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National Health and
Medical Research Council

Department of Health



SUMMARY GUIDE FOR THE MANAGEMENT OF OVERWEIGHT AND OBESITY IN PRIMARY CARE





Australian Government

**National Health and
Medical Research Council**

Department of Health

**Summary Guide for the Management of Overweight
and Obesity in Primary Care**

December 2013

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Disclaimer

This document is a general guide to appropriate practice, to be followed subject to the clinician's judgement and patient's preference in each individual case. The summary guide is designed to provide information to assist decision-making and is based on the best available evidence at the time of development of this publication.

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Introduction

The effects of overweight and obesity are widely recognised as one of Australia’s leading health concerns, involving all age and socioeconomic groups. Being overweight or obese is strongly associated with several chronic diseases including type 2 diabetes, cardiovascular disease and some cancers, and with mental health and eating disorders.

This summary guide contains information on how to assess and manage overweight and obesity in adults, adolescents and children.

It is a summary of the 2013 National Health and Medical Research Council (NHMRC) *Clinical practice guidelines for the management of overweight and obesity in adults, adolescents and children in Australia*¹ (‘Obesity Guidelines’).

The Obesity Guidelines and the summary guide are intended for use by primary healthcare professionals, including general practitioners, practice nurses, Aboriginal health workers and allied health professionals (e.g. dietitians, psychologists, exercise physiologists, diabetes educators, social workers, occupational therapists, physiotherapists, mental health nurses).

This summary guide includes key messages, recommendations, practice points, and management models. Recommendations and practice points (PPs) have retained their gradings from the Obesity Guidelines. These are summarised below and explained in detail on page xi of the Obesity Guidelines. Links to resources are available on the **NHMRC website**. Health professionals should refer to the full guideline for more detailed guidance.

Clinical guidance in the summary guide is staged according to the 5As approach: **Ask** and **Assess**, **Advise**, **Assist**, **Arrange**.

The Obesity Guidelines and the summary guide were funded by the Department of Health.

Grade	Description
NHMRC recommendations	
A	Body of evidence can be trusted to guide the practice
B	Body of evidence can be trusted to guide the practice in most situations
C	Body of evidence provides some support for recommendation(s) but care should be taken in its application
D	Body of evidence is weak and recommendation must be applied with caution
CBR	Consensus-based recommendation formulated in the absence of quality evidence
PP	Developed by the Obesity Guidelines Development Committee for areas beyond the scope of the systematic review.

¹ National Health and Medical Research Council (2013) *Clinical practice guidelines for the management of overweight and obesity in adults, adolescents and children in Australia*. Melbourne: National Health and Medical Research Council

Key messages

The key messages are derived from recommendations in the Obesity Guidelines and highlighted by clinical experts as the most important messages to promote for obesity management in primary care.

For adults:

1. Measure waist circumference in addition to calculating BMI
2. Discuss readiness to change lifestyle behaviours
3. Convey the message that even small amounts of weight loss improve health and wellbeing
4. Use multicomponent approaches — these work better than single interventions
5. Refer appropriately to assist people to make lifestyle changes or for further intervention
6. Support a self-management approach and provide ongoing monitoring

For children and adolescents:

1. Use percentile charts to monitor growth
2. Promote physical activity, dietary modification and healthy behaviours to families
3. Encourage healthy behaviours such as drinking water and reducing screen time
4. Aim for weight maintenance — this is an acceptable goal
5. Know when to refer

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Weight management in adults

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Overweight and obesity management model for adults

Establish a therapeutic relationship, communicate and provide care in a way that is person-centred, culturally sensitive, non-directive and non-judgemental			
Use the body mass index (BMI) ² to classify overweight or obesity			
	BMI < 25.0	BMI 25.0–29.9	BMI 30.0–34.9 BMI 35.0–39.9 BMI > 40.0
	STANDARD CARE		ACTIVE MANAGEMENT
ASK AND ASSESS	Routinely assess and monitor BMI	Routinely assess and monitor BMI Discuss if BMI is increasing Screen and manage comorbidities (Section 4.4.2)	Routinely assess and monitor BMI (Section 4.2) Discuss health issues Screen and manage comorbidities (Section 4.4.2) Assess other factors related to health risk (Sections 4.4.3 to 4.4.5)
ADVISE	Promote benefits of healthy lifestyle	Promote benefits of healthy lifestyle, including reduced energy intake, increased physical activity and behavioural change	Promote benefits of healthy lifestyle, including reduced energy intake, increased physical activity and behavioural change Explain benefits of weight management (Chapter 5)
ASSIST		Assist in identifying local programs that may be of benefit	Assist in setting up weight loss program: • Advise lifestyle interventions (Section 6.1) • Based on comorbidities, risk factors and weight history, consider adding intensive weight loss interventions³ (Section 6.2) • Tailor the approach to the individual (Section 6.3)
ARRANGE			Review and monitoring (Section 7.1) Long-term weight management (Section 7.2)

