





Effective Psychological and Behavioural Interventions in Obesity Management

Michael Vallis PhD R. Psychⁱ, David Macklin MDⁱⁱ, Shelly Russell-Mayhew PhD R. Psychⁱⁱⁱ

- Department of Family Medicine, Faculty of Medicine, Dalhousie University
- ii) Department of Family and Community Medicine, University of Toronto; Medcan Clinic
- iii) Education Psychology, Werklund School of Education, University of Calgary

KEY MESSAGES FOR HEALTHCARE PROVIDERS

- All obesity management interventions involve behaviour on the part of the individual living with obesity (e.g., eating, activity, medication adherence), so behavioural change supports should be incorporated into all obesity management plans. This requires a shift in the patient-provider relationship from the provider as the expert (teach and tell) to that of the collaborator, sensitive to the psychology of the person.
- Obesity management interventions should be evaluated based on how sustainable the behavioural components of the intervention are for the individual. Obesity management plans that are sustainable for the individual should be prioritized over clinician- or program-led management plans.

Cite this Chapter

Vallis TM, Macklin D, Russell-Mayhew S. Canadian Adult Obesity Clinical Practice Guidelines: Effective Psychological and Behavioural Interventions in Obesity Management. Available from:

https://obesitycanada.ca/guidelines/behavioural. Accessed [date].

Update History

Version 1, August 4, 2020. The Canadian Adult Obesity Clinical Practice Guidelines are a living document, with only the latest chapters posted at obesitycanada.ca/guidelines.

- Individuals living with obesity should be encouraged to build self-esteem and self-efficacy (confidence to overcome barriers to the desired behaviour), based on results that are achievable from behavioural efforts and not on idealized ideas of body weight and shape.
- Nutrition, medical adherence and physical activities are outcomes of psychological and behavioural interventions and not interventions in themselves. Behaviour change strategies underlying dietary, medical and activity programs should be identified (i.e., what are the change strategies by which sustainable changes to eating, medical adherance and activity are achieved?)

KEY MESSAGES FOR HEALTHCARE PROVIDERS WORKING IN A SOLO PRACTICE

- Adopt a collaborative relationship with the patient, using the principles of motivational interviewing, to encourage the patient to choose and commit to evidence-based, sustainable behaviours associated with obesity management.
- Consider the use of a minimal intervention tool, such as Obesity Canada's 5As of Obesity Management™ (Ask, Assess, Advise, Agree, Assist).
- Healthcare providers should ask permission to educate the patient about obesity management success being related more to improved health, function and quality of life resulting from achievable behavioural and psychological goals, and not just on the amount of weight loss.

- Education should be focused around biology, bias and behaviour. Ask permission to discuss evidence regarding biological and environmental factors, including genetics (family history, the instinctual drive for food), neuroendocrine functions that promote weight regain following weight loss, and physical and social environments (i.e. built environment, food availability/security, sociocultural factors).
- Consider using the concept of "best weight" (i.e., the
 weight that a person can achieve and maintain while living
 their healthiest and happiest life). This education should be
 offered as a means of reducing self-bias and supporting
 appropriate outcome goals that acknowledge that weight
 is not a behaviour. This encourages body acceptance.
- Educate the patient that success is related to setting achievable, sustainable goals to which they can adhere, while developing confidence to overcome barriers and fostering an intrinsic motivation to maintain the plan. Goals should positively impact health, function and quality of life.

- Encourage the patient to:
 - Set, and sequence goals that are realistic and achievable.
 - · Self-monitor behaviour.
 - Analyze setbacks using problem solving and cognitive reframing, including clarifying and reflecting on values-based behaviours. See Figure 1 for an illustration of how to support the patient in their obesity management journey.
 - For providers who function within teams (including obesity specialty programs), at least one member of the team should develop competency in behavioural interventions, including self-monitoring, goal setting and action planning, reinforcement management, social comparison, cognitive restructuring, motivational interviewing and values-based counselling. Psychological and behavioural interventions should focus on the impact of the intervention on adherence, self-efficacy and autonomous motivation.

Recommendations

- 1. Multicomponent psychological interventions (combining behaviour modification [goal setting, self-monitoring, problem solving], cognitive therapy [reframing] and values-based strategies to alter nutrition and activity) should be incorporated into care plans for weight loss and improved health status and quality of life (Level 1a, Grade A)^{1–8} in a manner that promotes adherence, confidence and intrinsic motivation (Level 1b, Grade A).^{9–13}
- 2. Healthcare providers should provide longitudinal care with consistent messaging to people living with obesity to support the development of confidence in overcoming barriers (self-efficacy) and intrinsic motivation (personal, meaningful reasons to change), to encourage the patient to set and sequence health goals that are realistic and achievable (Level 1a, Grade A), 9-15 to self-monitor behaviour (Level 1a, Grade A)910.14,15 and to

- analyze setbacks using problem-solving and adaptive thinking (cognitive reframing), including clarifying and reflecting on values-based behaviours (Level 1a, Grade A).^{9,10,14,15}
- 3. Healthcare providers should ask patients' permission to educate them that success in obesity management is related to improved health, function and quality of life resulting from achievable behavioural goals, and not on the amount of weight loss. (Level 1a, Grade A). 16,17
- 4. Healthcare providers should provide follow-up sessions consistent with repetition and relevance to support the development of self-efficacy and intrinsic motivation. 9-15 Once an agreement to pursue a behavioural path has been established (health behaviour and/or medication and/or surgical pathways) follow-up sessions should repeat the above messages in a fashion consistent with repetition (the provider role) and relevance (the patient role) to support the development of self-efficacy and intrinsic motivation (Level 1a, Grade A).

