

## **Weight management before, during and after pregnancy**

This quick reference guide presents the recommendations made in 'Dietary interventions and physical activity interventions for weight management before, during and after pregnancy'.

The guidance does not cover:

- women who are underweight (that is, those who have a body mass index [BMI] less than 18.5 kg/m<sup>2</sup>)
- clinical management of women who are obese during pregnancy
- those who have been diagnosed with, or who are receiving treatment for, an existing condition such as type 1 or type 2 diabetes
- food safety advice.

The guidance is for NHS and other commissioners, managers and professionals who have a direct or indirect role in, and responsibility for, women who are pregnant or who are planning a pregnancy and mothers who have had a baby in the last 2 years. This includes those working in local authorities, education and the wider public, private, voluntary and community sectors.

It is particularly aimed at: GPs, obstetricians, midwives, health visitors, dietitians, community pharmacists and all those working in antenatal and postnatal services and children's centres. It may also be of interest to women before, during and after pregnancy and their partners and families, and other members of the public.

The guidance complements but does not replace NICE guidance on: obesity, maternal and child nutrition, antenatal care, postnatal care, physical activity, behaviour change, antenatal and postnatal mental health and diabetes in pregnancy. (See related NICE guidance, pages 14–15 for a list of publications.)

### **NICE public health guidance 27**

**This guidance was developed using the NICE public health intervention process.**

NICE public health guidance makes recommendations on the promotion of good health and the prevention of ill health. This guidance represents the views of NICE and was arrived at after careful consideration of the evidence available. Implementation of this guidance is the responsibility of local commissioners and/or providers. Commissioners and providers are reminded that it is their responsibility to implement the guidance, in their local context, in light of their duties to avoid unlawful discrimination and to have regard to promoting equality of opportunity. Nothing in this guidance should be interpreted in a way which would be inconsistent with compliance with those duties.

## Introduction

### Weight management: a definition

In this guidance the term 'weight management' includes:

- assessing and monitoring body weight
- preventing someone from becoming overweight (body mass index [BMI] 25–29.9 kg/m<sup>2</sup>) or obese (BMI greater than or equal to 30 kg/m<sup>2</sup>)
- helping someone to achieve and maintain a healthy weight before, during and after pregnancy by eating healthily and being physically active and gradually losing weight after pregnancy.

The recommendations are based on strategies and weight-loss programmes that are proven to be effective for the whole population. The criteria for effective programmes are listed on page 3. Programmes that do not meet these criteria are unlikely to help women to maintain a healthy weight in the long term.

### Changing behaviour

Evidence-based behaviour change advice includes:

- understanding the short, medium and longer-term consequences of women's health-related behaviour
- helping women to feel positive about the benefits of health-enhancing behaviours and changing their behaviours
- recognising how women's social contexts and relationships may affect their behaviour
- helping plan women's changes in terms of easy steps over time
- identifying and planning situations that might undermine the changes women are trying to make and plan explicit 'if-then' coping strategies to prevent relapse<sup>1</sup>.

Reputable sources of information and advice about diet and physical activity for women before, during and after pregnancy include: 'The pregnancy book'<sup>2</sup>, 'Birth to five'<sup>3</sup> and the 'Eat well' website<sup>4</sup>.

<sup>1</sup> This is an edited extract from a recommendation that appears in 'Behaviour change'. NICE public health guidance 6.

<sup>2</sup> Department of Health (2009) The pregnancy book. London: Department of Health.

<sup>3</sup> Department of Health (2009) Birth to five. London: Department of Health.

<sup>4</sup> [www.eatwell.gov.uk](http://www.eatwell.gov.uk)

## Achieving and maintaining a healthy weight<sup>5</sup>

Women will be more likely to achieve and maintain a healthy weight before, during and after pregnancy if they:

- base meals on starchy foods such as potatoes, bread, rice and pasta, choosing wholegrain where possible
- eat fibre-rich foods such as oats, beans, peas, lentils, grains, seeds, fruit and vegetables, as well as wholegrain bread and 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
- eat a low-fat diet and avoid increasing their fat and/or calorie intake
- eat as little as possible of fried food; drinks and confectionery high in added sugars (such as cakes, pastries and fizzy drinks); and other food high in fat and sugar (such as some take-away and fast foods)
- eat breakfast
- watch the portion size of meals and snacks, and how often they are eating
- make activities such as walking, cycling, swimming, aerobics and gardening part of everyday life and build activity into daily life – for example, by taking the stairs instead of the lift or taking a walk at lunchtime
- minimise sedentary activities, such as sitting for long periods watching television, at a computer or playing video games
- walk, cycle or use another mode of transport involving physical activity.

