Obesity prevention

Clinical guideline
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www.nice.org.uk/guidance/cg43
Your responsibility

The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals and practitioners are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or the people using their service. It is not mandatory to apply the recommendations, and the guideline does not override the responsibility to make decisions appropriate to the circumstances of the individual, in consultation with them and their families and carers or guardian.

All problems (adverse events) related to a medicine or medical device used for treatment or in a procedure should be reported to the Medicines and Healthcare products Regulatory Agency using the Yellow Card Scheme.

Local commissioners and providers of healthcare have a responsibility to enable the guideline to be applied when individual professionals and people using services wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with complying with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.
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Overview

This guideline covers preventing children, young people and adults becoming overweight or obese. It outlines how the NHS, local authorities, early years' settings, schools and workplaces can increase physical activity levels and make dietary improvements among their target populations.

The clinical management of obesity is covered by NICE's guideline on obesity: identification, assessment and management.

NICE has also produced guidelines on preventing excess weight gain and weight management: lifestyle services for overweight or obese adults.

Who is it for?

- Commissioners and providers
- Employers
- Local authorities
- Primary care trusts
- Healthcare professionals
- Head teachers and chairs of governors
- Children, young people and adults, and their families and carers
Introduction

This is the first national guidance on the prevention of overweight and obesity in adults and children in England and Wales. The guidance aims to:

- stem the rising prevalence of obesity and diseases associated with it
- increase the effectiveness of interventions to prevent overweight and obesity
- improve the care provided to adults and children at risk of overweight and obesity.

The recommendations are based on the best available evidence of effectiveness, including cost effectiveness. The advice on the prevention of overweight and obesity applies in both NHS and non-NHS settings.

The guidance supports the implementation of the 'Choosing health' White Paper in England, 'Designed for life' in Wales, the revised GP contract and the existing national service frameworks (NSFs). It also supports the joint Department of Health, Department for Education and Skills and Department for Culture, Media and Sport target to halt the rise in obesity among children under 11 by 2010, and similar initiatives in Wales.

Rationale for public health guidance

Public health and clinical audiences share the same need for evidence-based, cost-effective solutions to the challenges in their day-to-day practice, as well as to inform policies and strategies to improve health. Complementary clinical and public health guidance are essential to address the hazy divisions between prevention and management of obesity.

The 2004 Wanless report 'Securing good health for the whole population' stressed that a substantial change will be needed to produce the reductions in preventable diseases such as obesity that will lead to the greatest reductions in future healthcare costs. In addition to recommending a more effective delivery framework for health services providers, the report proposed an enhanced role for schools, local authorities and other public sector agencies, employers, and private and voluntary sector providers in developing opportunities for people to secure better health.
It is unlikely that the problem of obesity can be addressed through primary care management alone. More than half the adult population are overweight or obese and a large proportion will need help with weight management. Although there is no simple solution, the most effective strategies for prevention and management share similar approaches. The clinical management of obesity cannot be viewed in isolation from the environment in which people live.

NICE continues to recognise the importance of an integrated approach to the prevention, identification, assessment and management of obesity, as shown in the NICE topic page on obesity.
Working with people to prevent and manage overweight and obesity: the issues

Preventing and managing overweight and obesity are complex problems, with no easy answers. This guidance offers practical recommendations based on the evidence. But staff working directly with the public also need to be aware of the many factors that could be affecting a person's ability to stay at a healthy weight or succeed in losing weight.

- People choose whether or not to change their lifestyle or agree to treatment. Assessing their readiness to make changes affects decisions on when or how to offer any intervention.

- Barriers to lifestyle change should be explored. Possible barriers include:
  - lack of knowledge about buying and cooking food, and how diet and exercise affect health
  - the cost and availability of healthy foods and opportunities for exercise
  - safety concerns, for example about cycling
  - lack of time
  - personal tastes
  - the views of family and community members
  - low levels of fitness, or disabilities
  - low self-esteem and lack of assertiveness.

- Advice needs to be tailored for different groups. This is particularly important for people from black and minority ethnic groups, vulnerable groups (such as those on low incomes) and people at life stages with increased risk for weight gain (such as during and after pregnancy, at the menopause or when stopping smoking).

Working with children and young adults

- Treating children for overweight or obesity may stigmatisise them and put them at risk
of bullying, which in turn can aggravate problem eating. Confidentiality and building self-esteem are particularly important if help is offered at school.

- Interventions to help children eat a healthy diet and be physically active should develop a positive body image and build self-esteem.
Person-centred care: principles for health professionals

When working with people to prevent or manage overweight and obesity, health professionals should follow the usual principles of person-centred care.

