

Obesity prevention and management

Position statement - January, 2025

1. Position

The RACGP:

- recognises that obesity is one of the Nation's most important health issues, (1) affecting the health, wellbeing, and productivity of many Australians. (2-4).
- Acknowledges that obesity is linked directly and indirectly to many chronic conditions (5-7) and causes significant morbidity and mortality. (8,9)
- Believes that General practice has a central role to play in the primary, secondary and tertiary prevention
 of obesity, the latter focusing on the management of individuals currently living with obesity. This role
 needs to be continually supported through improved funding (10) of GP consultations to reflect the
 complexity of the disease (11,12) process, but also increased funding to be directed towards addressing the
 current inequity in access to effective evidence-based obesity-management services and therapies. (13,14).
- Funding general practice research to evaluate the effectiveness of primary and secondary obesity preventative strategies is also much needed.

2. Background

Obesity affects individuals, their families and/or carers, the workforce, the healthcare system, and the wider community. (15) Obesity determinants include strong genetic predisposition, (16-19), early life experiences, (20-22) and environmental factors. The latter may contribute to the epigenetic (23,24) determinants of obesity.

The worldwide prevalence of obesity has increased over recent decades, reflecting the significant contribution of changes in lived environments and lifestyle factors (25).

Despite 32% of Australian adults living with obesity ⁽²⁾, a retrospective analysis of a large Melbourne General Practice database found that only 22.2% and 4.3% of patients ⁽²⁶⁾ had a body mass index (BMI) and waist circumference (WC), respectively, recorded in their electronic medical record, which is currently not consistent with Guideline ⁽²⁷⁾ recommendations. Furthermore, research has shown that if a formal diagnosis of obesity is made and documented, there is a greater chance that an obesity management plan ⁽²⁸⁾ will be developed.

The prevalence of obesity in Aboriginal and Torres Strait Islander peoples is continuing to rise and is of major concern. In 2018–19, 71% of Aboriginal and Torres Strait Islander peoples aged 15 years and over, were living with overweight or obesity. The rise was driven by an increase in non-remote areas ⁽²⁾. Obesity/overweight is thought to contribute to 11% of the health gap between Aboriginal and Torres Strait Islander peoples and non-Indigenous Australians ⁽²⁹⁾. The inequity in health service access and provision for Australians with obesity is further accentuated in those from Aboriginal and Torres Strait Islander backgrounds.

The ACTION Australia study ⁽³⁰⁾ showed that there is a mean delay of 8.9 years from when a person living with obesity first starts to struggle with their weight and when they have an initial consult with a healthcare professional about this. During this time, many such people will progress to more severe stages of obesity and/or develop complications of obesity, some of which are irreversible.

Advances in medical research have resulted in the provision of more effective therapeutic options as adjuncts to lifestyle interventions. Effective obesity-management therapy should be ongoing to prevent relapses, given *metabolic adaptation* including hormonal changes ⁽³¹⁾ and reduction in basal metabolic rate ⁽³²⁾, occurs after weight loss due to adipocyte mass reduction. Therefore, this condition requires lifelong management ^(10,33).

People living with obesity commonly experience stigmatisation and social inequity in daily life (34-36) – a situation compounded because systemic inequity and stigmatisation currently limit access to effective treatments (13,14). Consequently, they often present late with more advanced stages of disease.

Australian GPs and their primary care teams are well recognised for their comprehensive competence in chronic disease management ⁽³⁷⁾. The National Obesity Strategy 2022 (NOS) (10) recommends GPs "...identify unhealthy weight gain at various life stages, with early action to prevent further progression and reverse small increases in weight". It emphasises the importance of enabling people with obesity to "access early and appropriate support and treatment to improve health, prevent further weight regain, complications and associated diseases such as type 2 diabetes."

