



TOOL D8 Choosing interventions

TOOL
D8

For:	All commissioners in local areas developing an obesity strategy
About:	This tool provides information on interventions, divided into the Department of Health's five core themes, as set out in <i>Healthy Weight, Healthy Lives</i> . ¹ It is based on evidence of effectiveness and cost-effectiveness adapted from the NICE guideline on obesity. ⁶ Interventions have been ranked according to the level of evidence of effectiveness as assigned by NICE.
Purpose:	To give local areas an understanding of what interventions are effective and cost-effective. However, local areas should not feel constrained to implement only interventions with evidence of effectiveness. It is important that areas try new interventions, provided they are evaluated and so add to the evidence base. See Tool D14 Monitoring and evaluation: a framework .
Use:	<ul style="list-style-type: none"> • Should be used as a guide to selecting interventions. • Can be used as a checklist of interventions.
Resource:	<i>Obesity: The prevention, identification, assessment and management of overweight and obesity in adults and children.</i> ⁶ www.nice.org.uk

Key to grading evidence

Levels of evidence for intervention studies	
Level of evidence	Type of evidence
1++	High-quality meta-analyses, systematic reviews of RCTs, or RCTs with a very low risk of bias
1+	Well conducted meta-analyses, systematic reviews of RCTs, or RCTs with a low risk of bias
1-	Meta-analyses, systematic reviews of RCTs, or RCTs with a high risk of bias*
2++	High quality systematic reviews of non-RCT, case-control, cohort, CBA or ITS studies High quality non-RCT, case-control, cohort, CBA or ITS studies with a very low risk of confounding, bias or chance and a high probability that the relation is causal
2+	Well conducted, non-RCT, case-control, cohort, CBA or ITS studies with a very low risk of confounding, bias or chance and a moderate probability that the relation is causal
2-	Non-RCT, case-control, cohort, CBA or ITS studies with a high risk of confounding, bias or chance and a significant risk that the relationship is not causal
3	Non-analytic studies (eg case reports, case series)
4	Expert opinion, formal consensus

Notes:

* Studies with a level of evidence (-) should not be used as a basis for making recommendations.
RCT: Randomised controlled trial. CBA: Controlled before and after. ITS: Interrupted time series.

Source: National Institute for Health and Clinical Excellence (2006)⁶

Evidence tables

Children: healthy growth and healthy weight

Desired behaviour	Interventions	Evidence base			Intervention already in place	Select intervention
		Effectiveness	Evidence	Cost-effectiveness		
EARLY YEARS						
More healthy options and healthy eating	Improvement in food service to pre-school children	Reductions in dietary intakes of fat and improved weight outcomes (1+)	A US-based study reported that a parent education programme focusing on nutrition-related behaviour resulted in the intervention group consuming significantly more fruits, vitamin-C-rich fruits, green vegetables, breads, rice/pasta and orange vegetables than the control group. ¹⁵⁷ Another study reported that attending educational sessions significantly improved the frequency of parents offering their child water. ¹⁵⁸ Furthermore, a systematic review reported beneficial effects on the nutritional content of day-care menus. ⁶⁶	–		
	Education through videos and interactive demonstrations	Small but important beneficial effect as long as interventions not solely focused on nutrition education (2+)		–		
	Changing food provision at nursery	Opinion of Guideline Development Group (GDG) (4)		–		
More physical activity	Provision of regular meals in supportive environment free from distractions					
	Encourage parents to engage in a significant way in active play, and reduce sedentary behaviour	Particularly effective (2+)	One study reported that attending educational sessions significantly improved the frequency of parents engaging in active play with their child. ¹⁵⁸ A UK-based study was successful in significantly reducing television-viewing (the primary aim of the study) but did not show significant improvements in snacking or watching television during dinner. ¹⁵⁹	–		
	Structured physical activity programmes within nurseries	Limited evidence of effectiveness (grade pending)	The UK-based MAGIC (Movement and Activity Glasgow Intervention in Children) pilot study reported that a nursery-based structured physical activity programme resulted in a significant improvement in children's physical activity levels. ⁶	–		
Key points <ul style="list-style-type: none"> • Interventions should be tailored as appropriate for lower-income groups. (1+) • 2-5 years is a key age at which to establish good nutritional habits, especially when parents are involved. (1+) • Interventions require some involvement of parents or carers. (1+) 						

