



Clinical Practice Guidelines for the Management of Overweight and Obesity for Adults, Adolescents and Children in Australia

Draft Guidelines
November 2024



Australian Government
**Department of Health
and Aged Care**

Title

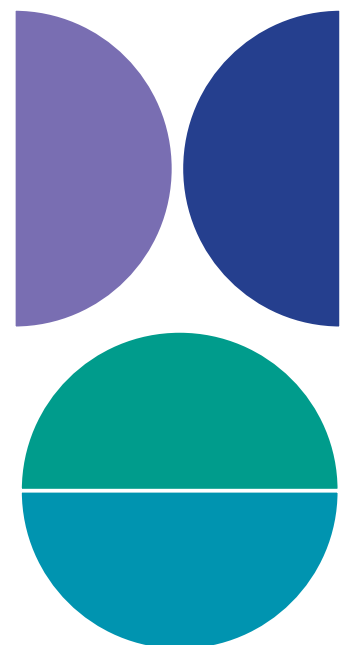
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PLAIN LANGUAGE SUMMARY

This plain language summary explains the *Clinical Practice Guidelines for the Management of Overweight and Obesity for Adults, Adolescents and Children in Australia* (the Guidelines).

Overweight and obesity affect two thirds of adults in Australia. A quarter of children and teenagers are also affected. Overweight and obesity mean having too much body fat. Overweight and obesity increase the risk of health problems. These problems include heart disease, type 2 diabetes, and some cancers. Overweight and obesity can affect everyday activities. They can make moving difficult and cause sleeping problems. Some people are treated unfairly because of their weight. Sometimes this unfair treatment happens in healthcare. The effects of overweight and obesity differ between people.

People may choose to seek help from healthcare providers to manage their weight. The Guidelines will help healthcare providers when caring for these people.

The Guidelines are based on scientific evidence. A review of research looked at ways to manage overweight and obesity. The review covers changes people can make in their everyday lives, weight-loss drugs, and surgery. The everyday changes people can make focused on diet, physical activity, sleep, thinking about weight management, and family life. The main purpose of the review was to find out how well these approaches work. The review also looked at the experiences of people using these approaches.

Different groups of people may need help in different ways. People's needs can vary due to age, culture, beliefs, ability, health conditions, and pregnancy. The Guidelines include advice for four age groups. These groups are children, teenagers, young and middle-aged adults, and older adults. The Guidelines provide advice for:

- Aboriginal and Torres Strait Islander people
- Culturally and linguistically diverse people
- People with disability
- People with a mental health condition
- People with an eating disorder
- Pregnant and post-partum women.

The Guidelines have advice on changes people can make in their everyday lives, weight-loss drugs, and surgery. The Guidelines do not recommend one approach more than another. Healthcare providers need to tailor the advice to each person and situation.

EXECUTIVE SUMMARY

The prevalence of many chronic conditions is higher in people **living with overweight or obesity**. There are long- and short-term effects of overweight and obesity during childhood and adolescence. Young and middle-aged adults with overweight or obesity are at a higher risk of morbidity and mortality from a range of chronic conditions compared to adults of a healthy weight.

Healthcare professionals can use the **5As framework** to guide management of health interventions for people living with overweight or obesity.

1. ASK



“Would it be all right if we discussed your weight?”

Asking permission

- Shows compassion and empathy
- Builds patient-provider trust

2. ASSESS



Once the person living with overweight or obesity gives permission, assessment must be undertaken in a sensitive and non-judgmental way. Refer to Guidance notes for Assessment ([Appendix B](#))

History

Examination

Clinical Investigations

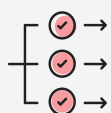
3. ADVISE



There are many different **treatment approaches** that may be used in the treatment of overweight and obesity, either alone or in combination.



4. ASSIST



Collaborating on a **tailored treatment plan**. Plans should be developed in collaboration with the person living with overweight or obesity with the principles of person-centredness at the forefront.

5. ARRANGE



Making plans for **appropriate assessment, management and follow-up** is an essential step. Referral to other health professionals should be considered.

Recommendations have been developed for population groups to support healthcare professionals in guiding the treatment journey for their patient. Populations include children, adolescents, young and middle-aged adults, and older adults living with overweight or obesity. Specific recommendations for the following specific sub-group populations were also developed: Aboriginal and Torres Strait Islander people, culturally and linguistically diverse people, and those living with disability, an eating disorder or a mental health condition and women during pregnancy and post-partum. Evidence for the following interventions for the clinical management of overweight and obesity were identified: nutrition, physical activity, psychology, family-based, sleep, pharmacology, and bariatric surgery, either alone or in combination. Please refer to Table 1 for summary of recommendations.

Table 1: Recommendation summary by population and intervention type

	Age-group populations				Sub-group populations (any age group)					
	<u>Children</u>	<u>Adolescents</u>	<u>Young and middle-aged adults</u>	<u>Older adults</u>	<u>Aboriginal and Torres Strait Islander people</u>	<u>Culturally and linguistically diverse people</u>	<u>People with disability</u>	<u>People with a mental health condition</u>	<u>People with an eating disorder</u>	<u>Pregnant and post-partum women</u>
Nutrition interventions alone	Δ	-	Δ	Δ	-	-	Δ	-	-	-
Dietary approaches with no specific daily energy intake goal	Δ	-	★★★★★	Δ	-	-	Δ	-	-	-
Nutrition intervention with a daily energy intake goal	-	-	☆★★★★	Δ	-	-	-	-	-	-
Nutrition intervention with a daily energy intake goal followed by dietary approaches with no specific daily energy intake goal	-	-	Δ	-	-	-	-	-	-	-
Physical activity interventions alone	Δ	Δ	☆★★★★	Δ	-	-	-	-	-	-
Aerobic exercise	Δ	-	★★★★★	-	-	-	-	-	-	-
Strengthening activities	-	-	Δ	Δ	-	-	-	-	-	-
Combined aerobic and strengthening activities	-	-	☆★★★★	☆★★★★	-	-	-	-	-	-
Nutrition and physical activity interventions	Δ	☆★★★★	Δ	Δ	-	-	Δ	Δ	Δ	-
Nutrition, physical activity, and psychological interventions	Δ	Δ	Δ	☆★★★★	-	-	-	☆★★★★	Δ	-
Nutrition, physical activity, and family-centred interventions	Δ	☆★★★★	☆★★★★	-	-	-	Δ	Δ	-	-
Nutrition, physical activity, and sleep interventions	-	-	Δ	-	-	-	-	-	-	-
Multimodal - four or more lifestyle interventions	☆★★★★	☆★★★★	☆★★★★	-	-	-	-	Δ	-	-
Nutrition and family-centred interventions	Δ	-	Δ	-	-	-	-	-	-	-
Nutrition and psychological interventions	-	-	Δ	-	-	-	-	-	-	-
Physical activity and psychological interventions	-	-	Δ	-	-	-	-	-	-	-
Nutrition and sedentary behaviour interventions	-	-	-	Δ	-	-	-	-	-	-
Pharmacological interventions	-	★★★★★	★★★★★	-	-	-	-	-	-	-
Bariatric surgery intervention vs medical treatment	-	★★★★★	☆★★★★	-	-	-	-	-	-	-
Bariatric surgery plus adjunct therapy intervention vs bariatric surgery plus usual care/placebo	-	-	☆★★★★	-	-	-	-	-	-	-
Endoscopic surgery intervention versus medical treatment	-	-	Δ	-	-	-	-	-	-	-
Population-level consensus statement	-	-	-	-	✓	✓	-	-	-	✓

- No recommendation is provided due to lack of available data for this population/subgroup and intervention type.

* Recommendations are provided according to age group. Additional recommendations are provided for the population sub-groups.

Table legend

☆☆☆☆	Strong recommendation against the intervention
★☆☆☆	Conditional recommendation against the intervention
☆☆☆☆	Conditional recommendation for either the intervention or the comparator
☆☆☆☆	Conditional recommendation for the intervention
★★★★	Strong recommendation for the intervention
△	Consensus statement for the intervention
✓	Population-level consensus statement

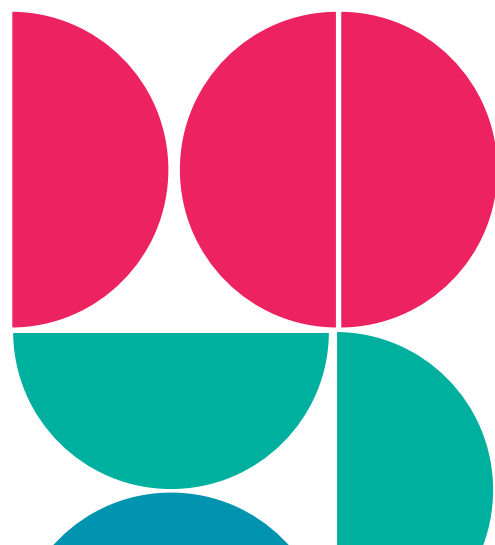
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GLOSSARY OF TECHNICAL TERMS, ACRONYMS, AND ABBREVIATIONS

Adolescent	Aged 12 to <18 years
BMI	Body mass index
Children	Aged 2 to <12 years
DASH	Dietary Approaches to Stop Hypertension
GDC	Guidelines Development Committee
GRADE	Grading of Recommendations Assessment, Development, and Evaluation
NHMRC	National Health and Medical Research Council (Australia)
Older adult	Aged \geq 65years
PBS	Pharmaceutical Benefits Scheme
TGA	Therapeutic Goods Administration
TIS	Translating and Interpreting Service
WC	Waist circumference
WHO	World Health Organization
Young and middle-aged adults	Aged 18 to <65 years

INTRODUCTION

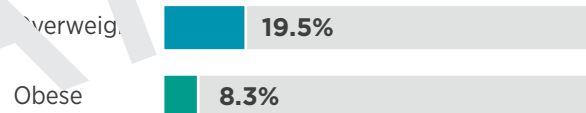
In 2022, the Australian Government Department of Health and Aged Care commissioned an update of the 2010 Clinical Practice Guidelines for the Management of Overweight and Obesity for Adults, Adolescents and Children in Australia, last updated in 2013 (1). Overweight and obesity refers to excessive fat accumulation. Obesity is a chronic condition that increases the risk of poor health outcomes (see Box 1) (2). Not all individuals have the same level of risk, with body composition, fat distribution and adipose tissue function modifying the risk of developing secondary chronic conditions (3). The most recent Australian data (4) identified that the prevalence of overweight and obesity continues to increase. Among adults (18 years and over), 34.0% live with overweight, while 31.7% live with obesity. In children and adolescents aged 5-17 years, 19.5% live with overweight, and 8.3% live with obesity (see figure below) (4). There were similar rates of overweight and obesity in boys and girls (i.e. 29.2% and 26.1% respectively) (4).

Prevalence of overweight and obesity in Australia (2022)

ADULTS (18 years and over)



CHILDREN (5-17 years)



In addition to the high prevalence across the lifespan, some population groups experience additional considerations in relation to their weight. These include people living with an eating disorder (5, 6), mental health conditions (7), a disability (8), Aboriginal and Torres Strait Islander people (9), and people from culturally and linguistically diverse backgrounds (10).



Box 1 Chronic conditions associated with overweight or obesity

The prevalence of many chronic conditions is increasing in people living with overweight or obesity. There are long- and short-term effects of overweight and obesity during childhood and adolescence. Overweight and obesity in childhood frequently progresses to adolescence and predict a greater risk of disease morbidity and mortality during adulthood (11, 12). During childhood and adolescence, the presence of overweight or obesity results in elevated disease biomarkers. For example, children and adolescents with obesity have a greater prevalence of dyslipidaemia compared to those of a healthy weight; and high-density lipoprotein cholesterol is lower in children with overweight or obesity than in children of a healthy weight (13, 14). Children and adolescents with overweight or obesity can have significantly higher systolic and diastolic blood pressures compared with young people of a healthy weight (13).

Young and middle-aged adults with overweight or obesity are at a higher risk of morbidity and mortality from a range of chronic conditions compared to adults of a healthy weight (15-21). When compared to healthy weight adults, those living with overweight or obesity have increased risk of developing several types of cancer, including thyroid (15), kidney (16), gallbladder (17, 18), liver (19), gastroesophageal (20) and colorectal (21) cancers. Longitudinal studies report that young and middle-aged adult women experiencing overweight or obesity have a higher risk of miscarriage and lower rate of pregnancy and live birth post-in vitro fertilisation treatment (22). Young and middle-aged men with overweight and obesity have increased risk of infertility, when compared with those of a healthy body weight (23, 24). Young and middle-aged men living with overweight or obesity have an increased risk of musculoskeletal pain, physical disability, complications after hip and knee arthroplasty (25) and greater risk of depression or symptoms of depression (26). In addition to reduced prevalence of the conditions described above, weight loss also results in improvements in health biomarkers, and mental health indicators (27).

In older adults there is a U-shaped relationship between BMI and mortality, with the bottom of the curve falling in the ranges that classify people as overweight or the lower end of obesity (28). The apparent protective effects for older adults who are living with overweight or obesity is known as the obesity paradox (29). In older adults, greater lean mass in those with obesity, compared to those without obesity, may explain this paradox (30, 31). The risk of sarcopenia is lower among those with obesity than those without obesity. Older adults with sarcopenic obesity are known to have increased prevalence of all-cause and cardiovascular disease-related mortality, cognitive impairment, depression, hypertension, dyslipidaemia, diabetes mellitus, metabolic syndrome, arthritis, functional limitations, falls, and lung diseases (31). In comparison, older people with obesity (but not sarcopenia) may have a greater risk of hypertension, hyperlipidaemia, dyslipidaemia, diabetes mellitus, metabolic syndrome, arthritis, falls, and lung diseases (31).

The evidence synthesis undertaken to inform this 2025 iteration of the Guidelines has been revised from the approach used in the past due to changes to Guideline development processes in Australia (e.g. the need to adhere to procedures and requirements for meeting the NHMRC standards for clinical practice guidelines (32, 33), including the application of the internationally recognised GRADE Evidence to Decision framework for health system and public health decisions (34), and NHMRC Guideline registration and approval). The evidence synthesis has been reframed to consider the benefits and impacts of weight maintenance in addition to weight reduction, and the experiences of people living with overweight or obesity.

SCOPE OF THE GUIDELINES

These Guidelines are to support healthcare professionals to provide evidence-informed treatment recommendations for Australian adults, adolescents, and children living with overweight or obesity. They will also be of interest to other professionals, including relevant not-for-profit organisations who have contact with people living with overweight or obesity. The use of the Guidelines will vary depending on the role and scope of practice of different professional groups, as well as the setting in which care is provided. The Guidelines will be of interest to consumers and community organisations.

Population prevention and broader public health aspects of obesity treatment are outside the scope of these Guidelines. These perspectives are considered within a range of government policies such as the National Obesity Strategy 2022-2032 (a 10-year framework for action to prevent, reduce, and treat overweight and obesity prevalence in Australia) (35) and the National Preventive Health Strategy 2021-2030 (36). There is also specific guidance on obesity management included in the Clinical Practice Guidelines for Pregnancy Care (2020) (37). There are several other relevant national guidelines currently in development, including the Review of the Australian Dietary Guidelines and both the Australian Physical Activity Guidelines for Adults and, for Older Australians also currently under review. As socio-economic factors are important drivers of obesity, a systems-wide approach to addressing wider determinants of health is needed, for example, addressing education, employment, housing, infrastructure, commercial, and early childhood education and care.

The WHO provides international guidance on the clinical management of overweight and obesity in documents including Health Service Delivery Framework for Prevention and Management of Obesity (38). The WHO have a target of zero growth in the prevalence of obesity between 2010 and 2030 to align with the United Nations Sustainable Development Goals (39) target 3.4: to reduce by one third premature mortality from non-communicable diseases by 2030.

Consistent with the international literature (40), the updated Guidelines provide evidence, where available, for a wider variety of populations than in previous Guidelines. For example, specific guidance has been developed for older adults in this version of the Guidelines. Over the past 30 years the percentage of adults aged 65 years and over in Australia has increased from 11% to 17%, to over 3 million adults in this age category (41).

Since the release of the previous Guidelines in 2013, the narrative surrounding people living with overweight or obesity has evolved. The reframing that continues to occur acknowledges

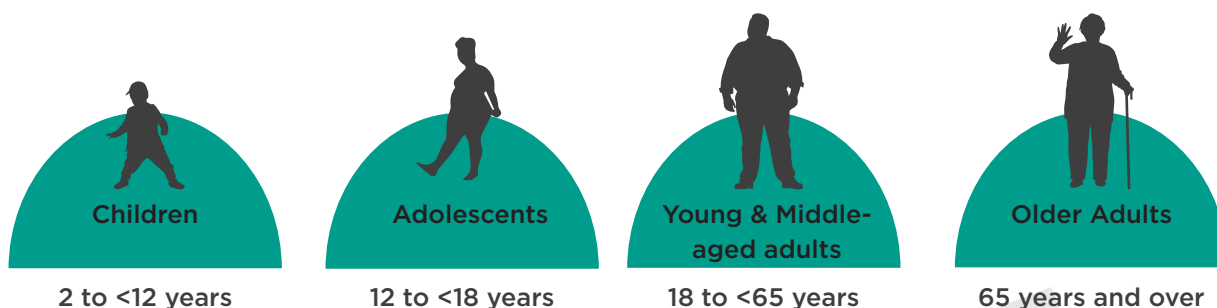
“that the solutions lie across the whole of society, moving away from a narrative of blame and individual responsibility, which promotes stigma, and focusing on treatment and prevention with an equity and systems lens” (42).

Lived experience of people with obesity has gained prominence in informing development of these Guidelines (43). Themes of

“the development of obesity; a life limited; stigma, judgment, shame, and blame; treatment and; experiences of specific or minority groups” (43)

tell of the person’s perspectives. The updated Guidelines acknowledge the existence of weight stigma and seeks to position the individual’s experience at the centre of care by engaging lived experience perspectives throughout the guideline development process.

Guidelines have been developed for people living with overweight or obesity in the following populations:



Population subgroups for whom specific information may be required (such as risks or treatment considerations) include:



Recommendations have been developed to reflect the evidence for effectiveness of a treatment modality, and to present other considerations when choosing a weight management intervention for the person living with overweight or obesity. Studies eligible for the evidence synthesis were required to have outcome measures at 12 months post study commencement. This limited the body of evidence for some interventions, including pharmacological interventions.

The Guidelines do not prioritise available treatments within individual weight management interventions (e.g., specific pharmacological interventions) but rely on healthcare professionals to interpret the evidence and apply in context of individual needs in collaboration with the individual. As such, no prescriptive clinical pathway or algorithm has been developed. While recommendations for weight management in people with eating disorders are provided, specific advice relating to the treatment of the eating disorders themselves is outside the scope of these Guidelines (44). Further detail on the evidence available for each treatment modality can be found in the Technical Report.

EXPERIENCE OF PEOPLE LIVING WITH OVERWEIGHT OR OBESITY

Weight stigma (45) is embedded across Australian society, including within existing health policy and practice (46) and is known to result in avoidance of, or delays in, receiving treatment, a delay in preventive care, and an increased risk of all-cause morbidity and mortality (47, 48). These Guidelines acknowledge the presence and considerable negative impact of weight stigma and seek to raise healthcare professionals' awareness of the perspectives and experiences of people living with overweight or obesity (45-49). People living with overweight or obesity frequently experience weight stigma when receiving care across the spectrum of healthcare settings and professionals.

