

SUPPORTING

SUSTAINABLE WEIGHT LOSS

It is not surprising, in light of the current obesity and T2D epidemics¹, that the weight loss effects of GLP-1 receptor agonists have attracted considerable attention both within the medical community and beyond. And while weight loss can lead to the reversal of T2D, regained weight can see T2D return. Glenn Mackintosh and Dr Lauren Prictor provide suggestions for using medications for weight loss within a multi-disciplinary team for sustainable weight loss.

Many factors underpin the worldwide shortage of GLP-1 receptor agonists.^{2,3} It can be partly attributed to an increase in off-label prescribing for people with obesity, but the TGA is also investigating the apparent promotion of these medications on social media platforms, possibly driven by influencers pursuing aesthetic goals rather than improved health outcomes.³

An over-emphasis on pharmacological therapy can lead to people underestimating the importance of making sustained, long-term, and healthy lifestyle modifications, supported by multi-disciplinary teams.² It can also result in an underestimation of the risks associated with the use of any medications resulting in weight loss - whether a diabetes therapy with an additional weight loss effect, or a medication exclusively prescribed for weight loss.

WEIGHT LOSS MEDICATIONS – A CATALYST TO WEIGHT LOSS?

Weight loss medications are often perceived as being the 'catalysts' to weight reduction, a perception that has both advantages and disadvantages.

Advantages

By regarding medications as a catalyst for weight loss, people's motivation to make other lifestyle modifications, such as dietary changes and increased physical activity, can also be enhanced.³ Weight loss medications can result in early weight reduction, which may also improve

people's confidence in their ability to make long-term, sustainable, and healthy lifestyle changes.

Disadvantages

One problem associated with this 'catalyst perspective' is the potential for some people to develop unrealistic expectations about the initial effects these medications may have on weight loss. Weight loss medications may result in up to 12% of body weight loss, whereas many people with obesity will be seeking to lose up to 30% of their total body weight.^{5,6} This may lead to feelings of disappointment if the initial weight loss is less than they had expected. In turn, this may actually lead to a loss of confidence in their ability to make long-term changes to their eating, exercise, and behaviours.^{3,4}

The perceived failure to attain a desired weight can also result in persistent body dissatisfaction. This dissatisfaction has been linked to mental health conditions,⁷ reduced quality of life,⁸ harmful dieting practices and disordered eating,⁹ exercise avoidance,¹⁰ weight regain,¹¹ and weight cycling.¹²

OTHER LIMITATIONS OF WEIGHT LOSS MEDICATIONS

Risk of Regain with Weight Management

Initiating weight loss can be difficult, but often the real challenge is maintaining the weight loss in the long term. The reality is that many people who lose weight will eventually regain it.

New research has studied the long-

term effects of once-weekly subcutaneous semaglutide and lifestyle intervention. The STEP 1 trial followed 327 participants who completed 68 weeks of treatment with semaglutide and intensive lifestyle intervention. The participants who received semaglutide lost on average 17.3% of their body weight compared to 2% for the placebo group. Both groups were then followed up for a further 52 weeks after the treatment, or placebo, had ceased.¹³

Participants regained two-thirds of their lost weight one year after stopping treatment. This was also associated with the reversal of some of the cardiometabolic improvements made during treatment, such as both systolic and diastolic blood pressures returning to pre-weight loss baselines.¹³ This pattern mirrors the well-known "Nike swoosh" trajectory of weight loss observed in diet and exercise interventions, where weight regain commences soon after treatment ceases.^{14,15}

Fat-Free Mass Loss

Apart from the potential risk of weight regain, weight loss medications are also associated with reductions in fat-free mass (FFM) as well as reductions in fat mass. Loss of FFM, such as reductions in skeletal muscle and bone density, can have a negative impact on overall health and physical functioning. Women, especially postmenopausal women, are more vulnerable than men to bone loss during weight reduction due to changes in sex steroid levels.¹⁶ Maintaining skeletal

Image: © Max Herlynking / Unsplash

muscle mass is especially important for people with T2D because greater skeletal muscle mass improves insulin sensitivity, reduces insulin requirements, and plays a crucial role in glucose uptake, storage, and oxidation.^{17,18}

A recent meta-analysis has found that GLP-1 receptor agonists can reduce FFM as well as fat mass.¹⁹⁻²² Other medications associated with a reduction in FFM are orlistat,²³ bupropion and

naltrexone,²⁴ topiramate, phentermine,²⁵ and SGLT-2 inhibitors.¹⁷

Exercise is an effective strategy for maintaining FFM during weight reduction; the combination of endurance and resistance exercise leads to the most significant improvements in insulin sensitivity in T2D and in reducing FFM loss.²⁶ Additionally, adequate protein intake during weight reduction also helps to mitigate the loss of FFM.²⁶

Fig. 1. Reviewed Studies (14) Showing Relative proportions of fat mass and lean body/fat-free mass within total weight loss elicited by GLP-1 receptor agonist therapy⁴⁰

