

# NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

## Guideline scope

### Maternal and child nutrition: nutrition and weight management in pregnant women, and nutrition in children up to 5 years

This guideline will update and amalgamate:

- the NICE guideline on maternal and child nutrition (PH11) **and**
- the recommendations on weight management during pregnancy in the NICE guideline on weight management before, during and after pregnancy (PH27). (Note that the recommendations on weight management before and after pregnancy will be covered in a separate guideline.)

The guideline will be developed using the methods and processes outlined in [developing NICE guidelines: the manual](#).

The [NICE quality standard on maternal nutrition](#) may need to be revised or updated when this guideline is published.

#### **1 Why the guideline is needed**

A pregnant woman's nutritional status and weight before, during and after pregnancy influences the growth and development of their child, as well as their own short- and long-term health. They need sufficient energy, macronutrients and micronutrients from their diet, as well as from body reserves.

Supporting women to adopt a healthy diet and to achieve and maintain a healthy weight during pregnancy will provide important benefits to their future health. Likewise, ensuring that babies and pre-school children have the best possible nutritional start in life is vital to their growth and development (see [Public Health England's Giving every child the best start in life](#)). Child nutrition

1 includes providing milk, solid food and necessary supplements at the right  
2 times and for the right duration, at home or in early years settings. The  
3 [Scientific Advisory Committee on Child Nutrition \(SACN\) report on feeding in](#)  
4 [the first year of life](#) considered many areas of public health nutrition in the first  
5 year of life, including breastfeeding, introduction of solid foods including  
6 potentially allergenic foods, diversification of the diet, and oral health, but  
7 there are still areas of uncertainty regarding implementation and uptake of  
8 advice. In addition, the updated [NICE guideline on postnatal care](#) included  
9 recommendations on all aspects of baby feeding that cover the antenatal  
10 period as well as the first 8 weeks after the birth.

### 11 **Key facts and figures**

12 Over half of women giving birth in England from 2015 to 2017 were of an  
13 unhealthy weight:

- 14 • 28.4% were overweight (with a body mass index [BMI] of 25.0 to  
15 29.9 kg/m<sup>2</sup>)
- 16 • 21.3% were living with obesity (with a BMI of 30.0 kg/m<sup>2</sup> or over)
- 17 • 2.8% were underweight (with a BMI of less than 18.5 kg/m<sup>2</sup>).

18 The likelihood of an adverse maternal outcome, or serious complications for  
19 the baby after birth, increases as BMI increases (as seen in the [National](#)  
20 [Maternity and Perinatal Audit \[NMPA\]](#)).

21 There is clear evidence of a social gradient. The NMPA showed that women  
22 living in the most deprived areas were more likely to be living with  
23 underweight or with obesity.

24 There is no national, evidence-based guidance on appropriate weight gain  
25 during pregnancy. The US Institute of Medicine recommends different levels  
26 of gestational weight gain, depending on pre-pregnancy BMI.

27 It is estimated that up to 45% of pregnancies in the UK may be unplanned,  
28 which has an impact on poor preconception health; including low uptake of  
29 preconception folic acid supplements (only around 31% of women take folic  
30 acid before pregnancy).

1 Although 81% of women in the UK start breastfeeding their baby, by 6 weeks  
2 only 55% are still doing so. Increasing the proportion of women who continue  
3 to breastfeed or express breast milk beyond 6 months of age would yield  
4 additional health benefits. Therefore, more focus is needed on helping women  
5 to continue breastfeeding for longer.

## 6 **Current practice and why this update is needed**

7 There is uncertainty about whether the recommended folic acid dose before  
8 and during the first 12 weeks of pregnancy should be higher for women living  
9 with overweight or obesity (BMI over 30 kg//m<sup>2</sup>).

10 For all adults (including pregnant and breastfeeding women), the UK  
11 Government recommends a daily 10 microgram vitamin D supplement.  
12 Concerns have been raised whether this is sufficient for pregnant women  
13 living with overweight or obesity.