Obesity has been an Australian National Health Priority Area ⁽⁴⁾ since 2008; with two-thirds of Australian adults ⁽²⁾ living with overweight or obesity. Obesity is considered a pro-inflammatory(5,38,39) heterogeneous disease process ^(5,17) given that the excess dysfunctional adiposity ⁽⁴⁰⁾ impairs the health of an individual in different ways. It is well documented that obesity often causes unfavourable metabolic and hormonal changes in the individual; however, it can also cause mechanical and/or mental health sequelae. Obesity is also associated with an increased risk of developing other chronic diseases such as diabetes, heart disease, osteoarthritis and many cancers ⁽⁴¹⁾ such as breast, endometrial, ovarian, oesophageal, upper and lower gastrointestinal tract (GIT) including pancreatic

The causes of obesity are multiple and complex, and include genetics, early life experiences "the developmental origins of health and disease" ^(42,43), epigenetics (a change in the way genes are expressed), the brain-gut axis regulating several GIT hormones⁽⁴⁴⁾, alterations in the gut microbiome ⁽⁴⁵⁾ (bacteria and cells that live in the gut), disordered sleep⁽⁴⁶⁾, iatrogenic (medication-related) and high stress levels among others. While the heritability of obesity has been shown in twin studies and clinical practice, only a small percentage of patients have a purely genetic cause (e.g. leptin deficiency) ⁽⁴⁷⁻⁴⁹⁾ or a purely medical cause (e.g. hypothalamic tumour) for their obesity. For most people at genetic risk of developing obesity, environmental factors (physical, social and economic) ⁽⁵⁰⁾ facilitate weight gain and subsequent adiposopathy ^(5,38) (adipose tissue dysfunction).

In particular, visceral adiposity (adipocytes around the vital organs) is strongly associated with an increased risk of developing T2 Diabetes ⁽⁷⁾, cardiovascular disease ⁽³⁹⁾, metabolic dysfunction-associated fatty liver disease ⁽⁵¹⁾ (MAFLD) and many other metabolic health sequelae. Similarly, an awareness that adipocytes are part of the neuroendocrine system whereby the gut and the brain communicate about energy stores ⁽⁴⁴⁾, has had a profound impact on our understanding of the disease process and management approaches.

The scientific discovery of hunger and satiety hormones which are regulated by the hypothalamus (which is not under voluntary control) and our understanding of *metabolic adaptation* by the body as a physiological "survival" response to adipocyte mass reduction (as a result of weight loss), has helped to scientifically explain why weight loss *maintenance* is challenging for the majority of people living with obesity ⁽⁵²⁾. This disturbance in normal physiology ⁽³¹⁾ is detrimental to health, function and wellness and is associated with many comorbidities ^(36, 37).

The bidirectional relationship between obesity and mental health ^(53,54) is well documented in the medical literature. Consequently, mental health issues place people at increased risk of obesity and deserve special consideration ⁽⁵⁵⁾. Weight gain may be a consequence of symptoms such as impaired motivation or self-care, insomnia, physical inactivity and/or an unhealthy relationship with food e.g. comfort/stress eating etc ⁽⁵⁰⁾. In addition, many psychotropic medications are prone to appetite stimulation and subsequent weight gain in addition to other metabolic side effects, which are a significant cause of morbidity and demand the careful attention of the treating clinician ⁽⁵⁶⁻⁵⁷⁾.

Furthermore, it has been shown in the literature that people living with obesity are less likely to participate in health prevention and screening programs ⁽⁵⁸⁻⁵⁹⁾ because of previous negative experiences with HCPs and/or fear of "fat"/weight shaming. As a result, such individuals may present when the disease is well advanced and/or when

complications have arisen, resulting in poorer health outcomes. Alternatively, some people living with obesity may avoid healthcare altogether if they feel shamed about their weight and/or body size. Obviously, this represents a missed opportunity to intervene early.

Public obesity messages that focus only on weight and individual factors contribute to stigma and weight bias (35,37) and consequently, affect the health and wellbeing of the individuals (36). Additionally, people living with obesity commonly report experiencing stigmatisation and social inequity in many other aspects of daily life – a situation compounded because systemic inequity and stigmatisation currently limit access to effective treatments (13,14)

Of those Australian adults who qualify for bariatric metabolic surgery based on BMI alone, uptake of surgery is unacceptably low (1%). In 2022, 3.2% of these primary operations were performed in the Australian public healthcare system ⁽¹³⁾. Furthermore, at the time of writing, there were no obesity-management medications (OMM) on the Pharmaceutical Benefits Scheme (PBS). A retrospective analysis of a large U.S. electronic medical record database revealed that only ~1% of adults meeting Food and Drug Administration criteria for obesity management medications (OMM) were prescribed them, with even fewer continuing OMM 12 months later ⁽¹⁴⁾. The low uptake of these effective evidence-based adjunct therapies is even more pronounced in those from socio-economic disadvantaged groups, exacerbating the divide between those who can and cannot afford private health insurance.