² A BMI of 25.0–29.9 is classified as overweight and a BMI > 30.0 is classified as obese. Calculation of BMI is discussed in Section 4.2 of the Obesity Guidelines.

³ Intensive interventions include very low-energy diets, weight loss medications and bariatric surgery.

Note: Section entries refer to the corresponding section in the Obesity Guidelines.

Ask and assess

Measure waist circumference in addition to calculating BMI

Why is this important?

Routine assessment of body mass index (BMI) and waist circumference aims to identify people who may benefit from advice about weight management. Waist circumference is a good indicator of total body fat and a useful predictor of visceral fat. As waist circumference is also a useful predictor of chronic disease, its measurement is recommended in current Australian guidelines to refine assessment of risk of cardiovascular disease and diabetes.

BMI is calculated by: $\text{Weight (kg)}/\text{Height (m)}^2$

MEASURING WAIST CIRCUMFERENCE

1. Use a measuring tape that is checked monthly for stretching (replace if stretched)
2. Ask the person to remove heavy outer garments, loosen any belt and empty pockets
3. Ask the person to stand with their feet fairly close together (about 12–15 cm) with their weight equally distributed and to breathe normally
4. Holding the measuring tape firmly, wrap it horizontally at a level midway between the lower rib margin and iliac crest (approximately in line with the umbilicus). The tape should be loose enough to allow the measurer to place one finger between the tape and the person's body
5. Record the measurement taken on an exhalation

Note that as with BMI, the threshold at which waist circumference indicates increased risk differs depending on gender and ethnicity. For Aboriginal peoples, the risk for cardiovascular events is related to waist circumference independent of other cardiovascular risk factors.

Recommendations and practice points	
Ask about and assess weight	
B	Use BMI to classify overweight or obesity in adults.
C	For adults, use waist circumference, in addition to BMI, to refine assessment of risk of obesity-related comorbidities.
PP	Current Australian guidelines should be used to guide assessment and management of absolute cardiovascular risk and type 2 diabetes in adults.
PP	Current Australian guidelines should be used to guide assessment and management of physical comorbidities associated with excess weight in adults.
PP	Weight history, including previous weight loss attempts, should be part of the assessment of people who are overweight or obese.

For more information about calculating and interpreting BMI and waist circumference, refer to Section 4.2 and 4.3 of the Obesity Guidelines.

Ask and assess

Discuss readiness to change lifestyle behaviours

Why is this important?

A person’s willingness to make the behavioural changes needed to effectively manage weight is a key factor in targeting interventions. An effective therapeutic relationship and use of motivational interviewing are likely to facilitate discussion of readiness to change.

While it is not clear whether tools for assessing readiness to change are helpful in predicting change or weight loss, asking the right questions is essential — for example, to assess the person’s interest and confidence in change, and identify possible barriers and available sources of support.

The following questions can help in discussing readiness to change lifestyle behaviours:

- How important do you think it is for you to make changes at the moment?
- How confident are you that you can change your eating patterns and increase your physical activity to improve health?
- Are there any stressful events in your life now that might get in the way?
- Do you feel you can succeed in changing health behaviours, and how much do you believe it is worth the effort?
- Can you picture yourself changing health behaviours? How do you think your friends and family will react to your efforts?
- Are there people who can support you to change health behaviours? Do you think they will help you in your efforts?

In the longer term, it is important to manage attitudes and expectations about weight loss and regain, and continue to encourage lifestyle change.

Recommendations and practice points	
D	For adults who are overweight or obese, discuss readiness to change lifestyle behaviours.

For more information about discussing readiness to change, refer to Section 4.4.5 of the Obesity Guidelines.

Advise

Convey the message that even small amounts of weight loss improve health and wellbeing

Why is this important?