Training, self-reflection, and feedback about weight bias are all strategies for healthcare professionals that have been shown to decrease stigma (50). Several effective weight stigma reduction strategies for healthcare have been identified (51), including education focused on weight-inclusive approaches and empathy evoking interventions, to ensure that the health workforce is trained to deliver care that minimises weight stigma and judgement (50, 51). In Australia, the Weight Issues Network and The Obesity Collective provide resources relating to the lived experience of overweight and obesity, including how weight stigma and weight biases are a significant barrier to effective healthcare (e.g. [Weight Stigma Lived Experience](#) and, [Stigma related resources](#)).

Weight stigma is frequently experienced during treatment specifically for weight management. Children and adolescents living with overweight or obesity and participating in weight management programs describe feelings of depression, being bullied, and poor body image (52-54). Adults living with overweight or obesity participating in weight management programs have described negative social, romantic, economic, and health-related consequences associated with their weight (55-57). Weight stigma among healthcare professionals can lead to inappropriate, delayed or denied health care (58). Weight stigma may contribute to the increasing prevalence of overweight and obesity (59). It is therefore of the utmost importance that healthcare professionals improve their understanding of weight stigma and their personal biases that may impact patient care in order to effectively implement the recommendations within these Guidelines.

THE PATIENT JOURNEY IN OVERWEIGHT OR OBESITY TREATMENT

Overweight and obesity are complex conditions that require a person-centred approach to treatment. Person-centredness involves sharing power and responsibility, a strong therapeutic relationship, seeing the patient as a person, and a holistic approach (60). In Australia, the journey of a patient for weight management often begins in primary care. A person's journey through the healthcare system in Australia for weight management can be very challenging (61) so these Guidelines recommend a central role for the primary care team to support the person to navigate the different treatment options. In addition, a range of other specialist healthcare professionals may be consulted along the care pathway.

As a chronic condition, the assessment, diagnosis, and treatment of obesity requires a systematic approach. Often the 5As framework (62) is used by healthcare professionals to guide the management of health interventions for overweight and obesity. Therefore, these have been incorporated into the recommendations presented below.

HOW TO USE THESE GUIDELINES

The GRADE Evidence-to-Decision framework was used by the Guideline Development Committee to determine the strength and direction of a Recommendation (for or against an intervention) and followed structured consideration of desirable effects, undesirable effects, balance of effects, certainty of evidence, resource requirements and cost effectiveness, equity, acceptability and feasibility. The strength of a Recommendation was determined using the framework's balance of effects and certainty of evidence. Recommendations are categorised as defined in Table 2.

Table 2: Categories of the guideline recommendations

SR	Strong Recommendation: A strong recommendation was given when there was moderate to high certainty evidence that also showed benefits clearly outweighed reported harms.
CR	Conditional Recommendation: A conditional recommendation was given when there was low certainty evidence that suggested benefits outweighed harms.
CS	Consensus Statement: A consensus statement was given where there was very low certainty evidence, or where evidence was absent or insufficient, and/or if there was an unclear balance between benefits and harms. The statements were made based on the Guideline Development Committee's expert opinion and formulated by a consensus process.
PP	Practice Points: A practice point was developed by the Guideline Development Committee to guide the practical application of the evidence. These points were formulated where important issues and additional considerations arose from discussion of evidence-based or consensus recommendations.

Recommendations are also assigned a strength rating, and certainty of evidence rating. The GRADE Evidence-to-Decision framework recommendation strength rating system is based on the GRADE Handbook, as shown in Table 3 below.

Table 3: GRADE Evidence-to-Decision framework recommendation strength rating system

Symbol representation	GRADE handbook definition of recommendation strength
★☆☆☆☆	Strong recommendation against the intervention
★★☆☆☆	Conditional recommendation against the intervention
★★★☆☆	Conditional recommendation for either the intervention or the comparison
★★★★☆	Conditional recommendation for the intervention
★★★★★	Strong recommendation for the intervention
△	Consensus statement for the intervention

The strength of certainty of evidence was rated using the system shown in Table 4. Certainty of evidence was based on risk of bias, inconsistency (heterogeneity), indirectness (PICOT and applicability), imprecision, other considerations (including publication bias, large effect, plausible confounding factors).

Table 4: GRADE certainty of the evidence rating system

Strength of evidence	GRADE handbook definition of recommendation strength
High	We are very confident that the true effect lies close to that of the estimate of the effect.
Moderate	We are moderately confident in the effect estimate: The true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different.
Low	Our confidence in the effect estimate is limited: The true effect may be substantially different from the estimate of the effect.
Very low	We have very little confidence in the effect estimate: The true effect is likely to be substantially different from the estimate of effect.

Further detail regarding the methods can be found in [Appendix A: Developing the Guidelines](#) and the accompanying Technical Report.



RECOMMENDATIONS

Recommendations have been developed for population groups to support the healthcare professional in guiding the treatment journey for their patient. Evidence for the following interventions for the management of overweight and obesity were identified: nutrition, physical activity, psychology, family-based, sleep, pharmacology, and bariatric surgery, either alone or in combination. The specific interventions (e.g. type of nutrition intervention or pharmacological treatment) are summarised within each recommendation and can also be found in the relevant Evidence to Decision framework in the Technical Report. The recommendations are presented in a series of tables. For a number of interventions in specific population groups there was insufficient evidence to develop a recommendation. In these cases, we suggest referring to the general population guideline for the relevant age group, with appropriate clinical judgement. A summary of the findings is presented in [Table 1](#).

The following intervention types were considered in these guidelines.

NUTRITION INTERVENTIONS

A diverse range of nutrition interventions have been evaluated to support weight loss and subsequent maintenance. The nutrition interventions identified through this evidence review were primarily either dietary approaches with no specific daily energy intake goal, or including a pre-specified daily energy intake goal. These may be delivered through strategies including hypocaloric diets and intermittent energy restriction. Dietary modifications may also include altered macronutrient composition (e.g. low carbohydrate, low fat, or higher protein intakes), and dietary patterns (e.g. the [Australian Dietary Guidelines](#), DASH, or Mediterranean diet). Multiple nutritional education approaches have also been implemented as an adjunct to dietary change, including dietitian-supported behaviour modification strategies, web-based coaching programs, and other digital health/technological interventions.

PHYSICAL ACTIVITY AND SEDENTARY BEHAVIOUR INTERVENTIONS

Physical activity, including exercise, can play a central role in the management of obesity and its associated comorbidities. The physical activity type, time and intensity all influence the health outcomes of a physical activity intervention, including its effect on weight maintenance and weight loss. Physical activity interventions evaluated to support weight loss and subsequent maintenance typically comprise regular aerobic or strengthening activities alone, or in combination. Physical activity and sedentary behaviour have separate effects on health. Common sedentary behaviours include TV viewing, video game playing, computer and other devices use (collectively termed 'screen time'), and driving automobiles. As such, despite meeting physical activity recommendations (e.g. Australian Physical activity and exercise guidelines) people may also engage in high amounts of sedentary behaviour.

PSYCHOLOGY INTERVENTIONS

Psychological interventions for weight loss and maintenance have been developed to support the complex and multifaceted nature of weight management. The scope of psychological interventions for weight management is broad and encompasses various strategies aimed at addressing the psychological influences that contribute to weight gain and obesity (e.g. Cognitive Behavioural Therapy, motivational interviewing). These interventions are designed to modify behaviours, thoughts, emotions, and motivations associated with dietary behaviours and physical activity to support long-term weight loss and wellbeing. In addition, psychological interventions may involve stress management techniques, body image improvement, social support, and relapse prevention strategies.

FAMILY-BASED INTERVENTIONS

The home environment is recognised as a particularly important contributor to overweight and obesity, particularly in children and adolescents. Family-based interventions, including parent-only interventions, have been tested as a strategy to support weight management in children living with overweight or obesity. This approach may use a range of parent-targeted strategies including education, role modelling and child behaviour management to support improvements in health behaviours of children and adolescents.

SLEEP INTERVENTIONS

Sleep interventions may seek to lengthen sleep duration, improve sleep quality, or adjust irregular sleep timing. These interventions may impact on dietary intakes or eating behaviour, physical activity, and engagement in screen time, in turn leading to weight change. Sleep related strategies have been suggested as an approach for children, where earlier bedtime and longer sleep duration may support improved eating behaviours and change in body composition.

PHARMACOLOGICAL INTERVENTIONS

The use of pharmacological interventions for obesity treatment is rapidly evolving. In the past decade, the considerable progress in the development of anti-obesity medications has led to an expanding number of trials investigating the efficacy and safety of a range of pharmacological interventions. The Therapeutic Goods Administration has approved several pharmacological interventions for the management of overweight and obesity in Australia. Recommendations have been developed for pharmacological interventions approved for weight management (Semaglutide, Liraglutide, Orlistat, Phentermine, Tirzepatide and Naltrexone plus Bupropion). There were also a number of pharmacological interventions not currently approved for weight management. Further information on these can be found in the Technical Report.

Evidence continues to emerge for current pharmacological interventions and those in development for obesity management, therefore it is essential that healthcare professionals remain up to date with new evidence as it is reported.

SURGICAL INTERVENTIONS

Metabolic bariatric surgery is a treatment option for clinically moderate to severe obesity. The most common procedures performed worldwide, and in Australia, are sleeve gastrectomy, Roux-en-Y gastric bypass, and one anastomosis gastric bypass. Biliopancreatic diversion procedures are less frequently performed. All metabolic bariatric surgical procedures induce weight loss through early satiety and prolonged satiation. There is emerging interest in endoscopic treatments, but few are widely used in Australia. With the emergence of more effective pharmacological interventions, the role of surgery may change over the coming years, and this is an area that needs to be actively researched including the role of combining medical and surgical therapies.

General principles of overweight and obesity management are summarised in [Table 5](#). The remaining tables comprise age-specific guidance, the Recommendations and Practice Points. Summary tables for children aged 2 to <12 years ([Table 6](#)) adolescents aged 12 to <18 years ([Table 7](#)), young and middle-aged adults aged 18 to <65 years ([Table 8](#)) and older adults aged 65 years and above ([Table 9](#)) are presented below. Guidance for the following sub-group populations is also presented; Aboriginal and Torres Strait Islander people ([Table 10](#)), people from culturally and linguistically diverse backgrounds ([Table 11](#)), people with disability ([Table 12](#)), people with an eating disorder ([Table 13](#)), people with a mental health condition ([Table 14](#)) and pregnant and post-partum women ([Table 15](#)). The Appendices ([Appendix B: Guidance notes for Assessment](#); [Appendix C: Tips for supporting children and adolescents in healthy habits](#); [Appendix D: Pharmacotherapy for the treatment of obesity](#)) contain specific guidance to support the recommendations.



Table 5: General principles of overweight and obesity management

No.	Type	Recommendation	GRADE Evidence-to-Decision framework recommendation strength rating; GRADE certainty of evidence
1.1		General principles for the management of overweight or obesity	
Ask: Seek permission with compassion and empathy			
1.1.1.		Ask for permission to discuss the person's weight with empathy and compassion: "I understand that this can be a sensitive topic. Would it be alright if we discussed your weight as one potential factor contributing to your health problem/s?". This question also acknowledges the complex aetiology of many physical and mental health problems rather than having a singular focus on weight.	
1.1.2.		Recognise that maintaining or reducing body weight may not be appropriate for every person. Weight neutral approaches with a focus on other health measures and health behaviours may better support people whose preference is not to set a weight reduction goal.	
1.1.3.		Adopting a person-centred approach, begin with the person's concerns and understanding of their problem. For example, "What concerns do you have about your health, including your mental health?" and "What do you think would help in addressing your health problem/s?"	
1.1.4.		Healthcare professionals should acknowledge that the person may have experienced weight bias and discrimination and recognise their own potential weight bias.	
1.1.5.		Healthcare professionals should undertake professional development in the area of weight bias and stigma (such as The Obesity Collective's module Understanding the Science and Reality of Obesity for Better Patient Care).	
Assess: Considerations for assessment			
1.1.6	PP	Approach the assessment in a non-stigmatising way that avoids simplistic explanations of obesity.	
1.1.7	PP	Ensure that the clinic equipment (e.g., weighing scales, blood pressure cuffs, chairs, examination couches) is properly sized for larger bodies in all clinical areas.	
1.1.8	PP	Never weigh people in front of others; instead, place weighing scales in a private area such as the consultation room.	

1.1.9	PP	Offer a comprehensive assessment that acknowledges the complex biopsychosocial factors contributing to weight and its management to counter stigmatising attitudes (e.g., perceptions of blame).
1.1.10	PP	<p>History: Assess weight trajectory and previous weight management. Understand food habits, physical activity, sleep patterns, readiness to change and potential barriers.</p> <p>Consider potential contributing factors to weight, including medical conditions and medications, as well as the health and functional impact of excess weight, and the potential presence of eating disorders.</p> <p>Consider the person's living environment, potential social support and financial situation.</p>
1.1.11	PP	Many obesity treatments are expensive to access. Consider the patient's context when developing a management plan.
1.1.12	PP	<p>Examination: Seek permission to examine the person. Examination should include:</p> <ul style="list-style-type: none"> • Weight, height, waist circumference. • Measurement of blood pressure • Assessment for signs of complications and secondary causes of obesity. • Blood tests should include consideration of cardiovascular risk factors, metabolic dysfunction-associated steatotic liver disease (MASLD), and others as appropriate for the individual. <p>Compare measurements to relevant BMI cut-points or percentile charts (please refer to Appendix B: Guidance notes for Assessment).</p>
1.1.13	PP	<p>Consider the role of binge eating. Overweight or obesity can be a consequence of binge eating (63). Yet fewer than one in four people with eating disorders seek treatment and, even for those that do there is often a delay of many years before treatment is sought. Screening of eating disorders is therefore of high importance. There are several brief self-report questionnaires (e.g. the 7-item Binge Eating Disorder Screener) that can be administered to screen for the possible presence of an eating disorder. Follow up any responses suggesting the possible presence of an eating disorder with further assessment.</p>
1.1.14	PP	Discuss with the person any comorbidities that are identified and arrange a holistic management plan. This should include goals of care that are developed in collaboration with the person.
1.1.15	PP	A tool used to assess overall health and function is the Edmonton Obesity Staging System for adults, and its paediatric version, Edmonton Obesity Staging System for Pediatrics . The mental, metabolic, and physical impacts experienced by an individual living with overweight or obesity are considered by these frameworks.

1.1.16	PP	For adults, a person's suitability to undertake physical activity should be assessed prior to commencement of any physical activity intervention using the Exercise & Sports Science Australia Adult Pre-Exercise Screening System (See Appendix B: Guidance notes for Assessment).
1.1.17	PP	For children and adolescents, healthcare professionals should use the Exercise & Sports Science Australia Pre-Exercise Screening System for Young People (PSS-YP) Screening Tool: Parents (5-15 years) or Pre-Exercise Screening System for Young People (PSS-YP) Screening Tool: Young Person (16-17 years) prior to commencement of a physical activity intervention (See Appendix B: Guidance notes for Assessment).
1.1.18	PP	The person's severity of obesity, associated mental and physical health problems and their goals for care should guide the type and intensity of treatment.
Advise: Specific guidance population by population		
1.1.19	Please refer to each individual population section below for treatment guidelines	
Assist: Collaborate on a person-centred plan		
1.1.20	PP	Using a person-centred approach, collaborate on a tailored treatment plan. Consider the person's description of their journey including their identity, self-worth and beliefs about body shape and health. Integrate the medical history, patient story and context to help set the direction and treatment priorities.
1.1.21	PP	Ensure the tailored treatment plan incorporates the person's preferences, fitness level, health status and lifestyle.
1.1.22	PP	Support the person to achieve realistic goals through acquiring the motivation, skills, confidence and supports (social and/or environmental) for behaviour change. Strategies include looking back on the person's journey (what had previously worked and not worked) and consider biopsychosocial barriers and how these can be managed. Financial barriers can cause significant problems with access to treatment and this needs to be acknowledged in any treatment plan that is developed.
1.1.23	PP	Education and resources should be provided in formats and languages that are suitable for the person. These should take into account their age, life stage, gender, cultural background, ethnicity, socioeconomic status, food security (such as access to food, refrigeration and cooking facilities), and any additional specific communication needs and literacy level (e.g. learning disabilities, physical or cognitive impairments).

1.1.24	PP	Personalise the approach by considering any opportunities for change identified in the consultation/s.
1.1.25	PP	Aim to address internalised weight stigma and other misconceptions about obesity as relevant.
1.1.26	PP	Reframe negative views that are often weight-centric to be positive towards health benefits that can be gained regardless of weight loss.
1.1.27	PP	Focus on the person's goals of treatment, and identify the tools or resources needed that support the person with overweight or obesity to achieve long-term success. Expectations of weight loss should be realistic; goals should be sustainable over the long term (i.e. years to decades).
Arrange: Appropriate assessment, management and follow-up		
1.1.28	PP	Make plans for appropriate assessment, management and follow-up. Referral to other healthcare professionals should be considered.
1.1.29	PP	Consider the geographical and cost implications for many of the interventions, and eligibility for Chronic Disease Management Items.
1.1.30	PP	Arrange appropriate management for people with disordered eating, poor body image, depression and anxiety, weight-related bullying and other mental health issues where these are present. Note that some people will be at high risk for self-harm and suicide. Screening for high-risk situations should be prioritised.
1.1.31	PP	Ensure appropriate communication and handovers are given between treating teams in hospital/tertiary settings to the ongoing primary care team.
1.1.32	PP	Adolescents and youth who require ongoing tertiary care should receive support to transition between adolescent/ youth services to adult services while ensuring good communication with the primary care team. Healthcare professionals should identify such people in sufficient time to allow appropriate planning to occur in advance of them becoming ineligible due to their age.
1.1.33	PP	Transitioning through the healthcare system should take place with appropriate collaboration between the person, their family/ carers, and other stakeholders, and should be holistic and include education and support.

PP, Practice Point

SUMMARY OF GUIDELINES BY AGE

Table 6: Overweight or obesity management in children (2 to <12 years)

CHILDREN (2 TO <12 YEARS)

No.	Type	Recommendation	GRADE Evidence-to-Decision framework recommendation strength rating; GRADE certainty of evidence
2.1		General principles for overweight or obesity management in children	
2.1.1	PP	The focus for many children is on weight maintenance which is supported by the Australian Dietary Guidelines and the Australian 24-hour Movement Guidelines .	
2.1.2	PP	A range of approaches may be effective with a focus on the parents/carers as the agent of change. These approaches include a combination of nutrition, physical activity and family-centred or psychological interventions.	
2.1.3	PP	Early intervention gives families and children the opportunity to embed healthy behaviours into daily routines. Discuss the health benefits of obesity management. Benefits include improved cardiorespiratory fitness, blood pressure, increased HDL-C levels and decreased biomarker indicators of metabolic dysfunction-associated steatotic liver disease. Additionally, a reduction in mental health symptoms (depression, anxiety and eating disorder problems including bulimia, binge eating and emotional eating) may also be experienced.	
2.1.4	PP	Healthy habit tips for children can be found in Appendix C: Tips for supporting children and adolescents in healthy habits .	
2.1.5	PP	Interventions need to be tailored to the developmental stage of the child.	
2.1.6	PP	Strategies that incorporate inclusion, engagement and awareness of weight stigma and sensitivities are needed.	
2.1.7	PP	Choice of treatment should consider individual needs and preferences, and additional factors including obesity related comorbidities, ethnicity, socioeconomic status, social history, family medical history, mental health and wellbeing, and special educational needs and disabilities. The financial situation of the family can also impact their ability to access management.	
2.1.8	PP	Consider referral to an appropriate specialist for children who are living with obesity and have significant comorbidities or complex needs (for example, learning disabilities or other additional support needs).	
2.1.9	PP	Parents may require support in how to help their child with adherence to programs and how to manage resistance from their child.	

