



# A Patient-centred Approach to Obesity: Counselling Health Behaviour Change

William J. Watson, MD, CCFP, FCFP

Melanie Morris, MEd, RD

Peter Selby, MD, MHSc, CCFP

Kelly L. Howse, MD, CCFP

In today's world, families are under increasing stress, from financial and time constraints, to family breakdown, substance abuse, and threats of violence. Family physicians are seeing an increase in psychosocial issues such as anxiety and stress-related disorders, often co-existing with and complicating medical problems such as diabetes or pneumonia. The psychosocial issues are often more difficult to diagnose and manage than are the medical problems—and all take place in the family context. Very often, the family is the key to dealing effectively with the whole spectrum of complaints, requiring a psychosocial assessment. In the crowded family medicine curriculum, this vital area of knowledge and skill is often ignored in favour of more clear-cut procedural skills.

To educate family physicians about dealing with families, a group of family medicine educators, practitioners and mental health professionals affiliated with the Department of Family and Community Medicine at the University Of Toronto founded the Working with Families Institute (WWFI) in 1985. The WWFI has developed various training experiences for trainees and practising physicians.

### **Goals**

The goal of these modules is to provide a learning resource for physicians dealing with common medical and psychosocial issues that have an impact on families. The modules seek to bridge the gap between current and best practice, and provide opportunities for physicians to enhance or change their approach to a particular clinical problem.

The modules have been written by a multidisciplinary team from the Faculty of Medicine, University of Toronto. Each module has been peer-reviewed by external reviewers from academic family medicine centres across Canada. The approach is systemic, emphasizing the interconnectedness of family and personal issues and how these factors may help or hinder the medical problems. The topics range from postpartum adjustment to the dying patient, using a problem-based style and real case scenarios that pose questions to the reader. The cases are followed by an information section based on the latest evidence, case commentaries, references and resources.

### **How to Use the Modules**

The modules are designed for either individual learning or small group discussion. We recommend that readers attempt to answer the questions in the case scenarios before reviewing the case commentaries or reading the information section.

The editors welcome feedback on these modules and suggestions for other modules. Feedback can be directed to Dr. Watson at [dcfm.wwfi@utoronto.ca](mailto:dcfm.wwfi@utoronto.ca).

### **Acknowledgements**

The WWFI is grateful to the Counselling Foundation of Canada for its generous educational grant in support of this project. The editors also thank Iveta Lewis (Librarian-DFCM) Brian Da Silva (IT consultant-DFCM), and Danielle Wintrip (Communications Coordinator-DFCM) for their valuable contributions to this project.

In addition, we thank our editorial advisory group including Ian Waters, MSW, Peter Selby MD, Margaret McCaffery, and William Watson, MD.

We also acknowledge the work of the Practice-based Small Group Learning Program of the Foundation for Medical Practice Education, on which these modules are modelled.

*Bill Watson  
Margaret McCaffery  
Toronto, 2014*

**A Patient-centred Approach to Obesity:  
Counselling Health Behaviour Change****Authors:****William J. Watson, MD, CCFP, FCFP**

Associate Professor, Department of Family & Community Medicine and  
Dalla Lana School of Public Health  
University of Toronto  
Toronto, ON

**Melanie Morris, MEd, RD**

Associate Program Director, MPH Community Nutrition  
Department of Nutritional Sciences and  
Dalla Lana School of Public Health  
University of Toronto  
Toronto, ON

**Peter Selby, MD, MHSc, CCFP**

Associate Professor  
Department of Family and Community Medicine  
University of Toronto;  
Head, Nicotine Dependence Clinic  
Centre for Addiction and Mental Health  
Toronto, ON

**Kelly L. Howse, MD, CCFP**

Assistant Professor, Department of Family Medicine  
Queen's University  
Kingston, ON

---

**Reviewers:**

Sudi Devanesen, MD, CCFP, MCISc, FCFP  
Associate Professor, Department of Family and Community Medicine  
University of Toronto  
Toronto, ON

Macaran A. Baird, MD, MS  
Professor and Head  
Department of Family Practice and Community Health  
University of Minnesota Medical School  
Minneapolis, MN

Janet Christie-Seely, MD, CCFP, FCFP  
Professor, Department of Family Medicine  
University of Ottawa  
Ottawa, ON

Pauline Abrahams, MBChB, BSc, CCFP  
Member, Psychosocial-Spiritual Team  
Tammy Latner Centre of Palliative Care  
Mount Sinai Hospital  
Toronto, ON

---

**Editors:**

**William J. Watson**, MD, CCFP, FCFP  
**Margaret McCaffery**, Canterbury Communications

---

**Working With Families Institute, 2014**

Chair: William J. Watson, MD, CCFP, FCFP  
Associate Professor, Department of Family & Community Medicine  
and Dalla Lana School of Public Health  
University of Toronto

## CONTENTS

---

SUMMARY .....	6
OBJECTIVES .....	6
Key Features .....	6
Core Competencies.....	6
CASE STUDIES .....	7
INFORMATION POINTS .....	10
Definition, Prevalence, and Causes.....	10
Evaluation.....	11
Patients Who Should Receive Treatment.....	12
Types of Treatment.....	12
Childhood Obesity.....	14
The Importance of Family Factors.....	15
The Family Physician’s Role.....	16
Community and Commercial Programs.....	17
CASE COMMENTARIES.....	18
REFERENCES.....	22
RESOURCES.....	24

## SUMMARY

---

Family physicians (FPs) commonly deal with patients' concerns about weight, because of a direct request for advice on losing weight or because a medical assessment leads to concerns about a patient's overall health risks. As with other chronic conditions such as diabetes or hypertension, some people are predisposed to obesity because of a genetic tendency; the incidence is also influenced by environmental factors. Attempts at weight loss are frustrating for both patients and physicians, because patients have difficulty sustaining long-term weight reduction. An estimated two-thirds of the weight loss achieved by individual patients is regained in the year after the initial loss.<sup>1</sup> A patient-centred approach to obesity takes into account such factors as stage of change, level of motivation, health beliefs, support system, family background and other family factors, and psychosocial stress. This approach may improve overall patient care.<sup>2,3</sup> Factors beyond diet, exercise, and medications must be considered. FPs need to find ways to avoid frustration and engender optimism in their patients. In addition, we must recognize the role families play in contributing to and perpetuating obesity in patients, especially children.

## OBJECTIVES

---

After completing this module, you will be able to:

1. review the current information and management of obesity.
2. learn the techniques of agenda-setting, dealing with multiple agendas, and changing solitary behaviours.
3. develop practical, patient-centred strategies for assessing and treating patients with obesity.

### Key Features

1. Obesity is a major health issue that has increased substantially over the past generation.
2. The causes of obesity are multifactorial and include genetic, cultural, and psychological factors.
3. Within the health care system, FPs are in an excellent position to have a positive influence on patients who are trying to lose weight.

### Core Competencies

The core competencies addressed are related to the FP's roles as a communicator, a family medicine expert, and a manager, and include the following:

1. Demonstrating a patient-centred approach that incorporates the social and developmental context, and developing a plan with the patient and the family
2. Displaying effective, professional, and nonjudgmental communication skills
3. Engaging other resources effectively within the health care system

### Case 1: Rob, aged 38

Rob, a construction worker, is married with two children, aged seven and nine. He visits your office for a physical examination. When you ask whether he has any specific health concerns, he says he doesn't, but his wife is concerned about his health.