Desired behaviour	Interventions	Evidence base			Intervention already in place	Select intervention
		Effectiveness	Evidence	Cost-effectiveness		
SCHOOLS						
More healthy eating	Reduce consumption of carbonated drinks	Limited evidence that interventions were effective in reducing overweight and obesity (1++)	Three large-scale interventions aimed to modify school lunch provision: one significantly reduced children's total energy and fat intake; ¹⁶⁰ one reduced children's fat intake but not total energy intake in school lunch observations; ¹⁶¹ and the last showed no difference in fat intake. ¹⁶² One additional study within the fruit and vegetable intervention review showed that reducing relative prices of low-fat snacks was effective in promoting lower-fat snack purchases from vending machines in adolescents over one year. ¹⁶³ Analysis of the UK National School Fruit Scheme (now known as the School Fruit and Vegetable Scheme or SFVS) showed that 4-6 year old children receiving school fruit had a significantly higher daily intake than controls (117g/day compared to 67g/day, respectively) but this difference was not maintained two years after the intervention when free fruit was no longer available. ¹⁶⁴	There is some evidence that school-based interventions can result in cost-effective health gains. Both interventions identified resulted in weight loss at acceptable costs. (Wang et al, 2003 ¹⁶⁵ (1+) ; Wang et al, 2004 ¹⁶⁶ (2+))		
	Increase fruit and (to a lesser extent) vegetable intake Improve school meals Promote water consumption	Effective in improving dietary intake (1+) Key point Schoolchildren with the lowest fruit and vegetable intakes at baseline may benefit more from the school-based interventions than their peers (2+)				
More physical activity	Promotion of less sedentary behaviour (television watching)	May help children lose weight (no grade)	<i>Active play:</i> A 12-week, US-based intervention promoting active play supplementary to usual PE among 9 year olds showed significant improvements in the intervention children compared with the controls, particularly among girls. ¹⁶⁷ Another study reported that a small intervention over 14 months resulted in 5-7 year old children in the intervention group being more active in the playground than the control group children. ¹⁶⁸ <i>PE classes:</i> One study reported significant increases in moderate physical activity among female adolescents, particularly 'lifestyle' activity, at four-month follow-up, following the promotion of 60-minute PE classes five days a week and associated education classes. ¹⁶⁹ There is good corroborative evidence from the UK that 'safer routes to school' schemes can be effective. ¹⁷⁰ A series of studies found that, when both school travel plans and safer routes to school programmes were in place, there was a 3% increase in walking, a 4% reduction in single-occupancy car use and a 1.5% increase in car sharing. Bus and cycle use remained largely static. ¹⁷¹ Conversely, a series of selected case studies found an overall increase in cycle use and a decrease in car travel whereas the effects on walking and bus travel were variable. ¹⁷² Another scheme also found a considerable increase in walking and cycling to and from school three years after the intervention. ¹⁷³			
	Multi-component interventions	Effective while intervention in play (1+)				

