

NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE

PUBLIC HEALTH GUIDANCE

DRAFT SCOPE

1 Guidance title

Weight management for mothers after childbirth

1.1 *Short title*

Weight management after childbirth

2 Background

- a) The National Institute for Health and Clinical Excellence (NICE) has been asked by the Department of Health (DH) to develop guidance on public health interventions aimed at helping mothers to achieve and maintain a healthy weight after childbirth.
- b) NICE public health guidance supports the preventive aspects of relevant national service frameworks (NSFs), where they exist. If it is published after an NSF has been issued, the guidance effectively updates it. Specifically, in this case, the guidance will support the NSF on children, young people and maternity services (DH 2004a).
- c) This guidance will support a number of related policy documents including:
 - 'Choosing a better diet: a food and health action plan' (DH 2005a)
 - 'Choosing activity: a physical activity action plan' (DH 2005b)
 - 'Choosing health: making healthier choices easier' (DH 2004b)
 - 'Healthy lives, brighter futures' (DH 2009)
 - 'Healthy weight, healthy lives: a cross-government strategy for England' (Cross Government Obesity Unit 2008)

- 'Saving mothers' lives' (Confidential Enquiry into Maternal and Child Health 2007)
 - 'Tackling obesities: future choices' (Government Office for Science 2007)
 - 'Teenage parents next steps' (Department for Children, Schools and Families 2007).
- d) This guidance will provide recommendations for good practice, based on the best available evidence of effectiveness, including cost effectiveness. It is aimed at professionals, commissioners and managers, with public health as part of their remit, working within the NHS, local authorities and the wider public, private, voluntary and community sectors. It is particularly aimed at: GPs, health visitors, midwives, community pharmacists and all those working in primary and postnatal care services, children's centres and children's services. It will also be of interest to mothers, particularly new mothers, and women planning to have another child, as well as their partners and families.
- e) The guidance will complement NICE guidance on postnatal care; maternal and child nutrition; behaviour change; antenatal and postnatal mental health, methods to increase physical activity, physical activity and the environment, diabetes in pregnancy and obesity. For further details, see section 6.

This guidance will be developed using the NICE public health intervention process.

3 The need for guidance

- a) About half of women of childbearing age are either overweight (body mass index [BMI] 24.9–29.9 kg/m²) or obese (BMI greater than 29.9 kg/m²). About 18% of women are obese when they become pregnant (The Information Centre 2008). The Confidential Enquiry into Maternal and Child Health (2007) found that over half

of mothers who died during pregnancy, childbirth or within 42 days of childbirth were either overweight or obese. Maternal obesity also affects the child and is a significant risk factor for childhood obesity (Reilly et al. 2005).

- b) The NICE obesity guideline (2006) identified the postnatal period as a time when women are vulnerable to gaining weight. The more weight a woman gains during pregnancy, the more likely she is to retain the weight after childbirth. In a study of women from different racial and ethnic groups – white, black, Hispanic and Asian (mainly Chinese) – the average weight gain 2 years after childbirth was nearly 2 kg for women who were underweight or a healthy weight before pregnancy, and nearly 4 kg for women who were overweight or obese (Gunderson et al. 2001). There are also inequalities in weight retention. In one study, black women were consistently more likely to retain 9 kg 10 to 18 months after childbirth than white women (Parker and Abrams 1993). In another study, women with a lower income who gained more weight during pregnancy than recommended by the American Institute of Medicine (1990) were more likely to have retained more than 4.5kg 1 year after childbirth than women with higher incomes (Olson et al. 2003).
- c) The key risk factors for retaining excess weight after childbirth were fairly consistent across studies and were: a high weight before the pregnancy, a high BMI before the pregnancy and a large weight gain during the pregnancy, and risk increased with the number of previous pregnancies (Gunderson et al. 2001). Studies have also indicated a range of factors linked to low weight retention after childbirth: high levels of exercise, low food intake, breastfeeding a year after birth, a small weight gain during pregnancy, and extremes of maternal age (Olson et al 2003).
- d) Breastfeeding is often recommended as a strategy for promoting weight loss after childbirth, but findings from studies are mixed (Gore et al. 2003). Women who breastfeed, and healthcare

professionals, are often worried that losing weight may affect the quality and quantity of the milk. Women may receive little or no advice about the role of diet and exercise in weight management after childbirth. Clarification is therefore needed on how breastfeeding women manage their weight after childbirth.

- e) After having a child, many mothers find it difficult to eat a healthy diet and take regular exercise. This is especially so for a first-time mother, but also applies when the constant demands of caring for a new baby are added to caring for another child or children (Hewison and Dowswell 1994). All babies have frequent and irregular needs, and meeting these needs disrupts eating and sleep patterns for the whole family. Getting out of the home and staying out for long enough to buy food can be difficult for new mothers, especially if they lack support or rely on public transport (Whelan et al. 2002). In addition, after the birth of their baby mothers may resume their old lifestyles and may go back to smoking and drinking alcohol, which may affect their postnatal weight.