2.2	Behavioural interventions: nutrition alone, physical activity alone, and combined interventions		
2.2.1	PP	Children involved in behavioural interventions may experience challenges in adhering to programs due to increased stress, difficulty managing hunger, and resistance to making behavioural changes.	
2.2.2	PP	Behavioural changes may be more achievable for children if families are encouraged to engage in some changes together. This can also help alleviate stigma on the child.	
2.2.3	PP	Inaccurate beliefs and unsafe behaviours regarding weight loss, such as skipping meals and fad diets should be identified and addressed.	
Nutrition interventions			
2.2.4	CS	Dietary approaches with no specific daily energy intake goal may be encouraged as part of a comprehensive approach to management of weight-related health and wellbeing.	Δ Very low
Physical activity interventions			
2.2.5	PP	Appropriate enjoyable physical activities, that include realistic goal setting, should be developed with a goal to minimise risk of injury and stigma, while protecting mental health and engagement.	
2.2.6	CS	Aerobic activity interventions may be encouraged as part of a comprehensive approach to management of weight-related health and wellbeing.	Δ Very low
2.2.7	PP	Peer support and enjoyment of physical activities further contributes to improved mental and physical health, creating a sense of accomplishment and collaboration in achieving weight loss goals.	
2.2.8	PP	Identify opportunities to support habitual physical activity at school and within the community.	
Combined behavioural interventions			
2.2.9	CR	The following multimodal combination may be recommended as part of a comprehensive approach to management of weight-related health and wellbeing: Combined multimodal (four or more) behavioural interventions.	★★★★☆ Low

2.2.10	CS	<p>The following multimodal combinations may be encouraged as part of a comprehensive approach to management of weight-related health and wellbeing:</p> <p>Combined nutrition and physical activity interventions.</p> <p>Combined nutrition, physical activity, and psychological interventions.</p> <p>Combined nutrition, physical activity and family-centred interventions.</p> <p>Combined nutrition and family-centred interventions.</p>	<p>Δ Very low</p> <p>Δ Very low</p> <p>Δ Very low</p> <p>Δ Low</p>
2.2.11	PP	<p>Family-centred interventions, in combination with nutrition and physical activity, may be effective for the management of overweight or obesity. Evidence-based types of family-centred interventions include:</p> <ul style="list-style-type: none"> • Educating parents about healthy eating. • Encourage parents to attend dietitian consultations with their child. • Provide parents with practical food shopping and preparation advice. • Encourage parents to role-model weight management behaviours, provide children with positive reinforcement, and a home environment that is supportive of healthy behaviours. 	
2.3 Pharmacological management			
2.3.1	CS	There is no evidence to guide the use of pharmacological interventions in the management of children with obesity.	
2.4 Surgical management			
2.4.1	CS	No evidence was identified to guide the use of surgical interventions for the management of obesity in children.	
2.4.2	PP	Children with severe obesity should be referred for management in a specialist paediatric multidisciplinary service.	

CR, Conditional Recommendation; CS, Consensus Statement; PP, Practice Point

Table 7: Overweight or obesity management in adolescents (12 to <18 years)

ADOLESCENTS (12 TO <18 YEARS)			
No.	Type	Recommendation	GRADE Evidence-to-Decision framework recommendation strength rating; GRADE certainty of evidence
3.1		General principles for overweight or obesity management in adolescents	
3.1.1	PP	Strategies that incorporate inclusion, engagement and awareness of weight stigma and sensitivities are needed. This is an age when participation rates in physical activity/sport, particularly among adolescent girls, are known to decline.	
3.1.2	PP	Consider the role of eating disorders. Eating disorders predominately affect girls and women (although the gender ratio is more equivalent for binge eating disorder), and have their peak age of onset in adolescence and young adulthood.	
3.1.3		Healthcare professionals should engage with families to foster a supportive relationship. Family support for adolescent weight management programs is essential for success.	
3.1.4	PP	Discuss the health benefits of overweight or obesity management. Benefits include increased remission of metabolic syndrome, improved cardiorespiratory fitness, blood pressure, physical function, decreased biomarker indicators of metabolic dysfunction-associated steatotic liver disease, and reduction in depressive symptoms.	
3.1.5	PP	Treatment needs to be tailored to the developmental stage of the adolescent.	
3.1.6	PP	Choice of treatment should consider individual needs and preferences, and additional factors including obesity related comorbidities, ethnicity, socioeconomic status, social history, family medical history, mental health and wellbeing, and special educational needs and disabilities. The financial situation of the adolescent may also impact their ability to access care.	
3.1.7	PP	A range of approaches may be effective with the preferred approach negotiated with the adolescent and their parents/carers. These include a combination of nutrition, physical activity and family-centred or psychological interventions. For those with more severe obesity, consider pharmacological interventions or bariatric surgery, provided by teams with expertise in adolescent care.	
3.1.8	PP	Healthy habit tips for adolescents can be found in Appendix C: Tips for supporting children and adolescents in healthy habits .	

3.1.9	PP	For adolescents, plan weight management programs that involve frequent contact with healthcare professionals.	
3.1.10	PP	Consider referral to an appropriate specialist for adolescents who are living with obesity and have significant comorbidities or complex needs (for example, learning disabilities or other additional support needs).	
3.2	Behavioural interventions: physical activity alone, and combined interventions		
3.2.1	PP	Behavioural interventions may result in health benefits in addition to weight loss. These include improvements in health-related quality of life and a reduction in mental health symptoms (depression, anxiety and eating disorder problems including bulimia, binge eating and emotional eating).	
3.2.2	PP	Adolescents involved in behavioural interventions may experience challenges in adhering to programs due to increased stress, difficulty managing hunger, and resistance to making behavioural changes.	
3.2.3	PP	Inaccurate beliefs and unsafe behaviours regarding weight loss, such as skipping meals and fad diets may be identified and should be addressed.	
Nutrition interventions			
3.2.4	PP	No evidence was identified to guide the use of nutrition interventions for the management of overweight or obesity in adolescents. Healthy eating behaviours, such as following the Australian Dietary Guidelines , should be encouraged.	
Physical activity interventions			
3.2.5	PP	Appropriate individually tailored and monitored physical activity programs, that include realistic goal setting, should be developed with a goal to minimise risk of injury and stigma, while protecting mental health and engagement.	
3.2.6	CS	Physical activity interventions may be encouraged as part of a comprehensive approach to management of weight-related health and wellbeing.	Δ Very low
3.2.7	PP	Peer support and enjoyment of physical activities further contributes to improved mental and physical health, creating a sense of accomplishment and collaboration in achieving weight loss goals.	
3.2.8	PP	Identify opportunities to support habitual physical activity at school and within the community.	

Combined behavioural interventions	
3.2.9	<p>CR The following multimodal combinations may be recommended as part of a comprehensive approach to the management of weight-related health and wellbeing:</p> <p>Combined nutrition and physical activity interventions. ★★★★★☆ Low</p> <p>Combined nutrition, physical activity and family-centred interventions. ★★★★★☆ Low</p> <p>Combined multimodal (four or more) behavioural interventions. ★★★★★☆ Low</p>
3.2.10	<p>CS The following multimodal combination may be encouraged as part of a comprehensive approach to the management of weight-related health and wellbeing: Combined nutrition, physical activity and psychological interventions. Δ Very low</p>
3.2.11	<p>PP Family-centred interventions, in combination with nutrition and physical activity, may be effective for the management of overweight or obesity. Evidence-based types of family-centred interventions include:</p> <ul style="list-style-type: none"> • Raising awareness about goals. • Social support. • A healthy home food environment.
3.2.12	<p>PP Appropriate individually tailored and monitored physical activity programs, that include realistic goal setting, should be developed for adolescents living with overweight or obesity with a goal to minimise risk of injury and stigma, while protecting mental health and engagement.</p>
3.3	Pharmacological management
3.3.1	<p>PP Two medications are approved by the Australian Therapeutic Goods Administration (TGA) for the treatment of obesity in adolescents (12-17 years) at the time of these Guidelines: phentermine and semaglutide (2.4 mg), although none are currently funded in Australia through the Pharmaceutical Benefits Scheme. As this is a rapidly evolving field, it is recommended to check for updates to this statement through the TGA website.</p>
3.3.2	<p>SR Pharmacological interventions, approved by the TGA for weight management, should be considered, where clinically appropriate, as part of a comprehensive treatment program to improve weight-related health and wellbeing. Refer to Appendix D: Pharmacotherapy for the treatment of obesity for further guidance regarding specific pharmacological options.</p> <ul style="list-style-type: none"> • Semaglutide, 2.4mg. ★★★★★★ Moderate
3.3.3	<p>PP A long-term, comprehensive follow-up strategy involving caregivers is required to monitor health and well-being.</p>

3.3.4	PP	When prescribing a pharmacological intervention, clinical judgement will be required to ensure the agent is tailored to both the adolescent's health and their developmental stage.
3.3.5	PP	Based on clinical trials underway, the evidence is rapidly evolving. Healthcare professionals need to be aware of the evidence as it changes over time.
3.3.6	PP	Discuss with the person and their caregiver the potential benefits they may experience from pharmacological interventions in addition to weight loss. Healthcare professionals should be aware that each drug class has a different profile of additional benefits which may be relevant when prescribing, and the evidence regarding additional benefits is emerging rapidly and healthcare professionals should monitor regularly.
3.3.7	PP	Healthcare professionals should be aware each drug class has a different profile of adverse effects, which may be relevant when prescribing (Appendix D: Pharmacotherapy for the treatment of obesity). The evidence regarding adverse effects is rapidly emerging and therefore requires regular monitoring by healthcare professionals.
3.3.8	PP	Pharmacological intervention-related adverse effects are common, most gastrointestinal effects are mild and transient. Many adverse effects can be minimised or mitigated by starting at a low dose followed by a gradual increase.
3.3.9	PP	Regular review of medication and long-term follow-up are necessary.
3.3.10	PP	Awareness of possible drug-drug interactions is necessary. These differ by drug class.
3.3.11	PP	There is very limited long-term data from pharmacotherapy studies. We recommend regularly checking for updates or similar.

3.3.12	PP	A number of medications not approved by TGA for weight loss therapy are being used off-label in Australia for the management of obesity by practitioners experienced in obesity care. Off label prescribing requires discussion with the patient and documentation of the decision as the prescriber has an increased personal liability in the setting of an adverse event (Ongoing challenges of off-label prescribing) (Appendix D: Pharmacotherapy for the treatment of obesity in adults).	
3.4 Surgical management			
3.4.1	SR	For adolescents with severe obesity, healthcare professionals should consider bariatric surgery interventions as part of a comprehensive approach to management of weight-related health and wellbeing.	★★★★★ High
3.4.2	PP	Surgical management should form part of a multidisciplinary approach in the management of obesity. Interventions need to be considered as part of a comprehensive care plan focussed on treating the adolescent within their family and social context.	
3.4.3	PP	Discuss with the person the potential adverse events that may be experienced from surgical management and the need for a long-term comprehensive follow-up strategy with their healthcare providers. Adverse events include vitamin and nutrient deficiencies (e.g., iron thiamine, vitamin D, calcium, vitamin B12 and albumin). Adolescent specific supports to enable compliance with nutritional supplementation and post-bariatric surgery follow up should be considered.	

CR, Conditional Recommendation; CS, Consensus Statement; PP, Practice Point; SR, Strong Recommendation

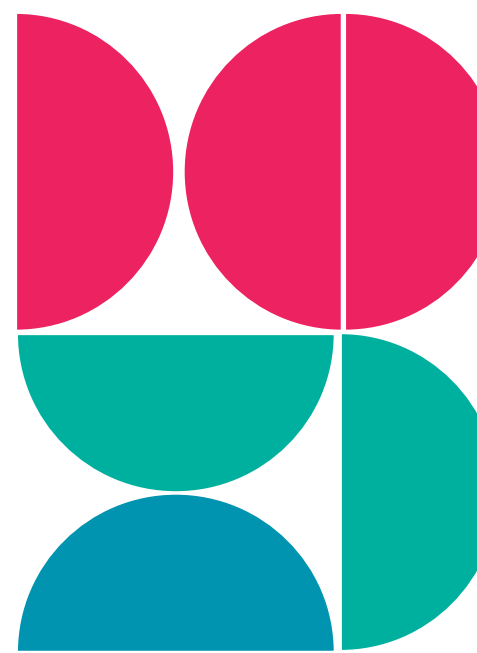


Table 8: Overweight or obesity management in young and middle-aged adults (18 to <65 years)**YOUNG AND MIDDLE-AGED ADULTS (18 TO <65 YEARS)**

No.	Type	Recommendation	GRADE Evidence-to-Decision framework recommendation strength rating; GRADE certainty of evidence
4.1		General principles for overweight or obesity management in young and middle-aged adults	
4.1.1	PP	Discuss with the person the benefits of overweight or obesity management. These benefits include a reduction in blood pressure, reduced risk of cardiovascular disease, type 2 diabetes, cancer risk and a decrease in the risk of mortality from cardiovascular disease. Additionally, improvements in various health-related quality of life domains may be experienced (e.g., global Health Related Quality of Life, physical, and emotional functioning).	
4.1.2	PP	A range of interventions may be effective, with the preferred approach negotiated with the person with overweight or obesity, including nutrition, physical activity, sedentary behaviour, sleep, and psychological interventions. Combinations of these approaches are recommended. Pharmacological or surgical interventions in conjunction with the listed behavioural interventions may also be recommended as guided by the eligibility criteria in the corresponding sections below.	
4.1.3	PP	The management plan should be reviewed at an appropriate interval and assess whether it needs to be modified. Arrangements should be made for ongoing follow up as more frequent contact is generally associated with better outcomes.	
4.1.4	PP	If there is no weight loss in line with the expected timeframe outlined in the management plan, potential reasons for this should be reviewed. Intensive weight loss interventions may also be considered depending on the goals of the person, degree of overweight or obesity and whether comorbidities are present.	
4.1.5	PP	Discuss with the person the possible harms they may experience while undertaking a behavioural intervention.	

4.2 Behavioural interventions: nutrition alone, physical activity alone, and combined interventions

Nutrition interventions

4.2.1 **PP** A range of nutrition approaches are effective for weight loss and/or maintenance. Tailoring nutrition approaches to achieve treatment goals should occur in partnership with the person to accommodate food preferences, allow flexibility and avoid overly restrictive and/or nutritionally inadequate diets.
Evidence-based dietary approaches for weight management include:

- DASH diet.
- Mediterranean diet.
- Low energy diets.
- Intermittent fasting.
- Commercially available meal replacements.
- Very low energy diets.
- Healthy dietary pattern consistent with the Australian Guide to Healthy Eating. Some individuals will require guidance on linking this to a specific daily diet or energy intake goal.

4.2.2 **CS** Different levels of evidence were identified for selected nutrition interventions.
Nutrition interventions overall may be encouraged as part of a comprehensive approach for the management of weight-related health and wellbeing. Δ
Very low
Included selected nutrition interventions, in order of recommendation strength, were:

Strong recommendation: Dietary approaches with no specific daily energy intake goal should be recommended as part of a comprehensive approach for the management of weight-related health and wellbeing. ★★★★★
Moderate

Conditional recommendation: Nutrition interventions with a daily energy intake goal may be recommended as part of a comprehensive approach for the management of weight-related health and wellbeing. ★★★★☆
Low

Consensus statement: Nutrition interventions with an initial daily energy intake goal, followed by dietary approaches with no specific daily energy intake goal may be encouraged as part of a comprehensive approach for the management of weight-related health and wellbeing. Δ
Very low

Physical activity interventions

4.2.3 **PP** Assess current physical activity levels using an available questionnaire (e.g. the [Active Australia Survey](#)) and identify those who do not meet [Australian physical activity guidelines](#) for adults. Encourage the person to regularly break up sitting time and replace with any intensity level of physical activity.

4.2.4	PP	Appropriate individually tailored and monitored physical activity programs, that include realistic goal setting, should be developed for people living with overweight or obesity with a goal to minimise risk of injury and stigma, while protecting mental health and engagement.	
4.2.5	PP	Adults should be encouraged to undertake regular physical activity, as it may result in additional health benefits even in the absence of weight loss. Recommended types of physical activity include: <ul style="list-style-type: none"> • aerobic activities such as brisk walking, swimming, cycling • muscle strengthening activities • reducing and breaking up sitting time throughout the day is also beneficial. 	
4.2.6	PP	For inactive adults who are living with overweight or obesity, particularly those who are older than 40 years and those with comorbidities, there should be an individualised approach to gradually increase physical activity to reach national physical activity guidelines of at least 150 minutes a week and muscle strengthening activities on at least two days a week. Prior to commencement of physical activity assess the person's suitability using the Exercise & Sports Science Pre-screening tools for Adults (See Appendix B: Guidance notes for Assessment).	
4.2.7	PP	Seek advice and support from appropriately qualified exercise specialists. In the case of chronic or complex comorbidities (or other situations where assistance for participation in physical activity is needed), healthcare professionals should arrange for the support of an Accredited Exercise Physiologist.	
4.2.8	CR	Different levels of evidence were identified for selected physical activity interventions. Physical activity overall may be recommended as part of a comprehensive approach to management of weight-related health and wellbeing. Included selected physical interventions, in order of recommendation strength, were: Strong recommendation: Combined aerobic exercise interventions should be recommended as part of a comprehensive approach to management of weight-related health and wellbeing. Conditional recommendation: Aerobic and strengthening activity interventions may be recommended as part of a comprehensive approach to management of weight-related health and wellbeing. Consensus statement: Strengthening activity interventions may be encouraged as part of a comprehensive approach to management of weight-related health and wellbeing.	★★★★☆ Low ★★★★★ Moderate ★★★★☆ Low Δ Very low
4.2.9	PP	Identify opportunities to support habitual physical activity within the community.	