Discussing the benefits of weight loss is part of the routine care of people who are overweight or obese. Even small amounts of weight loss bring health benefits including lowering cardiovascular risk, preventing, delaying progression of, or improving control of type 2 diabetes, and improving a range of other health conditions. Quality of life, self-esteem and depression may also improve. Even if no weight is lost, lifestyle change that includes less energy intake and more physical activity is likely to have some health benefits.

Recommendations and practice points	
Advise adults about the health benefits of lifestyle change and weight loss	
A	Adults who are overweight or obese can be strongly advised that modest weight loss reduces cardiovascular risk factors.
A	Adults with prediabetes or diabetes can be strongly advised that the health benefits of modest weight loss include prevention, delayed progression or improved control of type 2 diabetes.
B	Adults with kidney disease or sleep apnoea can be advised that improvements in these conditions are associated with a 5% weight loss.
C	Adults with musculoskeletal problems, gastro-oesophageal reflux or urinary incontinence can be advised that weight loss of 5% or more may improve symptoms.
C	Adults who are overweight or obese can be advised that quality of life, self-esteem and depression may improve even with small amounts of weight loss.

For more information about the benefits of weight loss, refer to Section 5.1 of the Obesity Guidelines.

Use multicomponent approaches — these work better than single interventions

Why is this important?

Multicomponent interventions that address all three lifestyle areas related to overweight and obesity — nutrition, physical activity and psychological approaches to behavioural change — are more effective than single interventions.

How should this be done?

Treatment goals should focus on improved health rather than on weight loss. Lifestyle approaches should aim to create an energy deficit by reducing energy intake, increasing energy expenditure or both, supported by measures to assist behavioural change. Psychological and behavioural therapies should be tailored to the individual and his or her situation.

Recommendations and practice points	
Assist adults to lose weight through lifestyle interventions	
A	For adults who are overweight or obese, strongly recommend lifestyle change—including reduced energy intake, increased physical activity and measures to support behavioural change.
A	For adults who are overweight or obese, design dietary interventions that produce a 2500 kilojoule per day energy deficit and tailor programs to the dietary preferences of the individual.
PP	Current Australian dietary guidelines should be used as the basis of advice on nutrition for adults.
CBR	For adults who are overweight or obese, prescribe approximately 300 minutes of moderate-intensity activity, or 150 minutes of vigorous activity, or an equivalent combination of moderate-intensity and vigorous activities each week combined with reduced dietary intake.
PP	Current Australian physical activity guidelines should be used as the basis of advice on preventing weight gain through physical activity.
PP	For adults who are overweight or obese, particularly those who are older than 40 years, there should be an individualised approach to increasing physical activity.
PP	Individual or group-based psychological interventions may improve the success of weight management programs.
PP	There is very limited evidence on the potential benefits or harms of complementary therapies in treating overweight and obesity.

For more information about approaches for specific population groups, including Aboriginal and Torres Strait Islander peoples, refer to Section 3.3 of the Obesity Guidelines.

Refer appropriately to assist people to make lifestyle changes or for further intervention

Why is this important?

Although lifestyle approaches are well suited to delivery in primary healthcare settings, referral to other health professionals, specialists and community-based programs can further assist the individual to achieve health goals. When referral to allied health services (e.g. dietitian, psychologist, exercise physiologist) or for intensive interventions (e.g. very low energy diets, weight loss medication, bariatric surgery) is required, primary healthcare professionals have a continuing role in monitoring and review. Specific tools (e.g. Lifescripts) and knowledge of local service providers, community programs and activities can assist health professionals to refer appropriately.

Recommendations and practice points	
Assist adults who require additional intensive intervention	
A	For adults with BMI ≥ 30 kg/m ² , or adults with BMI ≥ 27 kg/m ² and comorbidities, orlistat may be considered as an adjunct to lifestyle interventions, taking into account the individual situation.
PP	Very low-energy diets are a useful intensive medical therapy that is effective in supporting weight loss when used under medical supervision. They may be a consideration in adults with BMI > 30 kg/m ² , or with BMI > 27 kg/m ² and obesity-related comorbidities, taking into account the individual situation.
A	For adults with BMI > 40 kg/m ² , or adults with BMI > 35 kg/m ² and comorbidities that may improve with weight loss, bariatric surgery may be considered, taking into account the individual situation.
PP	Bariatric surgery, when indicated, should be included as part of an overall clinical pathway for adult weight management that is delivered by a multidisciplinary team (including surgeons, dietitians, nurses, psychologists and physicians) and includes planning for continuing follow-up.
PP	Bariatric surgery may be a consideration for people with a BMI > 30 kg/m ² who have poorly controlled type 2 diabetes and are at increased cardiovascular risk, taking into account the individual situation.