Effective weight-loss programmes:

- address the reasons why someone might find it difficult to lose weight
- are tailored to individual needs and choices
- are sensitive to the person's weight concerns<sup>6</sup>
- are based on a balanced, healthy diet<sup>6</sup>
- encourage regular physical activity<sup>6</sup>
- expect people to lose no more than 0.5–1 kg (1–2 lb) a week<sup>6</sup>
- identify and address barriers to change.

Weight-loss programmes are not recommended during pregnancy as they may harm the health of the unborn child, see recommendation 2.

<sup>5</sup> The first nine criteria in this list are an edited extract from a recommendation in 'Obesity'. NICE clinical guideline 43. The last criterion is from a recommendation in 'Physical activity in the workplace'. NICE public health guidance 13.

<sup>6</sup> This is an edited extract from a recommendation that appears in 'Obesity'. NICE clinical guideline 43.

### Recommendation 1 Preparing for pregnancy: women with a BMI of 30 or more

#### Whose health will benefit?

- Women with a BMI of 30 or more who may become pregnant, including those who have previously been pregnant.

#### Who should take action?

- NHS and other commissioners and managers.
- GPs, health visitors, midwives, practice nurses, pharmacists and other health professionals working in weight management, fertility, pre-conception advice and care services, gynaecology and contraceptive services.
- Managers and health professionals in children's centres.
- Directors of public health, planners and organisers of public health campaigns and occupational health advisers.
- Dietitians and public health nutritionists working in NHS and non-NHS settings.

#### What action should they take?

- NHS and other commissioners and managers, directors of public health and planners and organisers of public health campaigns should ensure health professionals understand the importance of achieving a healthy weight before pregnancy. Local education initiatives should also stress the health risks of being obese, including during pregnancy.
- Health professionals should use any opportunity, as appropriate, to provide women with a BMI of 30 or more with information about the health benefits of losing weight before becoming pregnant (for themselves and the baby they may conceive). This should include information on the increased health risks their weight poses to themselves and would pose to their unborn child.
- GPs, dietitians and other appropriately trained health professionals should advise, encourage and help women with a BMI of 30 or more to reduce weight before becoming pregnant. They should explain that losing 5–10% of their weight (a realistic target) would have significant health benefits<sup>7</sup> and could increase their chances of becoming pregnant. Further weight loss, to achieve a BMI within the healthy range (between 24.9 and 18.5 kg/m<sup>2</sup>) should also be encouraged, using evidence-based behaviour change techniques (see page 2). Losing weight to within this range may be difficult and women will need to be motivated and supported.

<sup>7</sup> This is an edited extract from a recommendation that appears in 'Obesity'. NICE clinical guideline 43.

- Health professionals should encourage women to check their weight and waist measurement periodically or, as a simple alternative, check the fit of their clothes.
- Health professionals should offer a weight-loss support programme involving diet and physical activity. The programme should follow the principles of good practice, as outlined on page 3.
- Health professionals should offer specific dietary advice in preparation for pregnancy, including the need to take daily folic acid supplements. This includes professionals working in pre-conception clinics, fertility clinics, sexual and reproductive health services and children's centres.

## Recommendation 2 Pregnant women

If a pregnant woman is obese this will have a greater influence on her health and the health of her unborn child than the amount of weight she may gain during pregnancy. That is why it is important, when necessary, to help women lose weight before they become pregnant.

Dieting during pregnancy is not recommended as it may harm the health of the unborn child.

Many pregnant women ask health professionals for advice on what constitutes appropriate weight gain during pregnancy. However, there are no evidence-based UK guidelines on recommended weight-gain ranges during pregnancy.