Desired behaviour	Interventions	Evidence base			Intervention already in place	Select intervention
		Effectiveness	Evidence	Cost-effectiveness		
More healthy schools	Multi-component addressing various aspects including school environment	<p>Equivocal to prevent obesity (2+)</p> <p>Effective in improving physical activity and dietary behaviour during intervention. UK-based evidence is limited (1+)</p>	<p>One study reported that 7-11 year old children in schools adopting a whole-school approach were consuming significantly more vegetables at one-year follow-up.¹⁷⁴ Another multicomponent intervention study reported that 5-7 year old children in the intervention group consumed significantly more vegetables and fruit (girls only).¹⁶⁸ The two-year Planet Health programme among US 12 year olds – promoting physical activity, improved diet and reduction of sedentary behaviours (with a strong emphasis on reducing television-viewing) – resulted in a reduction in the prevalence of obesity in intervention girls (but not boys) compared with controls.^{175, 176}</p> <p>A review of five UK school-based interventions concluded that all five interventions considered (fruit tuck shops, CD-ROM, art/play therapy, whole-school approach and a family-centred school-based activity) have the potential to be incorporated into a health-promoting school approach and could be more effective than stand-alone interventions. The authors highlighted the importance of actively engaging schools for the success of the intervention.¹⁷⁷</p>	<p>There is some evidence that school-based interventions can result in cost-effective health gains. Both interventions identified resulted in weight loss at acceptable costs. (Wang et al, 2003¹⁶⁵ (1+); Wang et al, 2004¹⁶⁶ (2+))</p>		
<p>Key points</p> <ul style="list-style-type: none"> • There is a body of evidence to suggest that young people’s views of barriers and facilitators to healthy eating indicated that effective interventions would (i) make healthy food choices accessible, convenient and cheap in schools, (ii) involve family and peers, and (iii) address personal barriers to healthy eating, such as preferences for fast food in terms of taste, and perceived lack of will-power. (1++) • There is a body of evidence to suggest that young people’s views on barriers and facilitators to physical activity suggest that interventions should (i) modify physical education lessons to suit their preferences, (ii) involve family and peers, and make physical activity a social activity, (iii) increase young people’s confidence, knowledge and motivation relating to physical activity, and (iv) make physical activities more accessible, affordable and appealing to young people. (1++) • There is limited UK evidence to indicate that in terms of engaging schools it is important to enlist the support of key school staff. (2+) 						

Promoting healthier food choices

Desired behaviour	Interventions	Evidence base			Intervention already in place	Select intervention
		Effectiveness	Evidence	Cost-effectiveness		
RAISING AWARENESS						
More healthy eating	Educational promotional campaign	Unclear for weight management (1+) Evidence that campaign can increase awareness of healthy diet and subsequently improve dietary intake (2+)	Interventions can result in improvements in various dietary outcomes, including a decrease in fat consumption, an increase in fruit and vegetable intake, and a decrease in fried foods and snacking. For example: <ul style="list-style-type: none"> The BBC's Fighting Fat, Fighting Fit campaign demonstrated statistically significant improvements in diet five months after the campaign in a random survey of people who registered for more information. Significant improvements were reported in fruit and vegetable intake, with a 13% increase in respondents eating the recommended 5 portions a day. There was also a 16% increase in participants eating fried food less than once a week. Significant improvements were also observed in consumption of fat spreads, consumption of lower-fat milk, removal of fat from meat, snacking and consumption of starch-based meals.^{178, 179} One-year follow-up of the Department of Health's community-based 5 A DAY pilot projects demonstrated that the intervention had stemmed a fall in fruit and vegetable intake against the national trend. Overall the intervention had a positive effect on people with the lowest intakes. Those who ate fewer than 5 portions a day at baseline increased their intake by 1 portion over the course of the study. In contrast, those who ate 5 or more portions a day at baseline decreased intakes by about 1 portion per day.¹⁸⁰ A review by the Food Safety Promotion Board in Ireland reported that social marketing interventions were strongly and equally effective at influencing behaviour, knowledge and psychosocial variables such as self-efficacy, attitudes and perceptions of the benefits of eating more healthily. Social marketing interventions appeared to be moderately effective at influencing stage of change in relation to diet, and to have a more limited effect on diet-related physiological outcomes such as blood pressure, Body Mass Index and cholesterol.¹⁸¹ 	–		
	Food promotion	Some evidence that it can have an effect on children's food preferences, purchase behaviour and consumption. The majority of food promotion focuses on foods high in fat, sugar and salt and therefore tends to have a negative effect. However, food promotion has the potential to influence children in a positive way (2+)		–		
	Public health media campaign	Limited evidence that it can have beneficial effect on weight management, particularly among individuals of higher social status (2+)		–		
Key points <ul style="list-style-type: none"> Parents are important role models for children and young people in terms of behaviours associated with the maintenance of a healthy weight. (3) Books, magazines and television programmes are an important source of information, and actively involving media providers may improve the effectiveness of interventions. (3) A significant proportion of parents may not recognise that their child is overweight and may have a poor understanding of how to translate general advice into specific food choices. (3) 						