3. Policy response

Recognise the importance of obesity

Currently we have an 'obesogenic' environment that does not support people to readily make healthy decisions about their nutrition and physical activity levels (50). Furthermore, the prevalence of poor mental health, elevated stress levels, poor sleep patterns etc are currently greater that what they were in past decades. All these things play a role in this complex heterogeneous disease process, particularly in individuals who are genetically *at-risk* of developing obesity (48). Therefore, prevention strategies require a *whole-of-systems approach* that includes not only the healthcare sector, but also public health safeguards, town planning, transport, nutrition and education (61-62).

Obesity is both a cause and consequence of many other chronic conditions. Obesity is expected to have periods of relapse and remission and, given its progressive nature ^(10,12), lifelong management will be required ^(10,33,63). Furthermore, there are certain periods along the life course and life events which are predictably associated with obesity relapse such as the inter-partum period ⁽⁶⁴⁾, prolonged need for steroid therapy for medical reasons, prolonged immobilisation, initiation of psychotropic medications ⁽⁵⁶⁾ etc.

Given that obesity is a chronic health condition requiring a long-term multifaceted approach to management, GPs are well placed to assist and manage such individuals. GPs should be supported and appropriately funded to apply chronic disease management principles including planned, proactive, team-based care that is stepped up according to need (10,33,65,66).

Public policy

To work effectively and equitably towards reducing obesity in our communities, we need a balanced combination of individual and public health measures ^(3,67). To prioritise their health, individuals increasingly must work against the environments in which they live ⁽⁵⁰⁾. The RACGP recognises the need for a change in public policy to support prowellness environments, where healthier options are readily available and affordable. The RACGP advocates that the focus of the health message be on 'gaining health' by reducing adiposopathy, rather than simply 'losing weight', recognising that obesity is about more than body weight ⁽⁶⁸⁾.

Recognise the key role of GPs in managing obesity

The RACGP recognises that a skilled and enabled primary care workforce is essential for obesity prevention and management ^(27,31,63). GPs are in a unique position to bridge issues that cross primary care and public health. GPs deal with individuals' day to day, but also have a deep understanding of the communities in which they work.

The delay in clinical presentation and lower participation rates in preventative screening programmes by people

living with obesity underscores the need for GPs to address all forms of prevention: primary, secondary and tertiary. This is also supported by the NOS (10).

The RACGP encourages strategies to support GPs and their primary care teams in improving their documentation of measures of obesity/overweight and the subsequent management plan including follow-up. The Department of Health has made available Medicare Benefits Schedule provisions for GPs in this role, via the use of Chronic Disease Management Plans for the care of individuals living with obesity. This is supported by the NOS ⁽¹⁰⁾.

Education and support for GPs in managing obesity

The RACGP recognises the need for more education of registrars and practising GPs in all levels of prevention including tertiary i.e. detection and management of obesity, and importantly the need for awareness of stigmatisation and inequity. Many GPs have the skills required to provide professional advice to individuals *at risk* of developing obesity, but they need to be supported to provide effective, evidence-based management to patients living with obesity (10,33,63). Some of the cited barriers for therapeutic inertia include:

- the perception that people living with obesity are "not motivated"; the literature suggests otherwise (69,30)
- 2. a concern that raising the topic of obesity might offend the individual; the literature suggests otherwise (69-70).
- 3. insufficient consulting time-however recently Medicare has made provisions for longer duration consults for more complex patient-clinician interactions.
- 4. the NOS (10) encourages GPs to be *proactive* not reactive in the management of people living with obesity/overweight however, dissemination of this important public health message has been limited.