On questioning this obviously large man, you discover he consumes one to two beers a day (usually after work) and two to three beers a day on weekends. The CAGE questionnaire result is negative. He smokes one pack of "light" cigarettes a day. He does not do "formal" exercise, but he does manual labour 10 hours a day and doesn't see the need for other exercise.

You review Rob's diet. He says he has a muffin and a cup of coffee in the morning. He takes a packed lunch of cold cuts with some fruit. However, he buys "snacks" from the food truck at 11 am and again at 3 pm; these include four coffees with cream. Dinner is his largest meal, and is usually prepared by his wife. When she is out, he cooks a TV dinner. He doesn't believe in diets because his parents were from "the old country"; they both lived until their 70s and "they ate everything and nothing happened to them." His brother had a myocardial infarction (MI) at age 50. When asked how his wife feels about his weight, he reluctantly acknowledges that she is very concerned and afraid that he will have a heart attack as his brother did.

On physical examination, his body mass index (BMI) is 34, his waist circumference is 110 cm, and his blood pressure (BP) measurement is 140/93 mm Hg with a large cuff.

You order some blood tests and advise Rob that losing weight will lower his risk of coronary artery disease, stroke, and diabetes. You give him a diet sheet and tell him how he is hurting himself and his family by not "taking care of himself." You advise him that he is really "packing on the calories" with the amount of beer he drinks; that is why he has a beer belly. He agrees with your recommendation politely but has excuses as to why he can't follow through with your advice. You make a follow-up appointment for two weeks from today.

- ***Which of Rob's behaviours concern you? What is the evidence to support your concerns?***
- ***How motivated do you think Rob is to change each of these behaviours, and what is his readiness to change?***
- ***What approach could you take to increase his motivation and decrease his resistance?***

Rob fails to return for his appointment two weeks later, but does return in four weeks because of a rash in his groin. He is clearly upset by this new development. On examination, you diagnose an intertriginous yeast rash due to an "apron of fat." You prescribe clotrimazole cream and tell him that the rash is a result of his obesity.

Results of blood tests from four weeks ago are as follows: glucose 5 mmol/L, gamma-glutamyl transpeptidase 114 IU/L (normal 40 to 80 IU/L), total cholesterol 5.8 mmol/L, high-density lipoprotein cholesterol 1.1 mmol/L, low-density lipoprotein cholesterol 3.6 mmol/L, and triglycerides 2.8 mmol/L.

- *At this point, what has happened to Rob's level of motivation?*
- *Would you involve his family, and if so, how?*

### **Case 2: Margaret, aged 28**

Margaret, a nurse who married one year ago, comes to your office for a checkup. Since her wedding, she has gained 23 kg (50 lb) and her BMI is 29. She does shiftwork and does not exercise regularly. She and her husband eat out two to three times a week. She notes that her husband has also gained weight, but he is not concerned. In fact, he is upset that she wants to lose weight.

Margaret used to do competitive swimming in high school and does not like her weight at this time. She asks you for a diet pill.

- *What are your concerns about Margaret's behaviour?*
- *At what stage of behavioural change is Margaret in relation to each of these behaviours?*
- *How do you respond to her request for a diet pill?*
- *What interventions do you recommend, and why?*
- *Would you involve her husband, and if so, how?*

### **Case 3: Raj, aged five**

Raj, whom you have known since he was born, is visiting you today for his immunizations. He has been healthy but has always been "a little overweight." You note that his weight continues to be above the 95th centile, and his height is at the 50th centile. He is munching on a bag of chips as he sits in the office with his mother. When you ask him what he does for fun, he replies that he loves to watch television and play video games.

Raj's father recently developed type 2 diabetes and both his paternal grandparents in India have diabetes. His paternal uncle died suddenly at age 48. He had truncal obesity, but no diabetes and no known heart disease. Raj's mother considers him the healthiest child in the extended family.

- *What are Raj's risky behaviours?*
- *What is your evidence that these behaviours are risky?*
- *At what stage of behavioural change are Raj and his parents in relation to each of these behaviours?*
- *What are your concerns about Raj's current weight, and how do you discuss these concerns with his parents?*
- *What strategies can you use to move to the action stage of change?*



#### **Case 4: Frank, aged 64**

Frank is married and in his final year of work as a car salesman. He recently had an MI and his wife is worried about his health. His BMI is 37 (173 cm/110 kg) and he has abdominal adiposity. Since he quit smoking two years ago, he has gained 23 kg.

- 
- *What questions do you ask and what approach do you take in the initial part of your interview with Frank?*
- *How do you encourage Frank to make his own decisions on how to approach weight loss?*
- *Would you involve Frank's wife? If so, how?*

**Definition, Prevalence, and Causes**

1. Obesity is defined as a BMI above 30 kg/m<sup>2</sup> (Table 1), and is characterized by excessive body fat accumulation in adipose tissue to the extent that health may be adversely affected. The BMI is a simple index of weight for height that provides the best anthropomorphic measure of body fatness in a population.<sup>1-4</sup>
  
2. The World Health Organization has identified the high prevalence of overweight and obesity as the major neglected global public health issue; the incidence has nearly doubled since 1980.<sup>4</sup> Currently, in industrialized countries, a preoccupation with diet, exercise, and low-fat products has been accompanied by a paradoxical and dramatic increase in the prevalence of obesity. In Canada, the prevalence of obesity has increased by 50% since 1980, and it is a major public health risk.<sup>5,6</sup> According to estimates from a 2004 survey, 59% of adults in Canada are overweight (BMI ≥25) and 23% of adults are obese (BMI >30) (Table 1). Significant changes have also been seen in the prevalence of obesity in children and teenagers. Approximately 26% of children and adolescents in Canada are overweight, and 10% are obese. The prevalence of other comorbid conditions, such as type 2 diabetes, dyslipidemia, hypertension, coronary artery disease, stroke, osteoarthritis, and certain forms of cancers, is highly correlated with increasing BMI.<sup>1,7</sup> The economic burden is also very high, and was estimated to account for 7.8% of the total costs of illness in the United States in 1986, or about \$56 billion. The economic costs of obesity were estimated at \$4.6 billion in 2008, up about 19% from \$3.9 billion in 2000; this estimate is based on costs associated with the eight chronic diseases most consistently linked to obesity.<sup>7-9</sup>

**Table 1**

**World Health Organization Classification of Overweight and Obesity in Adults, Using Body Mass Index (BMI)**

Classification	BMI	Risk of comorbidities
Underweight	<18.5	Low
Normal	18.5-24.9	Average
Overweight	25-29.9	Mildly increased
Obese	>30	
Class 1	30-34.9	Moderate
Class 2	35-39.9	Severe
Class 3 (morbidly obese)	>40	Very severe

**Adapted from:** Obesity and overweight. Media centre. World Health Organization; [updated 2013 Mar; cited 14 Mar 2014]. Fact Sheet No. 311. Available from: <http://www.who.int/mediacentre/factsheets/fs311/en/>