14 Pregnant women have their weight measured at their first antenatal  
15 appointment, but there is no agreement on suggested weight gain during  
16 pregnancy. There is new evidence from published studies, topic experts and  
17 internal surveillance by NICE (see the NICE surveillance reports for [the](#)  
18 [maternal and child nutrition guideline](#) and the [weight management before,](#)  
19 [during and after pregnancy guideline](#)), which indicates that nutritional and  
20 lifestyle interventions during pregnancy may be beneficial for pregnancy  
21 outcomes and beyond.

22 For babies and children up to 5 years, the UK Government recommends a  
23 daily supplement containing vitamins A, C and D. However, it is unclear  
24 whether vitamin A supplementation is still necessary in the UK, given that  
25 infant formula and many staple foods are already fortified.

## 26 **2 Who the guideline is for**

27 This guideline is for:

- 28 • healthcare professionals working in the NHS who are responsible for  
29 maternal and child nutrition (for children from birth to 5 years old), including

- 1 midwives, health visitors, dietitians, public health nutritionists, primary  
2 healthcare professionals, general practitioners, community paediatricians,  
3 school and community nurses, dentists and dental professionals and  
4 pharmacists
- 5 • commissioners of community and secondary antenatal and postnatal care  
6 services, weight management and activity or exercise services, and  
7 primary care services
  - 8 • providers of pre-school education and care services and early years  
9 settings
  - 10 • women who may become pregnant and pregnant women, and their  
11 partners
  - 12 • families, carers, partners, people who look after babies and children up to  
13 5 years, and the public.

14 It may also be relevant for:

- 15 • social care practitioners
- 16 • local authorities
- 17 • other organisations providing advice and support about maternal and child  
18 nutrition (for example, voluntary groups or private providers).

19 NICE guidelines cover health and care in England. Decisions on how they  
20 apply in other UK countries are made by ministers in the [Welsh Government](#),  
21 [Scottish Government](#), and [Northern Ireland Executive](#).

## 22 **Equality considerations**

23 NICE has carried out [an equality impact assessment](#) [add hyperlink in final  
24 [version](#)] during scoping. The assessment:

- 25 • lists equality issues identified, and how they have been addressed
- 26 • explains why any groups are excluded from the scope.

27 The guideline will look at inequalities relating to:

- 28 • age-related service assumptions, particularly around young women and  
29 older women

- 1 • socio-economic status, particularly around those experiencing food
- 2 insecurity and economically vulnerable groups
- 3 • different ethnic groups
- 4 • religious and cultural considerations
- 5 • women and parents with disabilities, physical and mental health conditions
- 6 • women going through assisted conception
- 7 • LGBTQ+ women and parents
- 8 • geographical location, particularly in relation to access to primary care
- 9 services.

## 10 **3 What the guideline will cover**

### 11 **3.1 Who is the focus?**

#### 12 **Groups that will be covered**

- 13 • Women during a single or multiple pregnancy and for 5 years following the
- 14 birth. Weight management will only be covered during pregnancy.
- 15 Preconception will be covered only in relation to folic acid supplements.
- 16 • Babies and children from birth to 5 years. Breastfeeding and formula
- 17 feeding will only be covered from 8 weeks after birth. Feeding up to 8
- 18 weeks is covered in the [NICE guideline on postnatal care](#).

19 We will give specific consideration to women who are living with overweight or  
20 obesity during pregnancy. Women living with underweight will only be  
21 considered for weight management during pregnancy. Other specific  
22 considerations are set out in the [equality considerations](#). These are likely to  
23 be identified on a case-by-case basis in relation to specific review questions.

24 This guideline will use the terms 'woman' or 'mother' throughout. These should  
25 be taken to include people who do not identify as women but who are  
26 pregnant or have given birth. Similarly, when the term 'parents' is used, this  
27 should be taken to include anyone who has main responsibility for caring for a  
28 baby or child.