The amount of weight a woman may gain in pregnancy can vary a great deal. Only some of it is due to increased body fat – the unborn child, placenta, amniotic fluid and increases in maternal blood and fluid volume all contribute.

### Whose health will benefit?

- All pregnant women but, in particular, those with a BMI of 30 or more.

### Who should take action?

- Obstetricians, midwives, GPs and practice nurses.
- Dietitians and public health nutritionists.
- Managers and health professionals in children's centres.
- Midwifery assistants, support workers and other healthcare practitioners.

### What action should they take?

- At the earliest opportunity, for example, during a pregnant woman's first visit to a health professional, discuss her eating habits and how physically active she is. Find out if she has any concerns about diet and the amount of physical activity she does and try to address them.
- Advise that a healthy diet and being physically active will benefit both the woman and her unborn child during pregnancy and will also help her to achieve a healthy weight after giving birth. Advise her to seek information and advice on diet and activity from a reputable source (see page 2).
- Offer practical and tailored information. This includes advice on how to use Healthy Start vouchers to increase the fruit and vegetable intake<sup>8</sup> of those eligible for the Healthy Start scheme (women under 18 years and those who are receiving benefit payments).
- Dispel any myths about what and how much to eat during pregnancy. For example, advise that there is no need to 'eat for two' or to drink full-fat milk. Explain that energy needs do not change in the first 6 months of pregnancy and increase only slightly in the last 3 months (and then only by around 200 calories per day).
- Advise that moderate-intensity physical activity will not harm her or her unborn child. At least 30 minutes per day of moderate intensity activity is recommended.
- Give specific and practical advice about being physically active during pregnancy<sup>9</sup>:
  - recreational exercise such as swimming or brisk walking and strength conditioning exercise is safe and beneficial
  - the aim of recreational exercise is to stay fit, rather than to reach peak fitness
  - if women have not exercised routinely they should begin with no more than 15 minutes of continuous exercise, three times per week, increasing gradually to daily 30-minute sessions<sup>10</sup>
  - if women exercised regularly before pregnancy, they should be able to continue with no adverse effects.
- Explain to those women who would find this level of physical activity difficult that it is important not to be sedentary, as far as possible. Encourage them to start walking and to build physical activity into daily life, for example, by taking the stairs instead of the lift, rather than sitting for long periods.

<sup>8</sup> This is an edited extract from a recommendation that appears in 'Maternal and child nutrition'. NICE public health guidance 11.

<sup>9</sup> See [www.rcog.org.uk/womens-health/clinical-guidance/exercise-pregnancy](http://www.rcog.org.uk/womens-health/clinical-guidance/exercise-pregnancy)

<sup>10</sup> 'Obesity' NICE clinical guideline 43 recommends adults should be encouraged to do at least 30 minutes of at least moderate-intensity physical activity on 5 or more days a week. The activity can be in one session or several lasting 10 minutes or more.

- Measure weight and height at the first contact with the pregnant woman, being sensitive to any concerns she may have about her weight. If these data are not available at their first booking appointment, then the midwife should do this. Do not rely on self-reported measures of weight and height. Clearly explain why this information is needed and how it will be used to plan her care. Weigh her in light clothing using appropriate, calibrated weighing scales that are regularly checked. Calculate BMI by dividing weight (kg) by the square of height (m<sup>2</sup>), or use the BMI calculator<sup>11</sup> after measuring and weighing. Use BMI percentile charts for pregnant women under 18 years, as a BMI measure alone does not take growth into account and is inappropriate for this age group<sup>12</sup>.
- Weight, height and BMI should be recorded in notes, the woman's hand-held record and the patient information system. If a hand-held record is not available, use local protocols to record this information.
- Do not weigh women repeatedly during pregnancy as a matter of routine. Only weigh again if clinical management can be influenced or if nutrition is a concern<sup>13</sup>.
- Explain to women with a booking appointment BMI of 30 or more how this poses a risk, both to their health and the health of the unborn child. Explain that they should not try to reduce this risk by dieting while pregnant and that the risk will be managed by the health professionals caring for them during their pregnancy.
- Offer women with a booking appointment BMI of 30 or more a referral to a dietitian or appropriately trained health professional for assessment and personalised advice on healthy eating and how to be physically active. Encourage them to lose weight after pregnancy<sup>14</sup>.