Advice, treatment and care should take into account people's needs and preferences. People should have the opportunity to make informed decisions about their care and treatment, in partnership with their health professionals.

Good communication between health professionals and people is essential. It should be supported by evidence-based written information tailored to the person's needs. Advice, treatment and care, and the information people are given about it, should be non-discriminatory and culturally appropriate. It should also be accessible to people with additional needs such as physical, sensory or learning disabilities, and to people who do not speak or read English.

For older children who are overweight or obese, a balance needs to be found between the importance of involving parents and the right of the child to be cared for independently.

If people do not have the capacity to make decisions, healthcare professionals should follow the Department of Health and social care's reference guide to consent for examination or treatment and the code of practice that accompanies the Mental Capacity Act. In Wales, healthcare professionals should follow advice on consent from the Welsh Government.

If the person is under 16, healthcare professionals should follow the guidelines in the Department of Health and Social Care's Seeking consent: working with children.
Key priorities for implementation

The prevention and management of obesity should be a priority for all, because of the considerable health benefits of maintaining a healthy weight and the health risks associated with overweight and obesity.

Public health

NHS

- Managers and health professionals in all primary care settings should ensure that preventing and managing obesity is a priority, at both strategic and delivery levels. Dedicated resources should be allocated for action.

Local authorities and partners

- Local authorities should work with local partners, such as industry and voluntary organisations, to create and manage more safe spaces for incidental and planned physical activity, addressing as a priority any concerns about safety, crime and inclusion, by:
  - providing facilities and schemes such as cycling and walking routes, cycle parking, area maps and safe play areas
  - making streets cleaner and safer, through measures such as traffic calming, congestion charging, pedestrian crossings, cycle routes, lighting and walking schemes
  - ensuring buildings and spaces are designed to encourage people to be more physically active (for example, through positioning and signing of stairs, entrances and walkways)
  - considering in particular people who require tailored information and support, especially inactive, vulnerable groups.
Early years settings

- Nurseries and other childcare facilities should:
  - minimise sedentary activities during play time, and provide regular opportunities for enjoyable active play and structured physical activity sessions
  - implement Department for Education and Skills, Food Standards Agency and Caroline Walker Trust guidance on food procurement and healthy catering.

Schools

- Head teachers and chairs of governors, in collaboration with parents and pupils, should assess the whole school environment and ensure that the ethos of all school policies helps children and young people to maintain a healthy weight, eat a healthy diet and be physically active, in line with existing standards and guidance. This includes policies relating to building layout and recreational spaces, catering (including vending machines) and the food and drink children bring into school, the taught curriculum (including PE), school travel plans and provision for cycling, and policies relating to the National Healthy Schools Programme and extended schools.

Workplaces

- Workplaces should provide opportunities for staff to eat a healthy diet and be physically active, through:
  - active and continuous promotion of healthy choices in restaurants, hospitality, vending machines and shops for staff and clients, in line with existing Food Standards Agency guidance
  - working practices and policies, such as active travel policies for staff and visitors
  - a supportive physical environment, such as improvements to stairwells and providing showers and secure cycle parking
  - recreational opportunities, such as supporting out-of-hours social activities, lunchtime walks and use of local leisure facilities.
Self-help, commercial and community settings

- Primary care organisations and local authorities should recommend to patients, or consider endorsing, self-help, commercial and community weight management programmes only if they follow best practice (see recommendation 1.1.7.1 for details of best practice standards).
People have the right to be involved in discussions and make informed decisions about their care, as described in NICE's information on making decisions about your care.

Making decisions using NICE guidelines explains how we use words to show the strength (or certainty) of our recommendations, and has information about prescribing medicines (including off-label use), professional guidelines, standards and laws (including on consent and mental capacity), and safeguarding.

The following guidance is based on the best available evidence. The full guideline gives details of the methods and the evidence used to develop the guidance.

In the recommendations, 'children' refers to anyone younger than 18 years. 'Young people' is used when referring to teenagers at the older end of this age group.

Staff who advise people on diet, weight and activity – both inside and outside the NHS – need appropriate training, experience and enthusiasm to motivate people to change. Some will need general training (for example, in health promotion), while those who provide interventions for obesity (such as dietary treatment and physical training) will need more specialised training. In the recommendations, the term 'specific' is used if the training will be in addition to staff's basic training. The term 'relevant' is used for training that could be part of basic professional training or in addition to it.

