

Overweight and obesity

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The Royal Australian College of General Practitioners' position on obesity and weight management, as set out in the *Guidelines for preventive activities in general practice* (red book) and *Smoking, Nutrition, Alcohol and Physical activity: a population health guide to behavioural risk factors in general practice (SNAP guide)*.



THE ROYAL AUSTRALIAN
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Background

Prevalence

The prevalence of obesity has increased worldwide. A 2001 National Health Survey estimated 2.4 million Australian adults (16% of men and 17% of women) to be obese (body mass index [BMI] >30) and a further 4.9 million overweight (42% men, 25% women). Since 1989–1990 prevalence has increased from 9% to 16% in men and 10% to 17% in women.¹ There are similar figures in other reports.²

Children and adolescents

Obesity is also increasing in children and adolescents. Prevalence is 19.5% in boys and 21.1% in girls, with the greatest proportion in boys aged 12–15 years (26.1%) and girls aged 7–11 years (23.5%).¹

Most affected

In Australia, the groups most affected are:

- Aboriginal and Torres Strait Islander people are twice as likely to be obese – 31% of Indigenous Australians compared to 16% of non-Indigenous Australians.¹
- Socioeconomic status – the Australian Institute of Health and Welfare’s report *Australia’s health* found that ‘the most disadvantaged socioeconomic group had nearly double the rate of obesity (23%) of those in the most advantaged group (12%).’¹

Burden of disease

The proportion of total disease burden attributed to being overweight is 4.4% (males) and 4.3% (females).¹

Impact on health

Being overweight contributes to higher mortality and morbidity, and contributes to:

- type 2 diabetes: reported four times as often in obese women (8.7%) and twice as often in obese men (7.7%)¹
- cardiovascular disease
- high blood pressure: obese people are more likely to report high blood pressure
- certain cancers
- sleep apnoea
- osteoarthritis
- psychological disorders
- social problems.¹

Being a healthy weight can help:

- improve blood cholesterol levels, blood pressure and blood glucose levels
- reduce the risk of other health related problems
- improve self confidence and self esteem
- make it easier to be physically active.³

Economic impact

It is estimated that obesity and its associated illnesses cost Australian society and governments as much as \$1.2 billion per year.⁴

Preventable health problems place a substantial burden of suffering on individuals, families and communities, as well as a heavy burden on society as they draw on scarce health care resources.

Role of general practitioners

General practitioners play a key role in preventive care and can provide support services to patients. GPs can provide advice and increase patient awareness of the issues and potential dangers of weight gain. Information on risk factors can be used to help educate patients about the need to change their lifestyle and to help the GPs and patients decide when and how to intervene. The agreed interventions can be summarised in a patient’s care management plan and risk factors referred to in subsequent consultations.⁵

Issues

Determinants of health

The current view of health is that it is 'multicausal', ie. 'healthiness, disease, disability and, ultimately death are seen as the result of the interaction of human biology, lifestyle and environmental (including social) factors, modified by health interventions.'¹

Health determinants are the factors that have a positive or negative effect at either the individual or population health level. There are various ways of categorising determinants, including proactive factors, (eating more fruit and vegetables), risk factors (smoking and low socioeconomic status), structural factors (poverty and unemployment), and specific factors (smoking and physical activity). There is no one measure, but rather a web of interactions.

'For almost all risk and protective factors the associated effect is not "all or nothing". For risk factors, rather than there being one point at which risk begins, there is an increasing effect as the exposure increases. For example, each increment in a person's body weight above their optimal level is associated with an increase in the risk of ill health. Although the increasing risk often starts at relatively low levels, the usual practice is to monitor a risk factor by reporting the proportion at the riskier end of the spectrum.'¹

Prevention

Prevention programs will stem the obesity epidemic more efficiently than weight loss programs. However, only a few prevention programs have been developed or implemented, and the success rates reported to date have been low. Obesity prevention programs should be high on the scientific and political agenda in both industrialised and industrialising countries.⁶