<sup>11</sup> Visit [www.eatwell.gov.uk/healthydiet/healthyweight/bmicalculator/](http://www.eatwell.gov.uk/healthydiet/healthyweight/bmicalculator/)

<sup>12</sup> A BMI calculator for children and young people under 18 is available from [www.nhs.uk/tools/pages/healthyweightcalculator.aspx](http://www.nhs.uk/tools/pages/healthyweightcalculator.aspx)

<sup>13</sup> This is an edited extract from a recommendation that appears in 'Antenatal care'. NICE clinical guideline 62.

<sup>14</sup> This is an edited extract from a recommendation that appears in 'Maternal and child nutrition'. NICE public health guidance 11.

### Recommendation 3 Supporting women after childbirth

#### Whose health will benefit?

- Women who have had a baby in recent months.

#### Who should take action?

- GPs, health visitors, midwives, practice nurses, pharmacists and other health professionals working in weight management.
- Managers and health professionals in children's centres.
- Dietitians and public health nutritionists working in NHS and non-NHS settings.

#### What action should they take?

- Use the 6–8-week postnatal check as an opportunity to discuss the woman's weight. Ask those who are overweight, obese or who have concerns about their weight if they would like any further advice and support now – or later. If they say they would like help later, they should be asked whether they would like to make an appointment within the next 6 months for advice and support.

- During the 6–8-week postnatal check, or during the follow-up appointment within the next 6 months, provide clear, tailored, consistent, up-to-date and timely advice about how to lose weight safely after childbirth. Ensure women have a realistic expectation of the time it will take to lose weight gained during pregnancy. Discuss the benefits of a healthy diet and regular physical activity, acknowledging the woman's role within the family and how she can be supported by her partner and wider family. Advice on healthy eating and physical activity should be tailored to her circumstances. For example, it should take into account the demands of caring for a baby and any other children, how tired she is and any health problems she may have (such as pelvic floor muscle weakness or backache).
- Health professionals should advise women, their partners and family to seek information and advice from a reputable source. Women who want support to lose weight should be given details of appropriate community-based services.

- Midwives and other health professionals should encourage women to breastfeed. They should reassure them that a healthy diet and regular, moderate-intensity physical activity and gradual weight loss will not adversely affect the ability to breastfeed or the quantity or quality of breast milk<sup>15</sup>.
- Health professionals should give advice on recreational exercise from the Royal College of Obstetrics and Gynaecology<sup>16</sup>. In summary, this states that:
  - If pregnancy and delivery are uncomplicated, a mild exercise programme consisting of walking, pelvic floor exercises and stretching may begin immediately. But women should not resume high-impact activity too soon after giving birth.
  - After complicated deliveries, or lower segment caesareans, a medical care-giver should be consulted before resuming pre-pregnancy levels of physical activity, usually after the first check-up at 6–8 weeks after giving birth.
- Health professionals should also emphasise the importance of participating in physical activities, such as walking, which can be built into daily life.

<sup>15</sup> This is an edited extract from a recommendation that appears in 'Maternal and child nutrition'. NICE public health guidance 11.

<sup>16</sup> Visit [www.rcog.org.uk/womens-health/clinical-guidance/exercise-pregnancy](http://www.rcog.org.uk/womens-health/clinical-guidance/exercise-pregnancy)

#### Recommendation 4 Women with a BMI of 30 or more after childbirth

##### Whose health will benefit?

- Women who had a pre-pregnancy BMI of 30 or more.
- Women with a BMI of 30 or more who have had a baby within recent months.

##### Who should take action?

- GPs, health visitors, practice nurses, pharmacists and other health professionals working in weight management.
- Managers and health professionals in children's centres.
- Dietitians and public health nutritionists working in NHS and non-NHS settings.