Combined behavioural interventions		
4.2.10	CR	<p>The following multimodal combination may be recommended as part of a comprehensive approach to management of weight-related health and wellbeing:</p> <p>Combined multimodal (four or more) behavioural interventions.</p> <p style="text-align: right;">★★★★☆ Low</p>
4.2.11	CS	<p>The following multimodal combinations may be encouraged as part of a comprehensive approach to management of weight-related health and wellbeing:</p> <p>Combined nutrition and physical activity (with or without sedentary behaviour) interventions. Δ Very low</p> <p>Combined nutrition, physical activity and psychological interventions. Δ Very low</p> <p>Combined nutrition, physical activity and sleep interventions. Δ Very low</p> <p>Combined nutrition and family-centred interventions. Δ Low</p> <p>Combined nutrition and psychological interventions. Δ Very low</p> <p>Combined physical activity and psychological interventions. Δ Very low</p>
4.2.12	PP	<p>Family-centred interventions, in combination with nutrition and physical activity, may be effective for the management of overweight or obesity. Evidence-based types of family-centred interventions include:</p> <ul style="list-style-type: none"> • Raising awareness about goals. • Social support. • A healthy home food environment.
4.2.13	PP	<p>Psychological interventions, in combination with nutrition and physical activity, may be effective for the management of overweight or obesity. Evidence-based types of psychological interventions include:</p> <ul style="list-style-type: none"> • Motivational interviewing to build readiness to change • Cognitive behavioural therapy to learn the skills to support long term behaviour changes.
4.2.14		<p>Sleep interventions may be prescribed for the management of overweight or obesity, in combination with nutrition and physical activity interventions. Evidence-based sleep interventions include:</p> <ul style="list-style-type: none"> • Sleep hygiene.
4.2.15	PP	<p>While less is known about effects of multimodal approaches to weight management, some people may be encouraged to take up multimodal treatments with specific tailoring to their needs.</p>

4.2.16	PP	Behavioural interventions may result in health benefits in addition to weight loss. These include improved health-related quality of life (vitality, physical function and reduced body pain) and a reduction in mental health symptoms (depression, anxiety and eating disorder problems including binge eating and emotional eating).	
4.3 Pharmacological management			
4.3.1	PP	Within a holistic management plan that includes behavioural supports, all adults with a BMI over 30kg/m ² or BMI over 27kg/m ² with weight-related co-morbidities, should be offered a pharmacological intervention. A shared decision-making approach should be used including discussion about benefits, side effects, cost, potential long-term risks and emerging risks of medications.	
4.3.2	PP	Six medications are approved by the Australian Therapeutic Goods Administration (TGA) for the treatment of obesity at the time of these Guidelines: phentermine, orlistat, liraglutide (3.0 mg), naltrexone/bupropion and semaglutide (2.4 mg), and tirzepatide, although none are currently funded in Australia through the Pharmaceutical Benefits Scheme. Further detail on these medications can be found in Appendix D: Pharmacotherapy for the treatment of obesity . As this is a rapidly evolving field, it is recommended to check for updates to this statement through the TGA website.	
4.3.3	SR	<p>Pharmacological interventions, approved by the TGA for weight management, should be considered as part of a comprehensive treatment program to improve weight-related health and wellbeing. Refer to Appendix D: Pharmacotherapy for the treatment of obesity for further guidance regarding specific pharmacological options.</p> <p>Specific pharmacological interventions included in the evidence review were:</p> <ul style="list-style-type: none"> • Semaglutide, 2.4mg • Liraglutide, 3.0mg • Orlistat, 360mg • Naltrexone, 32 mg plus Bupropion, 360 mg • Tirzepatide, 5 mg • Tirzepatide, 10 mg • Tirzepatide, 15 mg 	<p>★★★★★</p> <p>Moderate Moderate Low Moderate High High Moderate</p>
4.3.4	PP	Discuss with the person the potential benefits they may experience from pharmacological interventions in addition to weight loss. Healthcare professionals should be aware that additional benefits vary according to medication class, which may be relevant when prescribing (Appendix D: Pharmacotherapy for the treatment of obesity).	

4.3.5	PP	The profile of adverse effects vary according to medication class, which may be relevant when prescribing (Appendix D: Pharmacotherapy for the treatment of obesity). Medication-related adverse effects are common and can include gastrointestinal effects, headache, insomnia, and palpitation. Most gastrointestinal effects are mild and transient. Many adverse effects can be minimised or mitigated by starting at a low dose followed by a gradual increase.	
4.3.6	PP	A number of medications not approved by TGA for weight loss therapy are being used off-label in Australia for the management of obesity by practitioners experienced in obesity care. Off label prescribing requires discussion with the patient and documentation of the decision as the prescriber has an increased personal liability in the setting of an adverse event (Ongoing challenges of off-label prescribing) (Appendix D: Pharmacotherapy for the treatment of obesity). Documentation should be shared to a patient's My Health Record (if applicable) to enable continuity of care.	
4.4	Surgical management		
4.4.1	PP	Metabolic and bariatric surgery may be considered a treatment option for people with class I obesity with obesity related co-morbidities who do not achieve substantial or durable weight loss or co-morbidity improvement with non-surgical methods, and should be discussed for anyone with class II or more obesity regardless of the presence of obesity related co-morbidities. For guidance on obesity classification refer to Appendix B: Guidance notes for Assessment .	
4.4.2	CR	Bariatric surgery interventions may be recommended as part of a comprehensive approach to management of weight-related health and wellbeing.	★★★★☆ Low
4.4.3	CS	Some endoscopic therapies may be considered as part of a comprehensive approach to management of weight-related health and wellbeing.	△ Very low
4.4.4	CR	Adjunct therapy (e.g., cognitive behavioural therapy and, physical activity) combined with bariatric surgery interventions may be recommended as part of a comprehensive approach to management of weight-related health and wellbeing.	★★★★☆ Low
4.4.5	PP	Surgical management should form part of a multidisciplinary approach in the management of obesity.	
4.4.6	PP	Discuss with the person that most endoscopic therapies are intended to be reversible so may not offer sustainable weight loss.	
4.4.7	PP	Discuss with the person the potential benefits of a more proven sustainable treatment effect that comes with surgery.	
4.4.8	PP	Discuss with the person the potential adverse events that may be experienced from surgical management and the need for a long-term comprehensive follow-up strategy with their healthcare providers. Adverse events include vitamin and nutrient deficiencies (e.g., iron, thiamine, vitamin D, calcium, vitamin B12 and albumin) and surgery related adverse events.	

CR, Conditional Recommendation; CS, Consensus Statement; PP, Practice Point; SR, Strong Recommendation

Table 9: Overweight or obesity management in older adults (> 65 years)

No.	Type	Recommendation	GRADE Evidence-to-Decision framework recommendation strength rating; GRADE certainty of evidence
5.1 General principles for overweight or obesity management in older adults			
5.1.1	PP	Clinical judgement is required for older adults living with overweight or obesity to balance priorities for health care in the presence of co-morbidities (e.g. chronic kidney disease, insulin-requiring Type 2 diabetes mellitus, cancer) as well as age-related conditions (e.g. sarcopenia, osteoporosis/osteopenia, etc.) and treatment with medications that have weight or nutrition requirement implications.	
5.1.2	PP	Discuss with the person the benefits of overweight or obesity management. Benefits in adults in general include a reduction in blood pressure, reduced risk of cardiovascular disease, type 2 diabetes, cancer risk and a decrease in the risk of mortality from cardiovascular disease. Additionally, improvements in various health-related quality of life domains may be experienced (e.g., global Health Related Quality of Life, physical, and emotional functioning).	
5.2 Behavioural interventions: nutrition alone, physical activity alone, and combined interventions			
Nutrition interventions			
5.2.1	PP	Tailoring nutrition approaches to achieve weight management goals should occur in partnership with the person to accommodate food preferences, allow flexibility and avoid overly restrictive and/or nutritionally inadequate diets to ensure nutrient intakes are optimised. Evidence-based dietary approaches for weight management in older adults include: <ul style="list-style-type: none"> • Low energy diets. 	
5.2.2	CS	Different levels of evidence were identified for selected nutrition interventions. Nutrition interventions overall may be encouraged as part of a comprehensive approach for the management of weight-related health and wellbeing. Included selected nutrition interventions, in order of recommendation strength, were: Consensus statement: Nutrition interventions with a daily energy intake goal may be encouraged, for individuals for whom weight loss is the primary goal, as part of a comprehensive approach for the management of weight-related health and wellbeing. Consensus statement: Dietary approaches with no specific daily energy intake goal may be encouraged as part of a comprehensive approach for management of weight-related health and wellbeing.	<p>Δ Very low</p> <p>Δ High</p> <p>Δ Very low</p>

5.2.3	PP	When considering nutrition interventions in older adults living with overweight or obesity, healthcare professionals will need to balance the potential benefit from improving diet quality (and hence improved food and nutrient intakes) versus the need for weight reduction. Healthy dietary approaches with no specific daily energy intake goal may better align with quality-of-life goals.	
Physical activity interventions			
5.2.4	CS	<p>Different levels of evidence were identified for selected physical activity interventions.</p> <p>Physical activity overall may be encouraged as part of a comprehensive approach to management of weight-related health and wellbeing.</p> <p>Included selected physical interventions, in order of recommendation strength, were:</p> <p>Conditional recommendation: Aerobic and strengthening exercise interventions may be recommended as part of a comprehensive approach for the management of weight-related health and wellbeing.</p> <p>Consensus statement: Strengthening exercise interventions may be encouraged as part of a comprehensive approach for the management of weight-related health and wellbeing.</p>	<p>Δ Very low</p> <p>★★★★☆ Low</p> <p>Δ Moderate</p>
5.2.5	PP	For inactive older adults who are living with overweight or obesity, particularly those with comorbidities, there should be an individualised approach to gradually increase physical activity to reach national physical activity guidelines for older Australians of 30 minutes of moderate intensity physical activity on most days, and strength exercises on 2 or 3 days. Prior to commencement of physical activity assess the person's suitability using the Exercise & Sports Science Pre-screening tools for Adults (See Appendix B: Guidance notes for Assessment).	
5.2.6	PP	Appropriate individually tailored and monitored physical activity programs, that include realistic goal setting, should be developed with a goal to minimise risk of injury and stigma, while protecting mental health and engagement.	
5.2.7	PP	Older adults should be encouraged to increase their physical activity, even if it does not result in weight loss, as it has additional health benefits. Recommended types of physical activity include: <ul style="list-style-type: none"> • muscle strengthening activities • reducing and breaking up sitting time throughout the day is also beneficial. 	
5.2.8	PP	Seek advice and support from appropriately qualified exercise specialists. In the case of chronic or complex comorbidities (or other situations where assistance for participation in physical activity is needed), healthcare professionals should arrange for the support of an Accredited Exercise Physiologist.	

5.2.9	PP	Identify opportunities to support habitual physical activity within the community.	
Combined behavioural interventions			
5.2.10	CR	The following multimodal combinations may be recommended as part of a comprehensive approach to management of weight-related health and wellbeing: Combined nutrition, physical activity and psychological interventions.	★★★★☆ Low
5.2.11	CS	The following multimodal combinations may be encouraged as part of a comprehensive approach to management of weight-related health and wellbeing: Combined nutrition and physical activity interventions. Combined nutrition and sedentary behaviour interventions.	Δ Very low Δ Low
5.2.12	PP	Psychological interventions, in combination with nutrition and physical activity, may be effective for the management of overweight or obesity. Evidence-based types of psychological interventions include: <ul style="list-style-type: none"> • Motivational interviewing to build readiness to change. • Cognitive behavioural therapy to learn the skills to support long term behaviour change. 	
5.2.13	PP	Appropriate individually tailored and monitored physical activity programs, that include realistic goal setting, should be developed with a goal to minimise risk of injury and stigma, while protecting mental health and engagement.	
5.3 Pharmacological management			
5.3.1	CS	There is a lack of evidence to guide the use of pharmacological interventions for the management of overweight or obesity specifically in older adults. Whilst there were pharmacological studies identified which allowed for the inclusion of adults >65 year, the average age of included participants was <65 years and these studies did not provide specific information relating to the older adults only.	
5.3.2	PP	Pharmacological interventions, approved for weight management in conjunction with adjunctive behavioural therapy may be appropriate as part of a comprehensive treatment program to improve weight-related health and wellbeing. Balancing of risks and benefits required to determine appropriateness. Refer to Pharmacological management in young and middle-aged adults.	

5.4 Surgical management		
5.4.1	CS	There is a lack of evidence to guide the use of surgical interventions for the management of obesity in older adults. Whilst there were surgical studies identified which allowed for the inclusion of adults >65 year, the average age of included participants was <65 years and these studies did not provide specific information relating to the older adults only.
5.4.2	PP	Bariatric surgery could be considered where the person living with obesity could benefit from weight loss to improve health, physical function or quality of life.
5.4.3	PP	There is no evidence to support an age limit on people seeking metabolic and bariatric surgery and a holistic assessment of the person, including quality of life, impact of co-morbidities and anaesthetic risk, is recommended.

CR, Conditional Recommendation; CS, Consensus Statement; PP, Practice Point

DRAFT



SUMMARY OF GUIDELINES FOR SUB-GROUP POPULATIONS

Table 10: Overweight or obesity management in Aboriginal and Torres Strait Islander people

ABORIGINAL AND TORRES STRAIT ISLANDER PEOPLE

No.	Type	Recommendation	GRADE Evidence-to-Decision framework recommendation strength rating; GRADE certainty of evidence
6.1		General principles for overweight or obesity management in Aboriginal and Torres Strait Islander people	
6.1.1	CS	<p>Aboriginal and Torres Strait Islander people have continuously cared for the land and seas of Australia and are the longest living culture on Earth spanning 65,000 years. Since colonisation there have been significant challenges to the health and wellbeing of Aboriginal and Torres Strait Islander people, and voices of the community need to be valued and respected when applying the Guidelines in this group.</p> <p>Strong connection to culture and community are essential for wellbeing. Access and affordability to culturally responsive health services including through existing community controlled health services, for pharmacological and surgical interventions is essential.</p> <p>Due to the impact of colonisation, Aboriginal and Torres Strait Islander people are disproportionately affected by poverty and disadvantage. There are challenges of affordability and access to healthy food, housing options and appropriate healthcare. These challenges need to be considered when creating a treatment plan for Aboriginal and Torres Strait Islander patients.</p>	
6.1.2	CS	There is no current research evidence that is specific for Aboriginal and Torres Strait Islander people to guide clinical management. Refer to age specific guidance to help guide overweight or obesity management in Aboriginal and Torres Strait Islander people.	
6.1.3	PP	Healthcare professionals should familiarise themselves with key documents such as the Obesity, diet and physical activity in Aboriginal and Torres Strait Islander adults and the National Aboriginal and Torres Strait Islander Health Plan 2021-2031 .	

CS, Consensus Statement; PP, Practice Point

Table 11: Overweight or obesity management in people from culturally and linguistically diverse backgrounds**PEOPLE FROM CULTURALLY AND LINGUISTICALLY DIVERSE BACKGROUNDS**

No.	Type	Recommendation	GRADE Evidence-to-Decision framework recommendation strength rating; GRADE certainty of evidence
7.1		General principles for overweight or obesity management in people from culturally and linguistically diverse backgrounds	
7.1.1	CS	<p>We acknowledge and recognise the experiences of people living in Australia from culturally and linguistically diverse backgrounds. Additional challenges may exist in interacting and engaging with the Australian health system. The voices of these individuals and their communities need to be valued and respected when applying the Guidelines.</p> <p>Improved access and affordability to culturally responsive health services, including pharmacological and surgical interventions are needed for people living with overweight or obesity.</p>	
7.1.2	CS	There is a lack of evidence to guide clinical management specific for culturally and linguistically diverse people. Refer to age specific guidance to help guide overweight or obesity management in people from culturally and linguistically diverse backgrounds.	
7.1.3	PP	There may be variations in adiposity cut-points and differential risk for comorbidities for some ethnicities, including Asian populations .	
7.1.4	PP	Healthcare professionals are encouraged to engage with interpreter and translation services for people for whom English is a second language. TIS is available nationally Translating and Interpreting Service (TIS National) .	
7.1.5	PP	Healthcare professionals should consider different cultural practices regarding food and physical activity when making recommendations. These may include periods of fasting and celebration and culturally significant foods.	
7.1.6	PP	Healthcare professionals should consider cultural beliefs about body shape and size and provide culturally sensitive advice to support healthy growth.	

CS, Consensus Statement; PP, Practice Point

Table 12: Overweight or obesity management in people with disability

PEOPLE WITH DISABILITY

No.	Type	Recommendation	GRADE Evidence-to-Decision framework recommendation strength rating; GRADE certainty of evidence
8.1 General principles for overweight or obesity management in people with disability			
8.1.1	PP	Consistent with Article 25 of the United Nations' Convention on the Rights of Persons with Disabilities , healthcare professionals are to provide the same quality of care to people with disability as to others, including gaining free and informed consent.	
8.1.2	PP	Treatment needs to be person-centred, based on the nature of a person's disability and age.	
8.1.3	PP	Access to healthcare professionals with expertise in metabolic conditions and disabilities should be considered in complex situations. A holistic approach to the management of overweight or obesity should be taken, ensuring the person is not viewed only in terms of their impairment.	
8.1.4	PP	Discuss with the person and/or their family the benefits, other than weight loss, that may be experienced through the management of overweight or obesity. Please refer to the appropriate age group section above for guidance.	
8.1.5		Information provided to the person should be in formats and languages that are suited to the person. Specific communication needs should be taken into consideration (e.g., because of intellectual disabilities, physical disabilities or neurocognitive impairments).	
8.2 Behavioural interventions: nutrition alone, physical activity alone, and combined interventions			
Nutrition interventions			
8.2.1	CS	Dietary approaches with no specific daily energy intake goal may be encouraged as part of a comprehensive approach for management of weight-related health and wellbeing.	Δ Very low

Combined behavioural interventions		
8.2.2	CS	<p>Multimodal interventions may be encouraged as part of a comprehensive approach to management of weight-related health and wellbeing:</p> <p>Combined nutrition and physical activity (with or without sedentary behaviour) interventions. Δ Very low</p> <p>Combined nutrition, physical activity and family-centred interventions. Δ Very low</p>
8.2.3	PP	<p>Family-centred interventions, in combination with nutrition and physical activity, may be effective for the management of overweight or obesity. Evidence-based types of family-centred interventions include:</p> <ul style="list-style-type: none"> • Provide instructions to parents/guardians on behavioural strategies such as diet and physical activity monitoring, “stimulus control” modifications in the home, goal setting and positive reinforcement. • Engage parents/guardians in education/behavioural counselling sessions.
8.2.4	PP	Identify opportunities to support habitual physical activity within the community.
8.2.5	PP	Consider whether specialist advice and support for physical activity may be beneficial.
8.2.6	CS	Based on the age of the person with a disability, refer to the recommendations for the relevant treatment type. A lack of evidence was identified to guide the use of physical activity alone, pharmacological, or surgical interventions for the management of overweight or obesity in people with disability.

CS, Consensus Statement; PP, Practice Point

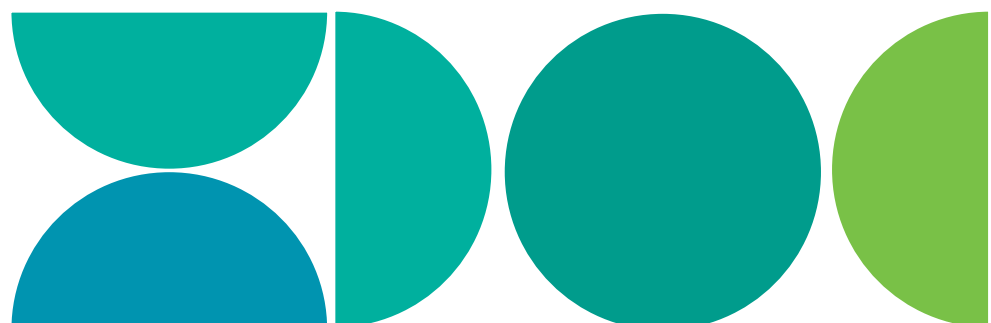


Table 13: Overweight or obesity management in people with an eating disorder

PEOPLE WITH AN EATING DISORDER

No.	Type	Recommendation	GRADE Evidence-to-Decision framework recommendation strength rating; GRADE certainty of evidence
9.1		General principles for overweight or obesity management in people with an eating disorder	
9.1.1	PP	Healthcare professionals should familiarise themselves with Eating Disorder Safe Principles: Whole-of Community Approaches To Do No Harm in Relation to Eating Disorders, Disordered Eating and Body Image Distress (Eating Disorder Safe Principles).	
9.1.2	PP	Treatment for eating disorders should be prioritised before targeting weight loss given that features of eating disorders could be exacerbated by a premature focus on weight loss (e.g., overconcern with body shape/weight and maladaptive dieting and other weight control behaviours) and/or interfere with successful weight management (e.g., binge eating).	
9.1.3	PP	For individualised treatment planning, discuss with the person (and their family as appropriate) the relative benefits and limitations of undertaking professionally-supported weight management versus a weight-neutral approach.	
9.1.4	PP	Consider the risks associated with overweight or obesity and the health and other benefits of moderate weight loss, as well as the challenges of sustaining weight losses and the health benefits from changing eating and physical activity patterns irrespective of weight loss.	
9.1.5	PP	Monitoring to assess undesirable health outcomes (including the potential exacerbation of eating disorder symptoms) in the context of weight management is essential.	
9.1.6	PP	In conjunction with the management of the eating disorder, where clinically appropriate, individually tailored and monitored treatments for overweight or obesity, that include realistic goal setting, and weight related health and wellbeing may be encouraged. For further information on the management of the eating disorder, see the Management of Eating Disorders for People with a Higher Weight: Clinical Practice Guideline .	

