should offer you a structured weight loss programme. You should aim to lose weight gradually (up to about 1 kg or about 1 to 2 lbs a week). Crash dieting is not good for your health. Remember even a small weight loss can give you significant benefits.

You may be offered a referral to a dietician or an appropriately trained health professional. If you are not yet ready to lose weight, you should be given contact details for support for when you are ready.

An increased dose of folic acid

If you have a BMI of 30 or above, remember to start taking 5 mg of folic acid at least a month before you start trying to conceive. Continue taking this until you reach your 13th week of pregnancy.

Sources and acknowledgements

This information has been developed by the RCOG Patient Information Committee. It is based on the RCOG guideline *Management of women with obesity in pregnancy* (March 2010) and NICE guideline *Dietary interventions and physical activity interventions for weight management before, during and after pregnancy* (July 2010). This information will also be reviewed, and updated if necessary, once the guideline has been reviewed. The Guideline contains a full list of the sources of evidence we have used. You can find it online at: <http://www.rcog.org.uk/files/rcog-corp/CMACERCOGJointGuidelineManagementWomenObesityPregnancya.pdf>.

The RCOG produces guidelines as an educational aid to good clinical practice. They present recognised methods and techniques of clinical practice, based on published evidence, for consideration by obstetricians and gynaecologists and other relevant health professionals. The ultimate judgement regarding a particular clinical procedure or treatment plan must be made by the doctor or other attendant in the light of clinical data presented by the patient and the diagnostic and treatment options available.

This means that RCOG Guidelines are unlike protocols or guidelines issued by employers, as they are not intended to be prescriptive directions defining a single course of management. Departure from the local prescriptive protocols or guidelines should be fully documented in the patient's case notes at the time the relevant decision is taken.

This information has been reviewed before publication by women attending clinics in Camberley, London and Aylesbury.

A glossary of all medical terms is available on the RCOG website at: <http://www.rcog.org.uk/womens-health/patient-information/medical-terms-explained>.

A final note

The Royal College of Obstetricians and Gynaecologists produces patient information for the public. This information is based on guidelines which present recognised methods and techniques of clinical practice, based on published evidence. The ultimate judgement regarding a particular clinical procedure or treatment plan must be made by the doctor or other attendant in the light of the clinical data presented and the diagnostic and treatment options available.