1.1 Public health recommendations

The public health recommendations are divided according to their key audiences and the settings they apply to:

- the public
- the NHS
- local authorities and partners in the community
- early years settings
- schools
- workplaces
- self-help, commercial and community programmes.

Some of the recommendations are at a strategic level (primarily for those involved in planning and management of service provision and policies), and others are at delivery level (for individual staff, teams and team managers).

The implementation section has information about the status of NICE guidance in different settings, and links to tools to help with implementing the recommendations and meeting training needs. In many cases, implementation will involve organisations working in partnership.

### 1.1.1 Recommendations for the public

This section has been replaced by the [NICE guideline on preventing excess weight gain](https://www.nice.org.uk/guidance/cg43).

### 1.1.2 The NHS

The following recommendations are made specifically for health professionals and managers in the NHS, but may also be relevant to health professionals in other organisations. Recommendations in other sections may also be relevant for NHS health professionals working with local authorities and other organisations.

These recommendations are for:

- senior managers, GPs, commissioners of care and directors of public health
- staff in primary and secondary care, particularly those providing interventions, including public health practitioners, nurses, behavioural psychologists, physiotherapists, GPs, pharmacists, trained counsellors, registered dietitians, public health nutritionists and specifically trained exercise specialists.

With specific training, staff such as pharmacy assistants or support staff in general practices may also be able to give advice and support.
Implementing these recommendations will contribute to the English target to halt the annual rise in obesity in children younger than 11 years by 2010, and similar initiatives in Wales. Recommendations can be delivered through local strategic partnerships and other local agreements and partnerships.

NICE has developed tools to help organisations implement this guidance. In many cases, implementation will involve organisations working together in partnership.

Primary care staff should engage with target communities, consult on how and where to deliver interventions and form key partnerships and ensure that interventions are person centred.

Tailoring advice to address potential barriers (such as cost, personal tastes, availability, time, views of family and community members) is particularly important for people from black and minority ethnic groups, people in vulnerable groups (such as those on low incomes) and people at life stages with increased risk for weight gain (such as during and after pregnancy, menopause or smoking cessation). Many of the recommendations below also highlight the need to provide ongoing support – this can be in person, or by phone, mail or internet as appropriate.

**Overarching recommendation**

1.1.2 Managers and health professionals in all primary care settings should ensure that preventing and managing obesity is a priority at both strategic and delivery levels. Dedicated resources should be allocated for action.

**Strategy: for senior managers and budget holders**

1.1.2 In their role as employers, NHS organisations should set an example in developing public health policies to prevent and manage obesity by following existing guidance and (in England) the local obesity strategy. In particular:

- on-site catering should promote healthy food and drink choices (for example by signs, posters, pricing and positioning of products)

- there should be policies, facilities and information that promote physical activity, for example, through travel plans, by providing showers and secure
cycle parking and by using signposting and improved décor to encourage stair use.

1.1.2.3 All primary care settings should ensure that systems are in place to implement the local obesity strategy. This should enable health professionals with specific training, including public health practitioners working singly and as part of multidisciplinary teams, to provide interventions to prevent and manage obesity.

1.1.2.4 All primary care settings should:

- address the training needs of staff involved in preventing and managing obesity
- allocate adequate time and space for staff to take action
- enhance opportunities for health professionals to engage with a range of organisations and to develop multidisciplinary teams.

1.1.2.5 Local health agencies should identify appropriate health professionals and ensure that they receive training in:

- the health benefits and the potential effectiveness of interventions to prevent obesity, increase activity levels and improve diet (and reduce energy intake)
- the best practice approaches in delivering such interventions, including tailoring support to meet people's needs over the long term
- the use of motivational and counselling techniques.

Training will need to address barriers to health professionals providing support and advice, particularly concerns about the effectiveness of interventions, people's receptiveness and ability to change and the impact of advice on relationships with patients.

**Delivery: for all health professionals**

1.1.2.6 Interventions to increase physical activity should focus on activities that fit easily into people's everyday life (such as walking), should be tailored to people's
individual preferences and circumstances and should aim to improve people's belief in their ability to change (for example, by verbal persuasion, modelling exercise behaviour and discussing positive effects). Ongoing support (including appropriate written materials) should be given in person or by phone, mail or internet.

1.1.2.7 Interventions to improve diet (and reduce energy intake) should be multicomponent (for example, including dietary modification, targeted advice, family involvement and goal setting), be tailored to the individual and provide ongoing support.

1.1.2.8 Interventions may include promotional, awareness-raising activities, but these should be part of a long-term, multicomponent intervention rather than one-off activities (and should be accompanied by targeted follow-up with different population groups).

