Weight loss options in general practice

A positive approach, using the 5As, is required when helping obese patients manage their weight

Obesity, defined as a body mass index (BMI) of 30 kg/m² or more, is increasingly prevalent in Australia, affecting 28% of adults, 7% of children aged 5–17 years and 27% of patients who present to general practice.1,2 Overweight and obesity are strong risk factors for chronic conditions such as diabetes, which have also been steadily increasing over the past two decades.1

Although obesity is ultimately due to an imbalance between energy intake (diet) and expenditure (digestion, metabolism and physical activity), this is influenced by a complex range of other factors, including genetics, epigenetics, the gut biome, the social environment, culture and health literacy over the life cycle.3

In the face of this complexity and repeated failed efforts by their patients to lose weight, many clinicians feel frustrated, attributing the lack of success to lack of patient motivation.4 The negative attitudes of some clinicians, in turn, result in many patients trying to lose weight without medical support.5 Yet, obesity can be addressed successfully and even small amounts of weight loss are associated with lowered cardiovascular risk and delayed onset of chronic conditions such as diabetes.6

The 5As approach provides a useful framework for general practitioners to help obese patients manage their weight and was adopted in the recent National Health and Medical Research Council (NHMRC) clinical management guidelines.7 It involves the following steps:

- **ask and assess** BMI, waist circumference, diet (especially fruit, vegetable and fat intake), physical activity, comorbidities, medications that might contribute to weight gain, and readiness to change
- **advise** on the benefits of a healthy lifestyle and weight management; even small amounts of weight loss (5%) are beneficial
- **assist** by providing (directly or by referral) education on diet, physical activity and behaviour change; a diet that produces an energy deficit of 2500 kJ per day and 300 minutes of moderate-intensity activity or 150 minutes of vigorous activity per week are recommended
  - if BMI > 30 kg/m² with no weight loss, consider a very low energy diet
  - if BMI > 40 kg/m² or > 35 kg/m² with comorbidities, consider surgery
- **arrange** follow-up and review, to prevent relapse and provide support.

Effective interventions target both diet and physical activity, use established behaviour-change techniques and mobilise social support.8 Fad diets are unhelpful. Low-carbohydrate, high-protein diets can be useful in achieving short-term weight loss but caution is needed because there is evidence of increased long-term cardiovascular risk.9 Very low energy diets using meal replacements can be beneficial but require careful monitoring and support (although meal replacement products are available without a prescription).

Obese patients are not often referred to allied health professionals (eg, dietitians, exercise physiologists and health educators), even though such referrals can help patients achieve and maintain modest weight loss. Education and coaching in diet and physical activity change has been shown to result in 3%–10% weight loss.10 There are many different weight loss services and programs run by commercial providers, health clinics, government agencies and non-government organisations. However, not all are evidence based and it can be a challenge for GPs to know which will be effective. Further, many patients fall by the wayside because of cost, availability, transport, and appropriateness for their language, sex or cultural background. Cost can be reduced by using chronic disease management items in the Medicare Benefits Schedule when referring patients who have chronic conditions; these help patients access multidisciplinary care from three providers. It is important to assist patients as they navigate the complexities of the health care system, especially patients with low health literacy.

Currently available medications are not well tolerated and have limited effectiveness in weight maintenance. Orlistat and phentermine are the only weight loss drugs registered for use in Australia. Both are expensive and neither is listed on the Pharmaceutical Benefits Scheme. In this issue of the Journal, Neoh and colleagues10 show that a combination of phentermine and topiramate is poorly tolerated due to adverse effects. A phentermine–topiramate combination was recently approved for use in the United States, although the approved formulation and doses differed from those used in Neoh et al’s study.

Another article in this issue, by Lukas and colleagues,11 adds to the body of evidence showing that surgery is effective in not only achieving weight loss but also in control of comorbidities, especially diabetes.12 The choice of surgical procedure (eg, laparoscopic adjustable gastric banding, laparoscopic sleeve gastrectomy or Roux-en-Y bypass)
should be individualised. Surgery should not be considered a last resort, especially because relatively young patients can benefit. However, surgery is an expensive option for most people (as access to bariatric procedures in the public sector is limited, despite evidence of effectiveness), and surgery is most effective when it is part of a multidisciplinary approach that includes diet, physical activity and psychological support.

Whatever the treatment approach, follow-up is important. This should be frequent: fortnightly for the first 3 months of a weight loss program with review and escalation in intensity if there is less than 1% decrease in weight.

It is not news to GPs that there is no panacea to the obesity epidemic and that other interventions are required early in life and at a population level. However, there is justification for some optimism — modest weight loss and reductions in health risk are possible, and GPs have an important role to play in helping patients manage their weight.

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Diabetes and the human condition
Adapting to a global dilemma

The treatment of diabetes before insulin therapy tested the skills of the clinician and the commitment of the patient. But by the 1920s, insulin became widely available for the diabetic community in North America.1

If diabetes was once considered a simple problem of insulin deficiency it is not seen that way now. Instead it is a window on complex metabolic distortions, signals, substrates and reactions.

A second form of diabetes

An extraordinary twist in the diabetes story has been the epidemic of type 2 diabetes. Rapid changes in the human environment — massive migrations from rural to urban environments with upheavals in diet away from traditional foods — have accompanied soaring prevalence rates in developed and developing economies alike. Why cannot humans adapt to our new environments? Maybe we can — but it will take ages. Plutella xylostella caterpillars adapt to an obesogenic environment, but in eight generations.2 So we must turn instead to the environmental factors that promote diabetes and hinder its treatment.

What we eat is inextricably linked to the food that is available, affordable and acceptable. In order to make lasting and sustainable changes to the food environment, the food system from paddock to plate must change. This may occur through the accumulation of many small changes.

The role of Big Farmer

Agricultural subsidies for cash crops can be a health hazard. Subsidised corn and soybean oil in the United States lead to cheap ultraprocessed foods. Production of high-fructose corn syrup, used in beverages, is supported by large government subsidies.

But with reduced subsidies corn farmers are now planting orchards and growing vegetables. Cause and effect cannot be disentangled, but changes in agriculture are occurring in parallel with health awareness.3 Farm incomes are recovering in parallel with increased sales of fruits and vegetables.

Improvements must be made not only in food production, but also in food-processing practices. Product reformulation can reduce the levels of salt and sugar and replace trans and saturated fats. Ensuring that a health-promoting