9.2 Behavioural interventions: combined interventions

Combined behavioural interventions

9.2.1	CS	Where clinically appropriate, the following multimodal combinations may be encouraged as part of a comprehensive approach to management of weight-related health and wellbeing:	
		Combined nutrition and physical activity interventions.	Δ Very low
		Combined nutrition, physical activity and psychological.	Δ Low
9.2.2	CS	Based on the age of the person with an eating disorder, refer to the recommendations for the relevant treatment type. A lack of evidence was identified to guide the use of nutrition alone, physical activity alone, pharmacological, or surgical interventions for the management of overweight or obesity in people with an eating disorder.	

CS, Consensus Statement; PP, Practice Point

Table 14: Overweight or obesity management in people with a mental health condition

PEOPLE WITH A MENTAL HEALTH CONDITION

No.	Type	Recommendation	GRADE Evidence-to-Decision framework recommendation strength rating; GRADE certainty of evidence
10.1		General principles for overweight or obesity management in people with a mental health condition	
10.1.1	PP	All people with a serious mental illness and other mental health conditions living with overweight or obesity should be offered treatment for their weight-related health and wellbeing.	
10.1.2	PP	Antipsychotic medications cause significant weight gain. Weight-gain is greatest with olanzapine followed by asenapine, risperidone, aripiprazole, quetiapine XR, brexpiprazole, cariprazine, and lurasidone.	
10.1.3	PP	A long-term comprehensive follow-up strategy is required to monitor weight-related health and wellbeing. This is particularly important for people newly diagnosed with a serious mental illness to prevent weight gain associated with some medications prescribed for the treatment of a mental health condition.	
10.1.4	PP	Access to healthcare professionals with skills in managing both serious mental illness and metabolic conditions is needed, including General Practice and mental healthcare professional review.	
10.1.5	PP	Discuss with the person (and their family as appropriate) the risk associated with overweight or obesity. Please refer to the appropriate age group section above for guidance.	
10.1.6	PP	Discuss with the person (and their family as appropriate) the benefits, other than weight loss, that may be experienced through the management of overweight or obesity. Please refer to the appropriate age group section above for guidance.	
10.1.7	CS	Based on the age of the person living with overweight or obesity and a mental health condition, refer to the recommendations for the relevant treatment type. A lack of evidence was identified to guide the use of nutrition alone, physical activity alone, pharmacological or surgical interventions for the management of overweight or obesity in people with a mental health condition.	

10.2 Behavioural interventions: combined interventions		
Combined behavioural interventions		
10.2.1	CR	<p>The following multimodal combinations may be recommended as part of a comprehensive approach to management of weight-related health and wellbeing:</p> <p>Combined nutrition, physical activity and psychological interventions.</p> <p style="text-align: right;">★★★★☆ Low</p>
10.2.2	CS	<p>The following multimodal combination may be encouraged as part of a comprehensive approach to management of weight-related health and wellbeing:</p> <p>Combined nutrition and physical activity interventions.</p> <p style="text-align: right;">Δ Very low</p>
10.2.3	CS	<p>Combining nutrition, physical activity and family-centred interventions may result in little to no difference in adiposity in people with a mental health condition.</p> <p style="text-align: right;">Δ Low</p>
10.2.4	CS	<p>A combination of four or more behavioural interventions likely results in little to no difference in adiposity.</p> <p style="text-align: right;">Δ Moderate</p>
10.2.5	PP	<p>While less is known about effects of multimodal approaches to weight management, some people may be encouraged to take up multimodal treatments with specific tailoring to their needs.</p>
10.2.6	PP	<p>Identify opportunities to support habitual physical activity within the community.</p>
10.3 Pharmacological interventions		
10.3.1	PP	<p>Based on the age of the person living with overweight or obesity and a mental health condition, refer to the recommendations for the pharmacological interventions in the relevant age group.</p>
10.3.2	PP	<p>Prescribers should be aware that there are medications with specific contraindications to people with a mental health condition, including the medications they are currently on. Please refer to Appendix D: Pharmacotherapy for the treatment of obesity and the TGA website for further information and updates regarding contraindications and side effects of medications.</p>

CR, Conditional Recommendation; CS, Consensus Statement; PP, Practice Point

Table 15: Overweight or obesity management in pregnant and post-partum women

PREGNANT AND POST-PARTUM WOMEN			GRADE Evidence-to-Decision framework recommendation strength rating; GRADE certainty of evidence
No.	Type	Recommendation	
11.1		General principles for overweight or obesity management in pregnant and post-partum women	
11.1.1	CS	Evidence regarding overweight or obesity management in pregnant and post-partum women was not reviewed in these guidelines. General guidance only has been provided in these recommendations. For detailed guidance in this population please refer to the nutrition and physical activity section of the Australian pregnancy care guidelines.	
11.1.2	PP	While weight loss interventions are contraindicated during pregnancy, dietary and exercise interventions in pregnancy can reduce gestational weight gain to a modest degree (of the order of 1kg) but have no impact on clinical outcomes for the woman or her baby.	
11.1.3	PP	Nutrition during pregnancy should be appropriate to support foetal development and align with recommendations in the Australian Dietary Guidelines.	
11.1.4	PP	Low- to moderate-intensity physical activity during pregnancy is associated with a range of health benefits and is not associated with adverse outcomes.	
11.1.5	PP	Higher level activities may be possible for women who were involved in these before pregnancy and have the required level of fitness. Intensity of activity should be reduced in the third trimester.	
11.1.6	PP	Behavioural counselling may reduce maternal weight gain.	
11.1.7	PP	Very low-energy diets, weight loss medications and bariatric surgery are contraindicated in pregnancy.	
11.1.8	PP	After pregnancy, extended breastfeeding is recommended. Infants who are exclusively breastfed for at least six months are less likely to gain excessive weight and develop obesity later in life.	

CS, Consensus Statement; PP, Practice Point

GOVERNANCE

MANAGEMENT OF COMPETING INTERESTS

Guideline Development Committee members were provided with Terms of Reference and a Conflict of Interest declaration form upon invitation to the Committee. The Terms of Reference defined the Committee's purpose and detailed the working arrangements. Expectations relating to meeting attendance, communication, and standards of behaviour at meetings were defined. Processes such as meeting schedule and format, management of conflicts of interest, and confidentiality were also detailed.

Committee members were required to disclose of all relevant interests upon acceptance into the group so that conflicts of interest could be identified and managed. Members were also required to inform the Co-Chair(s) of any new interests at the beginning of each meeting. In the case of a conflict of interest arising in relation to an agenda item being discussed at Guideline Development Committee meetings (face-to-face, telephone, or videoconference), the Committee member with the conflict of interest left the meeting for the entire discussion of the relevant agenda item and returned to the Committee meeting when invited by the Co-Chair(s). The minutes of the meeting recorded the reason for the Committee member's absence and time of re-joining the meeting. To ensure the transparency and neutrality of the Guidelines, the Deakin University staff involved in the project declined all opportunities to consult with staff representing industry throughout the Guideline development process.

Guideline Development Committee

Professor Louise Baur (Co-Chair)
Professor Clare Collins (Co-Chair)
Professor Wendy Brown
Professor Elizabeth Denney-Wilson
Professor Jodie Dodd
Associate Professor Nathan Johnson
Dr Blake Lawrence
Professor Susan Paxton
Professor Elizabeth Rieger
Associate Professor Liz Sturgiss
Associate Professor Priya Sumithran
Adjunct Professor Nicole Turner
Mr Andrew Wilson

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Dr Sachin Wasnik

GUIDELINE DEVELOPMENT COMMITTEE EXPERTISE AND CONFLICTS OF INTEREST

Guideline Development Committee member and expertise	Conflicts of Interest
<p>Professor Louise Baur (Co-Chair) Paediatric health University of Sydney</p>	<p>Novo Nordisk: Member, Steering Committee, ACTION Teens Study, 2020-current. Novo Nordisk is the sponsor of the study. My travel and accommodation costs to attend study workshops have been paid. Speaker's fees, Novo Nordisk, 2020-current. All funds are directed to the hospital research cost centre.</p> <p>Lilly: Member Tirzepatide IBU Control Weight Management Advisory Board, 2023-current. Honoraria are directed into my hospital research cost centre.</p> <p>World Obesity Federation (WOF): This is an international NGO which has members in >100 countries. Its role is to undertake advocacy, educational, journal publishing and educational activities in the area of obesity.</p> <p>President of WOF (2022-2024; previously President-Elect 2020-2022; Past-President from July 2024-2026). This is an honorary position.</p> <p>WOF is in official relations with WHO and undertakes advocacy with, and for, WHO around WHO's Obesity Action Plan. This includes a focus on both obesity prevention and obesity management. WOF receives funds from Novo Nordisk, Lilly, and other industry partners to support WOF's educational and policy activities, especially in low and middle income countries. I receive no funds myself.</p>
<p>Professor Clare Collins (Co-Chair) Nutrition and dietetics University of Newcastle</p>	<p>No conflicts to declare.</p>
<p>Professor Wendy Brown Bariatric surgery Monash University</p>	<p>Grants from Johnson and Johnson, Medtronic, GORE, Applied Medical, Novo Nordisk, NHMRC, Myerton, and the Australian Commonwealth Government. Personal fees from GORE, Novo Nordisk, Pfizer and Merck Sharpe and Dohme for lectures and advisory boards.</p>
<p>Professor Elizabeth Denney-Wilson Nursing University of Sydney</p>	<p>In 2018 I attended a health professional training event in Bali, sponsored by an infant formula company. I provided a lecture on the associations between infant formula and excess weight gain in infants. The company paid for my flight and accommodation but had no input into my lecture. I have had no contact since.</p>
<p>Professor Jodie Dodd Obstetrics and maternal foetal medicine Women's and Children's Hospital Adelaide; The University of Adelaide</p>	<p>No conflicts to declare.</p>

Associate Professor Nathan Johnson Exercise and sports science University of Sydney	Novo Nordisk: Has received honoraria for speaking engagements regarding exercise for obesity management 2023.
Dr Blake Lawrence Weight stigma Curtin University	No conflicts to declare.
Professor Susan Paxton Psychology, counselling, and therapy La Trobe University	No conflicts to declare.
Professor Elizabeth Rieger Psychology Australian National University	No conflicts to declare.
Dr Liz Sturgiss General practice medicine Australian National University; Monash University	I was awarded competitive grants from the following organisations: RACGP Foundation, NHMRC, Victorian Health Promotion Foundation, National Centre for Healthy Ageing. These grants have been paid to my organisation and not to me directly. I was awarded a non-competitive tender by Diabetes NSW/ACT in 2021 for implementation research on DiRECT-AUS. This tender was paid to my organisation and not directly to me. In 2019, I was paid speakers fees and transport costs by Diabetes NSW/ACT and Diabetes QLD to present to clinicians on weight management.
Associate Professor Priya Sumithran Endocrinologist Alfred Health; Monash University	Grants, NHMRC and MRFF, paid to institution Leadership group, The Obesity Collective, unpaid Council, ANZOS (until 2022), unpaid Data Safety Monitoring Board, not for profit investigator-initiated study, University of Adelaide (until 2021), unpaid Co-authorship of manuscripts on obesity/obesity medications with medical writer provided by Novo Nordisk, Eli Lilly
Adjunct Professor Nicole Turner Indigenous health Indigenous Allied Health Australia; University of Canberra	No conflicts to declare.
Mr Andrew Wilson Consumer/lived experience	No conflicts to declare.

IMPLEMENTATION OF THE GUIDELINES

The Department of Health and Aged Care (the Department) recognises that ultimate impact of these Guidelines is contingent upon the success of strategic efforts to promote the awareness, acceptance, uptake, and adherence of recommendations. To facilitate awareness of the availability, and to promote uptake of the Guidelines, consideration will be given to opportunities to disseminate the Guidelines to medical colleges and other relevant organisations to encourage promotion amongst members and the sector more broadly. Options to disseminate through existing health networks, for example Primary Health Networks (PHNs), will also be explored. The Department will facilitate any forthcoming dissemination and implementation of the Guidelines.

FUNDING

The Commonwealth Department of Health and Aged Care funded the development of the Guidelines.

FUTURE GUIDELINE REVIEW AND UPDATE

At the time of publication there was no scheduled time for Guideline review and update. An update is desirable when the evidence changes substantively, noting the rapidly changing nature of available pharmacotherapy and surgical options.

REFERENCES

1. National Health and Medical Research Council. Clinical practice guidelines for the management of overweight and obesity in adults, adolescents and children in Australia. Melbourne: NHMRC; 2013 [cited 2024 August 23]. Available from: <https://www.nhmrc.gov.au/about-us/publications/clinical-practice-guidelines-management-overweight-and-obesity>.
2. World Health Organisation. Obesity and overweight Geneva, Switzerland: WHO; 2024 [cited 2024 September 18]. Available from: <https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight>.
3. Blüher M. Adipose tissue dysfunction contributes to obesity related metabolic diseases. *Best Pract Res Clin Endocrinol Metab.* 2013;27(2):163-77. doi: 10.1016/j.beem.2013.02.005
4. Australian Bureau of Statistics. National health survey Canberra: ABS; 2022 [cited 2023 August 23]. Available from: <https://www.abs.gov.au/statistics/health/health-conditions-and-risks/national-health-survey/latest-release>.
5. Hay P, Chinn D, Forbes D, Madden S, Newton R, Sugenor L, et al. Royal Australian and New Zealand College of Psychiatrists clinical practice guidelines for the treatment of eating disorders. *Aust N Z J Psychiatry.* 2014;48(11):977-1008. doi: 10.1177/0004867414555814
6. Ralph AF, Brennan L, Byrne S, Caldwell B, Farmer J, Hart LM, et al. Management of eating disorders for people with higher weight: clinical practice guideline. *J Eat Disord.* 2022;10(1):121. doi: 10.1186/s40337-022-00622-w
7. Naslund JA, Whiteman KL, McHugo GJ, Aschbrenner KA, Marsch LA, Bartels SJ. Lifestyle interventions for weight loss among overweight and obese adults with serious mental illness: a systematic review and meta-analysis. *Gen Hosp Psychiatry.* 2017;47:83-102. doi: 10.1016/j.genhosppsych.2017.04.003
8. Hossaini J, Osmani V, Klug SJ. Behavioral weight loss interventions for people with physical disabilities: a systematic review. *Obes Rev.* 2024;1-14. doi: 10.1111/obr.13722
9. Thurber KA, Joshy G, Korda R, Eades S, J., Wade V, Bambrick H, et al. Obesity and its association with sociodemographic factors, health behaviours and health status among Aboriginal and non-Aboriginal adults in New South Wales, Australia. *J Epidemiol Community Health.* 2018;72(6):491. doi: 10.1136/jech-2017-210064
10. Kelly R, Hatzikiriakidis K, Kuswara K. Inequities in obesity: Indigenous, culturally and linguistically diverse, and disability perspectives. *Public Health Res Pract.* 2022;32:e3232225. doi: 10.17061/phrp3232225
11. Park MH, Falconer C, Viner RM, Kinra S. The impact of childhood obesity on morbidity and mortality in adulthood: a systematic review. *Obes Rev.* 2012;13(11):985-1000. doi: 10.1111/j.1467-789X.2012.01015.x
12. Sommer A, Twig G. The impact of childhood and adolescent obesity on cardiovascular risk in adulthood: a systematic review. *Curr Diabetes Rep.* 2018;18(10):91. doi: 10.1007/s11892-018-1062-9
13. Lichtenauer M, Wheatley SD, Martyn-St James M, Duncan MJ, Cobayashi F, Berg G, et al. Efficacy of anthropometric measures for identifying cardiovascular disease risk in adolescents: review and meta-analysis. *Minerva Pediatric.* 2018;70(4):371-82. doi: 10.23736/S0026-4946.18.05175-7
14. Sharma V, Coleman S, Nixon J, Sharples L, Hamilton-Shield J, Rutter H, et al. A systematic review and meta-analysis estimating the population prevalence of comorbidities in children and adolescents aged 5 to 18 years. *Obes Rev.* 2019;20(10):1341-9. doi: 10.1111/obr.12904
15. Ma J, Huang M, Wang L, Ye W, Tong Y, Wang H. Obesity and risk of thyroid cancer: evidence from a meta-analysis of 21 observational studies. *Med Sci Monit.* 2015;21:283-91. doi: 10.12659/MSM.892035
16. Liu X, Sun Q, Hou H, Zhu K, Wang Q, Liu H, et al. The association between BMI and kidney cancer risk: an updated dose-response meta-analysis in accordance with PRISMA guideline. *Medicine.* 2018;97(44):e12860. doi: 10.1097/MD.00000000000012860
17. Li L, Gan Y, Li W, Wu C, Lu Z. Overweight, obesity and the risk of gallbladder and extrahepatic bile duct cancers: a meta-analysis of observational studies. *Obesity.* 2016;24(8):1786-802. doi: 10.1002/oby.21505
18. Tan W, Gao M, Liu N, Zhang G, Xu T, Cui W. Body mass index and risk of gallbladder cancer: systematic review and meta-analysis of observational studies. *Nutrients.* 2015;7(10):8321-234. doi: 10.3390/nu7105387
19. Yang C, Lu Y, Xia H, Liu H, Pan D, Yang X, et al. Excess body weight and the risk of liver cancer: systematic review and a meta-analysis of cohort studies. *Nutr Cancer.* 2020;72(7):1085-97. doi: 10.1080/01635581.2019.1664602
20. Du X, Hidayat K, Shi B-M. Abdominal obesity and gastroesophageal cancer risk: systematic review and meta-analysis of prospective studies. *Biosci Rep.* 2017;37(3):BSR20160474. doi: 10.1042/BSR20160474
21. Kokts-Porietis RL, Elmrayed S, Brenner DR, Friedenreich CM. Obesity and mortality among endometrial cancer survivors: a systematic review and meta-analysis. *Obes Rev.* 2021;22(12):e13337. doi: 10.1111/obr.13337
22. Rittenberg V, Seshadri S, Sunkara SK, Sobaleva S, Oteng-Ntim E, El-Toukhy T. Effect of body mass index on IVF treatment outcome: an updated systematic review and meta-analysis. *Reprod Biomed Online.* 2011;23(4):421-39. doi: 10.1016/j.rbmo.2011.06.018
23. Campbell JM, Lane M, Owens JA, Bakos HW. Paternal obesity negatively affects male fertility and assisted reproduction outcomes: a systematic review and meta-analysis. *Reprod Biomed Online.* 2015;31(5):593-604. doi: 10.1016/j.rbmo.2015.07.012
24. Campbell JM, McPherson NO. Influence of increased paternal BMI on pregnancy and child health outcomes independent of maternal effects: a systematic review and meta-analysis. *Obes Res Clin Pract.* 2019;13(6):511-21. doi: 10.1016/j.orcp.2019.11.003
25. Pozzobon D, Ferreira PH, Blyth FM, Machado GC, Ferreira ML. Can obesity and physical activity predict outcomes of elective knee or hip surgery due to osteoarthritis? A meta-analysis of cohort studies. *BMJ Open.* 2018;8(2):e017689. doi: 10.1136/bmjopen-2017-017689