Knowing when to refer
Referral to an allied health professional may be appropriate When individuals ask for specific information related to weight management or indicate interest in undertaking a specific weight loss program When community-based programs are available, especially for people with a BMI < 35 and without major comorbidities who are ready for change When specific health indicators demonstrate increased health risks (e.g. increased blood pressure, lipid profiles, blood glucose) and the individual would benefit from interventions related to weight loss When the individual's eating patterns are not meeting nutritional requirements (e.g. to a dietitian) When the individual might benefit from attending a structured group support program When the individual is having difficulty achieving behavioural change and may benefit from a behavioural weight loss intervention (e.g. to a psychologist) Referral to specialist support may be appropriate When the individual has a BMI > 35 kg/m² or BMI > 30 kg/m² with comorbidities When comorbidities need specialist management (e.g. musculoskeletal problems, sleep apnoea, fertility problems, type 2 diabetes, eating disorders, depression or other mental health comorbidities) When a very low-energy diet or weight management medication is recommended (e.g. refer to a specialist weight management clinic) When bariatric surgery is a consideration (e.g. refer to a specialised bariatric surgery centre) When an endocrine or syndromic cause is suspected (e.g. refer to an endocrinologist)
▶ For more information about referral to health professionals and programs, refer to Section 6.3.6 of the Obesity Guidelines.

Arrange

Support a self-management approach and provide ongoing monitoring

Why is this important?

For successful long-term weight management, people must overcome strong physiological responses that encourage weight regain, as well as resisting a return to weight-promoting lifestyle habits.

How should this be done?

A self-management approach is required, involving continued lifestyle change, strategies for regulating mood, frequent monitoring of weight, and catching lapses before they become large-scale weight gains.

Healthcare professionals have an important role in monitoring and reviewing weight and behaviours, providing continuing support, reinforcing lifestyle and behavioural advice, and discussing intensive interventions if needed.

Recommendations and practice points	
Develop an appropriate weight loss program	
C	For adults, include a self-management approach in weight management programs.
PP	Encourage people to make goals for behavioural change.
PP	Regular self-weighing (e.g. weekly) may be a useful component of self-management.
B	For active weight management in adults, arrange fortnightly review for the first 3 months and plan for continuing monitoring for at least 12 months, with additional intervention as required.
PP	The weight loss plan should be reviewed after 2 weeks to determine its suitability for that individual and to assess whether it needs to be modified.
PP	If there is no weight loss (less than 1% body weight or no change in waist circumference) after 3 months of active management, lifestyle behaviours and causes of weight gain should be reviewed. Intensive weight loss interventions may also be considered depending on degree of overweight or obesity and whether comorbidities are present.
Long-term weight management	
A	For adults who achieve initial weight loss, strongly recommend the adoption of specific strategies, appropriate to their individual situation, to minimise weight regain.
PP	For long-term weight management, adults can be advised of the importance of taking action (e.g. seeing a health professional) when small amounts of weight (approximately 3 kg) have been regained. If there is weight regain, consideration should be given to reassessing energy intake and physical activity, and reintervening with weight loss strategies.
PP	Long-term weight management may be more successful if it involves a self-management approach, continuing contact with health professionals and behavioural strategies for maintaining motivation.
PP	Self-management strategies for long-term weight management may include maintaining a healthy lifestyle, identifying ways to manage hunger, setting and reviewing goals, and regular self-weighing.

For more information about self-management and monitoring, refer to Section 7 of the Obesity Guidelines.

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Weight management in children and adolescents

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Overweight and obesity management model for children and adolescents

The model below outlines management of overweight and obesity in children aged 2–18 years based on BMI percentiles from the United States Centers for Disease Control (US-CDC) or World Health Organization (WHO) growth charts.⁴ For infants and children younger than 2 years, growth is monitored based on age, length and weight (rather than BMI), using WHO growth charts.

For both age groups, active management involves routine assessment, regular monitoring and referral as required.