##### What action should they take?

- Explain the increased risks that being obese poses to them and, if they become pregnant again, their unborn child. Encourage them to lose weight.
- Offer a structured weight-loss programme. If more appropriate, offer a referral to a dietitian or an appropriately trained health professional. They will provide a personalised assessment, advice about diet and physical activity and advice on behaviour change strategies such as goal setting (see page 2). Women who are not yet ready to lose weight should be provided with information about where they can get support when they are ready.
- Use evidence-based behaviour change techniques (see page 2) to motivate and support women to lose weight.
- Encourage breastfeeding and advise women that losing weight by eating healthily and taking regular exercise will not affect the quantity or quality of their milk<sup>17</sup>.

<sup>17</sup> This is an edited extract from a recommendation that appears in 'Maternal and child nutrition'. NICE public health guidance 11.

## Recommendation 5 Community-based services

### Whose health will benefit?

- All women before, during and after pregnancy.

### Who should take action?

- NHS and other commissioners and managers.
- Managers of local authority leisure and community services including swimming pools and parks.
- Managers and health professionals in slimming and weight management clubs.
- Managers and health professionals in children's centres.
- NHS health trainers and health and fitness advisers working in local authority leisure services and voluntary, community and commercial organisations.

### What action should they take?

- Local authority leisure and community services should offer women with babies and children the opportunity to take part in a range of physical or recreational activities. This could include swimming, organised walks, cycling or dancing. Activities need to be affordable and available at times that are suitable for women with older children as well as those with babies. Where possible, affordable childcare (for example, a creche) should be provided and provision made for women who wish to breastfeed.
- NHS and other commissioners and managers, local authority leisure services and slimming clubs should work together to offer women who wish to lose weight after childbirth the opportunity to join a weight management group or slimming club. Health professionals should continue to monitor, support and care for women with a BMI of 30 or more who join weight management groups and slimming clubs.
- Weight management groups and slimming clubs should adhere to the principles outlined at the beginning of this section (see page 3). This includes giving advice about healthy eating and the importance of physical activity and using evidence-based behaviour-change techniques (see page 2) to motivate and support women to lose weight.

- NHS health trainers and non-NHS health and fitness advisers should advise women that a healthy diet and being physically active will benefit both them and their unborn child during pregnancy. They should also explain that it will help them to achieve a healthy weight after giving birth – and could encourage the whole family to eat healthily and be physically active.
- NHS health trainers and non-NHS health and fitness advisers should encourage those who have weight concerns before, during or after pregnancy to talk to a health professional such as a GP, practice nurse, dietitian, health visitor or pharmacist<sup>18</sup>. They should also advise women, their partners and family to seek information and advice on healthy eating and physical activity from a reputable source.
- NHS health trainers and non-NHS health and fitness advisers should offer specific dietary advice in preparation for pregnancy, including the need to take daily folic acid supplements.

<sup>18</sup> This is an edited extract from a recommendation that appears in 'Obesity'. NICE clinical guideline 43.

## Recommendation 6 Professional skills

### Whose health will benefit?

- All women before, during and after pregnancy, particularly those with a BMI of 30 or more.

### Who should take action?

- Professional bodies and others responsible for setting competencies and developing continuing professional development programmes for health professionals, healthcare assistants and support staff.
- Training boards and organisations responsible for training health and fitness advisers and NHS health trainers.

### What action should they take?

- Ensure health professionals, healthcare assistants and support workers have the skills to advise on the health benefits of weight management and risks of being overweight or obese before, during and after pregnancy, or after successive pregnancies.
- Ensure they can advise women on their nutritional needs before, during and after pregnancy and can explain why it is important to have a balanced diet and to be moderately physically active.

- Ensure they have behaviour change knowledge, skills and competencies. This includes being able to help people to identify how their behaviour is affecting their health, draw up an action plan, make the changes and maintain them.
- Ensure they have the communication techniques needed to broach the subject of weight management in a sensitive manner. They should be able to give women practical advice on how to improve their diet and become more physically active. They should be able to tailor this advice to individual needs and know when to refer them for specialist care and support.
- Ensure they have the knowledge and skills to help dispel common myths. This includes myths about what to eat and what not to eat during pregnancy and about weight loss in relation to breastfeeding.
- Ensure they have knowledge, skills and competencies in group facilitation, are aware of the needs of minority ethnic groups and have knowledge of local services.
- Ensure their training is regularly monitored and updated.