3. Obesity prevalence differs by ethnic subgroup. A disturbingly high prevalence of chronic obesity-related illnesses is seen in Canada's aboriginal population and an increased prevalence of obesity is seen in economically disadvantaged populations. Finally, the dramatic increase currently seen in children and youth foreshadows a further increase in the overall prevalence of obesity and the early development of type 2 diabetes and cardiovascular disease (CVD).<sup>7-9</sup>
4. Causes of obesity are complex and multifactorial.<sup>8</sup> Obesity is commonly attributed to overeating and/or decreased physical activity secondary to a sedentary lifestyle.<sup>4</sup> However, a growing body of evidence is eroding many long-held misconceptions about obesity. This shift in thinking includes the understanding that obesity is a true disease with genetic determinants, rather than a "character flaw." Genetic factors account for 25- 30% of obesity, while social, behavioural, and cultural factors account for the other 70-75%.<sup>8</sup> Considerable evidence indicates that obesity is a familial condition.<sup>9</sup> Offspring of parents with CVD are often overweight in childhood and have increased lipid and fasting insulin levels. Metabolic syndrome associated with hypertension, dyslipidemia, and hyperinsulinemia has a strong association with obesity and increases the risk of CVD (Table 2). It is also more common in certain cultural groups (see Case 3: Raj, age five).<sup>2</sup> Other factors include a low metabolic rate, environmental factors, inactivity, family behaviour patterns, a poorly developed satiety response, and reactive eating because of stress or anxiety. Morbid obesity is characterized by an increased number of adipocytes and a degree of irreversibility. Overeating increases the size of the adipocytes; once adipocytes achieve their maximal size, proliferation is induced and massive, irreversible obesity may result.<sup>1,8</sup>

---

**Table 2**  
**Obesity Comorbidities**

• Impaired glucose tolerance
• Hyperinsulinemia
• Type 2 diabetes mellitus
• Dyslipidemia
• Hypertension
• Cardiovascular diseases
• Osteoarthritis
• Certain forms of cancers

---

**Adapted from:** Lau DCW, Douketis JD, Morrison KM, Hramiak IM, Sharma AM, Ur E; Obesity Canada Clinical Practice Guidelines Expert Panel. 2006 Canadian clinical practice guidelines on the management and prevention of obesity in adults and children [summary]. *CMAJ*. 2007;176:S1-13.

5. Environmental influences on obesity consist of numerous structural societal factors that define the options available for eating and activity.<sup>10</sup> Individual food choices clearly depend on attitudinal and behavioural predispositions, but they are also conditioned by the following:
  - Availability and preparation of different foods, such as convenience or processed foods
  - Availability of soft drinks and fruit juices
  - The amount of television food advertising
  - Food consumption outside the home

Inactivity appears to be a major contributor to obesity. For example, simply using cell phones and television remotes is estimated to cause approximately 1 kg of annual weight gain.<sup>10</sup> Other causes of reduced activity include habitual use of cars for travelling even short distances, inadequacy of public transportation, and increased use of home computers. Trends specifically affecting children's activity include the decrease in walking to and from school because of distance or safety reasons, the decline of school physical education programs, and the lack of outdoor recreational facilities. Cultural trends that predispose people to have an excess of energy intake over energy expenditure include increased mechanization, poor building design with less opportunity to climb stairs, family life and parenting styles that lead to a reduction in shared family meals, the ubiquity of food products and their diversity, and the lag in the evolution of nutrition advice.<sup>10-12</sup>

## Evaluation

6. The initial assessment of the obese patient should include four steps: measurement of height and weight to calculate BMI, measurement of waist circumference, assessment of risk status, and assessment of readiness to lose weight (Appendix 1).<sup>8,13</sup> The FP should complete the following steps.
  - Take a thorough history, which includes an exploration of lifestyle habits (personal and family eating and activity), previous weight-loss methods used, and readiness to change.
  - Document cigarette and alcohol consumption.
  - Obtain a family history of obesity and comorbidities (Table 2).
  - Complete a physical examination, which includes measurement of height and weight (BMI), measurement of waist circumference and a visual inspection of fat distribution, measurement of BP and heart rate, determination of target organ damage, palpation of the thyroid gland, and examination of the extremities for stasis ulcers, edema, or venous insufficiency.
  - Order laboratory investigations to screen for diabetes, dyslipidemia, and gout, and to measure hepatic and renal function. In addition, order electrocardiography to screen for left ventricular hypertrophy, and consider thyroid-stimulating hormone testing to rule out thyroid disease.
  - Consider an exercise stress test before initiating an exercise program, especially in patients with obesity-associated comorbidity.

- Consider asking the patient to keep a diet diary indicating daily food intake, as well as any emotional triggers that may be associated with overeating. This exercise may help the patient obtain more insight and control over his or her eating.

### Patients Who Should Receive Treatment

7. Some individuals suffer severe, life-threatening medical complications as a result of their obesity, whereas others appear to remain healthy for their entire lives despite greater than normal amounts of body fat. A personal or family history of adverse health consequences from obesity, such as diabetes, suggests that the patient will have greater health risks and should receive aggressive treatment.<sup>1,2,4-9</sup>
8. The 2006 Canadian Clinical Practice Guidelines on the Management and Prevention of Obesity in Adults and Children recommend that, in overweight and obese adults, the first treatment option for clinically significant weight loss and reduced obesity-related symptoms should be an energy-reduced diet and regular physical activity.<sup>8</sup>

### Types of Treatment

9. The cornerstone of successful weight management, and the most difficult element to achieve, is compliance with a regimen of diet and exercise, education and lifestyle modifications, and possibly drug therapy. The goal of intervention is to reduce excess fat and body weight by 5-10% of baseline weight at a rate of 0.5 to 1.0 kg (1-2 lb) a week over six months, and to maintain the new weight. If successful, these manoeuvres will substantially reduce the incidence of hypertension, type 2 diabetes, and coronary artery disease. Multiple randomized, controlled trials have shown that even a modest 10% weight reduction can reduce BP and improve lipid and glucose profiles.<sup>8,14</sup>
10. The treatment focus should be on improving the patient's physical and mental health, not on achieving an unrealistic "dream weight." Patients can have metabolic success without losing weight. The FP must understand that desired outcomes include behaviour changes, not just weight loss (Appendices 1 and 2). How these issues are discussed with patients is very important, and physicians should be careful with their choice of language (see Case 4: Frank, aged 64). In order to achieve some success, patients' efforts to manage their weight must be persistent.<sup>8</sup>
11. Psychosocial interventions for overweight or obesity can improve weight-reduction outcomes significantly. A recent Cochrane review showed that cognitive behaviour therapy, combined with diet and exercise, resulted in significantly greater weight reduction than did diet and exercise alone.<sup>15</sup>

Behaviour therapy should start with an assessment of the patient's perception of risks and problems associated with current behaviour (Table 3). Assessment of the patient's stage of change will determine the educational approach that will achieve the best results.<sup>16</sup> While busy physicians rarely have time to provide the amount of education required,

they have many opportunities to develop a trusting relationship with patients over time and to guide them through the strategies for healthy weight reduction and physical activity. Patient-centred counselling, such as use of the motivational interviewing strategies outlined by Miller and Rollnick and other approaches can be extremely helpful in assisting patients with behaviour change (Tables 4 and 5 and Appendix 3).<sup>17</sup> Specifically, “motivational interviewing is a collaborative, goal-oriented style of communication with particular attention to the language of change. It is designed to strengthen personal motivation for and commitment to a specific goal by eliciting and exploring the person’s own reasons for change within an atmosphere of acceptance and compassion.”<sup>17</sup>

**Table 3**

**Tips on Behaviour Modification**

- Increase patients’ perceptions of risks and problems associated with current behaviour.
- Listen to patients; try to understand what emotional stress interferes with behaviour modification and discuss how strongly it affects their lives.
- Help patients determine the best course of action for change.
- Help patients eliminate alcoholism and cigarette smoking from their lives.
- Individualize treatment and assess progress throughout the course of treatment.
- Teach patients stress management and relaxation techniques.
- Reinforce the fact that their goal is to lose only 5% to 10% of body weight and then concentrate their efforts on long-term maintenance of weight loss.
- Advise patients to note particular events that interfere with their goals during their weight loss and maintenance program, and to discuss these with you.