## 1 **Groups that will not be covered**

2 The guideline will not cover women and children who have clinical conditions  
3 that mean they need specialist nutrition advice and care. For example, the  
4 guideline will not cover:

- 5 • women and children with diabetes, epilepsy or HIV
- 6 • children who are underweight or in whom growth concerns have been  
7 raised.

8 However, the guideline will cross-refer when appropriate to other NICE  
9 guidance, such as the guidelines on postnatal care and antenatal care,  
10 intrapartum care, pregnancy and complex social factors, obesity prevention,  
11 weight management, eating disorders, diabetes in pregnancy, fertility  
12 problems and faltering growth.

## 13 **3.2 Settings**

### 14 **Settings that will be covered**

15 All settings where publicly funded maternal and child nutrition assessment,  
16 advice and support is provided.

## 17 **3.3 Activities, services or aspects of care**

### 18 **Key areas that will be covered in this update**

19 We will look at evidence in the areas below when developing the guideline.

20 We will consider making new recommendations or updating existing  
21 recommendations in these areas only. It may not be possible to make  
22 recommendations in all the areas.

- 23 1 Vitamin supplementation.
- 24 2 Weight management and healthy eating during pregnancy.
- 25 3 Breastfeeding and formula feeding from 8 weeks after birth.
- 26 4 Healthy eating for children up to 5 years.

27 This guideline will also link to any relevant recommendations on dietary  
28 advice, allergies and oral health in other NICE and government guidance.

1 Note that guideline recommendations for medicines will normally fall within  
2 licensed indications; exceptionally, and only if clearly supported by evidence,  
3 use outside a licensed indication may be recommended. The guideline will  
4 assume that prescribers will use a medicine's summary of product  
5 characteristics to inform decisions made with individual patients.

6 **Areas from previous guidelines that will be updated or removed**

7 This table sets out how the recommendations in the [NICE guideline on](#)  
8 [maternal and child nutrition](#) and the [NICE guideline on weight management](#)  
9 [before, during and after pregnancy](#) will be updated or removed (stood down).

10 NICE supports the implementation of UK Government advice about nutrition  
11 and will reference this in the guideline when relevant.

## 1 Areas from previous guidelines that will be updated or removed

Key area in Maternal and child nutrition guideline (PH11)	Action
Training	Remove. NICE supports the implementation of professional training standards by relevant health and social care professional organisations in this area.
Folic acid	Review the evidence on: <ul style="list-style-type: none"> <li>• the groups of women who should be advised to take high-dose folic acid supplements (in line with government advice) before and during the first 12 weeks of pregnancy</li> <li>• folic acid supplementation before and during the first 12 weeks of pregnancy for women living with overweight or obesity</li> <li>• improving uptake of folic acid for all women before and during the first 12 weeks of pregnancy.</li> </ul>
Healthy Start (and vitamin D)	Review the evidence on: <ul style="list-style-type: none"> <li>• vitamin D supplementation during pregnancy for women living with overweight and obesity</li> <li>• improving uptake of Healthy Start vitamin supplementation for pregnant women, babies and children up to 5 years</li> <li>• improving uptake of healthy eating advice in children up to 5 years to promote healthier growth (see also the changes to the recommendations on child health promotion).</li> </ul>
Diet in pregnancy	Review the evidence in this area, together with the evidence on weight management during pregnancy (currently covered in the weight management before, during and after pregnancy guideline, PH27). In particular, we will look for evidence on: <ul style="list-style-type: none"> <li>• what gestational weight gain is healthy and appropriate during pregnancy</li> <li>• what interventions help women manage their weight during pregnancy</li> <li>• improving uptake of healthy eating advice during pregnancy.</li> </ul>
Obesity	This area will be updated in 2 different guidelines. Obesity during pregnancy will be updated in this guideline. Obesity in all other groups will be updated in <a href="#">the NICE guidelines on weight management</a> .