GPs are part of a multi-dimensional approach

The RACGP recognises the need for a multi-dimensional approach, including population-wide public health measures, and targeted approaches for particular *at-risk* groups (27).

Furthermore, the RACGP agrees with the NOS' recognition that GPs need to be better supported to play their role in managing people living with obesity (10).

'Systems thinking' is producing encouraging results in the crucial paediatric age group, and may be applicable to other *high-risk* groups ^(71,50).

Stigmatisation

The stigmatisation of obesity in our communities is a major problem, and well-intentioned but insensitive comments or policies may do more harm than good. As a step to reduce the stigmatisation of obesity, the RACGP commits to using person-first language and to ending the use of stigmatising images and messages when referring to issues relating to obesity.

Furthermore, the RACGP recognises that the clinical focus of obesity management should be improving health, wellness, quality of life and independence of the individual (5,7,40).

Health inequity

Health inequity is a consequence of, and a contributing factor to, obesity (35,36). All obesity initiatives should clearly state how they are working towards reducing health inequity in underserved populations, particularly Aboriginal and Torres Strait Islander communities. The RACGP recognises that to effectively and equitably prevent obesity, a balanced combination of individual and upstream measures is required (67). Seeking consultation from consumer groups, including people with the lived experience, on obesity initiatives should also be considered.

The RACGP recommends increased government support for clinical services, effective obesity-management adjunct therapies including equitable access to public-funded bariatric metabolic surgery and PBS subsidised obesity-management medication.

Advocacy

The RACGP calls for all levels of government, and other sectors including manufacturing and retail and public health authorities, to join GPs in addressing Australia's obesogenic environment. Obesity is a serious health issue for individuals living with obesity, and for their families and carers. The RACGP is committed to the primary, secondary and tertiary prevention of this life-threatening disease process to ensure better health outcomes and quality of life for all Australians.

4. References

- 1. General Practice, Health of a Nation Report 2024. Royal Australian College of General Practitioners.
- 2. Australian Institute of Health and Welfare (2024) Overweight and obesity, AIHW, Australian Government [Accessed 02 November 2024]. https://www.aihw.gov.au/reports/overweight-obesity/overweight-and-obesity/contents/overweight-and-obesity
- 3. Australian Institute of Health and Welfare (2024) Australia's health 2024: in brief, catalogue number AUS 249, AIHW, Australian Government.
- Australian Institute of Health and Welfare. Improving Australia's burden of disease (including references to National Health Priority Areas). Canberra: AIHW, 2018. Available at www.aihw.gov.au/getmedia/28c917f3cb00-44dd-ba86- c13e764dea6b/education-resource-health-priority-areas.pdf. aspx [Accessed 23 January 2019].
- 5. Marasi M et al. The cardio-renal-metabolic connection: a review of the evidence. Cardiovascular Diabetology (2023) 22:195
- 6. Afzal M. et al., Prevalence of overweight and obesity in people with severe mental illness: systematic review and meta-analysis. Frontiers in Endocrinology. 2021 Nov 25;12:769309.
- 7. Lingvay I, et al. Obesity management as a primary treatment goal for type 2 diabetes: time to reframe the conversation. The Lancet 2022. Volume 399, Issue 10322, p394-405
- 8. Delpino FM, dos Santos Rodrigues AP, Petarli GB, et al. Overweight, obesity and risk of multimorbidity: A systematic review and meta-analysis of longitudinal studies. *Obesity Reviews*. 2023; 24(6):e13562.
- Abdelaal M, et al. Morbidity and mortality associated with obesity Annals of Translational Medicine 2017;5(7):161
- 10. Commonwealth of Australia 2022. The National Obesity Strategy 2022-2032. Health Ministers Meeting
- 11. Bray G, et al. Obesity: A chronic relapsing progressive disease process. A position statement of the World Obesity Federation. Obes Rev 2017;18(7):715–23.
- 12. World Health Organisation Obesity and Overweight Fact Sheet, March 2024; https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight [accessed 2 November 2024]
- 13. The Bariatric Surgery Registry Annual Report 2022. Central Clinical School, Monash University, June 2023, Report No. 10.
- Zhang S, Manne S, Lin J, Yang J. Characteristics of patients potentially eligible for pharmacotherapy for weight loss in primary care practice in the United States. Obes Sci Pract. 2016 Jun;2(2):104-114. doi: 10.1002/osp4.46. Epub 2016 May 26. PMID: 27840686; PMCID: PMC5089644.
- 15. Weighing the cost of obesity: a case for action, October 2015. Price Waterhouse Coopers, Australia