Adapted from: Miller WR, Rollnick S. Motivational interviewing: helping people change. 3rd ed. Cardiff, UK: Guilford Press; 2013.

Several guidelines indicate obesity treatment is best managed by health care teams that include a physician and one or more allied health professionals, such as a dietitian, nurse, psychologist, or counsellor. Evidence also shows that family- and school-based programs have a considerable effect on the treatment of childhood obesity.<sup>18</sup>

12. A person’s eating behaviour unrelated to hunger also contributes to his or her being overweight. Emotional overeating, triggered by emotions such as anxiety, guilt, fear, frustration, boredom, and self-pity, is unaffected by drugs that suppress appetite and may be best addressed by psychological therapy. Many people have difficulty refraining from eating snack foods high in fat and sugar, especially during the evening, while watching television, and at night. Weight gain during holiday seasons accounts for a small annual increase in some individuals.<sup>19</sup> The FP’s anticipatory counselling may help patients prepare for these events and develop a

personal strategy to target cravings, enhance self-control, enhance stimulus control, and avoid overeating.

**Table 4**

**Motivational Interviewing in the Management of Obesity**

Essential elements

- Express empathy (be nonjudgmental)
- Support self-efficacy (highlight previous successes/skills)
- Roll with resistance (challenge the thought process, not the resisting statement)
- Develop discrepancy (between current behaviours and future goals)

Use strategies to try to elicit “change talk” during patient encounter<sup>a</sup>

- Ask evocative questions (“DARN CAT”)  
Preparatory change talk (“DARN”)  
Desire – Why do you want to lose weight?  
Ability – How could you lose weight?  
Reasons – If you lost “X” amount of weight, then what?  
Need – How important is it for you to lose weight, and why?
- Implementing Change Talk (“CAT”)  
Commitment – What do you intend to do about your weight?  
Activation – What are you ready or willing to do right now?  
Taking Steps – What have you already done to lose weight?
- Use the importance/confidence ruler  
On a scale from 1 to 10, how **important** is it to you to change your weight?  
And why are you a \_\_ and not a \_\_ (lower number)?  
Why might happen that could move you from a \_\_ to a \_\_ (higher number)?  
Same questions for asking patient how **confident** he or she is that he or she could lose weight?
- Query extremes  
What are the worst things that might happen if you don’t lose weight?  
What are the best things that might happen if you do lose weight?
- Look back/look forward  
How were things better before?  
Miracle question: If you were 100% successful in making the weight loss changes you want, what would be different?

Adapted from: Motivational interviewing; [cited 2014 Mar 14]. Available from:  
<http://www.motivationalinterview.org>

<sup>a</sup>“Change talk” refers to patient statements that reveal consideration of, motivation for, or commitment to change (e.g., “Doc, I think I need to lose some weight”).

**Table 5**  
**Modified 5-As Model for Obesity Counselling**

A	Definition	Rationale
<b>Ask</b>	Ask permission to discuss weight; be nonjudgmental; explore readiness for change	Weight is a sensitive issue; avoid verbal cues that imply judgment; indication of readiness might predict outcomes
<b>Assess</b>	Assess BMI, WC, obesity stage; explore drivers and complications of excess weight	BMI alone should never serve as an indicator for obesity interventions; obesity is a complex and heterogeneous disorder with multiple causes— drivers and complications of obesity will vary among individuals
<b>Advise</b>	Advise on health risks of obesity, benefits of modest weight loss, the need for a long-term strategy, and treatment options	Health risks of excess weight can vary; avoidance of weight gain or modest weight loss can have health benefits; considerations of treatment options should account for risks
<b>Agree</b>	Agree on realistic weight-loss expectations and targets, behavioural changes using the SMART framework, and specific details of the treatment options	Most patients and many physicians have unrealistic expectations; interventions should focus on changing behaviour; providers should seek patients' "buy-in" to proposed the treatment
<b>Assist</b>	Assist in identifying and addressing barriers; provide resources and assist in identifying and consulting with appropriate providers; arrange regular follow-up	Most patients have substantial barriers to weight management; patients are confused and cannot distinguish credible and noncredible sources of information; follow-up is an essential principle of chronic disease management

BMI = body mass index; SMART = specific, measurable, achievable, rewarding, timely; WC = waist circumference

Adapted from: 5As of obesity management. Canadian Obesity Network; [cited 2014 Mar 14]. Available from:

<http://www.obesitynetwork.ca/5As>

Vallis M, Piccinini-Vallis H Sharma AM, Freedhoff Y. Clinical review: modified 5 As: minimal intervention for obesity counseling in primary care. *Can Fam Physician*. 2013;59:27-31.

13. Many people who lose weight will regain most of the weight lost after five years. The reasons for this are not entirely clear.<sup>8</sup> Treatment may be unsuccessful because of a failure to address specific causes of obesity in individual patients and the use of reducing regimens that are not designed to maintain weight loss. A syndrome of restrained eating produced by chronic dieting leads to hunger, frustration, and rebound overeating.<sup>1</sup> When the patient returns without weight loss, examination of a variety of emotional factors that may be contributing to their failure or self-sabotage may be warranted. For example, if the patient is anxious and overeating, looking at the causes of anxiety and working on alternate strategies may be helpful.



Individuals with extreme obesity may have a history of childhood abuse and require referral and specialized therapy.<sup>20</sup>

14. Medication to reduce weight may be useful in patients with a BMI greater than 30 kg/m<sup>2</sup>, in those with comorbidities and a BMI of at least 27 kg/m<sup>2</sup>, or in those who fail to lose at least 2.2 kg (1 lb) a week after six months of lifestyle changes with diet and exercise. Diet drugs have limited benefit in the management of obesity, and while many patients will request such drugs, their effect is temporary and generally does not lead to long-term results. The only medication currently available in Canada for weight reduction is orlistat, an intestinal lipase inhibitor. Orlistat is approved for use in combination with antidiabetic medications (sulfonylureas, metformin, insulin) and may help improve blood sugar control for overweight or obese people who have type 2 diabetes and blood sugar inadequately controlled by diet, exercise, and antidiabetic medication. Orlistat has also been shown to reduce the risk of diabetes in obese people.<sup>21</sup> Evidence exists that orlistat, in combination with a conventional weight-loss program, can significantly improve oral glucose tolerance and diminish the rate of progression to the development of type 2 diabetes.<sup>15</sup> Its use is limited by side effects, such as abdominal pain, oily spotting of underclothes, inability to hold or a sudden urge to have a bowel movement, gas with leaky bowel movements, oily bowel movements, and an increased number of bowel movements.<sup>22</sup>
15. Patients who have severe or very severe obesity (BMI  $\geq 35$  or  $\geq 40$  with obesity complications) can be offered gastroplasty and gastric bypass surgery. Both methods create an upper gastric pouch that reduces gastric luminal capacity and causes early satiety. In general, weight loss with gastric surgery is similar to that reported with diet and drug treatments. Postoperative morbidities include wound infection, subphrenic abscesses, pneumonia, and pulmonary embolism.<sup>22</sup> In Canada, regional bariatric programs have been established to coordinate and improve care for severely obese patients.