Breastfeeding	<p>Link to the recommendations on breastfeeding in the <a href="#">NICE guideline on postnatal care</a>, which covers babies up to 8 weeks.</p> <p>Review the evidence on improving uptake of breastfeeding advice to continue beyond 8 weeks, including workplace interventions to help women who are returning to work.</p>
Link workers	Remove (stand down). This area is covered by the NICE guideline on patient experience in adult NHS services.
Infant formula	<p>Link to recommendations on formula feeding in the <a href="#">NICE guideline on postnatal care</a>, which covers babies up to 8 weeks.</p> <p>Review the evidence on improving uptake of existing guidance on safe and appropriate use of formula feeding after 8 weeks.</p>
Prescribing	It is standard practice that clinicians follow the British National Formulary (BNF) when prescribing, but we will consider if we can retain reference to these recommendations.
Child health promotion	<p>Link to recommendations in the <a href="#">NICE guideline on postnatal care</a>, which covers weighing babies up to 8 weeks.</p> <p>Review the evidence on:</p> <ul style="list-style-type: none"> <li>• folic acid supplementation before and during pregnancy for women living with overweight and obesity</li> <li>• vitamin D supplementation during pregnancy for women living with overweight and obesity</li> <li>• improving uptake of vitamin supplementation for babies and children up to 5 years</li> <li>• improving uptake of healthy eating advice in children up to 5 years to promote healthier growth</li> <li>• maintaining breastfeeding after 8 weeks, including workplace interventions to help women who are returning to work.</li> </ul> <p>We will retain recommendations on weighing healthy babies more than 8 weeks after birth.</p>
Allergies	<p>Remove.</p> <p>Link to the <a href="#">NICE guideline on food allergy under 19s: assessment and diagnosis and other UK government advice</a>.</p>
Oral health	<p>Remove.</p> <p>Link to the <a href="#">NICE guideline on oral health promotion for local authorities and partners</a> and the <a href="#">NICE guideline on oral health promotion for general dental practice</a>.</p>
Pre-school settings	Review the evidence on interventions to improve uptake of healthy eating advice in children up to 5 years to promote healthier growth.

Family nutrition	Review the evidence on interventions to improve uptake of healthy eating advice in children up to 5 years to promote healthier growth.
<b>Key area in weight management guideline (PH27)</b>	<b>Action</b>
Preparing for pregnancy: women with a BMI of 30 or more	No change as part of this update. This area will be updated by the <a href="#">NICE guidelines on weight management</a> .
Pregnant women	Review the evidence on managing weight during pregnancy and the expected range of gestational weight gain during pregnancy.
Supporting women after childbirth	No change as part of this update. This area will be updated by the <a href="#">NICE guidelines on weight management</a> .
Women with a BMI of 30 or more after childbirth	No change as part of this update. This area will be updated by the <a href="#">NICE guidelines on weight management</a> .
Community-based services	No change as part of this update. This area will be updated by <a href="#">the NICE guidelines on weight management</a> . Recommendations relating to pregnant women may be retained.
Professional skills	No change as part of this update. This area will be updated by the <a href="#">NICE guidelines on weight management</a> . Recommendations related to pregnant women may be retained.

1

2 Some recommendations may be retained from existing NICE guidelines. If  
3 retained, they may be edited to ensure that they meet current editorial  
4 standards and reflect the current policy and practice context. The new  
5 guideline will also cross-refer to other NICE and national guidance as needed.

### 6 **Areas that will not be covered by this update**

- 7 • Population-based screening programmes.
- 8 • National maternal and child nutrition policies that are already covered by  
9 the Department of Health and Social Care (advised by SACN) and the  
10 Food Standards Agency (advised by the Committee on Toxicity), such as  
11 population-based dietary recommendations, national advice on food safety,  
12 the nutritional composition of infant formula and the fortification of foods.
- 13 • Interventions, information and support for breast feeding and formula  
14 feeding of babies up to 8 weeks, as this is covered in the [NICE guideline on](#)  
15 [postnatal care](#).