1.1.2.9 Health professionals should discuss weight, diet and activity with people at times when weight gain is more likely, such as during and after pregnancy, the menopause and while stopping smoking.

1.1.2.10 All actions aimed at preventing excess weight gain and improving diet (including reducing energy intake) and activity levels in children and young people should actively involve parents and carers.

**Delivery: for health professionals in primary care**

1.1.2.11 All interventions to support smoking cessation should:

- ensure people are given information on services that provide advice on prevention and management of obesity if appropriate
- give people who are concerned about their weight general advice on long-term weight management, in particular encouraging increased physical activity.
Delivery: for health professionals in broader community settings

The recommendations in this section are for health professionals working in broader community settings, including healthy living centres and Sure Start programmes.

1.1.2.12 All community programmes to prevent obesity, increase activity levels and improve diet (including reducing energy intake) should address the concerns of local people from the outset. Concerns might include the availability of services and the cost of changing behaviour, the expectation that healthier foods do not taste as good, dangers associated with walking and cycling and confusion over mixed messages in the media about weight, diet and activity.

1.1.2.13 Health professionals should work with shops, supermarkets, restaurants, cafes and voluntary community services to promote healthy eating choices that are consistent with existing good practice guidance and to provide supporting information.

1.1.2.14 Health professionals should support and promote community schemes and facilities that improve access to physical activity, such as walking or cycling routes, combined with tailored information, based on an audit of local needs.

1.1.2.15 Health professionals should support and promote behavioural change programmes along with tailored advice to help people who are motivated to change become more active, for example by walking or cycling instead of driving or taking the bus.

1.1.2.16 Families of children and young people identified as being at high risk of obesity – such as children with at least one obese parent – should be offered ongoing support from an appropriately trained health professional. Individual as well as family-based interventions should be considered, depending on the age and maturity of the child.

Delivery: for health professionals working with preschool, childcare and family settings

1.1.2.17 Any programme to prevent obesity in preschool, childcare or family settings
should incorporate a range of components (rather than focusing on parental education alone), such as:

- diet – interactive cookery demonstrations, videos and group discussions on practical issues such as meal planning and shopping for food and drink
- physical activity – interactive demonstrations, videos and group discussions on practical issues such as ideas for activities, opportunities for active play, safety and local facilities.

Family programmes to prevent obesity, improve diet (and reduce energy intake) and/or increase physical activity levels should provide ongoing, tailored support and incorporate a range of behaviour change techniques (see the NICE guideline on obesity: identification, assessment and management).

1.1.2.18 Programmes should have a clear aim to improve weight management.

Delivery: for health professionals working with workplaces

1.1.2.19 Health professionals such as occupational health staff and public health practitioners should establish partnerships with local businesses and support the implementation of workplace programmes to prevent and manage obesity.

1.1.3 Local authorities and partners in the community

The environment in which people live may influence their ability to maintain a healthy weight – this includes access to safe spaces to be active and to an affordable, healthy diet. Planning decisions may therefore have an impact on the health of the local population. Fundamental concerns about safety, transport links and services need to be addressed. Effective interventions often require multidisciplinary teams and the support of a broad range of organisations.

These recommendations apply to:

- senior managers and budget holders in local authorities and community partnerships, who manage, plan and commission services such as transport, sports and leisure and open spaces (not just those with an explicit public health role)
• staff providing specific community-based interventions.

Implementation of these recommendations is likely to contribute to local area agreements and other local agreements and targets. The need to work in partnership should be reflected in the integrated regional strategies and reviewed regularly.

Recommendations that refer to the planning of buildings, and stair use in particular, should be implemented in the context of existing building regulations and policies, particularly in relation to access for disabled people.

NICE has developed tools to help organisations implement this guidance, meet training needs and evaluate the impact of action. In many cases, implementation will involve organisations working together in partnership.

Overarching recommendation

1.1.3.1 As part of their roles in regulation, enforcement and promoting wellbeing, local authorities, primary care trusts (PCTs) or local health boards and local strategic partnerships should ensure that preventing and managing obesity is a priority for action – at both strategic and delivery levels – through community interventions, policies and objectives. Dedicated resources should be allocated for action.

Strategy: for senior managers and budget holders

1.1.3.2 Local authorities should set an example in developing policies to prevent obesity in their role as employers, by following existing guidance and (in England) the local obesity strategy.

• On-site catering should promote healthy food and drink choices (for example by signs, posters, pricing and positioning of products).