- 16. Stunkard et al. The body mass of twins who have been reared apart. NEJM 1986; 322:1483
- 17. Bouchard, C. (2021), Genetics of Obesity: What We Have Learned Over Decades of Research. Obesity, 29: 802-820.
- 18. Stunkard et al. An adoption study of human obesity NEJM 1986, 314: 193
- 19. Bouchard C et al. The response to long-term overfeeding in identical twins. NEJM 1986; 322:1477
- Gracjner T.et al. Exposure to sugar rationing in the first 1000 days of life protected against chronic disease.
 Science 2024
- 21. Cusick S.E. et al. The role of nutrition on brain development: the golden opportunity of the "First 1,000 days". Journal of Pediatrics Vol 175, p16-21, August 2016.
- 22. Mameli C et al. Nutrition in the First 1000 Days: The Origin of Childhood Obesity. *International Journal of Environmental Research and Public Health.* 2016; 13(9):838.
- 23. Rohde K. et al. Genetics and epigenetics in obesity, Metabolism, Volume 92, 2019, Pages 37-50.
- 24. Rosen E.D. et al. Epigenetics and Epigenomics: Implications for Diabetes and Obesity. *Diabetes* 1 October 2018; 67 (10): 1923-1931
- 25. World Health Organization. Global Health Observatory (GHO) data: Obesity. Geneva: WHO, 2022. Available at https://www.who.int/data/gho/data/themes/topics/indicator-groups/indicator-group-details/GHO/risk-factors [Accessed 2 November 2024].
- 26. Turner L.R. et al. Obesity management in general practice: does current practice match guideline recommendations? The Medical Journal of Australia, Volume 202, Issue 7, April 2015, Pages 370-372
- https://www.racgp.org.au/clinical-resources/clinical-guidelines/key-racgp-guidelines/view-all-racgp-guidelines/preventive-activities-in-general-practice/what-s-new-in-the-10th-ed-red-book [accessed 7 November 2024]
- 28. Bardia A. et al, Diagnosis of Obesity by Primary Care Physicians and Impact on Obesity Management, Mayo Clinic Proceedings, Volume 82, Issue 8, 2007, Pages 927-932
- 29. Australian Institute of Health and Welfare 2024. Aboriginal and Torres Strait Islander Health Performance Framework: summary report August 2024. AIHW: Australian Government. Accessed [2 November, 2024].
- 30. Rigas G. et al, Delays in healthcare consultations about obesity Barriers and implications, Obesity Research & Clinical Practice, Volume 14, Issue 5, 2020, Pages 487-490, ISSN 1871-403X
- 31. Sumithran P. et al. Long-term Persistence of Hormonal Adaptation to Weight Loss, New England Journal of Medicine 2011 365:1597-604
- 32. Rosenbaum M et al; Adaptive thermogenesis in humans; Int J Obes (Lond). 2010 Oct; 34(0 1): S47–S55.
- 33. Busetto, L., et al. A new framework for the diagnosis, staging and management of obesity in adults. *Nat Med* **30**, 2395–2399 (2024).
- 34. Puhl RM. Weight stigma and barriers to effective obesity care. Gastroenterology Clinics. 2023 Jun 1;52(2):417-28
- 35. Phelan SM et al. Impact of weight bias and stigma on quality of care and outcomes for patients with obesity. Obesity reviews: An official journal of the International Association for the Study of Obesity 2015;16(4):319–26.
- 36. Emmer C, Bosnjak M, Mata J. The association between weight stigma and mental health: a meta-analysis. Obesity Reviews 2020, 21(1):e12935.
- 37. Harris M.F. et al, Care of patients with chronic disease: achievements in Australia over the past decade.