- 1 • Weight management for women before and after pregnancy, as these are
- 2 covered by the update to the [NICE guidelines on weight management](#).
- 3 • Weight management for children. Children aged over 2 years are covered
- 4 by the update to the [NICE guidelines on weight management](#).
- 5 • Care of preterm babies and low-birth-weight babies (defined by the World
- 6 Health Organization as a birth weight less than 2,500 g).
- 7 • Complementary therapy.

## 8 **Related NICE guidance**

### 9 **Published**

- 10 • [Antenatal care for uncomplicated pregnancies](#) (2021) NICE guideline
- 11 NG201
- 12 • [Postnatal care](#) (2021) NICE guideline NG194
- 13 • [Neonatal parenteral nutrition](#) (2020) NICE guideline NG154
- 14 • [Twin and triplet pregnancy](#) (2019) NICE guideline NG137
- 15 • [Hypertension in pregnancy: diagnosis and management](#) (2019) NICE
- 16 guideline NG133
- 17 • [Intrapartum care for women with existing medical conditions or obstetric](#)
- 18 [complications and their babies](#) (2019) NICE guideline NG121
- 19 • [Community pharmacies: promoting health and wellbeing](#) (2018) NICE
- 20 guideline NG102
- 21 • [Faltering growth: recognition and management of faltering growth in](#)
- 22 [children](#) (2017) NICE guideline NG75
- 23 • [Eating disorders: recognition and treatment](#) (2017) NICE guideline NG69
- 24 • [Oral health promotion: general dental practice](#) (2015) NICE guideline NG30
- 25 • [Coeliac disease: recognition, assessment and management](#) (2015) NICE
- 26 guideline NG20
- 27 • [Diabetes in pregnancy: management from preconception to the postnatal](#)
- 28 [period](#) (2015) NICE guideline NG3
- 29 • [Gastro-oesophageal reflux disease in children and young people: diagnosis](#)
- 30 [and management](#) (2015) NICE guideline NG1

- 1 • [Antenatal and postnatal mental health: clinical management and service](#)  
2 [guidance](#) (2014) NICE guideline CG192
- 3 • [Vitamin D: supplement use in specific population groups](#) (2014) NICE  
4 guideline PH56
- 5 • [Oral health: local authorities and partners](#) (2014) NICE guideline PH55
- 6 • [Weight management: lifestyle services for overweight or obese children](#)  
7 [and young people](#) (2013) NICE guideline PH47
- 8 • [Food allergy in under 19s: assessment and diagnosis](#) (2011) NICE  
9 guideline CG116
- 10 • [Atopic eczema in under 12s: diagnosis and management](#) (2007) NICE  
11 guideline CG57
- 12 • [Obesity prevention](#) (2006) NICE guideline CG43
- 13 • [Division of ankyloglossia \(tongue-tie\) for breastfeeding](#) (2005) NICE  
14 interventional procedures guidance IPG149

#### 15 **In development**

- 16 • [Weight management: preventing, assessing and managing overweight and](#)  
17 [obesity](#). NICE guideline. Publication expected June 2023.

#### 18 **NICE guidance about the experience of people using NHS services**

19 NICE has produced the following guidance on the experience of people using  
20 the NHS. This guideline will not include additional recommendations on these  
21 topics unless there are specific issues related to maternal and child nutrition:

- 22 • [Babies, children and young people's experience of healthcare](#) (2021) NICE  
23 guideline NG204
- 24 • [Medicines optimisation](#) (2015) NICE guideline NG5
- 25 • [Patient experience in adult NHS services](#) (2012) NICE guideline CG138
- 26 • [Medicines adherence](#) (2009) NICE guideline CG76

### 27 **3.4 Economic aspects**

28 We will take economic aspects into account when making recommendations.  
29 We will develop an economic plan that states for each review question (or key  
30 area in the scope) whether economic considerations are relevant, and if so

1 whether this is an area that should be prioritised for economic modelling and  
2 analysis. We will review the economic evidence and carry out economic  
3 analyses, using an NHS and personal social services (PSS) perspective, as  
4 appropriate. We will consider a wider public health perspective when relevant,  
5 if appropriate cost data are identified.