Desired behaviour	Interventions	Evidence base			Intervention already in place	Select intervention
		Effectiveness	Evidence	Cost-effectiveness		
COMMUNITY INTERVENTIONS LED BY HEALTHCARE PROFESSIONALS						
More healthy eating	Support and advice on physical activity and diet (not alone)	Effective for weight management (1+)	–	–		
	Moderate or high intensity dietary interventions – reduce fat intake and increase fruit and vegetable consumption	Clinically significant reductions in fat intake and increases fruit and vegetable consumption (1++)	–	–		
	Brief counselling, or dietary advice by GPs or other health professionals	Effective in improving dietary intake but tend to result in smaller changes than intensive interventions (1++)	–	–		
Key points <ul style="list-style-type: none"> • Interventions with a greater number of components are more likely to be effective. (1++) • Although the majority of studies included predominantly white, higher social status and reasonably motivated individuals, there is some evidence that interventions can also be effective among lower social groups and effectiveness does not vary by age or gender. (1+) • Tailoring dietary advice to address potential barriers (taste, cost, availability, views of family members, time) is key to the effectiveness of interventions and may be more important than the setting. (3) • The type of health professional who provides the advice is not critical as long as they have the appropriate training and experience, are enthusiastic and able to motivate, and are able to provide long-term support. (3) • There is some evidence that primary care staff may hold negative views on the ability of patients to change behaviours, and on their own ability to encourage change. (3) • There is a body of evidence from UK-based qualitative research that time, space, training, costs and concerns about damaging relationships with patients may be barriers to action by health professionals (GPs and pharmacists). (3) • There is some evidence from the UK that patients are likely to welcome the provision of advice, despite concerns by health professionals about interference or damaging the relationship with patients. (3) • It remains unclear whether interventions are more effective when delivered by multidisciplinary teams. (N/A) 						

Desired behaviour	Interventions	Evidence base			Intervention already in place	Select intervention
		Effectiveness	Evidence	Cost-effectiveness		
BROADER COMMUNITY						
More healthy eating	Point-of-purchase schemes in shops, supermarkets, restaurants and cafés – supported by education, information and promotion	Effective in short term. Longer-term, multi-component interventions may show greater effects (2++)	Strategies to minimise barriers to healthy eating by improving availability and access: Studies that looked at the effect of the opening of a supermarket in a deprived, poor-retail-access community in Leeds found that participants who switched to the new store increased their consumption of fruit and vegetables by 0.23 portions per day. The findings suggest that fundamental issues around cost, availability and taste are key considerations for future interventions. Twenty-eight per cent of those who did not switch to the new store were concerned about the expense. This was backed up by qualitative work which found that, although the stores improved physical access, this did not fundamentally alter economic access. ^{182, 183}	There is some evidence that a diet and physical activity intervention incorporating interactive educational sessions is cost-effective when compared with a similar intervention using only mailshot advice for couples living together for the first time. (Dzator et al, 2004 ¹⁸⁴ (1+) , Roux et al, 2004 ¹⁸⁵ (1+))		
	Novel educational and promotional methods such as videos and computer games	May be effective in improving dietary intake (1++)				
Key points <ul style="list-style-type: none"> Interventions may be ineffective unless fundamental issues are addressed, such as: individual confidence to change behaviour; cost and availability; pre-existing concerns such as poorer taste of healthier foods and confusion over mixed messages; and the perceived 'irrelevance' of healthier eating to young people. (3) Auditing the needs of all local users can help engage all potential local partners and establish local ownership. (3) 						