• Physical activity should be promoted, for example through travel plans, by providing showers and secure cycle parking and using signposting and improved décor to encourage stair use.

1.1.3.3 Local authorities (including planning, transport and leisure services) should engage with the local community, to identify environmental barriers to physical
activity and healthy eating. This should involve:

- an audit, with the full range of partners including PCTs or local health boards, residents, businesses and institutions

- assessing (ideally by doing a health impact assessment) the effect of their policies on the ability of their communities to be physically active and eat a healthy diet; the needs of subgroups should be considered because barriers may vary by, for example, age, gender, social status, ethnicity, religion and whether an individual has a disability.

Barriers identified in this way should be addressed.

1.1.3.4 Local authorities should work with local partners, such as industry and voluntary organisations, to create and manage more safe spaces for incidental and planned physical activity, addressing as a priority any concerns about safety, crime and inclusion, by:

- providing facilities such as cycling and walking routes, cycle parking, area maps and safe play areas

- making streets cleaner and safer, through measures such as traffic calming, congestion charging, pedestrian crossings, cycle routes, lighting and walking schemes

- ensuring buildings and spaces are designed to encourage people to be more physically active (for example, through positioning and signing of stairs, entrances and walkways)

- considering in particular people who require tailored information and support, especially inactive, vulnerable groups.

1.1.3.5 Local authorities should facilitate links between health professionals and other organisations to ensure that local public policies improve access to healthy foods and opportunities for physical activity.
Delivery: specific interventions

1.1.3.6 Local authorities and transport authorities should provide tailored advice such as personalised travel plans to increase active travel among people who are motivated to change.

1.1.3.7 Local authorities, through local strategic partnerships, should encourage all local shops, supermarkets and caterers to promote healthy food and drink, for example by signs, posters, pricing and positioning of products, in line with existing guidance and (in England) with the local obesity strategy.

1.1.3.8 All community programmes to prevent obesity, increase activity levels and improve diet (and reduce energy intake) should address the concerns of local people. Concerns might include the availability of services and the cost of changing behaviour, the expectation that healthier foods do not taste as good, dangers associated with walking and cycling and confusion over mixed messages in the media about weight, diet and activity.

1.1.3.9 Community-based interventions should include awareness-raising promotional activities, but these should be part of a longer-term, multicomponent intervention rather than one-off activities.

1.1.4 Early years settings

The preschool years (ages 2–5) are a key time for shaping lifelong attitudes and behaviours, and childcare providers can create opportunities for children to be active and develop healthy eating habits, and can act as positive role models.

These recommendations apply to:

- directors of children's services
- children and young people's strategic partnerships
- staff, including senior management, in childcare and other early years settings
- children's trusts, children's centres, Healthy Start and Sure Start teams
- trainers working with childcare staff, including home-based childminders and nannies.
Implementing these recommendations will contribute to meeting the target to halt the annual rise in obesity in children younger than 11 years by 2010 and to implementing the England and Wales National Service Frameworks for children, young people and maternity services (the Children's NSFs for England and Wales), and 'Every child matters' and similar initiatives in Wales.

NICE has developed tools to help organisations implement this guidance and meet training needs.

For all settings

1.1.4.1 All nurseries and childcare facilities should ensure that preventing excess weight gain and improving children's diet and activity levels are priorities.

1.1.4.2 All action aimed at preventing excess weight gain, improving diet (and reducing energy intake) and increasing activity levels in children should involve parents and carers.

1.1.4.3 Nurseries and other childcare facilities should:

- minimise sedentary activities during play time, and provide regular opportunities for enjoyable active play and structured physical activity sessions
- implement Department for Education and Skills, Food Standards Agency and Caroline Walker Trust guidance on food procurement and healthy catering.

1.1.4.4 Staff should ensure that children eat regular, healthy meals in a pleasant, sociable environment free from other distractions (such as television). Children should be supervised at mealtimes and, if possible, staff should eat with children.

1.1.5 Schools

During their school years, people often develop life-long patterns of behaviour that affect their ability to keep a healthy weight. Schools play an important role in this by providing opportunities for children to be active and develop healthy eating habits, and by providing role models. Improving children's diet and activity levels may also have wider benefits: regular physical activity is associated with higher academic achievement, better health in
childhood and later life, higher motivation at school and reduced anxiety and depression.

There is no evidence that school-based interventions to prevent obesity, improve diet and increase activity levels foster eating disorders or extreme dieting or exercise behaviour.

These recommendations apply to:

- directors of children's services
- staff, including senior management, in schools
- school governors
- health professionals working in or with schools
- children and young people's strategic partnerships
- children's trusts.