Health professional has appropriate communication skills, is culturally responsive and is able to gain the trust of the young person and family	
Use the body mass index (BMI) percentiles⁴ to monitor growth in children and adolescents	
	BMI <85th percentile BMI 85–94th percentile (US–CDC) BMI 85–97th percentile (WHO) BMI >95th percentile (US–CDC) BMI >97th percentile (WHO)
	STANDARD CARE ACTIVE MANAGEMENT
ASK AND ASSESS	Routinely assess and monitor BMI (Section 9.2) Routinely assess and monitor BMI (Section 9.2) History and clinical assessment (Section 9.3) Arrange referral for other assessments as required (Section 9.3.3)
ADVISE	Promote benefits of healthy lifestyle to parents and carers Promote benefits of healthy lifestyle to parents, carers, with or without the child or adolescent Explain benefits of weight management (Section 10.1)
ASSIST	Assist in setting up weight management program: - Agree on goals (Section 11.1) - Agree on intervention(s) (Section 11.3)
ARRANGE	Monitor and review (Section 12.1) Arrange referral (Section 12.2)

⁴ For children aged between 2 and 18 years, the United States Centers for Disease Control and Prevention (US-CDC) categorises overweight as between the 85th and 95th percentiles in the BMI charts and obesity as above the 95th percentile (see Chapter 13 of the Obesity Guidelines). The World Health Organization (WHO) categorises overweight as between the 85th and 97th percentile and obesity as above the 97th percentile. For infants and children younger than 2 years, the WHO growth charts are used to monitor for rapid weight gain.

Note: Section entries refer to the corresponding section in the Obesity Guidelines.

Ask and assess

Use percentile charts to monitor growth

Why is this important?

The 2011-12 Australian Health Survey⁵ found that among adolescents and children aged 2–17 years, 18.2% were classified as being overweight and 6.9% as being obese. Most children and adolescents who are overweight or obese are identified through primary health care. Weight status in children and adolescents varies with normal growth and stage of puberty. It also differs between males and females. As a result, weight status in children and adolescents is interpreted using age- and sex-specific growth charts.

How is growth monitored?

For infants and children aged up to 2 years, growth is monitored based on age, length and weight, using the World Health Organization (WHO) percentile charts.

For children and adolescents aged 2–18 years, growth is monitored based on age, height and weight, using sex-specific BMI percentile charts. BMI is not a fixed measure in this age group but varies with normal growth, stage of puberty and sex. Either the United States Centers for Disease Prevention and Control (US-CDC) or WHO BMI percentile charts may be used, with the same chart used over time to allow for consistent monitoring of growth.

The US-CDC categorises overweight as between the 85th and 95th percentile and obesity as above the 95th percentile. The WHO categorises overweight as between the 85th and 97th BMI percentiles and obesity as above the 97th percentile. These categories are not diagnostic but contribute to the overall clinical impression of the child or adolescent being measured.

Recommendations and practice points	
Ask about and assess weight	
PP	For children aged 2 to 18 years, use a BMI percentile chart to monitor growth, either US-CDC or WHO. Ensure that the same chart is used over time to allow for consistent monitoring of growth.
PP	For children younger than 2 years of age, use WHO charts to monitor growth.
PP	Waist:height ratio of ≥ 0.5 may be used to guide consideration of the need for further assessment of cardiovascular risk in children.

For more information about growth charts, refer to Section 9.2 of the Obesity Guidelines.

⁵ Australian Bureau of Statistics 2013, Australian Health Survey: Updated Results, 2011-2012, cat. no. 4364.0.55.033, ABS, Canberra.

Ask and assess

Consider history and identify possible causes for overweight and obesity

The likelihood that childhood overweight and obesity will persist into adulthood increases with the age of the child and with the presence of parental obesity. One of the strongest predictors of a child's weight is the weight status of his or her parents. Initial assessment should determine current health problems and risks for future disease.

- History taking includes developmental history, physical and mental health (including family history of obesity), and current health behaviours.
- Clinical assessment includes pubertal stage, possible causes for overweight or obesity (eg hypothyroidism) and indicators of comorbidities (eg raised blood pressure, joint pain, gastrointestinal symptoms, insulin resistance, intertrigo, dental health).

Recommendations and practice points	
Ask about and assess weight	
PP	Assist children and adolescents to get help for disordered eating, poor body image, depression and anxiety and weight-related bullying where these are present.
 For more information about assessment, refer to Section 9.3 of the Obesity Guidelines.	

Advise and assist

Promote physical activity, dietary modification and healthy behaviours to families

Why is this important?

Although population data on health behaviours among children and adolescents is limited, national surveys suggest that energy intake levels are rising. While around two-thirds of children aged 9–16 years undertake the recommended amount of physical activity, the same proportion exceed the recommended maximum 2 hours of screen-based activities per day.