Medical Journal of Australia. 2018 Jul;209(2):55-7.

- 38. de Mello AH, Costa AB, Engel JD, Rezin GT. Mitochondrial dysfunction in obesity. Life sciences. 2018 Jan 1;192:26-32.
- 39. Ndumele C.E. et.al. Cardiovascular-Kidney-Metabolic Health: A Presidential Advisory From the American Heart Association. Circulation, 2023; Volume 148, Issue 20, Pages 1606-1635
- 40. de Mello AH, Costa AB, Engel JD, Rezin GT. Mitochondrial dysfunction in obesity. Life sciences. 2018 Jan 1;192:26-32.
- 41. Pati, S, et al. "Obesity and cancer: a current overview of epidemiology, pathogenesis, outcomes, and management." *Cancers* 15.2 (2023): 485.
- 42. Hanson M.A., et al. Developmental origins of health and disease Global public health implications. Best Practice & Research Clinical Obstetrics & Gynaecology, Volume 29, Issue 1, 2015, Pages 24-31.
- 43. Godfrey KM et al. Developmental origins of metabolic disease: Life course and intergenerational perspectives. Trends Endocrinol Metab 2010;21(4):199–205.
- 44. Richards P, Thornberry NA, Pinto S. The gut-brain axis: Identifying new therapeutic approaches for type 2 diabetes, obesity, and related disorders. Molecular Metabolism. 2021 Apr 1;46:101175.
- 45. Rosenbaum M et al. The gut microbiota in human energy homeostasis and obesity. Trends Endocrinol Metab 2015;26(9):493–501.
- 46. Miller M.A. et al, Systematic review and meta-analyses of the relationship between short sleep and incidence of obesity and effectiveness of sleep interventions on weight gain in preschool children. Obesity Reviews. 2021 Feb;22(2):e13113.
- 47. Farooqi I.S. et al, Monogenic Obesity Syndromes Provide Insights Into the Hypothalamic Regulation of Appetite and Associated Behaviors, Biological Psychiatry, Volume 91, Issue 10, 2022, Pages 856-859.
- 48. Loos, R.J.F. et al., The genetics of obesity: from discovery to biology. Nat Rev Genet 23, 120–133 (2022).
- 49. Littleton, S.H., Berkowitz, R.I. & Grant, S.F.A. Genetic Determinants of Childhood Obesity. *Mol Diagn Ther* 24, 653–663 (2020).
- 50. Commonwealth of Australia, Department of Health 2021. National Preventative Health Strategy 2021-2030
- Roeb E et al. Excess body weight and metabolic (dysfunction)-associated fatty liver disease (MAFLD). Visc Med.2021 Aug;37(4):273-280
- 52. Kompaniyets L, Freedman DS, Belay B, Pierce SL, Kraus EM, Blanck HM, Goodman AB. Probability of 5% or greater weight loss or BMI reduction to healthy weight among adults with overweight or obesity. JAMA Network Open. 2023 Aug 1;6(8):e2327358-.
- 53. Dickerson FB et al. Obesity among individuals with serious mental illness. Acta Psychiatr Scand 2006;113(4):306–13.
- 54. Pereira-Miranda E, Costa PRF, Queiroz VAO, Pereira-Santos M, Santana MLP. Overweight and obesity associated with higher depression prevalence in adults: a systematic review and meta-analysis. J Am Coll Nutr. 2017;36(3):223–33
- 55. Smith J. et al., Cardiometabolic risk in first episode psychosis patients. Frontiers in Endocrinology. 2020 Nov 24;11:564240.
- 56. Ye W. et al. Mechanism and treatments of antipsychotic-induced weight gain. International Journal of Obesity. 2023 Jun;47(6):423-33.
- 57. Rotella F. et al., Long-term metabolic and cardiovascular effects of antipsychotic drugs. A meta-analysis of

randomized controlled trials, European Neuropsychopharmacology, Volume 32, 2020, Pages 56-65.