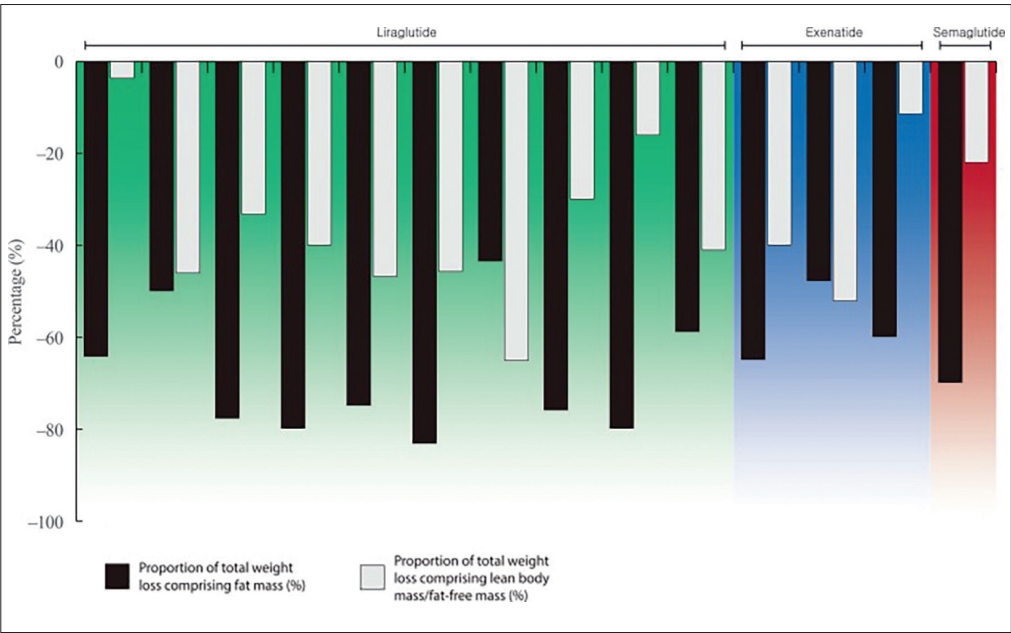
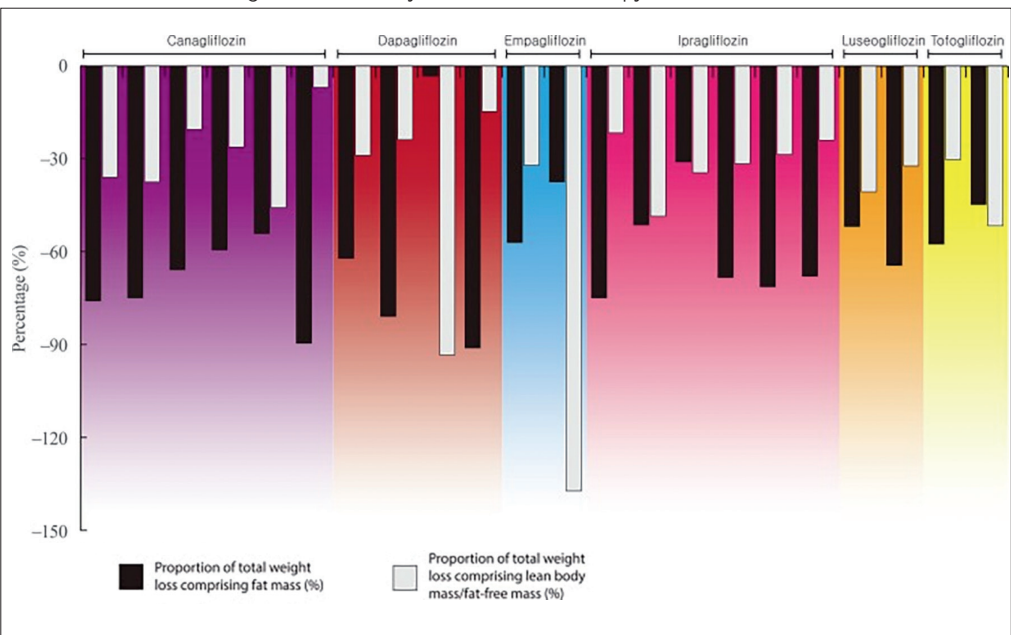


Fig. 2 Reviewed Studies (22) Showing Relative proportions of fat mass and lean body/fat-free mass within total weight loss elicited by SGLT-2 inhibitor therapy⁴⁰



SUPPORTING PEOPLE WHO ARE TAKING WEIGHT LOSS MEDICATIONS

Although advancements in weight loss medications are welcome, these treatments must be considered to be only one component of a comprehensive, holistic approach to weight management, and not a panacea.³

The following recommendations can guide GPs and allied health professionals in supporting people seeking weight reduction medications.

1. Assess Readiness to Change

For weight loss medications to be effective, concurrent behavioural and psychological changes are needed. The whole person should be considered including the current psychosocial context, their mental preparedness, and the level of support available for their health behaviour changes. GPs are frequently the people best placed to make these assessments as the person's psychosocial context is often well-known to the GP.

Assessing readiness for change may help people commence medications when they are most likely to be effective. This approach may also identify factors that may impact medication efficacy, and identify alternative or adjunct treatment options.