Key messages for people living with obesity

- The main goal of psychological and behavioural interventions is to help people living with obesity make changes that are sustainable, that promote positive self-esteem and confidence, and that improve health, function and quality of life.
- There is not one pathway to success. Goals should be individualized and be important to the individual and not just the clinician or program.
- There are many psychological and behavioural strategies that can be helpful. Individuals living with obesity should seek out a clinician with expertise in behaviour change to help identify relevant strategies.
- Given that healthier weights involve overcoming many challenges (cravings, habits, availability, social pressures) sustained behaviour change is more successful if the behaviours chosen by the individual are consistent with his/her core values.

Figure 1: Solo MD Model

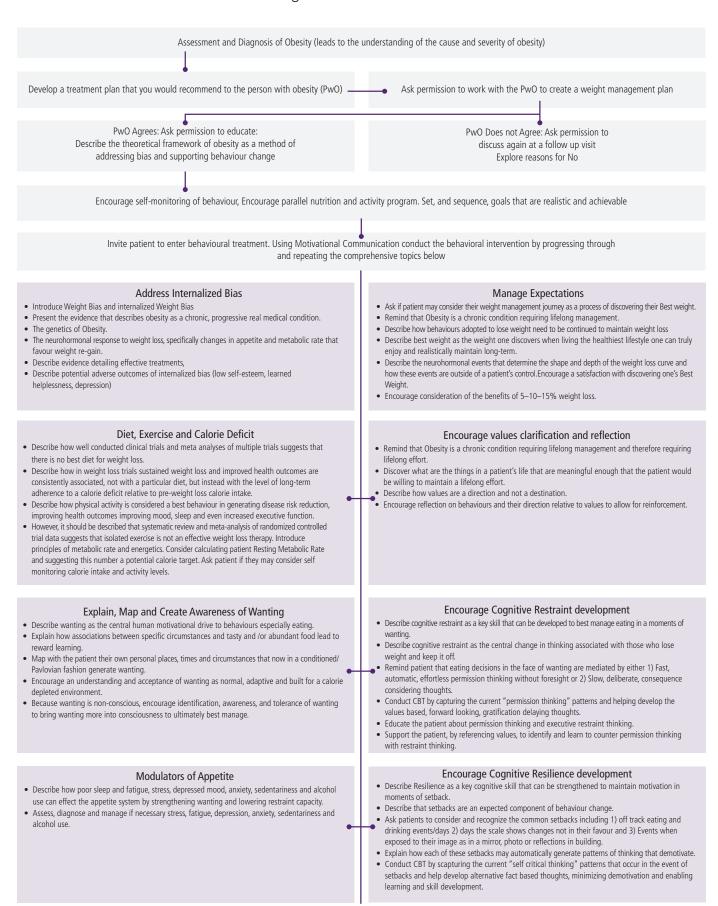


Table 1: Evidence review

Recommendations for primary care providers working in solo practices, teams and obesity management specialty services were based on a systematic review of the literature.

MAIN FINDING		EVIDENCE LEVEL
Multicomponent behavioural interventions implemented by trained individuals (regulated providers) focused on calorie restriction and energy expenditure are effective:	In producing modest weight loss in individuals with overweight and obesity. ^{1–7}	LEVEL 1A – GRADE A
	In producing improved health status and quality of life. ^{3,8}	LEVEL 1A – GRADE A
	Healthcare providers can be trained to effectively implement the wide range of behavioural interventions available. ^{14, 18–25}	LEVEL 1B – GRADE A
	The use of technology, such as interactive websites or mobile devices are effective as adjuncts to in person delivery of behavioural interventions (more research needed). ^{26,27}	LEVEL 1B – GRADE A
		LEVEL 1A – GRADE A
A number of specific behavioural interventions have been demonstrated to be effective, including self-monitoring, goal setting and action planning, reinforcement management, social comparison, cognitive restructuring and motivational interviewing. 9,10,14,15	Behavioural interventions that impact adherence, self-efficacy and autonomous (intrinsic) motivation are associated with the best long-term outcome. ^{9–13}	LEVEL 1B – GRADE A
		LEVEL 1A – GRADE A
	Behavioural interventions that strengthen restraint (self-regulation) improve outcomes, particularly in those who report strong food cravings. ^{32–34}	LEVEL 2 – GRADE B
Providers should be informed about the powerful neurobiological underpinnings of the drive to eat (food cravings) as well as the power of food as a reinforcement (associative learning). This information should be used to establish a nonjudgmental understanding of the barriers to change in the individual living with obesity (reducing stigma) and aid in the identification of behavioural goals that are achievable in the context of the strength of this drive. ^{28–31}	Acceptance and commitment therapies are value-added adjuncts to multi-component behavioural interventions. 35,36	LEVEL 2 – GRADE B
	Self-bias is common and may affect outcomes. Assessing for internalized weight bias is recommended to aid with reducing bias and encouraging achievable expectations. ^{37–39}	LEVEL 2 – GRADE B
	Coping strategies consistent with the principles of cognitive behaviour therapy and acceptance and commitment therapy can help mitigate against internalized weight bias. 37,40,41	LEVEL 1B – GRADE A
	Excessive weight loss expectations do not appear to be a deterrent to behavioural interventions. 16,17	LEVEL 1B – GRADE A
	Satisfaction with weight loss is associated with improved outcomes and can be encouraged as an alternative goal to achieving a specific weight. ^{42–43}	LEVEL 1B – GRADE A