Building physical activity into our lives

Desired behaviour	Interventions	Evidence base			Intervention already in place	Select intervention
		Effectiveness	Evidence	Cost-effectiveness		
RAISING AWARENESS						
More physical activity	Promotional campaigns	Unclear on weight maintenance (1+) Can improve knowledge, attitudes and awareness of physical activity. Levels of awareness are likely to vary according to type of medium used and the scale of the campaign (2++)	Physical activity and fitness campaigns: <ul style="list-style-type: none"> The BBC's Fighting Fat, Fighting Fit campaign showed significant improvements in physical activity: overall 39% of the full sample and 74% of completers increased their activity levels and the proportion undertaking regular moderate exercise increased from 29% to 45% (and from 29% to 60% for completers only).¹⁷⁹ The US-based VERB campaign which aims to increase awareness of physical activity among 9-13 year olds, found that levels of activity increased in line with awareness of the campaign. Those 9-10 year olds who were aware of the campaign engaged in 34% more free-time physical activity sessions per week than those who were unaware. However, no overall effect on free-time physical activity sessions was detected at the population level. Furthermore, 90% of children who were aware of VERB also demonstrated understanding of the messages. A significant positive relation was detected between the level of awareness of VERB and weekly average sessions of free-time physical activity.¹⁸⁶ The Australian Walk Safely to School Day attributed a relative, short-term increase of 31% of children walking to school to the campaign. On a population level this equates to a 6.8% increase in walking to school.^{187, 188} 	-		
	Public health media campaign	Limited evidence of beneficial effect on weight management, particularly among individuals of higher social status (2+) Unclear on influencing participation in physical activity. Evidence that campaigns should target motivated sub-groups (2++)			-	
Key points <ul style="list-style-type: none"> Books, magazines and television programmes are an important source of information, and actively involving media providers may improve the effectiveness of interventions. (3) 						

Desired behaviour	Interventions	Evidence base			Intervention already in place	Select intervention
		Effectiveness	Evidence	Cost-effectiveness		
COMMUNITY INTERVENTIONS LED BY HEALTHCARE PROFESSIONALS						
More physical activity	Support and advice on physical activity and diet (not alone)	Effective for weight management (1+)	–	–		
	Behavioural/educational interventions	Moderately effective for walking and non-facility-based activities (1++)	–	–		
	Free access to leisure facilities	Limited evidence – increase in activity levels (1+)	–	–		
Key points <ul style="list-style-type: none"> • Interventions with a greater number of components are more likely to be effective. (1++) • Although the majority of studies included predominantly white, higher social status and reasonably motivated individuals, there is some evidence that interventions can also be effective among lower social groups and effectiveness does not vary by age or gender. (1+) • Tailoring physical activity advice to address potential barriers (such as lack of time, access to leisure facilities, need for social support and lack of self-belief) is key to the effectiveness of interventions. (1++) • The type of health professional who provides the advice is not critical as long as they have the appropriate training and experience, are enthusiastic and able to motivate, and are able to provide long-term support. (3) • There is some evidence that primary care staff may hold negative views on the ability of patients to change behaviours, and on their own ability to encourage change. (3) • There is a body of evidence from UK-based qualitative research that time, space, training, costs and concerns about damaging relationships with patients may be barriers to action by health professionals (GPs and pharmacists). (3) • There is some evidence from the UK that patients are likely to welcome the provision of advice despite concerns by health professionals about interference or damaging the relationship with patients. (3) • It remains unclear whether interventions are more effective when delivered by multidisciplinary teams. (N/A) 						