## Implementation tools

NICE has developed tools to help organisations put this guidance into practice. For details see our website at [www.nice.org.uk/guidance/PH27](http://www.nice.org.uk/guidance/PH27)

## Further information

You can download the following from [www.nice.org.uk/guidance/PH27](http://www.nice.org.uk/guidance/PH27)

- A quick reference guide (this document) for professionals and the public.
- The guidance – the recommendations, details of how they were developed and evidence statements.
- Details of all the evidence that was considered and other background information.

For printed copies of the quick reference guide, phone NICE publications on 0845 003 7783 or email [publications@nice.org.uk](mailto:publications@nice.org.uk) and quote N2223.

The NICE website has a screen reader service called Browsealoud which allows you to listen to our guidance. Click on the Browsealoud logo on the NICE website to use this service.

## Updating the recommendations

This guidance will be reviewed at 3 and 5 years after publication to determine whether all or part of it should be updated. Information on the progress of any update will be posted at [www.nice.org.uk/guidance/PH27](http://www.nice.org.uk/guidance/PH27)

## Related NICE guidance

For more information about NICE guidance that has been issued or is in development, see [www.nice.org.uk](http://www.nice.org.uk)

### Published

- Venous thromboembolism – reducing the risk. NICE clinical guideline 92 (2010). Available from [www.nice.org.uk/guidance/CG92](http://www.nice.org.uk/guidance/CG92)
- Diabetes in pregnancy. NICE clinical guideline 63 (2008). Available from [www.nice.org.uk/guidance/CG63](http://www.nice.org.uk/guidance/CG63)
- Antenatal care. NICE clinical guideline 62 (2008). Available from [www.nice.org.uk/guidance/CG62](http://www.nice.org.uk/guidance/CG62)
- Promoting physical activity in the workplace. NICE public health guidance 13 (2008). Available from [www.nice.org.uk/guidance/PH13](http://www.nice.org.uk/guidance/PH13)
- Maternal and child nutrition. NICE public health guidance 11 (2008). Available from [www.nice.org.uk/guidance/PH11](http://www.nice.org.uk/guidance/PH11)
- Physical activity and the environment. NICE public health guidance 8 (2008). Available from [www.nice.org.uk/guidance/PH8](http://www.nice.org.uk/guidance/PH8)
- Intrapartum care. NICE clinical guideline 55 (2007). Available from [www.nice.org.uk/guidance/CG55](http://www.nice.org.uk/guidance/CG55)

- Antenatal and postnatal mental health. NICE clinical guideline 45 (2007). Available from [www.nice.org.uk/guidance/CG45](http://www.nice.org.uk/guidance/CG45)
- Behaviour change. NICE public health guidance 6 (2007). Available from [www.nice.org.uk/guidance/PH6](http://www.nice.org.uk/guidance/PH6)
- Obesity. NICE clinical guideline 43 (2006). Available from [www.nice.org.uk/guidance/CG43](http://www.nice.org.uk/guidance/CG43)
- Postnatal care. NICE clinical guideline 37 (2006). Available from [www.nice.org.uk/guidance/CG37](http://www.nice.org.uk/guidance/CG37)
- Four commonly used methods to increase physical activity. NICE public health guidance 2 (2006). Available from [www.nice.org.uk/guidance/PH2](http://www.nice.org.uk/guidance/PH2)
- Fertility. NICE clinical guideline 11 (2004). Available from [www.nice.org.uk/guidance/CG11](http://www.nice.org.uk/guidance/CG11)

### Under development

- Hypertension in pregnancy. NICE clinical guideline. (Publication expected August 2010)
- Pregnancy and complex social factors. NICE clinical guideline. (Publication expected September 2010)
- Multiple pregnancy. NICE clinical guideline. (Publication expected September 2011)
- Preventing obesity: whole system approaches. NICE public health guidance. (Publication expected February 2012)



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