### Childhood Obesity

16. Obesity has increased alarmingly in Canadian children. From 1981 to 1996, the prevalence of overweight increased by 92% in boys and 57% in girls.<sup>8,23</sup> Childhood obesity is associated with host factors that enhance susceptibility and environmental factors that increase food intake and decrease energy expenditure.<sup>17</sup> Some recent evidence from the United States shows that children who are overweight or obese at age five years tend to remain so into their teen years.<sup>24</sup> This study included 7,700 children from kindergarten to grade 8 and showed that 87% of the children who were obese in the eighth grade had had weights above the 50th percentile as kindergarteners. This finding suggests that any weight over the midpoint at age five can predispose children for obesity in the years to come.

Obese children under-report food intake and probably consume more food to maintain their weight at increased levels. Prevalence of obesity is related to family variables, including parental obesity, family size and age, socioeconomic status, genetic predisposition, intrauterine factors, and

household behaviour (i.e., children mimic the eating habits they see at home). Causes include a positive energy balance with an abundance of high-energy, high-fat foods, along with reduced physical activity. Television viewing is strongly associated with the prevalence of obesity, through its impact on food intake and activity. In order to help children achieve weight loss, physicians need to address and discuss weight-loss strategies with both obese children and their families. Studies on interventions for preventing obesity in children showed that programs designed to improve nutrition and physical activity generally benefited all children, without risk of harm from increased body image concerns, unhealthy dieting practices, increased levels of underweight, or unhealthy attitudes toward weight.<sup>25</sup>

17. To provide appropriate treatment for children who are obese or becoming obese, the physician must determine if the adiposity is temporary or the beginning of a permanent trend that requires intervention. The concept of “adiposity rebound” helps with this decision. The child’s family is important and contributes to the child’s body adiposity through both nature (an inherited metabolic tendency toward obesity) and nurture (the eating and activity environment and the family functioning). The activity level and energy intake, although out of balance for the obese child, may not be low or excessive when compared with recommended amounts for children of that age or with peers’ activity or intakes. A child-family pattern can be defined in overweight children by examining the presence of a metabolic tendency, energy intake, activity level, and family functioning. In looking at the pattern rather than just the child’s weight, the clinician can provide a much more effective weight-control program. In addition, sometimes a referral to change family functioning is necessary before such a program is implemented.

### **The Importance of Family Factors**

18. A supportive family is essential to successful weight loss. Families can be supportive of weight reduction or not. Randomized, controlled trials on the treatment of obesity indicate that spousal involvement and reinforcement increase the amount of weight loss and help the patient maintain it for longer periods. Some evidence shows that using a family approach to enhance spousal support can have a significant impact on weight reduction.<sup>26</sup> Some classic family roles have been identified:
  - The saboteur—the wife who doesn’t want to change her cooking to accommodate the husband or the grandmother who feeds an overweight grandchild too much of the wrong foods, even when the parents are trying to follow the physician’s advice
  - The critic—the husband who mocks his wife’s attendance at weight-loss programs
  - The motivator—a family member whose positive support can significantly improve weight reduction and maintain lifestyle changes

Family physicians must be aware of family influences, both positive and negative, and involve families or significant others as a resource to support beneficial changes.

19. Exercise is an important aspect of weight management and should be discussed with each patient, starting with the current level of activity.<sup>27,28</sup> For example, if an individual has a sedentary lifestyle with minimal walking or activity, the goal would be limited, with a modest increase in activity (e.g., a 10-minute walk, three times a week). Physical training helps prevent formerly obese subjects from regaining weight. An exercise program using weight resistance may also be safely included.

Encourage patients to engage in 30–45 minutes of physical activity of moderate intensity, three to five days a week. The exercise program should not disrupt daily life and should be safe enough to maintain over the long term without serious adverse effects on, for example, the musculoskeletal system. All adults should set a long-term goal to accumulate at least 30 minutes or more of moderate-intensity physical activity on most and preferably all days. Public health interventions promoting walking are likely to be the most successful. Indeed, walking is unique because of its safety, accessibility, and popularity.

For inactive children and youth, current guidelines recommend building up, gradually over several months, at least 90 minutes or more of physical activity a day and decreasing by at least 90 minutes a day the amount of time spent sitting still, such as watching TV or using computers. The increase in physical activity should include a combination of moderate activity such as brisk walking, skating, or bike riding, as well as vigorous activity such as running and playing soccer. A discussion about exercise is sometimes an opportunity for the physician to enlist the support of other family members to provide encouragement and support to the patient.

### **The Family Physician's Role**

20. Overweight and obesity are major challenges to the health care system and require a comprehensive and caring team approach for improved outcomes. Because of their ongoing knowledge of and relationship with the family, FPs have a critical role to play in assisting families and individuals, and have been encouraged to be aggressive in their approach to obesity in overweight patients.<sup>1,6,7</sup> However, both physicians and society in general may tend to be biased against obese individuals. This bias has negative consequences because it reinforces patients' negative stereotypes about their weight and could contribute to their avoidance of physicians. To circumvent this tendency, physicians should recognize their biases and make a conscious effort to treat their patients with understanding and respect, and to offer treatment that maximizes benefits.

Regardless of weight, all patients should be asked about their diet and exercise history. All patients should also be encouraged to follow a healthy lifestyle, which includes regular, moderate exercise and a well-balanced, portion-controlled, low-fat diet. A psychosocial history should be taken to

screen for eating disorders and inappropriate dieting. Repeated dieting should be avoided because it can produce more harm than benefit by contributing to binge eating, loss of self-esteem, and increased risk of sudden death and CVD.

Whether patients are able to lose weight or not, the FP can provide long-term support and care and encourage a healthy lifestyle, and can also work with other health care professionals, such as dietitians, to help patients achieve their goals. Use of a patient-centred approach is likely to yield a patient who is more motivated and a physician who is less frustrated.<sup>7,8</sup>

### **Community and Commercial Programs**

21. Community and commercial programs can support individuals attempting to lose weight. Many fad diets are based on high-protein, low-carbohydrate menus. Analysis of daily menus shows they are simply low-calorie diets masquerading as diets that have unique metabolic effects. The American Heart Association (AHA) Nutrition Committee reviewed these diets.<sup>29</sup> The AHA is concerned that diets such as the Dr. Sears Zone, Atkins, Protein Power, Sugar Busters, and Stillman diets are high in fat, particularly saturated fat, which most research shows raises serum cholesterol levels and risk of heart disease. Most of these diets are deficient in many vitamins, minerals, and dietary fibre. They also restrict the intake of fruits and vegetables, which contain many healthful, non-nutritive phytochemicals. The AHA concludes that, in addition to the compromised micronutrient intake, people who follow these diets over the long term are at risk for increased heart, kidney, bone, and liver problems. No long-term studies have been conducted to determine the safety or efficacy of these diets.