Desired behaviour	Interventions	Evidence base			Intervention already in place	Select intervention
		Effectiveness	Evidence	Cost-effectiveness		
BROADER COMMUNITY						
More physical activity	Promotion of active travel (eg publicity campaigns)	Not effective (1++)	A systematic review of active travel versus car travel concluded that targeted behavioural change programmes with tailored advice can improve the travel behaviour of motivated subgroups (the largest study showing a 5% shift to active travel). ¹⁸⁹		There is some evidence that a diet and physical activity intervention incorporating interactive educational sessions is cost-effective when compared with a similar intervention using only mail-shot advice for couples living together for the first time. (Dzator et al, 2004 ¹⁸⁴ (1+) , Roux et al, 2004 ¹⁸⁵ (1+))	
	Targeted behavioural change programmes with tailored advice. Subsidies for commuters	Effective in changing travel behaviour of motivated groups (1++)		–		
	Creation of, or enhanced access to space for physical activity (such as walking or cycling routes), combined with supportive information/promotion	Effective (2++)	A systematic review (of all US-based studies of varying designs) found strong evidence that the creation of space or enhanced access to places for physical activity combined with informational outreach activities is effective in increasing physical activity levels. Interventions increased the frequency of activity by between 21% and 84%. Interventions included access to fitness equipment, access to community centres and creation of walking trails. ¹⁹⁰			
	Point-of-decision prompts or educational materials such as posters and banners	Weak positive effect on stair walking (2+)		–		
	Changes to city-wide transport, which make it easier and safer to walk, cycle and use public transport – such as the congestion charging scheme in the City of London and Safe Route to School schemes	May be effective in making active transport appealing to local users (3)		–		
Key points <ul style="list-style-type: none"> Addressing safety concerns in relation to walking and cycling may be particularly important for females, and for children and young people and their parents. (3) Interventions may be ineffective unless fundamental issues are addressed, such as individual confidence to change behaviour, cost and availability; and the potential risks (including perception of risk) associated with walking and cycling. (3) Auditing the needs of all local users can help engage all potential local partners and establish local ownership. (3) 						

Creating incentives for better health

Desired behaviour	Interventions	Evidence base			Intervention already in place	Select intervention
		Effectiveness	Evidence	Cost-effectiveness		
More healthy eating	Information strategies such as labelling Increased provision of healthier food Reduction in cost of low-fat snacks	Effectiveness on weight outcomes is unclear (2++) Encourages consumption of a healthy diet (2++)	<i>Healthier food provision</i> – One systematic review concluded that worksite intervention studies targeting healthier food provision by information strategies such as labelling and/or changes in food availability or cost can encourage healthier eating. ¹⁹¹ <i>Incentives</i> – One study concluded that, when prices of low-fat snacks in 55 vending machines were reduced by 10%, 25% and 50%, the total number of items sold increased by 9%, 39% and 93%, respectively. ¹⁹²	–		
	Provision of water	No studies identified (N/A)	–	–		
	Behaviour modification programmes such as health screening with counselling/ education	Short-term weight loss. Weight loss may be regained post intervention (1+)	Evidence from 10 randomised controlled trials and one controlled non-randomised trial suggests that worksite behaviour modification programmes, such as a ‘health check’ followed by counselling, can result in short-term weight or body fat loss, although there was a tendency for weight regain after the intervention. ⁶	–		
	Behaviour modification programmes such as health screening followed by counselling and sometimes environmental changes	Improvements in nutrition while intervention in place (1+)	A systematic review found that worksite behaviour modification programmes can show a positive effect on dietary fat intake (up to 3% decrease in percentage of energy from fat). ¹⁹³ Programmes can also increase consumption of fruit and vegetables from 0.09 to 0.5 portions per day. Successful programmes included a wide range of educational interventions (such as a health check followed by counselling) sometimes accompanied by environmental changes. Information about long-term effects was limited. ⁶	–		
More physical activity	Use of educational sessions and informative materials	Inconclusive evidence on weight outcomes (N/A)	<i>Encouraging increased physical activity</i> – A systematic review concluded that the use of workplace-based educational sessions and informative materials had significant effects on levels of physical activity. ¹⁹³ Results from a systematic review support the implementation of worksite physical activity programmes. ¹⁹⁴ The overall conclusion of the review was that there was strong evidence for a positive effect of physical activity programmes on levels of physical activity.	Evidence suggests that physical activity counselling does not result in any cost-effective gains in health outcomes, and studies on the benefits in terms of lost productivity are equivocal. (Proper et al, 2004 ¹⁹⁵ (1+) , Aldana et al, 2005 ¹⁹⁶ (2-))		
	Active travel schemes	No studies identified (N/A)	<i>Active travel plans</i> (eg <i>Cycle to Work scheme</i>) There is evidence from a UK-based study ¹⁹⁷ and a Finnish-based study ¹⁹⁸ that workplace promotional strategies can increase the number of people travelling actively to work.	–		