There are different models for assessing readiness for change that can be used by GPs and psychologists. One commonly used model is the transtheoretical model, or Stages of Change model, proposed by Prochaska and DiClemente.²⁷ A detailed discussion of these models is beyond the scope of this article.

2. Work Closely Within a Multi-Disciplinary Team

Chronic health conditions such as T2D and obesity are complex and multifaceted. Optimal management of T2D and obesity require a cohesive and coordinated team approach. In addition to GPs, bariatric physicians, and bariatric surgeons, Australian research has identified three allied health professionals who can help individuals seeking weight reduction.²⁸

Dietitians can assist people in modifying their eating habits. Changes in eating behaviour can assist with weight loss, preserve FFM, and lead to metabolic health benefits independent of weight outcomes.²⁹

Exercise physiologists can assist people in preserving FFM during weight loss by creating exercise programs tailored to

a person's co-morbidities and physical restrictions. Regular physical activity can help maintain weight loss, protect against weight regain, and improve cardiometabolic variables, such as blood pressure, independent of any weight changes that may ensue.³⁰

Psychologists can help people to make changes by identifying and overcoming obstacles to adopting new eating and physical activity patterns. This enhances weight loss, improves psychological functioning, and helps weight loss maintenance.³¹ Psychological therapies also play a crucial role in addressing co-morbid mental health conditions, body image concerns,³³ and emotional eating.³⁴ Medications may reduce appetite and help people manage physiologically based drivers of over-eating but they may not be effective at addressing psychologically based food cravings. Non-hungry food cravings that are not alleviated with medication may be effectively treated with psychological interventions, such as Cognitive Behavioural Therapy (CBT) and Emotional Freedom Techniques (EFT),³⁵ also known as 'tapping'. EFT interventions have shown reductions in food cravings that were maintained two years post-intervention.³⁶

While people often consult their GP for initial assistance with weight reduction, a team approach can minimise the risks associated with weight loss medications, and maximise their benefits.

A GP Management Plan (GPMP) and Team Care Arrangement (TCA) can be a helpful way to coordinate the multidisciplinary team, ensure effective communication between the team members, and provide people seeking weight reduction access to five allied health services in a calendar year.

A Mental Health Care Plan (MHCP) can also be a helpful way to allow people to access Medicare-subsidised psychology services. However, to access a MHCP, it is a Medicare-mandated rule that people must have a mental health condition, which must be named in the MHCP. People living with obesity may also live with depression, anxiety, disordered eating, or bipolar affective disorder, for example.

Telehealth services and multi-disciplinary case conferences can also help the team to collaborate, especially if the services are being provided by professionals in several different clinics.

3. Provide Continuing Care

Educating people about the chronicity of obesity and the need for long-term, ongoing care is essential. GPs are often the professionals best placed to provide long-term support to people seeking weight reduction.

Interviews with Australian GPs identified a number of barriers to providing long-term weight management services including limited time during consultations, and lack of access to support services.³⁷ Although GPs recognise the importance of addressing weight management and facilitating lifestyle changes, these barriers affect their ability to provide adequate support to people during standard GP consultations.³⁷ These issues may be partly addressed by using GPMP, TCAs, and MHCPs to involve other healthcare professionals in GPs' care of people with obesity.^{38,39}

CONCLUSION

The availability of new weight loss medications provides GPs with opportunities to help more people living with obesity and T2D. These medications should not be viewed as a panacea to the obesity and T2D epidemic, as they are associated with risks, and there are limitations to their use. These medications should be used within the context of a multidisciplinary team that can provide comprehensive, holistic, and person-centred care in the long term. ■



PRACTICE TAKEAWAYS:

- 1 Obesity is a chronic health condition that requires long-term, ongoing care within a multi-disciplinary team.
- 2 A comprehensive, multi-disciplinary approach to weight management may include medications, diet and exercise interventions, and psychological support.
- 3 Patients may perceive weight loss medications as an initial catalyst for weight loss, which can enhance motivation and self-efficacy. However, there is a risk of excessive dependence on medication and unrealistic expectations, leading to disappointment and weight regain.
- 4 Weight loss medications can be a valuable tool in managing obesity and type 2 diabetes, but they are not a "magic pill" and should be used in conjunction with lifestyle modifications for long-term success.
- 5 It is crucial to consider the potential loss of fat-free mass (FFM) with weight loss interventions, as FFM loss can have negative impacts on overall health and physical function. Maintaining FFM is especially important for people with T2D, as it is crucial for insulin sensitivity and glucose control.

The authors declare no conflict of interest.

References: www.diabetesaustralia.com.au/diabetes-management-journal.



Glenn Mackintosh, BA(Psyc.), Hons (Psych. & HMS), Mpsych (Sp. & Ex.) MAPS, is the Founder of the Weight Management Psychology clinic and author of *Thinsanity: 7 Steps To Transform Your Mindset & Say Goodbye To Dieting Forever*



Dr Lauren M Pictor, MBBS FRACGP, is a General Practitioner and Lifestyle Medicine Physician operating her own medical services out of Next Practice Newstead, QLD