26. González-Castro TB, Escobar-Chan YM, Fresan A, López-Narváez ML, Tovilla-Zárate CA, Juárez-Rojop IE, et al. Higher risk of depression in individuals with type 2 diabetes and obesity: results of a meta-analysis. *J Health Psychol.* 2021;26(9):1404-19. doi: 10.1177/1359105319876326
27. Galaviz KI, Weber MB, Straus A, Haw JS, Narayan KMV, Ali MK. Global diabetes prevention interventions: a systematic review and network meta-analysis of the real-world impact on incidence, weight, and glucose. *Diabetes Care.* 2018;41(7):1526-34. doi: 10.2337/dc17-2222
28. Winter JE, MacInnis RJ, Wattanapenpaiboon N, Nowson CA. BMI and all-cause mortality in older adults: a meta-analysis. *Am J Clin Nutr.* 2014;99(4):875-90. doi: 10.3945/ajcn.113.068122
29. Dramé M, Godaert L. The obesity paradox and mortality in older adults: a systematic review. *Nutrients.* 2023;15(7):1780. doi: 10.3390/nu15071780
30. Lee DH, Keum N, Hu FB, Orav EJ, Rimm EB, Willett WC, et al. Predicted lean body mass, fat mass, and all cause and cause specific mortality in men: prospective US cohort study. *BMJ.* 2018;362:k2575. doi: 10.1136/bmj.k2575
31. Liu C, Wong PY, Chung YL, Chow SK-H, Cheung WH, Law SW, et al. Deciphering the “obesity paradox” in the elderly: a systematic review and meta-analysis of sarcopenic obesity. *Obes Rev.* 2023;24(2):e13534. doi: 10.1111/obr.13534
32. National Health and Medical Research Council. Guidelines for Guidelines Handbook: National Health and Medical Research Council [cited 2024 August 23]. Available from: www.nhmrc.gov.au/guidelinesforguidelines.
33. National Health and Medical Research Council. Procedures and requirements for meeting the NHMRC standards for clinical practice guidelines Melbourne: NHMRC; 2022 [cited 2024 August 23]. Available from: <https://www.nhmrc.gov.au/about-us/publications/meeting-2011-nhmrc-standard-clinical-practice-guidelines>.
34. GRADE Working Group. GRADE 2024 [cited 2024 August 23]. Available from: <https://www.gradeworkinggroup.org/>.
35. Commonwealth of Australia. The national obesity strategy 2022–2032 Health Ministers Meeting: Commonwealth of Australia; 2022 [cited 2024 August 23]. Available from: https://www.health.gov.au/sites/default/files/documents/2022/03/national-obesity-strategy-2022-2032_0.pdf.
36. Department of Health. National preventive health strategy 2021–2030 Canberra: Commonwealth of Australia; 2021 [cited 2024 August 23]. Available from: https://www.health.gov.au/sites/default/files/documents/2021/12/national-preventive-health-strategy-2021-2030_1.pdf.
37. Department of Health. Clinical Practice Guidelines: Pregnancy Care. Canberra: Australian Government Department of Health; 2020.
38. World Health Organisation. Health service delivery framework for prevention and management of obesity Geneva, Switzerland: WHO; 2023 [cited 2024 August 23]. Available from: <https://www.who.int/publications/i/item/9789240073234>.
39. United Nations. The 17 goals 2024 [cited 2024 August 23]. Available from: <https://sdgs.un.org/goals>.
40. Gaskin CJ, Cooper K, Stephens LD, Peeters A, Salmon J, Porter J. Clinical practice guidelines for the management of people living with overweight and obesity published internationally: a scoping review. *Obes Rev.* 2024;Early View:e13700. doi: 10.1111/obr.13700
41. Australian Institute of Health and Welfare. Profile of Australia’s population Canberra: AIHW; 2023 [cited 2024 August 23]. Available from: <https://www.aihw.gov.au/reports/australias-health/profile-of-australias-population>.
42. Gooley M, Baur L, Arashiro Z, Petre T, Martin J, Mitchell J, et al. Addressing obesity: determined action and bold leadership required for change. *Public Health Res Pract.* 2022;32:e3232219. doi: 10.17061/phrp3232219
43. Farrell E, Hollmann E, le Roux CW, Bustillo M, Nadglowski J, McGillicuddy D. The lived experience of patients with obesity: a systematic review and qualitative synthesis. *Obes Rev.* 2021;22(12):e13334. doi: 10.1111/obr.13334
44. National Eating Disorders Collaboration. National eating disorders strategy 2023–2033 2023 [cited 2024 August 23]. Available from: <https://nedc.com.au/national-strategy>.
45. Bellew B, Grunseit A, Huang B-H, Kite J, Laird Y, Thomas M, et al. Weight stigma and bias – what is known? Rapid review of evidence Sydney: The University of Sydney; 2020 [cited 2024 August 23]. Available from: <https://hdl.handle.net/2123/22997.2>.
46. Lawrence BJ, de la Piedad Garcia X, Kite J, Hill B, Cooper K, Flint S, et al. Weight stigma in Australia: a public health call to action. *Public Health Res Pract.* 2022;32(2):e3232224. doi: 10.17061/phrp3232224
47. Lawrence BJ, Kerr D, Pollard CM, Theophilus M, Alexander E, Haywood D, et al. Weight bias among health care professionals: a systematic review and meta-analysis. *Obesity.* 2021;29(11):1802-12. doi: 10.1002/oby.23266
48. Phelan SM, Burgess DJ, Yeazel MW, Hellerstedt WL, Griffin JM, van Ryn M. Impact of weight bias and stigma on quality of care and outcomes for patients with obesity. *Obes Rev.* 2015;16(4):319-26. doi: 10.1111/obr.12266
49. Sutin AR, Stephan Y, Terracciano A. Weight discrimination and risk of mortality. *Psychol Sci.* 2015;26(11):1803-11. doi: 10.1177/0956797615601103
50. Alberga AS, Pickering BJ, Alix Hayden K, Ball GDC, Edwards A, Jelinski S, et al. Weight bias reduction in health professionals: a systematic review. *Clin Obes.* 2016;6(3):175-88. doi: 10.1111/cob.12147
51. Talumaa B, Brown A, Batterham RL, Kalea AZ. Effective strategies in ending weight stigma in healthcare. *Obes Rev.* 2022;23(10):e13494. doi: 10.1111/obr.13494
52. Arai L, Panca M, Morris S, Curtis-Tyler K, Lucas PJ, Roberts HM. Time, monetary and other costs of participation in family-based child weight management interventions: qualitative and systematic review evidence. *PLoS ONE.* 2015;10(4):e0123782. doi: 10.1371/journal.pone.0123782
53. Lang S, Gibson S, Ng KW, Truby H. Understanding children and young people’s experiences pursuing weight loss maintenance using the Socio-ecological Model: a qualitative systematic literature review. *Obes Rev.* 2021;22(5):e13172. doi: 10.1111/obr.13172

54. Stankov I, Olds T, Cargo M. Overweight and obese adolescents: what turns them off physical activity? *Int J Behav Nutr Phys Act.* 2012;9(1):53. doi: 10.1186/1479-5868-9-53
55. Ansari M, Serjeant S. Patient experiences of weight loss and eating after bariatric surgery: a systematic review and qualitative synthesis. *J Hum Nutr Diet.* 2023;36(4):1438-50. doi: 10.1111/jhn.13121
56. Coulman KD, MacKichan F, Blazeby JM, Owen-Smith A. Patient experiences of outcomes of bariatric surgery: a systematic review and qualitative synthesis. *Obes Rev.* 2017;18(5):547-59. doi: 10.1111/obr.12518
57. Herpertz S, Kielmann R, Wolf AM, Langkafel M, Senf W, Hebebrand J. Does obesity surgery improve psychosocial functioning? A systematic review. *Int J Obes.* 2003;27(11):1300-14. doi: 10.1038/sj.ijo.0802410
58. Alberga AS, Edache IY, Forhan M, Russell-Mayhew S. Weight bias and health care utilization: a scoping review. *Prim Health Care Res Dev.* 2019;20:e116. doi: 10.1017/S1463423619000227
59. Puhl RM, Himmelstein MS, Pearl RL. Weight stigma as a psychosocial contributor to obesity. *Am Psychol.* 2020;75(2):274-89. doi: 10.1037/amp0000538
60. Sturgiss EA, Peart A, Richard L, Ball L, Hunik L, Chai TL, et al. Who is at the centre of what? A scoping review of the conceptualisation of 'centredness' in healthcare. *BMJ Open.* 2022;12(5):e059400. doi: 10.1136/bmjopen-2021-059400
61. Rigas G, Williams K, Sumithran P, Brown WA, Swinbourne J, Purcell K, et al. Delays in healthcare consultations about obesity - barriers and implications. *Obes Res Clin Pract.* 2020;14(5):487-90. doi: 10.1016/j.orcp.2020.08.003
62. The Royal Australian College of General Practitioners. Smoking, nutrition, alcohol, physical activity (SNAP): a population health guide to behavioural risk factors in general practice (2nd edition) 2015 [cited 2024 August 23]. Available from: <https://www.racgp.org.au/clinical-resources/clinical-guidelines/key-racgp-guidelines/view-all-racgp-guidelines/snap>.
63. Sonnevile KR, Horton NJ, Micali N, Crosby RD, Swanson SA, Solmi F, et al. Longitudinal associations between binge eating and overeating and adverse outcomes among adolescents and young adults: does loss of control matter? *JAMA Pediatr.* 2013;167(2):149-55. doi: 10.1001/2013.jamapediatrics.12
64. Sterne JAC, Savović J, Page MJ, Elbers RG, Blencowe NS, Boutron I, et al. RoB 2: a revised tool for assessing risk of bias in randomised trials. *BMJ.* 2019;366:l4898. doi: 10.1136/bmj.l4898
65. Schünemann H, Brożek J, Guyatt G, Oxman A. GRADE handbook: The GRADE Working Group; 2013 [cited 2024 August 23]. Available from: <https://gdt.grade.pro.org/app/handbook/handbook.html#h.hnedbo8ggjqk>.
66. The Royal Australian College of General Practitioners. Overweight and obesity. East Melbourne: RACGP; 2024.
67. Department of Health and Aged Care. Body mass index (BMI) and waist measurement: Australian Government Department of Health and Aged Care; 2021 [cited 2024 August 23]. Available from: <https://www.health.gov.au/topics/overweight-and-obesity/bmi-and-waist>.
68. National Aboriginal Community Controlled Health Organisation and The Royal Australian College of General Practitioners. National guide to a preventive health assessment for Aboriginal and Torres Strait Islander people: Evidence base. 3rd ed. East Melbourne: RACGP; 2018.
69. World Health Organization (Western Pacific Region). The Asia-Pacific perspective: redefining obesity and its treatment Sydney, Australia: Health Communications 2000 [cited 2024 August 23]. Available from: <https://iris.who.int/handle/10665/206936>.
70. Ross R, Neeland IJ, Yamashita S, Shai I, Seidell J, Magni P, et al. Waist circumference as a vital sign in clinical practice: a Consensus Statement from the IAS and ICCR Working Group on Visceral Obesity. *Nat Rev Endocrinol.* 2020;16(3):177-89. doi: 10.1038/s41574-019-0310-7
71. Grundy SM, Neeland IJ, Turer AT, Vega GL. Waist Circumference as Measure of Abdominal Fat Compartments. *J Obes [Internet].* 2013; 2013(1):[454285 p.]. Available from: <https://onlinelibrary.wiley.com/doi/abs/10.1155/2013/454285>.
72. MIMS online [Internet]. Crows Nest (NSW):MIMS Australia; 2024. Tirzepatide. [cited 2024 Sep 26]. Available from: <https://www.mimsonline-com-au/Search/QuickSearch.aspx?ModuleName=Product%20Info&searchKeyword=Tirzepatide>.
73. Lingvay I, Cohen RV, Roux CWI, Sumithran P. Obesity in adults. *Lancet.* 2024;404(10456):972-87. doi: 10.1016/S0140-6736(24)01210-8
74. Therapeutic Goods Administration (TGA). Therapeutic Goods Administration (TGA) Canberra: Australian Government Department of Health and Aged Care; 2024 [cited 2024 September 26]. Available from: <https://www.tga.gov.au/>.
75. Department of Health and Aged Care. Pharmaceutical Benefits Scheme (PBS) Canberra: Australian Government Department of Health and Aged Care; 2024 [cited 2024 September 26]. Available from: <https://www.pbs.gov.au/pbs/home>.
76. Jastreboff AM, Aronne LJ, Ahmad NN, Wharton S, Connery L, Alves B, et al. Tirzepatide once weekly for the treatment of obesity. *N Engl J Med.* 2022;387(3):205-16. doi: 10.1056/NEJMoa2206038
77. Boye KS, Thieu VT, Sapin H, Lee CJ, Landó LF, Brown K, et al. Patient-Reported Outcomes in People with Type 2 Diabetes Receiving Tirzepatide in the SURPASS Clinical Trial Programme. *Diabetes Ther.* 2023;14(11):1833-52. doi: 10.1007/s13300-023-01451-z
78. Qi QYD, Cox A, McNeil S, Sumithran P. Obesity medications: A narrative review of current and emerging agents. *Osteoarthritis and Cartilage Open.* 2024;6(2):100472. doi: 10.1016/j.ocarto.2024.100472
79. Walmsley R, Sumithran P. Current and emerging medications for the management of obesity in adults. *Med J Aust.* 2023;218(6):276-83. doi: 10.5694/mja2.51871

APPENDIX A: DEVELOPING THE GUIDELINES

DEVELOPMENT OF THE RECOMMENDATIONS

Recommendations have been developed following the NHMRC Guidelines for Guidelines process which includes the following stages: development of research questions, systematic review of the peer reviewed evidence, assessment of the certainty of evidence using the GRADE approach, Evidence-to-Decision framework, consultation with experts and the public, and methodological review.

A systematic review that underpins the treatment recommendations, along with three supporting scoping reviews to inform the context and Evidence to Decision framework assessments for the Guidelines were performed. The systematic review explored the approaches to, and effects of, weight management interventions on the degree and duration of weight loss and maintenance. The three scoping reviews explored 1) the impact of weight status, weight loss, weight maintenance, on health outcomes in individuals living with overweight or obesity; 2) the lived experiences of individuals with overweight and obesity receiving weight management treatment; and 3) the clinical outcomes other than weight loss or maintenance that may result from receiving a nutrition, physical activity, sedentary behaviour, psychological, family-centred, sleep, pharmacological and/or bariatric surgery intervention. Further information about these reviews is presented in the Technical Report.

The systematic review was informed by the following research question:

What are the approaches to, and effects of, weight management interventions on degree and duration of weight loss or weight maintenance?

Full methodological details of this systematic review and its results (including individual study findings, meta-analyses, GRADE and Evidence-to-Decision framework) are included in the Technical Report. The Technical Report will contain feedback obtained via the Public Consultation process, along with responses, and where appropriate, modifications made to the Guidelines based on the feedback received.

STRENGTHS AND LIMITATIONS

A number of strengths and limitations should be acknowledged in relation to the evidence reviews that informed the Guideline development process. A wide-ranging search in multiple databases was undertaken to identify the relevant evidence since the searches to inform the previous Guidelines were conducted in 2010. The subsequent scope of the research, with over 680 papers included, was greater than for the previous Guidelines. The evidence synthesis was reframed to consider the benefits and impacts of weight maintenance in addition to weight reduction, and the experiences of people living with overweight or obesity. A wider range of age groups was included as well as the population subgroups described above. No language restrictions were applied, ensuring all relevant studies were considered. Best practice methods were utilised through phases of study identification and risk of bias using ROB-2 (64) with all undertaken independently and in duplicate. The literature searches were restricted to trials reporting outcomes at 12 months. Although this approach had the advantage of identifying interventions with at least moderately enduring effects on weight-related outcomes, it meant that the literature on shorter-term outcomes (i.e., less

than 12 months) was untapped. Also, there was heterogeneity in the trial populations for some of the interventions, which may affect the generalisability of findings. For example, of the four trials of nutrition interventions with a daily energy intake goal for young and middle-aged adults, the participants were postmenopausal women, overweight (but not obese) women and men), sedentary adults with overweight, and adults with obesity.

The synthesis of evidence was complex, with a series of pragmatic decisions made regarding whether the control arm included an active or inactive comparator. Interventions were classified according to the components within the intervention condition, regardless of what components were in the comparison condition. For example, when the intervention comprised a combination of nutrition plus physical activity and the comparison was physical activity alone, the intervention was classified as nutrition and physical activity due to the heterogeneity in the components of the comparator arms. The implication of these classifications is that the meta-analyses of multimodal interventions with treated comparators may have underestimated the effects of these interventions. Also, different approaches could have been taken to the classification of interventions. For example, interventions that required adherence to prescribed nutrition and physical activity could have been separated from those where advice, counselling, or education targeting nutrition and physical activity was provided. The approach taken was chosen because it is common in public health practice focussed on improving physical activity and nutrition behaviours to use psychoeducational tools (e.g., knowledge provision, goal setting, and self-monitoring), with few trials investigating the effects of direct physical activity or food provision. Pharmacological interventions of differing doses were included in single meta-analyses. Combining different doses was a pragmatic solution to addressing the variability of different dosing regimens in the available trials.

Different decisions with respect to the meta-analyses could have been made. Synthetic effect sizes were created, combining different weight-related outcomes (e.g., body weight, BMI, and waist circumference) into single standardised effect sizes in order to maximise the use of the data available. Producing non-standardised effect sizes for each outcome (e.g., providing information of the effect of an intervention on body weight) may have been of practical value for clinicians.

GRADE and Evidence to decision processes were applied using international gold standard measures (65). Limitations of the evidence synthesis included absence of checking reference lists for further relevant research and citation tracking. Randomised controlled trials with follow-up periods of ≥ 12 months from baseline were eligible for inclusion which may have resulted in exclusion of effective weight loss interventions in certain treatment areas or population groups. For example, surgical weight management interventions often did not incorporate randomised controlled trials with a no-treatment control group, so additional evidence from longitudinal studies was included in the Evidence to Decision process. Where there was a lack of evidence for relevant treatment types among particular subgroups, reference was made to recommendations based on the age of the person. In terms of the broader Guideline development process, practice points and consensus recommendations were developed to complement the evidence for interventions and their effect established by the primary review.

APPENDIX B: GUIDANCE NOTES FOR ASSESSMENT

ASSESSMENT OF WEIGHT STATUS

Guidance for measurement of weight

- Seek permission to weigh the person
- Use a calibrated scale on a hard, level surface
- Ask the person to remove shoes and any heavy outer clothing
- Ask the person to stand on the scale with weight distributed on both feet
- Record their weight. Be aware that some people will not want to know their own weight, have a technique for recording weight in this circumstance.

Guidance for measurement of height

- Use a height measure that is vertical with the base at floor level
- Ask the person to remove shoes and any heavy outer clothing
- Ask the person to stand with their back to the height measure. The person should look straight ahead and their back of the head, back and buttocks should touch the height measure
- Press hair flat and record height

Guidance for calculation of BMI

BMI is calculated by the equation $\text{Weight (kg)}/\text{Height (m)}^2$ with classifications shown below. This is a guide and should be interpreted in terms of the patient's clinical history, examination and investigations. BMI cut points for different obesity-associated health risks also vary according to ethnicity.

CLASSIFICATION	GENERAL POPULATION BMI (KG/M ²)	POPULATION SPECIFIC BMI (KG/M ²)*
Healthy weight	18.5 to 24.9	
Overweight	25.0 to 29.9	23.0 to 27.4
Obese	>30	>27.5
Obese class I	30.0 to 34.9	27.5 to 32.4
Obese class II	35 to 39.9	32.5 to 37.4
Obese class III	≥ 40	≥ 37.5

BMI, body mass index; kg, kilograms; m, metres.