Desired behaviour	Interventions	Evidence base			Intervention already in place	Select intervention
		Effectiveness	Evidence	Cost-effectiveness		
More physical activity <i>(continued)</i>	Payroll incentive schemes (eg free gym membership)	Either only effective in the short term (during the period of the intervention) or ineffective for weight control (1+)	–	–		
	Using the stairs	No studies identified (N/A)	–	–		
	Behaviour modification programmes such as health screening with counselling/ education	Short-term weight loss. Weight loss may be regained post intervention (1+)	Evidence from 10 randomised controlled trials and one controlled non-randomised trial suggests that worksite behaviour modification programmes, such as a ‘health check’ followed by counselling can result in short-term weight or body fat loss although there was a tendency for weight regain after the intervention. ⁶	–		
	Behaviour modification programmes such as health screening followed by counselling and sometimes environmental changes	Improvements in physical activity while intervention in place (1+)	–	–		

Personalised support for overweight and obese individuals

Desired behaviour	Interventions	Evidence base			Intervention already in place	Select intervention
		Effectiveness	Evidence	Cost-effectiveness		
NON-CLINICAL SETTINGS TARGETED AT ADULTS						
More healthy eating and physical activity	Multi-component commercial group programmes	Multi-component programme more effective than standard self-help programme. It remains unclear whether the branded commercial group programme for which there is evidence of effectiveness (WeightWatchers) is more or less effective than other branded commercial programmes (1++)	–	–		
	Computer/email/internet-based programmes accompanied by greater ongoing support – in person, by post or email	Programmes more effective with than without ongoing support (1+)	–	–		
	Peer-led programme and a group-based and individual-based weight loss programme in a religious-based setting, a home-based exercise programme (accompanied by regular group sessions) and a programme providing information through interactive television	May be effective in the management of obesity (1+)	–	–		
	Meal replacement products	No strong evidence (N/A)	–	–		
	Commercial and computer-based weight loss programmes in men	Unclear (N/A)	–	–		
Key points						
<ul style="list-style-type: none"> • There is limited evidence that interventions to manage obesity based in workplace settings can be effective, although weight loss may be small in the long term. (1-) • There is limited evidence on the effectiveness of interventions based in non-clinical settings to manage obesity in adults (particularly men). (N/A) 						

Desired behaviour	Interventions	Evidence base			Intervention already in place	Select intervention
		Effectiveness	Evidence	Cost-effectiveness		
NON-CLINICAL SETTINGS TARGETED AT CHILDREN						
More healthy eating and physical activity	Home-based interventions accompanied by behaviour modification material and ongoing support	Effective but replicability on wider scale remains unclear (1+)	–	–		
Key points <ul style="list-style-type: none"> • There is limited evidence that interventions provided by school staff can aid the management of obesity in children and young people, at least in the short term, but this may be less effective than a more intensive intervention delivered in a clinical setting. (2-) • There is a paucity of evidence on the effectiveness of interventions to manage obesity in children based in non-clinical settings. The evidence that was identified was generally for children aged 8-12 years and at the extreme end of obesity. (N/A) • There is no UK-based evidence available on the effectiveness of interventions to manage obesity in children and young people in non-clinical settings. (N/A) • There is insufficient evidence to compare the effectiveness of interventions with or without family involvement in non-clinical settings. (N/A) • No evidence was identified which considered the effectiveness of exercise referral programmes to manage overweight or obesity in children and young people. (N/A) • Among both children and adults, interventions in non-clinical settings that are shown to be effective in terms of weight management, are likely to demonstrate significant improvements in participants' dietary intakes (most commonly fat and calorie intake) or physical activity levels. (1+) • The impact of participant joining fees and participant costs on the long-term effectiveness in 'real life' commercial programmes remains unclear. (N/A) • There is insufficient evidence to identify strategies in non-clinical settings that are associated with the long-term maintenance of weight and continuation of improved behaviours among overweight and obese adults and children. (N/A) • It remains unclear whether the source of delivery (both the main intervention and ongoing support) has an influence on effectiveness. (N/A) • There is insufficient evidence to assess the importance of the source of delivery (for example, health professional versus volunteer worker) on the effectiveness of programmes for children or adults. (N/A) • None of the identified studies considered inter-agency or inter-professional partnerships. (N/A) 						