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Improving outcomes for patients with obesity

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What are the health risks associated with obesity?

What are the core components of weight control programmes?

How can GPs advise and support patients?

IN ENGLAND THERE HAS BEEN A SHARP INCREASE IN THE PREVALENCE OF OVERWEIGHT AND OBESITY in adults. In 1993 58% of men and 49% of women were classified as overweight or obese compared with 65% and 58% respectively in 2011;[1] 24% of men and 26% of women were classed as obese in 2011.

Body mass index (BMI) is the most commonly used measure to classify people into weight status categories ranging from underweight to obese class III, as shown in table 1, p30.

While use of BMI has limitations as it does not take into account the difference between muscle and fat, it is a good quick indicator of increased risks.

Recommended cut-off points for weight classification are derived from research using mainly white participants. There is debate about whether there should be different BMI cut-off points for various ethnic groups as there is mounting evidence that associations between BMI, percentage of body fat, and body fat distribution differ across populations.[2]

In the prevention of type 2 diabetes, recent NICE guidance[3] concluded that 23 kg/m^2 indicates risk and 27.5 kg/m^2 higher risk for Asian populations. However, it is still not clear what these BMI thresholds should be for other ethnic groups.

HEALTH CONSEQUENCES OF OBESITY

The effects of being overweight on physical and mental health and wellbeing are well established.

These include an approximately seven-fold increased risk of developing type 2 diabetes,[4] with the increased risk higher for women than men.

Raised body weight increases strain on joints and generates musculoskeletal problems, particularly osteoarthritis of the knees and low back pain. »

Table 1

International classification of weight status

Classification	BMI (kg/m²)
Underweight	< 18.5
Healthy weight	18.5 to 24.99
Overweight	25.0 to 29.99
Obese class I	30.0 to 34.99
Obese class II	35.0 to 39.99
Obese class III	≥40

Obesity increases the risk of hypertension, coronary heart disease, deep vein thrombosis and pulmonary embolism. It is also associated with increased risk of certain cancers,[5] see table 2, above right.

'For Asian populations a BMI of 23 kg/m² indicates risk and 27.5 kg/m² higher risk for type 2 diabetes'

Obesity is an important risk factor for non-alcoholic fatty liver disease which if left untreated can progress to severe forms of liver disease, such as non-alcoholic steatohepatitis, fibrosis and cirrhosis. The risk of sleep apnoea is raised in obese individuals as is the risk of gastro-oesophageal reflux and gallstones, stress incontinence in women and erectile dysfunction in men.

Maternal obesity is associated with increased health risks for both mother and child,[6] such as:

- Gestational diabetes
- Hypertensive disorders of pregnancy
- Delivery complications
- Macrosomia
- Stillbirth

Mortality is increased by 29% with a 5 kg/m² increase in BMI above 25 kg/m².[7]

At a BMI of 30-35 kg/m², life span is reduced by 2-4 years and by 8-10 years for people with a BMI of 40-45 kg/m².[7]

Table 2

Risk of certain cancers with a 5 kg/m² increase in BMI[5]

	Relative risk	95% confidence interval
Males		
Oesophageal adenocarcinoma	1.52	1.33 to 1.74
Thyroid	1.33	1.04 to 1.70
Colon	1.24	1.20 to 1.28
Renal	1.24	1.15 to 1.34
Females		
Endometrium	1.59	1.50 to 1.68
Gallbladder	1.59	1.02 to 2.45
Oesophageal adenocarcinoma	1.51	1.31 to 1.74
Renal	1.34	1.25 to 1.43
Postmenopausal breast	1.12	1.08 to 1.16

LIFESTYLE WEIGHT MANAGEMENT PROGRAMMES

In May of this year, NICE published guidance on the provision of effective multicomponent lifestyle weight management services for adults who are overweight or obese.[8]

Some local authorities currently fund weight management programmes and criteria for referral to these should be clear.

It is important to stress to patients that there is no magic bullet and that on average programmes lead to modest weight loss (about 3% of body weight),[8] but that this varies widely. The more weight someone loses the greater the health benefits; a 5% weight loss that is maintained is worthwhile.[3,8]

There is no evidence that age, gender or ethnicity affect the outcome of a lifestyle weight management programme.

Group programmes tend to be more cost effective and many people gain support from others in the group. However, one-to-one sessions may be more suitable for some people.