### 6 **3.5 Key issues and draft questions**

#### 7 1 Vitamin supplementation

8 1.1 Which groups of women should be advised to take high-dose  
9 folic acid supplements (in line with government advice) before and  
10 during the first 12 weeks of pregnancy?

11 1.2 What dose of folic acid supplementation before and during the  
12 first 12 weeks of pregnancy is needed for women living with  
13 overweight or obesity?

14 1.3 What indication and dose of vitamin D is appropriate during  
15 pregnancy for women living with overweight and obesity?

16 1.44 What clinical strategies are effective to increase uptake of  
17 vitamin supplements (including folic acid and Healthy Start vitamins  
18 in line with government advice) for pregnant women, babies and  
19 children up to 5 years?

#### 20 2 Weight management and healthy eating during pregnancy

21 2.1 What gestational weight gain is healthy and appropriate during  
22 pregnancy?

23 2.2 What are the most effective and cost-effective interventions for  
24 helping women to achieve healthy and appropriate weight gain  
25 during pregnancy (for example, dietary interventions, regular  
26 weighing, physical activity)?

27 2.3 What clinical strategies are effective to increase uptake of  
28 healthy eating advice during pregnancy in line with government  
29 advice?

1 3 Breastfeeding and formula feeding from 8 weeks after the birth

2 3.1 What interventions are effective in maintaining breastfeeding  
3 after 8 weeks?

4 3.2 What do parents perceive to be the facilitators and barriers for  
5 maintaining breastfeeding after 8 weeks?

6 Rather than conducting new evidence reviews, questions 3.1 and  
7 3.2 will use the evidence reviews conducted for the [NICE guideline](#)  
8 [on postnatal care](#) (published April 2021), which covers babies up to  
9 8 weeks.

10 3.3 What information about safe and appropriate use of formula  
11 feeding should be given to parents and carers after 8 weeks?

12 3.4 What workplace interventions help women returning to work to  
13 continue breastfeeding?

14 4 Healthy eating behaviours in children up to 5 years

15 4.1 What clinical strategies are effective to increase uptake of  
16 appropriate and timely introduction to solids (complementary  
17 feeding)?

18 4.2 What clinical strategies are effective to promote healthy eating  
19 behaviours in children up to 5 years in line with government  
20 advice?

21 The key issues and draft questions will be used to develop more detailed  
22 review questions, which guide the systematic review of the literature.

### 23 **3.6 Main outcomes**

24 The main outcomes that may be considered when searching for and  
25 assessing the evidence are:

- 26 • morbidity (for example, gestational diabetes, pre-eclampsia,  
27 thromboembolism)
- 28 • adverse events

- 1 • starting and continuing breastfeeding
- 2 • change in maternal weight (for example, changes in BMI or waist
- 3 circumference)
- 4 • dietary intake (for example, energy and nutrient intake, and supplement
- 5 intake)
- 6 • health-related quality of life
- 7 • measures of psychological wellbeing (for example, depression and self-
- 8 esteem)
- 9 • perceptions of baby behaviours and preferences (for example appetite and
- 10 food refusal).

## 11 **4 NICE quality standards and NICE Pathways**

### 12 **4.1 NICE quality standards**

13 When this guideline is published, we may update the existing [NICE quality](#)  
14 [standard on maternal nutrition](#).

### 15 **4.2 NICE Pathways**

16 When this guideline is published, we will update the existing [NICE Pathway on](#)  
17 [maternal and child nutrition](#). NICE Pathways bring together everything NICE  
18 has said on a topic in an interactive flowchart.

## 19 **Further information**

This is the draft scope for consultation with registered stakeholders. The  
consultation dates are 1 October to 29 October 2021.

The guideline is expected to be published in November 2023.

You can follow progress of the [guideline on the NICE website](#).

[Our website has information about how NICE guidelines are developed](#).

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