### Case 1: Rob, aged 38

- *Which of Rob's behaviours concern you? What is the evidence to support your concerns?*
- *How motivated do you think Rob is to change each of these behaviours, and what is his readiness to change?*
- *What approach could you take to increase his motivation and decrease his resistance?*

Rob has class 1 obesity and is at risk for CVD with comorbid conditions, including hypertension. He also has other risk factors, such as problem drinking, smoking, a family history of early cardiac disease, a lack of exercise, and a high-fat diet. At this point in the stages of change continuum, he is precontemplative. The challenge is to move him to the contemplative stage by using appropriate communication techniques (active listening, empathic responding, summarizing etc.) and educational strategies that might help him change his behaviour.

You talk to Rob about what it meant for him to have a brother with an MI and what concerns he has about his own health (i.e., a sense of his own mortality and a fear of death).

- *At this point, what has happened to Rob's level of motivation?*
- *Would you involve his family, and if so, how?*

The development of a rash, which clearly upsets Rob, offers another opportunity to enhance his motivation. You can now work in partnership with him to develop an action plan and help him reduce his overall health risk.

In addition, you decide to examine underlying issues in his relationship with his wife, whom he may feel is nagging him in the hopes of motivating him. Control and power issues may exist in the relationship, and these may be preventing him from taking control of his weight. This might be an opportunity to include the whole family, to examine their food beliefs and how they might start to change.

### Case 2: Margaret, aged 28

- *What are your concerns about Margaret's behaviour?*
- *At what stage of behavioural change is Margaret in relation to each of these behaviours?*
- *How do you respond to her request for a diet pill?*

Margaret's BMI has changed since she married and began shift work as a nurse. She has reduced her exercise level and is upset about her weight. An appropriate approach would be exploring her possible concerns about her weight (e.g., risk

of illness, body image). Margaret is in the action stage, but diet pills are not the answer.

- ***What interventions do you recommend, and why?***
- ***Would you involve her husband, and if so, how?***

By demonstrating care and concern and helping her develop a plan for weight reduction and exercise, you can help motivate Margaret to change her behaviour. A referral to a dietitian and for a fitness assessment might be helpful.

In addition, this is an opportunity to meet with Margaret and her husband to review what weight means to them both, how the husband is supportive (or not), and how Margaret feels about herself in terms of sexuality, body image, age, etc. For instances, could this be a sign of depression with overeating as a symptom? Such a meeting may also provide you with insight into their eating routine and help you determine how they both can change their behaviour.

### **Case 3: Raj, age five**

- ***What are Raj's risky behaviours?***
- ***What is your evidence that these behaviours are risky?***

Raj is a child at risk for adult obesity and obesity-associated health problems, including diabetes and hypertension. He demonstrates poor eating habits (he is eating chips in the office) and a lack of exercise. In addition, evidence exists for a family history of early cardiac disease and diabetes, indicating the possibility of syndrome X. This is a metabolic syndrome with an association between insulin resistance, glucose intolerance, hypertension, and dyslipidemia.

- ***At what stage of behavioural change are Raj and his parents in relation to each of these behaviours?***
- ***What are your concerns about Raj's current weight, and how do you discuss these concerns with his parents?***
- ***What strategies can you use to move the stage of change to the action stage?***

Of significance is Raj's parents' apparent lack of concern about his health risks. They are in the precontemplative stage of change and need to be educated about the appropriate diet and activity level for their child. They must recognize a link between behaviour and health consequences. This could be accomplished using an educational process with Raj's parents to highlight healthy eating; such an approach must include appropriate sensitivity toward cultural beliefs. Dietary pamphlets and a referral to a dietitian would also be helpful. Family values and beliefs about eating must be acknowledged; these could take the form of fears about disease and death. These fears need to be addressed before starting to work on behaviour change. Once this process is completed, Raj's parents might be more amenable to monitoring his diet more closely.

#### Case 4: Frank, age 64

Frank has a significant degree of obesity combined with comorbid hypertension and a recent MI. He has had a large weight gain in the past two years and is a previous smoker. His need to lose weight and exercise is urgent.

- *What questions do you ask and what approach do you take in the initial part of your interview with Frank?*
- *How do you encourage Frank to make his own decisions on how to approach weight loss?*

In your interview with Frank, you use open-ended questions to allow him to identify his own behaviours and steps he might take:

**You:** Well, Frank, what can I do for you today?

**Frank:** Just came in for my checkup.

**You:** I'm noticing your weight is up a kilogram today, Frank. How are you feeling about your weight?

**Frank** (somewhat exasperated): Well, I'm getting heavier and heavier.

**You** (repeating Frank's statement): You're getting heavier and heavier. You seem a little frustrated about that.

**Frank:** I keep gaining. I don't know why.

**You:** You don't know why. What do you think is causing the weight gain?

**Frank:** Well, I guess I'm eating too much.

**You:** You think you might be eating too much? What about the quality of what you eat?

**Frank:** Yeah, too much and all the wrong stuff.

**You:** What's too much? What's the wrong stuff? Would you like to tell me what you've eaten so far today?

**Frank:** Oh, boy! Now I'm in trouble. Well, let's see.... I had scrambled eggs for breakfast and a toasted bacon and lettuce sandwich for lunch, and a few coffees.

**You:** Scrambled eggs, a BLT, and some coffees.

**Frank:** Well, I had some French fries with the BLT, too.

**You:** Some French fries.

**Frank:** ...And sausage and toast at breakfast, plus I put a lot of sugar in my coffees.

**You:** Sausage, toast, and sugar. So you feel you're eating too much and maybe making some poor choices. What would you like to do about it?

**Frank:** Well, I guess I should cut back.

**You:** So you'd like to cut back? What specifically would you like to cut back on?

**Frank:** Well, actually, I'm not sure. I guess the French fries.

**You:** Are you having French fries a lot?

**Frank:** Not really—maybe twice a week.

**You:** Would you find it helpful to talk to our dietitian?

**Frank:** That'd probably be a good idea. My wife's always trying to get me to eat the stuff she likes.

**You:** Maybe she'd like to go with you to the dietitian, so that you can get some ideas about foods that you both like. What else do you think is contributing to the weight gain?



**Frank:** Oh, I guess I'm a couch potato, too.

**You:** You're a couch potato, too. Is there anything you think you could do about that? Have you ever been active before?

**Frank:** Well, my wife thinks I should go to that cardiac rehab program.

**You:** I think that would be a good idea. So, you'd like to do something about your weight. You'd like to see if our dietitian can help you with your diet and you'd like to participate in our rehab program. I can arrange that for you. I think you've made some wise decisions.

The interview moves through the stages of behaviour change at the following points:

**Precontemplative:** "Just came in for my checkup."

**Contemplative:** "Well, I guess I'm eating too much."

**Preparation:** "Well, I guess I should cut back."

**Action:** "That'd probably be a good idea" (in response to the suggestion that he visit a dietitian) and  
"Well, I could go to that cardiac rehab program."

The **maintenance** stage will be represented by Frank's continued smoking cessation and dietary changes.

- *Would you involve Frank's wife? If so, how?*

In addition to working with Frank on weight loss and exercise, you suggest a meeting with his wife, who is obviously concerned, so that you all can discuss these issues.