Core components

NICE recommends that programmes should be:

- Multicomponent addressing dietary intake, increasing physical activity and using behavioural change techniques to support lifestyle (dietary and activity) changes.[9] These techniques include: goal setting in relation to dietary intake, physical activity and weight loss, problem solving, self-monitoring of behaviour, and weight loss and planning social support
- Developed by a multidisciplinary team with input from a registered dietician, registered psychologist and qualified physical activity instructor
- Delivered by individuals who have undergone appropriate training; programmes which include exercise sessions should be led by trained instructors
- Of at least three months' duration with weekly or fortnightly sessions which include a weigh-in session
- Focusing on long-term weight loss and prevention of weight regain. A realistic weight loss goal should be agreed at the outset. Effective weight management programmes include setting dietary targets, such as specific reductions in energy intake. They should encourage physical activity and reduction of sedentary behaviour
- Not prohibitively costly for the participant

'Maternal obesity is associated with increased health risks for both mother and child'

GP SUPPORT

GPs and practice nurses need to know what local services are available to aid weight management so that they can help individual patients decide what type of programme suits them best.

It is important to find out what the prerequisites are for NHS referrals and which commercial services are only available if patients pay themselves. Criteria for referral to a local lifestyle programme might include for example, a minimum BMI threshold (which may vary according to ethnicity), a minimum cardiovascular disease (CVD) risk or

key points

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In England there has been a sharp increase in the prevalence of overweight and obesity in adults. In 1993 58% of men and 49% of women were classified as overweight or obese compared with 65% and 58% respectively in 2011; 24% of men and 26% of women were classed as obese in 2011.

Body mass index (BMI) is the most commonly used measure to classify people into weight status categories. While use of BMI has limitations, as it does not take into account the difference between muscle and fat, it is a good quick indicator of increased risks. There is debate about whether there should be different BMI cut-off points for various ethnic groups. In the prevention of type 2 diabetes, recent NICE guidance concluded that 23 kg/m^2 indicates risk and 27.5 kg/m^2 higher risk for Asian populations.

Obesity increases the risk of hypertension, coronary heart disease, deep vein thrombosis and pulmonary embolism. It is also associated with an increased risk of certain cancers. Obesity is an important risk factor for non-alcoholic fatty liver disease which if left untreated can progress to severe forms of liver disease, such as non-alcoholic steatohepatitis, fibrosis and cirrhosis. The risk of sleep apnoea is raised in obese individuals as is that for gastro-oesophageal reflux and gallstones, stress incontinence in women and erectile dysfunction in men.

Lifestyle weight management programmes should be multicomponent, developed by a multidisciplinary team, delivered by individuals who have undergone appropriate training, focusing on long-term weight loss and prevention of weight regain and of a minimum three months' duration. Effective programmes include setting dietary targets, such as specific reductions in energy intake. They should encourage physical activity and reduction of sedentary behaviour. On average programmes lead to modest weight loss (about 3% of body weight), but this varies widely.

Other options that GPs and practice nurses might offer within the practice, over and above referral to lifestyle programmes, include help with intermittent or regular motivational support, and/or drug therapy. Success in the long term will depend on maintaining patients' resolve, helping them to build resilience when experiencing stress and challenges, so that they do not resume bad habits. The essence of success is to identify individuals who are motivated to lose weight.

Measuring a patient's weight can be carried out opportunistically, incorporated into annual reviews for long-term conditions or in an NHS Health Check. Practice teams should discuss how to take an active approach to health promotion, especially weight management as an integral component of everyday consultations.

presence of a long-term condition such as diabetes or CVD.

The weight management service options might include commercial slimming clubs that offer group support or lifestyle coaches providing one-to-one support and/or gym membership.

There is likely to be a time limit for participation such as a maximum of six months, and the individual may have to pay for the service if they want to continue longer term.

Other options that GPs and practice nurses might offer within the practice, over and above referral to lifestyle programmes, include help with intermittent or regular motivational support, and/or drug therapy.

Telehealth support such as the Florence, or 'Flo' simple telehealth, automated mobile texting programme may be available locally, if the CCG or health economy has a licence to provide Flo (www.digitalhealthsot.nhs.uk).

'A 5% weight loss that is maintained is worthwhile'

The clinician signs up the patient and monitors attainment of weight loss goals or the patient may be able to sign up directly.

There may be trusted health apps that a GP or nurse could signpost patients to if they prefer an autonomous way to work to their weight loss goals.

The essence of success is to identify individuals who are motivated to lose weight. Research has shown that not all primary care practitioners feel confident about raising the issue of weight, particularly if they have their own weight concerns.

The NICE guidance[8] highlights the need for training to identify when to raise weight management with someone and to do it confidently and with empathy.

Success in the long term will depend on maintaining patients' resolve, helping them to build resilience when experiencing stress and challenges, so that they do not resume bad habits.

Measuring a patient's weight can be carried out opportunistically, incorporated into annual reviews for long-term conditions or in an NHS Health Check.

Ideally healthcare professionals should prioritise motivating weight management in their everyday delivery of care as the potential health gains are so great. This may take a culture change for some teams. Weight management is relevant to many patients as the majority of adults in the UK are now overweight or obese.

Practice teams should discuss how to take an active approach to health promotion, especially weight management as an integral component of everyday consultations.

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