- f) The postnatal period (2 years after childbirth) is also a time when many women are thinking about trying for another child. In a study of 150,000 Swedish women, a gain of one to two BMI units over an average of 2 years between first and second pregnancies increased the risk of gestational hypertension, gestational diabetes or a large-for-gestational-age baby by an average of 20–40% (Villamor and Cnattingius 2006). The risk increased linearly with weight gain. A gain of three or more BMI units was associated with a statistically significantly increased risk of stillbirth which was independent of obesity-related complications of pregnancy such as pre-eclampsia, gestational hypertension and diabetes. The increased contact between healthcare professionals and mothers in the postnatal period makes this an ideal time for interventions to help women achieve a healthier BMI before another pregnancy. The NICE guidance on maternal and child nutrition (2008) provides

recommendations to those with a BMI over 30 kg/m² who have had a baby or who may become pregnant. This guidance will update and expand on this recommendation.

4 The guidance

Public health guidance will be developed according to NICE processes and methods. For details see section 5.

This document defines exactly what this guidance will (and will not) examine, and what the guidance developers will consider. The scope is based on a referral from the DH (see appendix A).

4.1 *Who is the focus?*

4.1.1 Groups that will be covered

- Mothers who have had a baby in the past 2 years, including:
 - both those who are breastfeeding and those who are not breastfeeding
 - those who are planning another pregnancy
- With a particular focus on women from vulnerable groups such as women diagnosed with gestational diabetes and those who had a BMI (greater than 30 kg/m²) before their pregnancy and who are at risk of retaining extra weight after childbirth.

4.1.2 Groups that will not be covered

- Women who have had a baby and have been diagnosed with or are receiving treatment for an existing condition such as type 1 or type 2 diabetes or postnatal depression.
- Women who are underweight (BMI less than 18.5 kg/m²) after childbirth.

4.2 *Activities*

4.2.1 *Activities/measures that will be covered*

Dietary interventions and/or physical activity interventions to help mothers achieve and maintain a healthy weight after childbirth. These may be targeted at individual women, families, communities or the whole population.

Interventions may include:

- assessment and monitoring of weight
- postnatal weight management in primary and secondary care (for example, one-to-one interventions)
- community interventions (for example, slimming clubs, mothers' support groups, breastfeeding support groups and exercise classes such as postnatal water exercise classes and classes run by physiotherapists, family nurse practitioners and health trainers)
- media campaigns (for example, magazine articles and promotional literature)
- incentives (for example, referral to exercise schemes).

4.2.2 *Activities/measures that will not be covered*

- a) Clinical interventions (such as surgery or drug treatment for obesity).
- b) Complementary therapies, treatments or practices (for example, hypnotherapy or acupuncture).

4.3 *Key questions and outcomes*

Below are the overarching questions that will be addressed along with the outcomes that would be considered as evidence of effectiveness:

Question:

- What are the most effective and cost-effective dietary interventions for helping mothers achieve and maintain a healthy weight after childbirth?

- What are the most effective and cost-effective physical activity interventions for helping mothers achieve and maintain a healthy weight after childbirth?
- What interventions are effective and cost effective for helping mothers avoid gaining more weight with each successive pregnancy?
- What interventions are effective and cost effective for helping mothers who are breastfeeding to manage their weight? What role does breastfeeding play in weight management?
- What are the views of new mothers, their partners and families and healthcare professionals on diet, physical activity and weight management after childbirth and before another pregnancy?

Expected outcomes:

A range of outcomes will be considered, depending on the available evidence:

Primary outcomes may include:

- changes in measures of body size such as body weight and body mass index
- changes in the mother's dietary intake (both the quantity and quality) and levels of physical activity.

Secondary outcomes may include:

- Measures of the mother's psychological wellbeing, depression and self-esteem after childbirth and the initiation and duration of breastfeeding.
- Rates of obesity at the time of later pregnancies.
- The health of the child and mother after pregnancy.
- Rates of childhood obesity.
- Access to, attendance at and use of health and support services.

- The impact on the partner and family.

4.4 Status of this document

This is the draft scope, released for consultation on 6 April 2009 until 11 May 2009, to be discussed at a public meeting on 23 April 2009. Following consultation, the final version of the scope will be available at the NICE website in June 2009.