Early weight management gives children and adolescents the opportunity to learn positive lifestyle behaviours, and reduce their risk of comorbidities in the short and long term.

The most significant benefit of weight management in childhood and adolescence is in preventing overweight or obesity in adulthood.

How to promote healthy behaviours

What	Why	How
Take a sensitive approach to discussing weight	Weight may be a sensitive topic for children and adolescents, particularly if they have experienced weight- related teasing or bullying. Parents may not have an accurate understanding of what is considered 'overweight' or 'obese', or may be reluctant to raise the topic with healthcare professionals.	Focus communication on the benefits of healthy lifestyle behaviours for the whole family rather than on the weight of the child or adolescent.
Take a family- focussed approach	Parental involvement and role modelling are important — lifestyle interventions should target the whole family and support children and their families to make small, sustainable changes in behaviour, a few at a time.	A focus on family health behaviours rather than weight is a preferred approach. With adolescents, the level of family involvement will depend on age and maturity.
Plan for frequent contact	Weight management interventions have better outcomes when contact with a healthcare professional is frequent. The frequency of contact will depend on whether the child requires active weight management or monitoring of weight and weight-related comorbidities.	More frequent contact with a healthcare professional is generally more successful in the short term. In the longer term, the frequency of contact needs to be balanced against sustainability, cost and resources, and the individual's needs.

Advise and assist

Encourage healthy behaviours such as drinking water and reducing screen time

How should this be done?

In general, weight management for children and adolescents should focus on changing the health behaviours that influence weight — dietary behaviours and physical activity.

Current Australian guidelines on dietary and water intake, physical activity and sedentary behaviour should form the basis of advice given. The Australian Dietary Guidelines advise drinking plenty of water instead of sugary drinks like cordial, energy drinks, sports drinks, fruit drinks, vitamin waters and soft drink.⁶

‘Screen time’ — watching television or DVDs, or using a computer or hand-held video device — is an important factor in childhood obesity. In fact, the amount of screen time may be a more likely indicator of developing overweight or obesity than the level of physical activity.

ADVICE TO SUPPORT PHYSICAL ACTIVITY AND REDUCE SEDENTARY BEHAVIOUR IN CHILDREN

Explain that being active is good for overall health as well as being fun

Encourage both moderate and vigorous activities every day

Be active with children (e.g. playing games with balls, or walking or bike riding together)

Support children to include physical activity in daily activities (e.g. walking to school, household tasks)

Encourage children to be involved in team sports

Reduce inactive leisure time (e.g. limit screen-based activities)

Get the family involved in local activities (e.g. sports clubs)

Make use of local opportunities for physical activity (e.g. swimming pool, walking tracks)

Be a good role model by being physically active yourself

For more information about lifestyle interventions, refer to Section 11.3 of the Obesity Guidelines.

⁶ National Health and Medical Research Council (2013) *Australian Dietary Guidelines*. Canberra: National Health and Medical Research Council.

Advise and assist

ADVICE TO SUPPORT HEALTHY EATING IN CHILDREN

Take a family approach to improving nutrition and be a good role model

Ensure children have regular meals, including breakfast and snacks, in a sociable atmosphere

Whenever possible, eat meals as a family

Separate eating from other activities such as watching television or using the computer

Encourage children to listen to internal hunger cues and to eat to appetite

Have healthy foods readily available

Avoid being restrictive or controlling of your child's food intake

Explain the concept of foods that are appropriate 'often' or 'sometimes'

Avoid using foods as treats or rewards

Comfort children with attention, listening and affection instead of food

Encourage children to develop healthy ways of regulating emotions (i.e. that don't involve food)

Recommendations and practice points	
Advise	
PP	Early weight management gives children and adolescents the opportunity to learn positive lifestyle behaviours, and reduce their risk of obesity, diabetes and cardiovascular disease in adulthood.
Assist children and adolescents to manage weight through lifestyle interventions	
C	For children and adolescents, focus lifestyle programs on parents, carers and families.
B	For children and adolescents, plan weight management programs that involve frequent contact with health professionals.
B	For children and adolescents who are overweight or obese, recommend lifestyle change—including reduced energy intake and sedentary behaviour, increased physical activity and measures to support behavioural change.
PP	More frequent contact with a health professional is generally more successful in the short term. In the longer term, the frequency of contact needs to be balanced against sustainability, cost and resources and the individual's needs.
PP	Current Australian dietary and physical activity guidelines should be used as the basis of advice on dietary intake, physical activity and sedentary behaviour for children and adolescents.