The importance of weight gain prevention is increasingly being recognised, given that the long term outcome of clinical treatment of obesity is poor.⁷ The National Health and Medical Research Council's (NHMRC) strategy for the prevention of overweight and obesity takes the view that 'while the treatment of people who are currently overweight and obese should continue, we believe that the current trend of an increasing prevalence of overweight and obesity will be reversed only if urgent steps are taken to prevent people becoming overweight and obese.'⁸

In a literature review undertaken for the NHMRC *Clinical practice guidelines for the management of overweight and obesity in children and adolescents* (2003), the risk that an obese child will become an obese adult was considered high, and studies showed that less than one-third of obese adults were obese in childhood.⁹ For adolescents, up to 50% of those who were obese adolescents remained obese as adults. Adolescents whose overweight persisted later in adolescence, and had a greater degree of overweight were more likely to be obese as an adult.⁹

Early identification

As many patients present to general practice for reasons other than specifically for weight loss, GPs are often the one to raise the subject.¹⁰ The importance of the role of GPs in early identification is highlighted by many people's unrealistic perceptions of their own weight. In the 2004–2005 National Health Survey, 63% of males and 59% of females considered themselves to be of acceptable weight, however, 62% of males and 45% of females surveyed were classified as overweight or obese based on their BMI.¹¹ Of the adult males who considered themselves to be of acceptable weight, only half were in the normal BMI range. Additionally, approximately 50% of parents of obese children do not perceive their child to be overweight.¹²

In discussing weight, it is important not to stigmatise patients who are overweight. When raising the issue with children, McCallum and Gerner suggest that clinicians discuss weight in the context of health, showing growth charts to the family and explaining what the healthiest weight would be, therefore suggesting that the child needs to 'grow into' their weight rather than lose weight.¹²

Management

A modest weight loss of 5–10% of starting weight can result in significant health benefits such as decreased hypertension as well as economic and personal outcomes.¹⁰ The goal should be to make small reductions in weight of 10% or less, and to emphasise diet and physical activity rather than simply monitoring weight.

General practitioners have both the opportunity and ongoing contact with patients that would appear to fulfil the requirements of weight management in children and adolescents.⁹ However, there is a lack of published studies examining primary care strategies to manage child overweight and obesity.¹³

Recommendations

The key college statements about obesity are contained in the red book and the SNAP guide.

Children and adolescents

The following extract outlines the red book recommendations (page 12) in relation to children and adolescents:

3.3 Overweight and obesity

An estimated 20–25% of children and adolescents in Australia are overweight, and a quarter of this group is obese. In certain ethnic groups, including Middle Eastern and Mediterranean backgrounds, and Aboriginal and Torres Strait Islander peoples, the prevalence appears to be even higher.⁹⁶ Screen for overweight and obesity every 1–2 years and assess the extent in relation to other children as the same stage of development, along with comorbidities associated with weight (B).

Who is at higher risk?	What should be done?	How often?	Level of evidence and references
Average risk 2–18 years	Assess growth: <ul style="list-style-type: none"> • Height • Weight • Waist circumference • Pubertal stage 	1–2 yearly	III B 96
Increased risk <ul style="list-style-type: none"> • Middle Eastern and Mediterranean backgrounds • Aboriginal and Torres Strait Islander peoples • Children with early (4–5 years of age) upward change in body mass index (BMI) • Children with obese parents 	Assess growth: <ul style="list-style-type: none"> • Height • Weight • Waist circumference • Pubertal stage 	Every 6 months	III B 96

Intervention	Technique	References
Compare BMI with BMI for age and gender	Compare BMI for age and gender using CDC charts (<i>Appendix 2</i>). BMI >85th percentile suggests overweight and BMI >95th percentile suggests obesity. Change over time provides more meaningful clinical information	48
Lifestyle intervention	See Section 3.2 <i>Preventive counselling and advice</i> for physical activity and nutrition advice. Details on overweight and obesity management can be found in NHMRC <i>Overweight and obesity in children and adolescents – a guide for general practitioners</i> www.health.gov.au/internet/wcms/Publishing.nsf/Content/obesity-guidelines-guidelines-gp_guide.htm \$FILE/children_gp.pdf	96