## REFERENCES

---

1. Lau DCW. A practical approach to obesity management. *Can J CME*. 2000;12(9):53-70.
2. Robinson BE, Gjerdingen DK, Houge DR. Obesity: a move from traditional to more patient-oriented management. *J Am Board Fam Pract*. 1995;8:99-108.
3. Stewart M, Belle Brown J, Weston WW, McWhinney IR, McWilliam CL, Freeman TR. *Patient-centered medicine: transforming the clinical method*. Thousand Oaks, CA: Sage Publications; 1995.
4. Obesity and overweight. Media centre. World Health Organization; [updated 2013 Mar; cited 14 Mar 2014]. Fact Sheet No. 311. Available from: <http://www.who.int/mediacentre/factsheets/fs311/en/>
5. Plourde G, Prud'homme D. Managing obesity in adults in primary care. *CMAJ*. 2012;184:1039-44.
6. Dietz WH. The paradoxical rise in obesity: an international perspective. In: *A national dialogue on healthy body weights: summary of proceedings*. Toronto: Canadian Institutes of Health Research; 2001. p. 3-4.
7. Obesity in Canada. Public Health Agency of Canada; 2011 [cited 14 Mar 2014]. Available from: <http://www.phac-aspc.gc.ca/hp-ps/hl-mvs/oic-oac/index-eng.php>
8. Lau DCW, Douketis JD, Morrison KM, Hramiak IM, Sharma AM, Ur E; Obesity Canada Clinical Practice Guidelines Expert Panel. 2006 Canadian clinical practice guidelines on the management and prevention of obesity in adults and children [summary]. *CMAJ*. 2007;176:S1-13.
9. Bosomworth NJ. Approach to identifying and managing atherogenic dyslipidemia: a metabolic consequence of obesity and diabetes. *Can Fam Physician*. 2013;59:1169-80.
10. Kumanyika SK. Environmental influences on childhood obesity: ethnic and cultural influences in context. *Physiol Behav*. 2008;94:61-70.
11. Valente AM, Strong W, Sinaiko AR. Obesity and insulin resistance in young people. *Am Heart J*. 2001;142:440-4.
12. Rao SV, Donahue M, Pi-Sunyer FX, Fuster V. Obesity as a risk factor in coronary artery disease. *Am Heart J*. 2001;142:1102-7.
13. Douketis JD, Feightner JW, Attia J, Feldman WF. Periodic health examination, 1999 update: 1. Detection, prevention and treatment of obesity. Canadian Task Force on Preventive Health Care. *CMAJ*. 1999;160:513-25.
14. Plourde G. Treating obesity: lost cause or new opportunity? *Can Fam Physician*. 2000;46:1806-13.
15. Shaw KA, O'Rourke P, Del Mar C, Kenardy J. Psychological interventions for obesity. *Cochrane Database Syst Rev*. 2005 Apr 18;(2):CD003818.

16. Prochaska JO, DiClemente CC, Norcross JC. In search of how people change. Applications to addictive behaviors. *Am Psychol.* 1992;47:1102-14.
17. Miller WR, Rollnick S. *Motivational interviewing: helping people change.* 3rd ed. Cardiff, UK: Guilford Press; 2013.
18. Story M. School-based approaches for preventing and treating obesity. *Int J Obes.* 1999;23(Suppl 2):S43-51.
19. Cleobury L, Tapper K. Reasons for eating 'unhealthy' snacks in overweight and obese males and females. *J Hum Nutr Diet.* 2013 Oct 18. doi: 10.1111/jhn.12169. [Epub ahead of print]
20. Salwen JK, Hymowitz GF, Vivian D, O'Leary KD. Childhood abuse, adult interpersonal abuse, and depression in individuals with extreme obesity. *Child Abuse Negl.* 2014 Jan 10. pii: S0145-2134(13)00392-X. doi: 10.1016/j.chiabu.2013.12.005. [Epub ahead of print]
21. Heymsfield SB, Segal KR, Hauptman J, Lucas CP, Boldrin MN, Rissanen A, et al. Effects of weight loss with orlistat on glucose tolerance and progression to type 2 diabetes in obese adults. *Arch Intern Med.* 2000;160:1321-6.
22. Snow V, Barry P, Fitterman N, Qaseem A, Weiss K; Clinical Efficacy Assessment Subcommittee of the American College of Physicians. Pharmacologic and surgical management of obesity in primary care: a clinical practice guideline from the American College of Physicians. *Ann Intern Med.* 2005;142:525-31.
23. Andersen RE. The spread of the childhood obesity epidemic. *CMAJ.* 2000;163:1461-2.
24. Cunningham SA, Kramer MR, Venkat Narayan KM. Incidence of childhood obesity in the United States. *N Engl J Med.* 2014;370:403-11.
25. Waters E, de Silva-Sanigorski A, Hall BJ, Brown T, Campbell KJ, Gao Y, et al. Interventions for preventing obesity in children. *Cochrane Database Syst Rev.* 2011 Dec 7;(12):CD001871.
26. Campbell TL. Family interventions in physical health. In: Sawa R, ed. *Family health care.* Newbury Park, CA: Sage; 1992. p. 213-27.
27. Leermakers EA, Dunn AL, Blair SN. Exercise management of obesity. *Med Clin North Am.* 2000;84(2):1-23.
28. O'Gorman D, Krook A. Exercise and treatment of diabetes and obesity. *Med Clin North Am.* 2011;95(5):953-69.
29. St. Jeor ST, Howard BV, Prewitt TE, Bovee V, Bazzarre T, Eckel RH; Nutrition Committee of the Council on Nutrition, Physical Activity, and Metabolism of the American Heart Association. Dietary protein and weight reduction: a statement for healthcare professionals from the Nutrition Committee of the Council on Nutrition, Physical Activity and Metabolism of the American Heart Association. *Circulation.* 2001;104:1869-74.

## RESOURCES

---

### Diabetes

Canadian Diabetes Association: <http://www.diabetes.ca>

EatRight Ontario (video series featuring a healthy eating menu plan that emphasizes carbohydrate choices): <http://www.eatrightontario.ca/en/Videos.aspx>

### General Nutrition

Academy of Nutrition and Dietetics: <http://www.eatright.org>

American Society of Bariatric Physicians: <http://www.asbp.org>

Canadian Health Network: <http://www.canadian-health-network.ca>

Canadian Obesity Network: <http://www.obesitynetwork.ca/>

Dietitians of Canada:

<http://www.dietitians.ca>

<http://www.dietitians.ca>

<http://www.dietitians.ca/Your-Health.aspx>

EatRight Ontario: <http://www.eatrightontario.ca> or 1-877-510-5102 (free nutrition advice from registered dietitians)

Health Canada:

<http://www.hc-sc.gc.ca>

<http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php>

<http://www.hc-sc.gc.ca/fn-an/index-eng.php>

National Institute of Nutrition: <http://www.nin.ca>

National Institutes of Health:

<http://www.nih.gov>

<http://www.nhlbi.nih.gov/guidelines/obesity/practgde.htm>

Ontario Public Health Association Nutrition Resource Centre:

<http://www.nutritionrc.ca/>

Public Health Agency of Canada: <http://www.phac-aspc.gc.ca/chn-rcc/nhe-nsa-eng.php>