 For more information about lifestyle interventions, refer to Section 11.3 of the Obesity Guidelines.

Advise and assist

Aim for weight maintenance — this is an acceptable goal

Why is this important?

Weight maintenance rather than weight loss is recommended for most children and many adolescents — maintaining weight during growth will allow a gradual decline in BMI. This approach avoids potential adverse effects in children who have not completed their pubertal growth spurt and should allow overweight and obese children to ‘grow into their weight’.

Referral may be required for postpubertal adolescents who have severe obesity and obesity-related comorbidities. In these circumstances, the management goal is weight loss rather than weight maintenance, and additional interventions may be warranted.

Recommendations and practice points	
D	For children who are managing overweight or obesity, advise that weight maintenance is an acceptable approach in most situations.

For more information about weight maintenance in children, refer to Section 11 of the Obesity Guidelines.

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Know when to refer

Why is this important?

An elevated BMI in childhood is associated with a high risk of obesity in adulthood. To optimise weight management, referral for further assessment and specialist assistance with lifestyle interventions may be warranted. Some children and adolescents may need specialist help for disordered eating, poor body image and depression and anxiety. Early weight management reduces the risk of comorbidities such as diabetes and cardiovascular disease in adulthood, as well as shorter-term obesity-related comorbidities in childhood such as sleep apnoea, orthopaedic problems and psychological distress.

When should this be done?

When growth is tracking well above the upper percentile on the appropriate chart, comorbidities are present or there are signs suggestive of endocrine or genetic disease, referral to a paediatrician or specialist clinic is required.

If psychosocial disturbance is present, referral to a specialist child and adolescent psychiatric service may be necessary.

Primary care health professionals have a continuing role in supporting lifestyle change. Referral for specialist care may be a consideration when there is no change in BMI percentile although health behaviours have apparently changed, there is a dramatic change in growth rate or new comorbidities are identified or symptoms of existing conditions do not improve.

The Obesity Guidelines discuss specific examples of when referral for specialist care may be a consideration in Section 12.2 (page 98).

Recommendations and practice points	
PP	Refer children and adolescents to hospital or paediatric services if: • they are aged between 2 and 18 years and have a BMI well above the 95th percentile on US-CDC growth charts or the 97th percentile on WHO charts • they are younger than 2 years, above the 97th percentile on WHO growth charts and gaining weight rapidly • they may have serious related comorbidities that require weight management (e.g. sleep apnoea, orthopaedic problems, risk factors for cardiovascular disease or type 2 diabetes, psychological distress) • an underlying medical or endocrine cause is suspected or there are concerns about height and development.

Assist

Consider specialist referral for postpubertal adolescents

For severe obesity and associated comorbidities in postpubertal adolescents, intensive interventions may be required. These interventions are delivered to this age group through specialist clinics, and should only be considered when lifestyle change alone has been unsuccessful and there is a reasonable expectation of benefit over risk.

Recommendations and practice points	
Assist postpubertal adolescents who require specialist intervention	
C	For postpubertal adolescents with a BMI > 40 kg/m ² (or > 35 kg/m ² with obesity-related complications), laparoscopic adjustable gastric banding via specialist bariatric/paediatric teams may be considered if other interventions have been unsuccessful in producing weight loss.
PP	Bariatric surgery should only be undertaken by a highly specialised surgical team within the framework of a multidisciplinary approach.

 For more information about adolescents and surgery, refer to Section 11.3.2 of the Obesity Guidelines.

Arrange

Plan for regular monitoring

Long-term monitoring of weight and obesity-related comorbidities, and family and child health behaviours is essential in monitoring and promoting the success of weight management in children and adolescents.

- Regular monitoring of weight status (ideally 3 monthly or more frequently) may be an appropriate component of approaches to weight management.
- Continuing review of family eating behaviours, sedentary time and physical activity habits and psychosocial factors is needed.
- Continuing monitoring of existing comorbidities and assessment for weight-related physical and mental health conditions is required throughout intervention and follow-up.

Recommendations and practice points	
Arrange monitoring and review	
PP	Regular monitoring of BMI (ideally 3 monthly or more frequently) may be an appropriate component of approaches to weight management.

For more information about monitoring, refer to Section 12.1 of the Obesity Guidelines.



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