

Obesity poses a serious risk to health. This review gives an introduction to, and taster of, our newly launched Nursing Times Learning unit on obesity management in adults

# Managing obesity in adults

Obesity is viewed by some as simply a cosmetic problem; in reality it is a serious health issue. In England, it is estimated that 47% of males and 36% of females will be obese by 2025, and this will rise to 60% of males and 50% of females by 2050 (Butland et al, 2007).

The many serious health consequences of obesity are already creating a huge burden on NHS resources, which can only increase as the number of people who are obese rises. National guidelines on conditions such as heart disease and type 2 diabetes recommend that obesity be tackled as part of treatment and as a preventive intervention. Primary care nurses, especially those involved in managing long-term conditions, and nurses involved in health promotion are particularly well placed to address obesity.

Some health consequences of obesity include: hypertension, dyslipidaemia, type 2 diabetes, obstructive sleep apnoea and depression. Obesity occurs when energy intake exceeds energy expenditure

on a regular basis. Causes include rare genetic syndromes, hypothalamic injury and some prescribed medications. However, the greatest influence on the development of obesity is lifestyle.

Obesity is measured by body mass index (BMI), calculated by  $\text{weight(kg)/height(m}^2\text{)}$ . Having a BMI of  $<35.0$  does not mean an individual is necessarily at less risk of obesity-related diseases (Table 1); for these people, adding waist circumference to assessment should be considered, as abdominal fat is an important risk factor (National Institute for Health and Clinical Excellence, 2006).

Weight loss of 5-10% has health benefits. In patients with a BMI of  $>35.0$ , weight loss of  $>15\text{-}20\%$  will be required to obtain a sustained improvement in comorbidity (Scottish Intercollegiate Guideline Network, 2010). The usual weight loss target is 0.5-1kg a week (NICE, 2006).

## Assessment

Obesity management is complex, as energy intake and expenditure are influenced by physical, social, emotional and environmental factors. Working in partnership with patients encourages them to develop confidence, a sense of control and self-management skills. They usually know broadly what influences their weight, but may need help to identify specific factors.

After motivation and barriers to losing weight are identified, individualised SMART (specific, measurable, attainable, realistic and time-bound) goals and actions should be agreed and provided in written format (NICE, 2006).

## Weight history

Obesity tends to run in families. Although genetics play a part, the greatest influence is family structure, roles and relationships. Individuals with a history of repeated dieting may believe they will never succeed; they tend to have unrealistic expectations and opt for "quick-fix" diets. Addressing these beliefs is important if long-term weight management is to be achieved.

## Motivation

Our reasons for intervening may be to improve health, but those who are obese may have different reasons for wishing to lose weight, such as being able to play with their children.

## Eating

A food and drink diary is a useful tool and should cover 24 hours a day. People with obesity often skip breakfast and eat late in the day; the diary will help identify those who snack at night or who may have night-eating syndrome. Quantities of food and high-calorie drinks, including alcohol, should be identified, as should convenience foods and take-away meals.

## Physical activity

The SIGN guideline on obesity states that international consensus guidelines recommend 45-60 minutes of moderate-intensity physical activity per day for adults (SIGN, 2010a). While this may be the eventual aim, it is important to assess current activity so appropriate goals can be set. Inactivity, such as watching television, should be addressed.

## Emotional/psychological aspects

Emotional wellbeing can be affected by cultural values. There is a general belief that obesity is the fault of the individual (Puhl and Brownell, 2003). Obese people often take on these prejudices, which result in self-blame, guilt and shame.

## Social support

Identifying sources of support among family, friends and colleagues is important for people with obesity. Different types of support may come from different people.

## Additional options

Various supportive additional options are recommended if they are based on principles including healthy eating and realistic targets, focus on long-term lifestyle changes and have ongoing support (NICE, 2006). This includes weight-loss interventions such as formula diets and diet plans.

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## OBESITY MANAGEMENT LEARNING OBJECTIVES

This learning unit is free to subscribers and £10 + VAT to non-subscribers at [nursingtimes.net/obesity](http://nursingtimes.net/obesity). After studying this unit you will be able to:

- 1 Explain the importance of addressing obesity and linked comorbidities
- 2 Identify how to approach the topic of obesity with a patient
- 3 Assess a patient for obesity
- 4 List the current principles of managing obesity
- 5 Identify some of the barriers to making long-term changes
- 6 Describe the need for individualised care

**TABLE 1. BODY MASS INDEX (BMI) CLASSIFICATION**

Classification	BMI (kg/m <sup>2</sup> )	Risk level of obesity-related diseases
Normal range	18.5-24.9	No increased risk
Overweight	25.0-29.9	Increased
Class I	30-34.9	Moderate
Class II	35.0-39.9	Severe
Class III (severe obesity)	>40.0	Very severe

BMI classification for South Asian, Chinese and Japanese people should be lower: a BMI of >23.0 is overweight and of >27.5 is obese (SIGN, 2010)

As an example, for those at moderate risk of diabetes, NICE (2012) guidance suggests slimming clubs or structured weight-loss programmes. People with certain medical conditions – such as type 2 diabetes, heart failure, uncontrolled hypertension or angina – should check with their GP or hospital specialist before starting a weight-loss programme.

Very-low-calorie diets (defined in legislation as 800kcal/day or less) may be used for a maximum of 12 weeks continuously by people with obesity and a medical condition requiring greater amounts of weight loss, for example obstructive sleep apnoea (Johansson et al, 2011) and diabetes (Snel et al, 2012). Programmes that follow a diet of <600kcal/d should only be carried out under clinical supervision (NICE, 2006).

Patients following commercial or self-help weight-management programmes should be monitored and supported by health professionals (NICE, 2006).

**Medication**

As well as lifestyle interventions, the drug orlistat (Xenical) may be prescribed for those who have a high fat intake. They should have a BMI of >28.0 and comorbidities, or a BMI of >30.0. If, after at least six months' intervention, there has been no beneficial weight loss, referral to a specialist clinic may be considered (SIGN, 2010). Treatment may include bariatric surgery.

**Conclusion**

Nurses are in an ideal position to discuss obesity with patients. Assessment and

intervention should not be limited to eating and physical activity but should include: comorbidity risk; weight history; expectations of weight loss; motivation; and psychological, emotional, social and environmental issues. Obesity management is complex and requires a holistic and person-centred approach. **NT**

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**References**

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**TEST YOUR KNOWLEDGE**

Can you answer these questions? To check if you are correct go to our learning unit at [nursingtimes.net/obesity](http://nursingtimes.net/obesity)

**1** It is estimated that in England, 47% of males and 36% of females will be obese by 2025. What are the two estimated figures for 2050?

- A. 60% male
- B. 56% male
- C. 45% female
- D. 50% female

**2** Which of the following comorbidities is associated with obesity?

- A. Coronary heart disease
- B. Obstructive sleep apnoea
- C. Type 2 diabetes
- D. Impaired fertility

**3** Waist measurement is sometimes recommended to help assess comorbidity risk factors in obesity. How is it measured?

- A. Standing with feet 25-30cm apart
- B. Over indoor clothing
- C. From the front
- D. At umbilicus level

**4** What minimum percentage of weight loss is required before health benefits are gained in those with a BMI of 25.0-35.0?

- A. 1-2%
- B. 5-10%
- C. 15-20%
- D. 25-30%

**5** Which of the following issues should be addressed in obesity management?

- A. Energy intake
- B. Emotional issues
- C. Social issues
- D. Inactivity



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