Adults

The following extract outlines the red book recommendations (pages 29–31) in relation to adults:

6.2 Overweight and obesity

Body weight reflects the balance between levels of dietary intake and physical activity. Body mass index (BMI) and adult waist circumference should be measured every 2 years for those patients who appear overweight (**A**).¹⁸¹ BMI may be misleading especially in older people and muscular individuals, and classifications may need to be adjusted for some ethnic groups.¹⁸²

Overweight poses a health burden at all ages. Patients who are overweight or obese should be offered individual lifestyle education and skills training.¹⁸³ Restrictive dieting is not recommended for children and adolescents. A modest weight loss of 5–10% of starting body weight in adults who are overweight is sufficient to achieve some health benefits.¹⁸²

Who is at higher risk of developing obesity related complications	What should be done?	How often?	Level of evidence and references
Average risk All Australians	Assess BMI and waist circumference in all adults over 18 years of age. In children and adolescents use age specific BMI-charts (see Section 3.3 <i>Overweight and obesity</i>). Offer general education on nutrition# and physical activity*	Every 2 years	I A 183
Increased risk <ul style="list-style-type: none"> Aboriginal and Torres Strait Islander peoples and those from Pacific islands Patients with existing diabetes or cardiovascular disease, stroke, gout, liver or-gallbladder disease 	Assess BMI and waist circumference in all adults over 18 years of age. Offer individual education on nutrition and physical activity	Every 12 months	I A III A 183
Identified risk of obesity <ul style="list-style-type: none"> Patients who are overweight or obese 	Assess weight and waist circumference. Develop weight management plan	Every 6 months	III B 183

For more information see the NHMRC *Dietary guidelines for Australian adults*

* For more information see the NHMRC *Physical activity guidelines*

For further information see pages 14–16 of the RACGP *SNAP guide* and the NHMRC *Overweight and obesity: a guide for general practitioners*

Intervention	Technique	References
BMI	Body mass index = body weight in kilograms divided by the square of height in metres. BMI of 25 or greater conveys increased risk	181,183
Waist circumference	An adult's waist circumference is measured half way between the inferior margin of the last rib and the crest of the ilium in the mid-axillary plane. The measurement is taken at the end of normal expiration >94 cm in males and >80 cm in females conveys increased risk >102 cm in males and >88 cm in females conveys high risk	181,183

The *SNAP guide* is compatible with the red book and offers a five step process for GP management involving:

- ask and assess: use of waist circumference and/or BMI
- advise and assist: tailoring advice to patient and their skills. Outline treatment options
- arrange: provide referrals as required
- follow up: review after 2–3 months.

Resources

The National Heart Foundation

The NHF has produced a useful information sheet that includes statistics on overweight and obesity. Available at www.heartfoundation.com.au/downloads/Ov&Ob_info_sheet_May04_FINAL.pdf.

The Australian Society for the Study of Obesity

The society has produced fact sheets specifically addressing the prevalence, causes, consequences, prevention and management of obesity in children and adults. Available at www.asso.org.au/home/obesityinfo/generalinfo.

Red book

Guidelines for preventive activities in general practice (red book) is available on the RACGP website at www.racgp.org.au/Content/NavigationMenu/ClinicalResources/RACGPGuidelines/TheRedBook/default.htm.

The *SNAP guide*

Smoking, Nutrition, Alcohol and Physical activity: a population health guide to behavioural risk factors in general practice is available on the RACGP website at www.racgp.org.au/Content/NavigationMenu/ClinicalResources/RACGPGuidelines/SNAPapopulationhealthguidetobehaviouralriskfactorsingeneralpractice/default.htm.

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