Implementing these recommendations will contribute to meeting the target to halt the annual rise in obesity in children younger than 11 years by 2010 and implementing the Children's NSFs for England and Wales, the National Healthy Schools Programme (and the Welsh Network of Healthy Schools Schemes), and 'Every child matters' and similar initiatives in Wales.

NICE has developed tools to help organisations implement this guidance and meet training needs.

Recommendations that refer to the planning of buildings, and stair use in particular, should be implemented in the context of existing building regulations and policies, particularly in relation to access for disabled people.

**Overarching recommendation**

1.1.5.1 All schools should ensure that improving the diet and activity levels of children and young people is a priority for action to help prevent excess weight gain. A whole-school approach should be used to develop life-long healthy eating and physical activity practices.
Strategy: for head teachers and chairs of governors

1.1.5.2 Head teachers and chairs of governors, in collaboration with parents and pupils, should assess the whole school environment and ensure that the ethos of all school policies helps children and young people to maintain a healthy weight, eat a healthy diet and be physically active, in line with existing standards and guidance. This includes policies relating to building layout and recreational spaces, catering (including vending machines) and the food and drink children bring into school, the taught curriculum (including PE), school travel plans and provision for cycling, and policies relating to the National Healthy Schools Programme and extended schools.

1.1.5.3 Head teachers and chairs of governors should ensure that teaching, support and catering staff receive training on the importance of healthy-school policies and how to support their implementation.

1.1.5.4 Schools should establish links with relevant organisations and professionals, including health professionals and those involved in local strategies and partnerships to promote sports for children and young people.

1.1.5.5 Interventions should be sustained, multicomponent and address the whole school, including after-school clubs and other activities. Short-term interventions and one-off events are insufficient on their own and should be part of a long-term integrated programme.

Delivery: for teachers and other professionals

1.1.5.6 Staff delivering physical education, sport and physical activity should promote activities that children and young people find enjoyable and can take part in outside school, through into adulthood. Children's confidence and understanding of why they need to continue physical activity throughout life (physical literacy) should be developed as early as possible.

1.1.5.7 Children and young people should eat meals (including packed lunches) in school in a pleasant, sociable environment. Younger children should be supervised at mealtimes and, if possible, staff should eat with children.
1.1.5.8 Staff planning interventions should consider the views of children and young people, any differences in preferences between boys and girls, and potential barriers (such as cost or the expectation that healthier foods do not taste as good).

1.1.5.9 Where possible, parents should be involved in school-based interventions through, for example, special events, newsletters and information about lunch menus and after-school activities.

1.1.6 Workplaces

The workplace may have an impact on a person's ability to maintain a healthy weight both directly, by providing healthy eating choices and opportunities for physical activity (such as the option to use stairs instead of lifts, staff gym, cycle parking and changing and shower facilities), and indirectly, through the overall culture of the organisation (for example, through policies and incentive schemes). Taking action may result in significant benefit for employers as well as employees.

These recommendations apply to:

- senior managers
- health and safety managers
- occupational health staff
- unions and staff representatives
- employers' organisations and chambers of commerce
- health professionals working with businesses.

The recommendations are divided into:

- those that all organisations may be able to achieve, with sufficient input and support from a range of staff, including senior management
- those that are resource intensive and may only be fully achieved by large organisations with on-site occupational health staff, such as the NHS, public bodies
and larger private organisations.

The recommendations are likely to build on existing initiatives – such as catering awards, Investors in People and Investors in Health, and the Corporate Health Standard in Wales.

NICE has developed tools to help organisations implement this guidance and meet training needs.

Recommendations that refer to the planning of buildings, and stair use in particular, should be implemented in the context of existing building regulations and policies, particularly in relation to access for disabled people.

**Overarching recommendation**

1.1.6.1 All workplaces, particularly large organisations such as the NHS and local authorities, should address the prevention and management of obesity, because of the considerable impact on the health of the workforce and associated costs to industry. Workplaces are encouraged to collaborate with local strategic partnerships and to ensure that action is in line with the local obesity strategy (in England).

**For all workplaces**

1.1.6.2 Workplaces should provide opportunities for staff to eat a healthy diet and be more physically active, through:

- active and continuous promotion of healthy choices in restaurants, hospitality, vending machines and shops for staff and clients, in line with existing Food Standards Agency guidance
- working practices and policies, such as active travel policies for staff and visitors
- a supportive physical environment, such as improvements to stairwells and providing showers and secure cycle parking
- recreational opportunities, such as supporting out-of-hours social activities, lunchtime walks and use of local leisure facilities.
Incentive schemes (such as policies on travel expenses, the price of food and drinks sold in the workplace and contributions to gym membership) that are used in a workplace should be sustained and part of a wider programme to support staff in managing weight, improving diet and increasing activity levels.