*Population specific cut-offs apply to people with a family background of either South Asian, Chinese, other Asian, Middle Eastern, Black African or African Caribbean (66).

Source: Adapted from Department of Health and Aged Care, Body mass index (BMI) and waist measurement (67).

Adjustments to these measures may be needed for certain populations such as Aboriginal and Torres Strait Islander people, people from culturally and linguistically diverse groups, and for older adults.

Guidance for interpreting BMI

- BMI is only one part of the assessment of personal health risk and should be considered alongside other clinical markers
- People with the same BMI may have different proportions of fat and fat-free mass
- A higher BMI threshold may be appropriate for some groups including for people who have a high muscle mass (e.g. athletes)
- At an equivalent BMI, women will usually have more body fat than men
- At the same BMI, older people will usually have more body fat than younger people
- Currently there is no validated adjusted threshold for Aboriginal and Torres Strait Islander people, however a BMI of 22kg/m² may be a more accurate reflection of risk, particularly in those from remote communities.
- People originally from some Asian countries (e.g. South Asian countries, China, Japan) may have high body fat at lower weights, so a lower BMI (e.g. >23kg/m²) may be considered to be within the overweight range.
- People originally from some Pacific Islands (including Māori) may have a higher proportion of lean body mass, so consider a higher BMI threshold.
- Central deposition of fat increases health risk so waist circumference may be a more appropriate guide for personal health risk.

Source: Adapted from the previous Guidelines (1, 61)

Limitations of BMI and alternative measurements

Due to the known limitations of BMI for assessing individual health risk, other clinical indicators should be used during diagnosis. Waist circumference is an indicator of visceral adiposity; hence it complements BMI by assessing weight distribution. For adults, risk of chronic disease is increased when waist circumference is ≥ 94 cm (men) or ≥ 80 cm (women), while risk is greatly increased at ≥ 102 cm (men) and ≥ 88 cm (women) for people of European descent (62). There may be variations in adiposity cut-points for some ethnicities (63).

Percentile charts, z scores and monitoring change over time support assessment of weight, height and BMI of children and adolescents (see the [World Health Organization growth charts for children](#)).

Guidance for measurement of waist circumference (64, 65)

- The measurement should be taken between the top of the iliac crest and the lower margin of the last palpable rib in the mid axillary line
- Measuring tape should be at a level parallel to the floor
- Consistent tension should be kept in the measuring tape

	WOMEN*	MEN*
Increased risk	>80 cm	>94 cm
Greatly increased risk	>88 cm	>102 cm

*These measurements do not apply to children and pregnant women (67).

Source: Adapted from Department of Health and Aged Care, Body mass index (BMI) and waist measurement (67).

ASSESSMENT OF NUTRITION

Children and Adults

The Eat for health program provides up-to-date advice about the amounts and kinds of foods that individuals need to eat for health and wellbeing. The recommendations are based on the latest scientific evidence, developed after looking at all the good quality research.

[Eat for health calculators](#) can estimate energy (kilojoule) needs, nutrient requirements and the number of serves from the [five food groups](#) people need daily.

ASSESSMENT OF PHYSICAL ACTIVITY

Children and adolescents

The Pre-Exercise Screening System for Young People is to be completed for the healthcare professional by a parent or carer on behalf of the child or adolescent prior to commencement of a physical activity intervention.

Adults

Prior to commencement of a physical activity intervention, the Adult Pre-Exercise Screening System may be self-administered or administered by the healthcare professional.

PRE-EXERCISE SCREENING SYSTEM FOR YOUNG PEOPLE

PARENT TOOL (PSS-PARENT)



Important Information: This tool is part of the Pre-Exercise Screening System (PSS) and should be used in conjunction with the PSS User Guide which covers how to use the information collected and to address the aims of each stage. This does not constitute medical advice. These guidelines and the PSS (together 'the material') is not intended for use to diagnose, treat, cure or prevent any medical conditions, is not intended to be professional advice and is not a substitute for independent health professional advice. Exercise & Sport Science Australia, Fitness Australia, Sports Medicine Australia and Exercise is Medicine (together 'the organisations') do not accept liability for any claims, howsoever described, for loss, damage and/or injury in connection with the use of any of the material, or any reliance on the information therein. While care has been taken to ensure the information contained in the material is accurate at the date of publication, the organisations do not warrant its accuracy. No warranties (including but not limited to warranties as to safety) and no guarantees against injury or death are given by the organisations in connection with the use or reliance on the material. If you intend to take any action or inaction based on the guidelines and/or the PSS, it is recommended that you obtain your own professional advice based on your specific circumstances.

Child/Young Person's Details:

Full Name: _____

Date of Birth: _____ Age: _____ Gender: Male Female Prefer not to say Other

Pre-exercise screening results will be kept as confidential files and shared only among individuals involved in the event of urgent medical care, and/or with the consent of the young person and/or parent/guardian.

STAGE 1 (COMPULSORY)

To be completed with a parent/guardian in conjunction with an exercise professional or the individual who is responsible for the medical care of the young person.



These questions are part of a screening system designed for young people participating in exercise. The aim is to identify any young person with medical conditions or warning signs that may put them at a higher risk of an unwanted event during activity or exercise sessions. Unwanted events may include something happening during exercise leading to illness, physical harm or death.

Definition of Child: A young person between the ages of 5-15 years old in your care

Please tick your response

Does your child have, or previously had:	YES	DON'T KNOW	NO
1. A heart condition?			
2. A close relative who has died suddenly from a heart condition before the age of 50?			
3. Uncontrolled epilepsy or seizures/convulsions?			
4. Fainting or dizzy spells with physical activity/exercise?			
5. Diabetes?			
6. An asthma attack requiring immediate medical attention at any time over the last 12 months?			
7. Anaphylactic reactions?			
8. Surgery in the last month?			
9. Any other conditions that may require special consideration for your child to exercise?			
IF YOU ANSWERED 'YES' or 'DON'T KNOW' to any of the 9 questions above, please discuss with the exercise leader or the person administering this form prior to undertaking exercise.			
IF YOU ANSWERED 'NO' we recommend you proceed to Stage 2 with the exercise leader or those providing medical care for the young person.			
10. Over the past seven days, on how many days was your child physically active for a total of 60 minutes or more per day?	Number of days:		

Parent/Guardian - I hereby acknowledge that:

- » To the best of my knowledge, all of the information supplied within this tool is correct.
- » I will inform the exercise leader or those providing medical care for the young person if there are any changes to the information provided.

Name: _____ Signature: _____ Date: _____

24-hour Physical Activity Guidelines

Following these guidelines may be challenging at times; however, meeting them will benefit health. Achieving these guidelines is associated with better health and leads to improved body composition, cardiorespiratory and musculoskeletal fitness, cardiovascular and metabolic health, academic achievement and cognition, and improved mental health and emotional regulation. For those not currently meeting these guidelines, a progressive adjustment towards them is recommended.

Figure 1. 24-hour physical activity guidelines

(<http://www.health.gov.au/internet/main/publishing.nsf/Content/health-24-hours-phys-act-guidelines>)



STAGE 2 (RECOMMENDED)

This stage is to be completed with an activity or exercise leader, or a relevant health professional, to highlight possible medical conditions or warning signs that may put a child/young person at risk of an unwanted event during activity or exercise sessions.

11. Does your child take any regular medications or supplements?

YES NO

If your child is taking any regular medications or supplements, provide details:

12. Does your child have any current health or medical management plans (e.g. anaphylaxis, asthma or diabetes)?

YES NO

If yes, provide details:

If yes, does your child always carry the relevant medication?

» Anaphylaxis - Epipen? YES NO NA

» Diabetes - insulin or glucose? YES NO NA

» Asthma - reliever (Ventolin or other)? YES NO NA

13. Has your child experienced heat related illness previously?

YES NO

If yes, provide details:

14. Has your child spent time in hospital (including day admission) for any medical condition/ illness/ injury during the last 12 months?

YES NO

If yes, provide details:

15. Does your child have any muscle, bone or joint problems and/or pain that could be made worse by participating in activity?

YES NO

If yes, provide details:

16. In the last month has your child suffered an episode of concussion?

YES NO

If yes, provide details:

17. Which of the following behaviours did your child do in the last 7 days?	Yes/No	Frequency	Duration (average)
Sport (including training)			
Physical Education class			
School physical activity (e.g. fitness lunch time sports)			
Active travel (e.g. walk or cycle to school)			
Other physical activity (e.g. gardening, walking the dog, play at playground)			

Over the last week, what time did your child go to bed (Sunday to Thursday evening)?	
Over the last week, what time did your child wake up (Monday to Friday morning)?	
On the weekend (Friday or Saturday evening), what time did your child go to bed?	
On the weekend (Saturday or Sunday morning), what time did your child wake up?	

On the last 5 school days (Monday to Friday), how much time on average did your child spend:	Hours
- watching movies or TV shows on any device (TV, computer, tablet or smartphone?)	
- surfing the internet for fun?	
- texting or messaging, or using social media?	
- playing videogames on smartphones, computers, tablets or consoles like Playstation?	

OPTIONAL

18. Is your child pregnant or have they given birth previously?

YES NO

If yes, provide details:

PRE-EXERCISE SCREENING SYSTEM FOR YOUNG PEOPLE

YOUNG PERSON TOOL (PSS-YP)



**To be completed
by a young person
16-17 years old**

Important Information: This tool is part of the Pre-Exercise Screening System and should be used in conjunction with the PSS User Guide which covers how to use the information collected and to address the aims of each stage. This does not constitute medical advice. These guidelines and the PSS (together 'the material') is not intended for use to diagnose, treat, cure or prevent any medical conditions, is not intended to be professional advice and is not a substitute for independent health professional advice. Exercise & Sport Science Australia, Fitness Australia, Sports Medicine Australia and Exercise is Medicine (together 'the organisations') do not accept liability for any claims, howsoever described, for loss, damage and/or injury in connection with the use of any of the material, or any reliance on the information therein. While care has been taken to ensure the information contained in the material is accurate at the date of publication, the organisations do not warrant its accuracy. No warranties (including but not limited to warranties as to safety) and no guarantees against injury or death are given by the organisations in connection with the use or reliance on the material. If you intend to take any action or inaction based on the guidelines and/or the PSS, it is recommended that you obtain your own professional advice based on your specific circumstances.

Child/Young Person's Details:

Full Name: _____

Date of Birth: _____ Age: _____ Gender: Male Female Preferred Day Other

Pre-exercise screening results will be kept as confidential files and shared only among individuals involved in the event of urgent medical care, and/or with the consent of the young person and/or parent/guardian.

STAGE 1 (COMPULSORY)

To be completed with an exercise professional or individual who is responsible for the medical care of the young person.



These questions are part of a screen designed for young people participating in exercise. The aim is to identify any young person with medical conditions or warning signs that may put them at a higher risk of an unwanted event during activity or exercise sessions. Unwanted events may include something unexpected during exercise leading to illness, physical harm or death.

Please tick your response

Do you have, or previously had:	YES	DON'T KNOW	NO
1. A heart condition?			
2. A close relative who has died suddenly from a heart condition before the age of 50?			
3. Uncontrolled epilepsy or seizures/convulsions?			
4. Fainting or dizzy spells during physical activity/exercise?			
5. Diabetes			
6. An asthma attack requiring immediate medical attention at any time over the last 12 months?			
7. Anaphylactic reactions?			
8. Surgery in the last month?			
9. Any other conditions that may require special consideration for you to exercise?			
IF YOU ANSWERED 'YES' or 'DON'T KNOW' to any of the 9 questions above, please discuss with the exercise leader or the person administering this form prior to undertaking exercise.			
IF YOU ANSWERED 'NO' we recommend you proceed to Stage 2 with the exercise leader or those providing medical care.			
10. Over the past seven days, on how many days were you physically active for a total of 60 minutes or more per day?	Number of days:		

Young Person - I hereby acknowledge that:

- » To the best of my knowledge, all of the information I have supplied within this screening tool is correct.
- » I will inform the exercise leader or person administering this form if there are any changes to the answers above.

Name: _____ Signature: _____ Date: _____

Parent/Guardian Consent (*required if young person 15 years old or younger) - I hereby acknowledge that:

- » To the best of my knowledge, all of the information supplied within this tool is correct.
- » I will inform the exercise leader or those providing medical care immediately if there are any changes to the information provided.

Name: _____ Signature: _____ Date: _____

24-hour Physical Activity Guidelines

Following these guidelines may be challenging at times; however, meeting them will benefit health. Achieving these guidelines is associated with better health and leads to improved body composition, cardiorespiratory and musculoskeletal fitness, cardiovascular and metabolic health, improved cognition, mental health and emotional regulation. For those not currently meeting these guidelines, a progressive adjustment towards them is recommended.

Figure 1. 24-hour physical activity guidelines

(<http://www.health.gov.au/internet/main/publishing.nsf/Content/health-24-hours-phys-act-guidelines>)



STAGE 2 (RECOMMENDED)

This stage is to be completed with an activity or exercise leader, or a relevant health professional, to highlight possible medical conditions or warning signs that may put a young person at a high risk of unwanted events during activity or exercise sessions.

11. Do you take any regular medications or supplements?

YES NO

If you are taking any regular medications or supplements, provide details:

12. Do you have any current health or medical management plans (e.g. anaphylaxis, asthma or diabetes)?

YES NO

If yes, provide details:

If yes to above, do you always carry any required medication?

» Anaphylaxis - Epipen? YES NO NA

» Diabetes - insulin or glucose? YES NO NA

» Asthma - reliever (Ventolin or other)? YES NO NA

13. Have you experienced heat related illness previously?

YES NO

If yes, provide details:

24-hour Physical Activity Guidelines

Following these guidelines may be challenging at times; however, meeting them will benefit health. Achieving these guidelines is associated with better health and leads to improved body composition, cardiorespiratory and musculoskeletal fitness, cardiovascular and metabolic health, improved cognition, mental health and emotional regulation. For those not currently meeting these guidelines, a progressive adjustment towards them is recommended.

Figure 1. 24-hour physical activity guidelines

(<http://www.health.gov.au/internet/main/publishing.nsf/Content/health-24-hours-phys-act-guidelines>)



STAGE 2 (RECOMMENDED)

This stage is to be completed with an activity or exercise leader, or a relevant health professional, to highlight possible medical conditions or warning signs that may put a young person at a high risk of unwanted events during activity or exercise sessions.

11. Do you take any regular medications or supplements?

YES NO

If you are taking any regular medications or supplements, provide details:

12. Do you have any current health or medical management plans (e.g. anaphylaxis, asthma or diabetes)?

YES NO

If yes, provide details:

If yes to above, do you always carry any required medication?

» Anaphylaxis - Epipen? YES NO NA

» Diabetes - insulin or glucose? YES NO NA


» Asthma - reliever (Ventolin or other)? YES NO NA

13. Have you experienced heat related illness previously?

YES NO

If yes, provide details:

This screening tool is part of the Adult Pre-Exercise Screening System (APSS) that also includes guidelines (see User Guide) on how to use the information collected and to address the aims of each stage. No warranty of safety should result from its use. The screening system in no way guarantees against injury or death. No responsibility or liability whatsoever can be accepted by Exercise & Sport Science Australia, Fitness Australia, Sports Medicine Australia or Exercise is Medicine for any loss, damage, or injury that may arise from any person acting on any statement or information contained in this system.



ADULT PRE-EXERCISE SCREENING SYSTEM (APSS)

This screening tool is part of the **Adult Pre-Exercise Screening System (APSS)** that also includes guidelines (see [User Guide](#)) on how to use the information collected and to address the aims of each stage. No warranty of safety should result from its use. The screening system in no way guarantees against injury or death. No responsibility or liability whatsoever can be accepted by Exercise & Sport Science Australia, Fitness Australia, Sports Medicine Australia or Exercise is Medicine for any loss, damage, or injury that may arise from any person acting on any statement or information contained in this system.

Full Name: _____
 Date of Birth: _____ Male: Female: Other:

STAGE 1 (COMPULSORY)

AIM: To identify individuals with known disease, and/or signs and symptoms of disease who may be at a higher risk of an adverse event due to exercise. An adverse event refers to an unexpected event that occurs as a consequence of an exercise session causing illness, health, physical form or death of an individual.

This stage may be self-administered and self-evaluated. Please complete the questions below and refer to the figures on page 2. Should you have any questions about the screening form please contact your exercise professional for clarification.

Please tick your response	YES	NO
1. Has your medical practitioner ever told you that you have a heart condition or have you ever suffered a stroke?		
2. Do you ever experience unexplained pains or discomfort in your chest at rest or during physical activity/exercise?		
3. Do you ever feel faint, dizzy or lose balance during physical activity/exercise?		
4. Have you had an asthma attack requiring immediate medical attention at any time over the last 12 months?		
5. If you have diabetes (type 1 or 2) have you had trouble controlling your blood sugar (glucose) in the last 3 months?		
6. Do you have any other conditions that may require special consideration for you to exercise?		

IF YOU ANSWERED 'YES' to any of the 6 questions, please seek guidance from an appropriate allied health professional or medical practitioner prior to undertaking exercise.

IF YOU ANSWERED 'NO' to all of the 6 questions, please proceed to question 7 and calculate your typical weighted physical activity/exercise per week.

<p>7. Describe your current physical activity/exercise levels in a typical week by stating the frequency and duration at the different intensities. For intensity guidelines consult figure 2.</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Intensity</th> <th style="text-align: center;">Light</th> <th style="text-align: center;">Moderate</th> <th style="text-align: center;">Vigorous/High</th> </tr> </thead> <tbody> <tr> <td>Frequency (number of sessions per week)</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> </tr> <tr> <td>Duration (total minutes per week)</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> </tr> </tbody> </table>	Intensity	Light	Moderate	Vigorous/High	Frequency (number of sessions per week)	_____	_____	_____	Duration (total minutes per week)	_____	_____	_____	<p>Weighted physical activity/exercise per week</p> <p>Total minutes = (minutes of light + moderate) + (2 x minutes of vigorous/high)</p> <p>TOTAL = _____ minutes per week</p> <ul style="list-style-type: none"> If your total is less than 150 minutes per week then light to moderate intensity exercise is recommended. Increase your volume and intensity slowly. If your total is more than or equal to 150 minutes per week then continue with your current physical activity/exercise intensity levels. It is advised that you discuss any progression (volume, intensity, duration, modality) with an exercise professional to optimise your results.
Intensity	Light	Moderate	Vigorous/High										
Frequency (number of sessions per week)	_____	_____	_____										
Duration (total minutes per week)	_____	_____	_____										

I believe that to the best of my knowledge, all of the information I have supplied within this screening tool is correct.