- 58. Sand FL. Et al., The influence of overweight and obesity on participation in cervical cancer screening: a systematic review and meta-analysis. Preventive Medicine. 2023 Jul 1;172:107519.
- 59. Alberga AS, Edache IY, Forhan M, Russell-Mayhew S. Weight bias and health care utilization: a scoping review. 2019 Prim Health Care Res Dev. 20, E116.
- 60. Kværner K.S, et al. Trajectories of body fatness from age 5 to 60 y and plasma biomarker concentrations of the insulin–insulin-like growth factor system, The American Journal of Clinical Nutrition, Volume 108, Issue 2, August 2018, Pages388–397
- 61. King L, et al. Best practice principles for community-based obesity prevention: Development, content and application. Obes Rev 2011;12(5):329–38.
- 62. Malakellis M, et al. School-based systems change for obesity prevention in adolescents: Outcomes of the Australian Capital Territory 'It's Your Move!'. Aust N Z J Public Health 2017;41(5):490–96.
- 63. Markovic TP, Proietto J, Dixon JB, Rigas G, Deed G, Hamdorf JM, Bessell E, Kizirian N, Andrikopoulos S, Colagiuri S. The Australian Obesity Management Algorithm: A simple tool to guide the management of obesity in primary care. Obesity Research & Clinical Practice. 2022 Sep 1;16(5):353-63.
- 64. Cantor A.G. et al., Counselling and Behavioral Interventions for Healthy Weight and Weight Gain in Pregnancy: Evidence Report and Systematic Review for the US Preventive Services Task Force. *JAMA*. 2021;325(20):2094–2109.
- 65. Khaled A., et.al. Pharmacotherapy before and after bariatric surgery, Metabolism, Volume 148, 2023, 155692
- 66. Elhag, W, et al. Effectiveness and Safety of Liraglutide in Managing Inadequate Weight Loss and Weight Regain after Primary and Revisional Bariatric Surgery: Anthropometric and Cardiometabolic Outcomes. OBES SURG 32, 1005–1015 (2022).
- 67. Rutter H, et al. Balancing upstream and downstream measures to tackle the obesity epidemic: A position statement from the European Association for the Study of Obesity. Obes Facts 2017;10(1):61–63.
- 68. Sharma AM et al. Redefining obesity: Beyond the numbers. Obesity 2017;25(4): 660-61.
- 69. Caterson, Ian D., et al. Gaps to bridge: misalignment between perception, reality and actions in obesity. Diabetes, Obesity and Metabolism 21.8 (2019): 1914-1924.
- 70. Mazza D. et.al., "90% of the time, it's not just weight": General practitioner and practice staff perspectives regarding the barriers and enablers to obesity guideline implementation, Obesity Research & Clinical Practice, Volume 13, Issue 4, 2019, Pages 398-403
- 71. Jansen S, Desbrow B, Ball L. Obesity management by general practitioners: The unavoidable necessity. Aust J Prim Health 2015;21(4):366–68.

RACGP Mission statement

The RACGP's mission is to improve the health and wellbeing of all people in Australia by supporting GPs, general practice registrars and medical students through its principal activities of education, training and research and by assessing doctors' skills and knowledge, supplying ongoing professional development activities, developing resources and guidelines, helping GPs with issues that affect their practice, and developing standards that general practices use to ensure high quality healthcare.

Acknowledgement of contributing authors of the 2019 Position Statement: Nic Brayshaw, Roy Rasalam, Nada Rawof, Elizabeth Sturgiss Georgia Rigas. The 2025 updated position statement was authored by Georgia Rigas and reviewed by Terri-Lynne South.

Disclaimer

The information set out in this publication is current at the date of first publication and is intended for use as a guide of a general nature only and may or may not be relevant to particular patients or circumstances. Nor is this publication exhaustive of the subject matter. It is no substitute for individual inquiry. Compliance with any recommendations does not guarantee discharge of the duty of care owed to patients. The RACGP and its employees and agents have no liability (including for negligence) to any users of the information contained in this publication.

© The Royal Australian College of General Practitioners 2024

This resource is provided under licence by the RACGP. Full terms are available at www.racgp.org.au/usage/licence

We acknowledge the Traditional Custodians of the lands and seas on which we work and live, and pay our respects to Elders, past, present and future.