For NHS, public organisations and large commercial organisations

Workplaces providing health checks for staff should ensure that they address weight, diet and activity, and provide ongoing support.

Action to improve food and drink provision in the workplace, including restaurants, hospitality and vending machines, should be supported by tailored educational and promotional programmes, such as a behavioural intervention or environmental changes (for example, food labelling or changes to availability).

For this to be effective, commitment from senior management, enthusiastic catering management, a strong occupational health lead, links to other on-site health initiatives, supportive pricing policies and heavy promotion and advertisement at point of purchase are likely to be needed.

1.1.7 Self-help, commercial and community programmes

This section has been replaced by the NICE guideline on weight management: lifestyle services for overweight or obese adults.

1.2 Clinical recommendations

This section has been replaced by the NICE guideline on obesity: identification, assessment and management.
Implementation

The NHS

The Healthcare Commission assesses the performance of NHS organisations in meeting core and developmental standards set by the Department of Health in 'Standards for better health', issued in July 2004. Implementation of clinical guidelines forms part of the developmental standard D2. Core standard C5 says that national agreed guidance should be taken into account when NHS organisations are planning and delivering care.

NICE has developed tools to help organisations implement this guidance.

Other audiences and settings

The guidance also makes recommendations for the following audiences and settings:

- public bodies – including local authorities; government, government agencies and arm's length bodies; schools, colleges and childcare in early years settings; forces, prisons and police service
- private and voluntary organisations
  - large employers (more than 250 employees)
  - small and medium employers (less than 50 and less than 250 employees, respectively)
- the general public including parents, and the media and others providing advice for different population groups.
Recommendations for research

The Guidance Development Groups have made the following recommendations for research, based on their review of evidence, to improve NICE guidance and patient care in the future.

1 What are the most effective interventions to prevent or manage obesity in children and adults in the UK?

Why this is important

Many studies of interventions to prevent and manage obesity were of short duration, with little or no follow-up, were conducted outside the UK and were poorly reported. There is an urgent need for randomised controlled trials (or other appropriately designed studies, in line, for example, with the transparent reporting of evaluations of nonrandomized designs, TREND statement), with at least 12 months postintervention follow-up.

Studies should use validated methods to estimate body fatness (BMI), dietary intake and physical activity, and should assess the benefits of measures additional to BMI (such as waist circumference in children). Details of the intervention, provider, setting and follow-up times should be reported. The development of a consolidated standards of reporting trials 'CONSORT'-type statement for public health research is strongly recommended. In research on managing obesity in clinical settings, the effects of different levels of intensity of non-pharmacological interventions and follow-up should be assessed. Further research is also needed on the effectiveness of pharmacological and surgical interventions in people with comorbidities such as type 2 diabetes or cardiovascular disease.
2 How does the effectiveness of interventions to prevent or manage obesity vary by population group, setting and source of delivery?

Why this is important

There is little UK-based evidence on the effectiveness of multicomponent interventions among key at-risk groups (for example, young children and families and black and minority ethnic groups), vulnerable groups (for example, looked-after children and young people, lower-income groups and people with disabilities) and people at vulnerable life stages (for example, women during and after pregnancy and people stopping smoking).

Interventions should be undertaken in 'real world' everyday clinical and non-clinical settings and should investigate how the setting, mode and source of delivery influence effectiveness. There is a need for research evaluating multicomponent interventions to manage obesity in primary care, because factors such as the types of participant, the training of staff and the availability of resources may affect the results. Future research should:

- assess the feasibility of using in the UK interventions shown to be effective in other developed countries
- collect sufficient data to assess how the effectiveness of the intervention varies by age, gender, ethnic, religious and/or social group
- consider the value of corroborative evidence, such as associated qualitative studies on acceptability to participants
- consider the potential negative effects of an intervention as well as the intended positive effects (particularly for studies of children and young people).
3 What is the cost effectiveness of interventions to prevent or manage obesity in children and adults in the UK?

Why this is important

There is little evidence on the cost effectiveness of interventions, partly because of a lack of outcome measures that are amenable to health economic evaluations. Much of the evidence on the effectiveness of prevention strategies concerns crude measures such as average weight loss rather than response rates. Follow-up is usually short. In clinical research, more information from quality-of-life questionnaires throughout the intervention and follow-up period would help assess how valuable any clinical improvement is to the individual. This would allow greater comparison between types of intervention and improve assumptions made in cost-effectiveness analyses. It would be valuable to run cost-effectiveness studies in parallel with clinical trials, so that patient-level data can be collected.