5 Further information

The public health guidance development process and methods are described in 'Methods for development of NICE public health guidance' (NICE 2006) available at www.nice.org.uk/phmethods and 'The public health guidance development process: An overview for stakeholders, including public health practitioners, policy makers and the public' (NICE 2006) available at www.nice.org.uk/phprocess

6 Related NICE guidance

Published

Diabetes in pregnancy. NICE clinical guideline 63 (2008). Available from www.nice.org.uk/CG63

Maternal and child nutrition. NICE public health guidance 11 (2008). Available from www.nice.org.uk/PH11

Physical activity and the environment. NICE public health guidance 8 (2008). Available from www.nice.org.uk/PH8

Antenatal and postnatal mental health. NICE clinical guideline 45 (2007). Available from www.nice.org.uk/CG45

Behaviour change. NICE public health guidance 6 (2007). Available from www.nice.org.uk/PH6

Four commonly used methods to increase physical activity. NICE public health guidance 2 (2006). Available from www.nice.org.uk/PH2

Effective weight management following childbirth draft scope for consultation
2 April–11 May 2009

Obesity. NICE clinical guideline 43 (2006). Available from www.nice.org.uk/CG43

Postnatal care. NICE clinical guideline 37 (2006). Available from www.nice.org.uk/CG37

Under development

Weight management in pregnancy. NICE public health guidance (publication expected June 2010)

Pregnancy and complex social factors. .NICE clinical guideline (publication expected August 2010)

Appendix A Referral from the Department of Health

The Department of Health asked NICE to:

'Produce intervention guidance for primary care on effective weight management following childbirth'.

Appendix B Potential considerations

It is anticipated that the Public Health Interventions Advisory Committee (PHIAC) will consider the following issues:

- The actions that those responsible for the health and care of women who have had a baby in the past 2 years should take, at what level, how often and for how long.
- The effectiveness and cost effectiveness of different interventions and activities, delivered in different ways (for example, one-to-one, in groups or aimed at whole communities) and in different settings. Whether the effectiveness and cost effectiveness of the intervention varies according to:
 - the status of the person delivering it
 - its frequency, duration and intensity
 - where it takes place.
- Whether interventions are transferable to other settings.
- Whether there are any adverse effects.
- How accessible and acceptable different interventions and approaches are to new mothers, women planning another pregnancy, their partners and families.
- Which interventions and approaches new mothers, women planning another pregnancy, their partners and families would prefer or choose.
- The needs of specific subgroups of new mothers, women planning another pregnancy, their partners and families. In particular, women:
 - from black and minority ethnic groups
 - from traveller communities
 - who are refugees and asylum seekers
 - who are prisoners
 - who are under 18
 - with a learning, physical or sensory disability

- with communication difficulties.
- The impact of the guidance on equity and the extent to which it promotes equality and diversity.
- Evidence from practice.
- The barriers to and opportunities for implementing the guidance, as perceived by practitioners and new mothers.

Appendix C References

Confidential Enquiry into Maternal and Child Health (2007) Saving mothers' lives: reviewing maternal deaths to make motherhood safer. The seventh report of the confidential enquiries into maternal deaths in the United Kingdom. London: Confidential Enquiry into Maternal and Child Health

Cross Government Obesity Unit (2008) Healthy weight, healthy lives: a cross-government strategy for England. London: Department of Health

Department for Children, Schools and Families (2007) Teenage parents next steps: guidance for local authorities and primary care trusts. London: Department for Children, Schools and Families.

Department of Health (2004a) National service framework for children, young people and maternity services. London: Department of Health

Department of Health (2004b) Choosing health: making healthier choices easier. London: Department of Health

Department of Health (2005a) Choosing a better diet: a food and health action plan. London: Department of Health

Department of Health (2005b) Choosing activity: a physical activity action plan. London: Department of Health

Department of Health (2009) Healthy lives, brighter futures – the strategy for children and young people's health. London: Department of Health

Gore SA, Brown DM, Smith D (2003) The role of postpartum weight retention in obesity among women: a review of the evidence. *Annals of Behavioral Medicine* 26 (2): 149–59

Government Office for Science (2007) Tackling obesities: future choices – modelling future trends in obesity and their impact on health. London: Department of Innovation, Universities and Skills

Gunderson EP, Abrams B, Selvin S (2001) Does the pattern of postpartum weight change differ according to pregravid body size? *International Journal of Obesity Related Metabolic Disorders* 25 (6): 853–62

Hewison J, Dowswell T (1994) *Child health care and the working mother*. London: Chapman and Hall

Institute of Medicine (1990) *Nutrition during pregnancy*. Washington DC: National Academic Press

Olson CM, Strawderman MS, Hinton PS et al. (2003) Gestational weight gain and postpartum behaviors associated with weight change from early pregnancy to 1 year postpartum. *International Journal of Obesity Related Metabolic Disorders* 27 (1): 117–27

Reilly JJ, Armstrong J, Dorosty AR et al. (2005) Early life risk factors for obesity in childhood: cohort study. *British Medical Journal* 330: 1357–63

The Information Centre (2008) *Health survey for England 2006: CVD and risk factors adults, obesity and risk factors children*. London: The Information Centre

Villamor E, Cnattingius S (2006) Interpregnancy weight change and risk of adverse pregnancy outcomes: population based study. *Lancet* 368: 1164–70

Whelan A, Wrigley N, Warm D et al. (2002) Life in a 'food desert'. *Urban Studies* Vol. 39 (11): 2083–100