Client signature: _____ Date: _____

FIGURE 1: Stage 1 Screening Steps

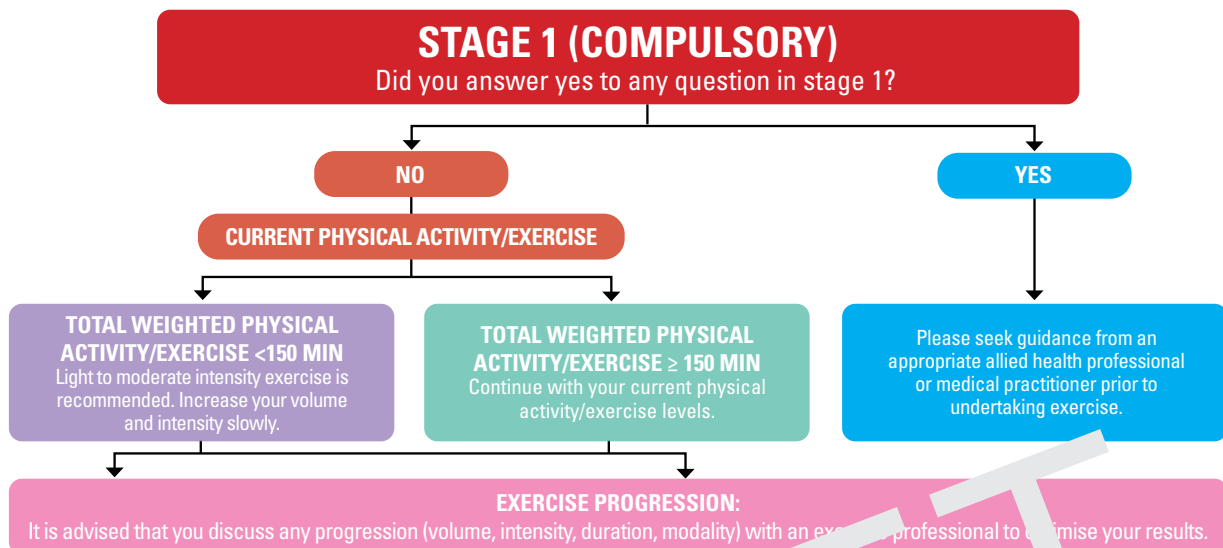


FIGURE 2: Exercise Intensity Guidelines

INTENSITY CATEGORY	HEART RATE MEASURES	PERCEIVED EXERCISE INTENSITY MEASURES	DESCRIPTIVE MEASURES
VERY LIGHT	40 to <55% HRmax*	VERY LIGHT TO LIGHT RPE# 1-2	<ul style="list-style-type: none"> An aerobic activity that does not cause a noticeable change in breathing rate An intensity that can be sustained for at least 60 minutes
MODERATE	55 to <70% HRmax*	MODERATE TO SOMEWHAT HARD RPE# 3-4	<ul style="list-style-type: none"> An aerobic activity that is able to be conducted whilst maintaining a conversation uninterrupted An intensity that may last between 30 and 60 minutes
VIGOROUS	70 to <90% HRmax*	HARD RPE# 5-6	<ul style="list-style-type: none"> An aerobic activity in which a conversation generally cannot be maintained uninterrupted An intensity that may last up to 30 minutes
HIGH	≥ 90% HRmax*	VERY HARD RPE# 7	<ul style="list-style-type: none"> An aerobic activity in which it is difficult to talk at all An intensity that generally cannot be sustained for longer than about 10 minutes

* HRmax = estimated heart rate maximum. Calculated by subtracting age in years from 220 (e.g. for a 50 year old person = 220 - 50 = 170 beats per minute).

= Borg's Rating of Perceived Exertion (RPE) scale, category scale 0-10.

Modified from Norton K, L. Norton & D. Sadgrove. (2010). Position statement on physical activity and exercise intensity terminology. J Sci Med Sport 13, 496-502.

STAGE 2 (RECOMMENDED)



AIM: This stage is to be completed with an exercise professional to determine appropriate exercise prescription based on established risk factors.

CLIENT DETAILS	GUIDELINES FOR ASSESSING RISK
<p>8. Demographics</p> <p>Age: _____</p> <p>Male <input type="checkbox"/> Female <input type="checkbox"/> Other <input type="checkbox"/></p>	<p>Risk of an adverse event increases with age, particularly males ≥ 45 yr and females ≥ 55 yr.</p>
<p>9. Family history of heart disease (e.g. stroke, heart attack)?</p> <p>Relationship (e.g. father) _____ Age at heart disease event _____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<p>A family history of heart disease refers to an event that occurs in relatives including parents, grandparents, uncles and/or aunts before the age of 55 years.</p>
<p>10. Do you smoke cigarettes on a daily or weekly basis or have you quit smoking in the last 6 months?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>If currently smoking, how many per day or week?</p> <p>_____</p>	<p>Smoking, even on a weekly basis, substantially increases risk for premature death and disability. The relative effects are still present up to at least 6 months post quitting.</p>
<p>11. Body composition</p> <p>Weight (kg) _____ Height (cm) _____</p> <p>Body Mass Index (kg/m²) _____</p> <p>Waist circumference (cm) _____</p>	<p>Any of the below increases the risk of chronic diseases:</p> <p>BM ≥ 30 kg/m²</p> <p>Waist > 94 cm male or > 80 cm female</p>
<p>12. Have you been told that you have high blood pressure?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>If known, systolic (mmHg) _____</p> <p>Diastolic (mmHg) _____</p> <p>Are you taking any medication for this condition?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>If yes, provide details _____</p>	<p>Either of the below increases the risk of heart disease:</p> <p>Systolic blood pressure ≥ 140 mmHg</p> <p>Diastolic blood pressure ≥ 90 mmHg</p>
<p>13. Have you been told that you have high cholesterol/ blood lipids?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>If known:</p> <p>Total cholesterol (mmol/L) _____</p> <p>HDL (mmol/L) _____</p> <p>LDL (mmol/L) _____</p> <p>Triglycerides (mmol/L) _____</p> <p>Are you taking any medication for this condition?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>If yes, provide details _____</p>	<p>Any of the below increases the risk of heart disease:</p> <p>Total cholesterol ≥ 5.2 mmol/L</p> <p>HDL < 1.0 mmol/L</p> <p>LDL ≥ 3.4 mmol/L</p> <p>Triglycerides ≥ 1.7 mmol/L</p>

CLIENT DETAILS	GUIDELINES FOR ASSESSING RISK
<p>14. Have you been told that you have high blood sugar (glucose)?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>If known: Fasting blood glucose (mmol/L) _____</p> <p>Are you taking any medication for this condition?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>If yes, provide details</p> <p>_____</p>	<p>Fasting blood sugar (glucose) ≥ 5.5 mmol/L increases the risk of diabetes.</p>
<p>15. Are you currently taking prescribed medication(s) for any condition(s)? These are additional to those already provided.</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>If yes, what are the medical conditions?</p> <p>_____</p>	<p>Taking medication indicates a medically diagnosed problem. Caution is required when taking medication information into account for determining appropriate exercise prescription because it is common for clients to list 'medications' that include contraceptive pills, vitamin supplements and other non-pharmaceutical tablets. Exercise professionals are not expected to have an exhaustive understanding of medications. Therefore, it may be important to use common language to describe what medical condition the drugs are prescribed for.</p>
<p>16. Have you spent time in hospital (including day admission) for any condition/illness during the last 12 months?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>If yes, provide details</p> <p>_____</p>	<p>There are positive relationships between illness rates and death versus the number and length of hospital admissions in the previous 12 months. This includes admission for heart disease, lung disease (e.g., Chronic Obstructive Pulmonary Disease (COPD) and asthma), dementia, hip fractures, infectious episodes and inflammatory bowel disease. Admissions are also correlated to 'poor health' status and negative health behaviours such as smoking, alcohol consumption and poor diet patterns.</p>
<p>17. Are you pregnant or have you given birth within the last 12 months?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>If yes, provide details</p> <p>_____</p>	<p>During pregnancy and after recent childbirth are times to be more cautious with exercise. Appropriate exercise prescription results in improved health to mother and baby. However, joints gradually loosen to prepare for birth and may lead to an increased risk of injury especially in the pelvic joints. Activities involving jumping, frequent changes of direction and excessive stretching should be avoided, as should jerky ballistic movements. Guidelines/fact sheets can be found here: 1) www.exerciseismedicine.com.au 2) www.fitness.org.au/Pre-and-Post-Natal-Exercise-Guidelines</p>
<p>18. Do you have any diagnosed muscle, bone, tendon, ligament or joint problems that you have been told could be made worse by participating in exercise?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>If yes, provide details</p> <p>_____</p>	<p>Almost everyone has experienced some level of soreness following unaccustomed exercise or activity but this is not really what this question is designed to identify. Soreness due to unaccustomed activity is not the same as pain in the joint, muscle or bone. Pain is more extreme and may represent an injury, serious inflammatory episode or infection. If it is an acute injury then it is possible that further medical guidance may be required.</p>

Important Information: This screening tool is part of the [Adult Pre-Exercise Screening System \('APSS'\)](#) and should be read with the APSS guidelines (see [User Guide](#)) on how to use the information collected and to address the aims of each stage. This does not constitute medical advice. This form, the guidelines and the APSS (together 'the material') is not intended for use to diagnose, treat, cure or prevent any medical conditions, is not intended to be professional advice and is not a substitute for independent health professional advice. Exercise & Sports Science Australia, Fitness Australia, Sports Medicine Australia and Exercise is Medicine (together 'the organisations') do not accept liability for any claims, howsoever described, for loss, damage and/or injury in connection with the use of any of the material, or any reliance on the information therein. While care has been taken to ensure the information contained in the material is accurate at the date of publication, the organisations do not warrant its accuracy. No warranties (including but not limited to warranties as to safety) and no guarantees against injury or death are given by the organisations in connection with the use or reliance on the material. If you intend to take any action or inaction based on this form, the guidelines and/or the APSS, it is recommended that you obtain your own professional advice based on your specific circumstances.

APPENDIX C: TIPS FOR SUPPORTING CHILDREN AND ADOLESCENTS IN HEALTHY HABITS

NSW Health

Healthy habits for thriving kids

3 to 17 years

Healthy eating gives your child energy to play, grow and learn

- 

Start each day with a healthy breakfast
This helps your child focus. Healthy options include porridge, low-sugar wholegrain cereal, eggs, wholegrain bread, milk, veggies, fruit and yoghurt.
- 

Offer a variety of foods from the 5 food groups
To support good health, include plenty of vegetables, fruit, cereals and grain foods, dairy or plant-based alternatives with added calcium, and meat, chicken, fish, seafood, eggs, beans/legumes, nuts and seeds.
- 

Offer healthy snacks
Healthy snacks can give kids energy between meals. Try fruit, veggies, nuts, yoghurt or wholegrain bread/crackers and cheese.
- 

Drink plenty of water each day
Water is the best drink for growing minds and bodies. It also helps keep teeth and gums healthy.
- 

Eat together when you can
Sharing and cooking meals together encourages kids to try different healthy foods. It's also a great way to spend time as a family.
- 

Brush teeth in the morning and before bed
Healthy teeth and gums help us smile, speak, eat and socialise.

Physical activity and sleep help with health, mood and focus

- 

Be active each day
3 to 5 years: at least 3 hours being active. Including 1 hour energetic play.
5 to 17 years: at least 1 hour doing things that make the heart beat faster and build strength. Plus several hours of light physical activity such as walking to school.
- 

Balance screen time and sitting with other activities
Break up screen time and sitting with activities that help support development. Limit screen time to:
3 to 5 years: no more than 1 hour a day.
6 to 17 years: no more than 2 hours a day (not counting school activities).
- 

Follow a bedtime routine to help kids get enough sleep.
Aim for:
3 to 5 years: 10 to 13 hours (including naps) each day.
6 to 13 years: 9 to 11 hours a night.
14 to 17 years: 8 to 10 hours a night.

For more healthy habits, scan the QR codes



Healthy, low cost recipes



Free programs for the whole family



Raising Children Network – advice for all ages



SHPN (CPH) 240708

Sourced from Healthy Kids for Professionals at pro.healthykids.nsw.gov.au

APPENDIX D: PHARMACOTHERAPY FOR THE TREATMENT OF OBESITY

	Phentermine	Orlistat	Liraglutide 3 mg	Naltrexone plus Bupropion	Semaglutide 2.4 mg	Tirzepatide
Year of TGA approval	1991	2000	2015	2018	2022	2024
Route and form	Oral (capsule)	Oral (tablet)	Subcutaneous (injection)	Oral (tablet)	Subcutaneous (injection)	Subcutaneous (injection)
Recommended dose	15 mg, 30 mg or 40 mg once daily	120 mg three times a day, with meals	Starting dose 0.6 mg daily, escalating by 0.6 mg per week over five weeks to 3 mg once daily	Starting dose one 8 mg naltrexone–90 mg bupropion tablet daily, escalating by one tablet per week over four weeks to two tablets twice daily (16 mg naltrexone–180 mg bupropion twice a day)	Starting dose 0.25 mg weekly, escalating every four weeks to 2.4 mg weekly over 16 weeks	Initial dose of 2.5mg per week, increasing to 5mg per week after 4 weeks and may increase dose by 2.5 mg increments after > 4 weeks on current dose up to a maximum of 15 mg per week, maintenance 5, 10 or 15 mg per week (72, 73)
Mechanism of action for weight loss	Reduces appetite by stimulating neural release of noradrenaline, serotonin and dopamine	Reduces absorption of dietary fat by inhibiting gastric and pancreatic lipases	Reduces appetite by stimulating GLP-1 receptors in several brain areas	Reduces appetite by stimulating activity of POMC neurons in the hypothalamus	Reduces appetite by stimulating GLP-1 receptors in several brain areas	Dual GIP/GLP-1 receptor agonism (73)
Population approved for use in* (74)	Adolescents and Adults	Adults only	Adults only	Adults only	Adolescents and Adults	Adults only
PBS subsidised for weight management* (75)	No	No	No	No	No	No
Contraindications and precautions	<ul style="list-style-type: none"> • Coronary artery disease • Uncontrolled hypertension • Hyperthyroidism • Glaucoma • Cardiac arrhythmias • MAOI • Pregnancy • Breastfeeding <ul style="list-style-type: none"> • Not recommended with SSRIs 	<ul style="list-style-type: none"> • Pregnancy • Breastfeeding • Chronic malabsorption syndrome (73) • Cholestasis (73) 	<ul style="list-style-type: none"> • Pregnancy • Breastfeeding • Personal or family history of medullary thyroid carcinoma or, • Multiple endocrine neoplasia syndrome type 2 	<ul style="list-style-type: none"> • Pregnancy • Breastfeeding • Uncontrolled hypertension • Seizure disorders • Bipolar disorder • Undergoing abrupt discontinuation of alcohol or anticonvulsant drugs • Chronic opioid use • MAOI 	<ul style="list-style-type: none"> • Pregnancy • Breastfeeding • Personal or family history of medullary thyroid carcinoma or, • Multiple endocrine neoplasia syndrome type 	<ul style="list-style-type: none"> • Pregnancy • Personal or family history of medullary thyroid carcinoma or, • Multiple endocrine neoplasia syndrome type 2 (72, 73)

	Phentermine	Orlistat	Liraglutide 3 mg	Naltrexone plus Bupropion	Semaglutide 2.4 mg	Tirzepatide
Side effects[†]	<ul style="list-style-type: none"> • Dry mouth • Insomnia • Palpitations • Tachycardia • Hypertension • Anxiety • Dizziness • Constipation 	<ul style="list-style-type: none"> • Steatorrhea • Oily spotting • Faecal urgency 	<ul style="list-style-type: none"> • Nausea • Diarrhoea • Constipation • Vomiting • Headache • Dyspepsia • Cholelithiasis 	<ul style="list-style-type: none"> • Nausea • Constipation • Headache • Vomiting • Dizziness • Insomnia • Dry mouth • Diarrhoea • Hypertension 	<ul style="list-style-type: none"> • Nausea • Diarrhoea • Constipation • Vomiting • Headache • Dyspepsia • Cholelithiasis 	<ul style="list-style-type: none"> • Nausea • Diarrhoea • Vomiting • Constipation • Abdominal pain • Dyspepsia (72, 73)
Mean placebo-subtracted weight loss	7.4 kg over 36 weeks	4% at 52 weeks	4–6% at 56 weeks	5% at 56 weeks	12–14% at 68 weeks	17.8% at 72 weeks (76)
Proportion of clinical trial participants with 5% and 10% weight loss at ~12 months	NA	73% and 41% (v 45% and 21% placebo)	63% and 33% (v 27% and 11% placebo)	48% and 25% (v 16% and 7% placebo)	86% and 69% (v 32% and 12% placebo)	91% and 84% (35 and 19% placebo) (76)
Effects on reward-related drivers of eating	Reduced craving for fats and sweets v placebo (Food Craving Inventory) at 12 weeks	No difference in changes to eating restraint, disinhibition, or binge eating v placebo after 18–33 months (Three Factor Eating Questionnaire, Binge Eating Scale)	Reduced desire to consume sweet, salty, fatty and savoury foods v placebo (visual analogue scales) at 16 weeks	Reduced desire to consume sweet and starchy foods, reduced incidence and strength of food cravings, reduced eating in response to food cravings, increased ability to resist food cravings and control eating during 56 weeks (Control of Eating Questionnaire). No difference v placebo on Food Craving Inventory Altered activation v placebo in several brain areas in response to palatable food cues on functional MRI after four weeks of treatment	Improved control of eating, reduced incidence and strength of food cravings v placebo (Control of Eating Questionnaire) following 20 weeks of treatment	NA
Effect on health-related quality of life (HRQoL)	NA	No difference in quality of life compared with lifestyle intervention plus placebo	Greater improvement in all domains (IWQOL-Lite) v placebo at 12 months	Greater improvement in all domains (IWQOL-Lite) v placebo at 12 months from week 8 of treatment	Greater improvement in physical function (IWQOL-Lite) v placebo and greater increase in mental component summary v placebo (SF-36)	No difference in overall HRQoL compared with placebo measured using EQ-5D-5L instrument (77)

	Phentermine	Orlistat	Liraglutide 3 mg	Naltrexone plus Bupropion	Semaglutide 2.4 mg	Tirzepatide
Approximate cost per month at maximum dose⁵	\$145	\$93	\$387	\$240	\$140 (Ozempic) \$460 (Wegovy)	\$690
Other considerations	<ul style="list-style-type: none"> It is recommended that phentermine be used with caution, and with monitoring of blood pressure, in people with hypertension. 	<ul style="list-style-type: none"> Reduction in risk of developing type 2 diabetes by 37% v placebo in people at high risk at four years. 	<ul style="list-style-type: none"> Reduction in risk of developing type 2 diabetes by 66% v placebo in people at high risk over three years. 	<ul style="list-style-type: none"> No improvement in blood pressure with weight loss. Caution and reduced dosing in patients treated with antidepressants and some antipsychotics. 	<ul style="list-style-type: none"> Greater improvements in semaglutide group for HbA1c, fasting plasma glucose. Greater percentage of patients in the semaglutide group with normoglycaemia at week 68–84.1% vs 47.8% (78) 	<ul style="list-style-type: none"> Pooled data for tirzepatide doses. Improved return to normoglycaemia from prediabetes. Improved fasting insulin levels. (78)

GI, Gastrointestinal; HRQoL, Health-related quality of life; IWQOL-Lite, Impact of Weight on Quality of Life-Lite questionnaire; MAOI, Monoamine oxidase inhibitors; NA, Data not Available; SF-36, 36-Item Short Form Health Survey; SSRI, selective serotonin reuptake inhibitor. *Based on Therapeutic Goods Administration (TGA) Australia approvals as of 10th October 2024. †Based on Pharmaceutical Benefits Scheme (PBS) as of 26th September 2024. ‡List of side effects is not comprehensive and does not list serious but rare side effects. Please refer to the [TGA website](#) for a more complete list. §Private script costs are at the discretion of individual pharmacies. Costs in table are correct as of 10th October 2024.

¶Disclaimer: Any differences in this table with outcomes reported in the Technical Report may be due to inclusion criteria resulting in different studies being incorporated.

Source: Table is adapted from Current and emerging medications for the management of obesity in adults, The Medical Journal of Australia (MJA), Box 2 (79). Data on tirzepatide has been added due to its recent approval by the TGA for weight management.