4 What elements make an intervention effective and sustainable, and what training do staff need?

Why this is important

There are considerable barriers to the implementation of interventions, including organisational structures and personal views of both health professionals and patients. The enthusiasm and motivational skills of the health professional providing support and advice are likely to be key, and interventions may be more effective when tailored to the individual's needs. Further research is required to identify:

- what elements make an intervention effective and sustainable
- what staff training is needed.
5 Evaluation and monitoring

Population trends in overweight and obesity

Data on the prevalence of overweight and obesity at national and regional levels (with subgroup analysis by age, gender and social status) are published annually by the 'Health survey for England' (HSE) and the 'Welsh health survey'. The continued collection of such data at national and regional levels is strongly recommended. The 'Health survey for England' also provides detailed data on children and on black and minority ethnic groups about every 5 years. To allow full analysis of trends, more frequent collection of data among these and other vulnerable groups at national and local levels is encouraged.

Local and national action

Although considerable action is being undertaken at a local level that could directly or indirectly have an impact on the prevention or management of obesity, little evaluation is being undertaken. This observation is reflected in the 2005 Dr Foster survey of obesity services, which found that only 15% of primary care organisations monitored interventions such as physical activity programmes and exercise on prescription. Many potentially important broader community policies are also not evaluated in terms of their health impact – examples include congestion charging, which is implemented to address traffic rather than health issues, and safer routes to schools.

It is therefore recommended that all local action – including action in childcare settings, schools and workplaces – be monitored and evaluated with the potential impact on health in mind. An audit of health impact should also be undertaken after each change has taken place. The need to evaluate projects should be taken into account when planning funding for those projects. It is recommended that the evaluation of local initiatives is carried out in partnership with local centres that have expertise in evaluation methods, such as health authorities, public health observatories and universities.

There is also limited high quality long-term evaluation of national schemes that are implemented locally and may have an impact on weight, diet or physical activity (such as interventions promoting a 'whole-school approach' to health, Sure Start initiatives and exercise referral schemes for children). It is therefore recommended that all current and future actions be rigorously monitored and evaluated with their potential health impact in mind. Evaluation of campaigns (including social marketing campaigns) should go beyond
the 'reach' of the campaigns and more fully explore their effectiveness in changing behaviour.

**Clinical practice**

In clinical practice there is a need to set up a registry on the use of orlistat in young people. There is also a need to undertake arrangements for prospective audits of bariatric surgery, so that the outcomes and complications of different procedures, their impact on quality of life and nutritional status, and the effect on comorbidities can be monitored in both the short and the long term.
Finding more information and committee details

To find NICE guidance on related topics, including guidance in development, see the NICE topic page on obesity.

For full details of the evidence and the guideline committee's discussions, see the full guideline. You can also find information about how the guideline was developed, including details of the guideline development group.

NICE has produced tools and resources to help you put this guideline into practice. For general help and advice on putting our guidelines into practice, see resources to help you put NICE guidance into practice.
Update information

March 2015: Section 1.1.1 was updated and replaced by NICE guideline NG7.

November 2014: Section 1.2 was updated and replaced by NICE guideline CG189.

May 2014: Section 1.1.7 was updated and replaced by NICE guideline PH53.

January 2010 This guideline updates and replaces NICE technology appraisal guidance 22, 31 and 46.

Sibutramine (Reductil): marketing authorisation suspended:

On 21 January 2010, the MHRA announced the suspension of the marketing authorisation for the obesity drug sibutramine (Reductil). This follows a review by the European Medicines Agency which found that the cardiovascular risks of sibutramine outweigh its benefits. Emerging evidence suggests that there is an increased risk of non-fatal heart attacks and strokes with this medicine.

The MHRA advises that:

- Prescribers should not issue any new prescriptions for sibutramine (Reductil) and should review the treatment of patients taking the drug.

- Pharmacists should stop dispensing Reductil and should advise patients to make an appointment to see their doctor at the next convenient time.

- People who are currently taking Reductil should make a routine appointment with their doctor to discuss alternative measures to lose weight, including use of diet and exercise regimens. Patients may stop treatment before their appointment if they wish.

NICE guideline CG43 recommended sibutramine for the treatment of obesity in certain circumstances. These recommendations have now been withdrawn and healthcare professionals should follow the MHRA advice.

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