Toronto Public Health: <http://www.toronto.ca/health/nutrition/>

Université Laval: <http://www.obesite.chaire.ulaval.ca/index.html>

University of California–Berkeley: <http://www.berkeleywellness.com>

### Healthful Eating on a Budget

EatRightOntario: <http://www.eatrightontario.ca/en/Budget.aspx>

FoodShare: <http://www.foodshare.net/>

The Stop Community Food Centre: <http://www.thestop.org/>

Toronto Public Health:

[http://www.toronto.ca/health/pdf/nm\\_healthy\\_shopping\\_in\\_a\\_hurry.pdf](http://www.toronto.ca/health/pdf/nm_healthy_shopping_in_a_hurry.pdf)

<http://www.toronto.ca/health/tfpc/>

<http://wx.toronto.ca/inter/health/food.nsf>

## **Healthy Weights**

Dietitians of Canada: <http://www.dietitians.ca/Your-Health/Nutrition-A-Z/Weight-Management.aspx?categoryID=59>

EatRight Ontario:

<http://www.eatrightontario.ca/en/Articles/Carbohydrate/>

<http://www.eatrightontario.ca/en/Articles/Weight-Management/>

Health Canada: <http://www.hc-sc.gc.ca/fn-an/nutrition/weights-poids/index-eng.php>

Toronto Public Health:

<http://www.toronto.ca/health/healthymeasures/index.htm>

<http://www.toronto.ca/health/pdf/goingwiththegrain.pdf>

## **Hypertension**

Dietitians of Canada: <http://www.dietitians.ca/Your-Health/Nutrition-A-Z/Sodium.aspx?categoryID=45>

EatRight Ontario:

<http://www.eatrightontario.ca/en/Articles/Hypertension-High-blood-pressure/>

<http://www.eatrightontario.ca/en/Articles/Sodium-Salt/>

Government of Canada Healthy Canadians:

<http://www.healthycanadians.gc.ca/eating-nutrition/sodium/issue-preoccupations-eng.php>

Toronto Public Health:

[http://www.toronto.ca/health/pdf/nm\\_hold\\_the\\_salt.pdf](http://www.toronto.ca/health/pdf/nm_hold_the_salt.pdf)

### **Stages of Change Theory**

This model describes a continuum of behaviour change stages through which individuals proceed during behaviour transitions. It helps facilitators identify which stage of behaviour change patients/clients are at, and assists health care providers in developing more precise communication strategies. The five stages of behaviour change include precontemplation, contemplation, preparation, action, and maintenance. A sixth stage—relapse—is sometimes included in the literature.

The model demonstrates how individuals may enter, relapse, and re-enter at any point on the continuum of behaviour change.

This model has been applied to a variety of risk behaviours, such as smoking, alcohol abuse, weight gain, and lack of physical activity.

The physician makes an intervention according to the readiness to change that the patient demonstrates. If the patient is in the precontemplative stage, the physician's task is to raise the patient's consciousness about the issue and help her or him move forward to the next stage (i.e., contemplation). In addition, the physician should assess whether the patient suffers from associated problems, such as depression, eating disorders, or chronic fatigue syndrome, which may pose significant barriers to change.

### **Reference**

Prochaska JO, DiClemente CC, Norcross JC. In search of how people change. Applications to addictive behaviors. *Am Psychol.* 1992;47:1102-14.

### **Initial Assessment in the Management of Obesity**

#### **Body Mass Index**

A determination of body mass index (BMI) is useful in risk assessment because it provides a more accurate measurement of total body fat than weight alone, height-weight tables, or bioelectric impedance. However, BMI may lead to an overestimation of the “fatness” of very muscular patients.

#### **Waist Circumference**

Excessive abdominal fat (a central pattern of obesity) is an important independent risk factor for disease. In older people or those of Asian descent, it is a better indicator of risk than is BMI.

Waist circumferences above 88 cm (35 inches) in Caucasian women and 102 cm (40 inches) in Caucasian men are indicative of a higher risk of diabetes, hypertension, dyslipidemia, and stroke.

Ethnic-specific values for waist circumference should be considered. For example, Lau et al. explain that a waist circumference above 80 cm in Asian women and 90 cm in Asian men indicates higher risk.

#### **Risk Status**

Identify diseases that place patients at very high risk for complications and mortality (established coronary artery disease, sleep apnea, and type 2 diabetes).

Identify other obesity-associated conditions (osteoarthritis, gallstones, menorrhagia, and stress incontinence).

Identify cardiovascular risk factors—cigarette smoking, hypertension, dyslipidemia, a family history of stroke, impaired fasting glucose, and age over 45 in men or 55 in women.

#### **Readiness to Lose Weight**

Assess the patient’s motivation—the reasons for weight loss, previous attempts, support from family and friends, attitudes toward physical activity, time availability, and potential barriers.

#### **References**

Dietz WH. The paradoxical rise in obesity: an international perspective. In: A national dialogue on healthy body weights: summary of proceedings. Toronto: Canadian Institutes of Health Research; 2001. p. 3-4.

Lau DCW, Douketis JD, Morrison KM, Hramiak IM, Sharma AM, Ur E; Obesity Canada Clinical Practice Guidelines Expert Panel. 2006 Canadian clinical practice guidelines on the management and prevention of obesity in adults and children [summary]. *CMAJ*. 2007;176:S1-13.

Obesity and overweight. Media centre. World Health Organization; [updated 2013 Mar; cited 14 Mar 2014]. Fact Sheet No. 311. Available from: <http://www.who.int/mediacentre/factsheets/fs311/en/>

Plourde G, Prud’homme D. Managing obesity in adults in primary care. *CMAJ*. 2012;184:1039-44.

### **Counselling Skills and Strategies: The Art of Motivational Interviewing**

Melanie Morris, RD, MEd

#### **The Counselling Process**

The counselling process may appear to be easy for a seasoned practitioner; however, it is actually a complex process that places the patient/client at the centre, integrates multiple fields of study, and involves a wide breadth of knowledge, skill, experience, and craft. Myriad counselling strategies and techniques are available to health care practitioners.

Experienced practitioners use active listening strategies to engage patients.<sup>1</sup> Active listening skills include clarifying, paraphrasing, reflecting, and summarizing. Each of these skills helps the practitioner communicate to the patient that he or she has been heard accurately, encourages the patient to do much of the talking, and helps direct and control the interview when time is limited.

Theories and models of behaviour change, such as Prochaska's transtheoretical stages of change, Becker et al.'s health belief model, mindful eating, solution-focused therapy, and motivational interviewing, further characterize the current practice of counselling patients with chronic illness.<sup>2-6</sup>

In recent years, counselling in the primary care setting has shifted from a traditional paradigm characterized by a one-way flow of educational do's and don'ts proffered by an expert therapist and directed toward a passive recipient, the patient. In this paradigm, a problem orientation is implemented and little attention is paid to troubleshooting the barriers to change that patients face. In more recent years, a more patient-centred approach acknowledges the role of the patient as expert in his or her own life.<sup>7</sup> This approach is characterized by the development of a partnership between patient and caregiver, fostering a choice among options for patients, and providing more attention to joint problem-solving.

Prochaska's transtheoretical stages of change theory and the health belief model are useful tools for identifying a patient's readiness for behaviour change.<sup>2</sup>

Mindful eating, solution-focused therapy, and motivational interviewing all are patient-centred strategies used to support patients in their efforts to make effective nutrition and health-related behavioural changes.<sup>4-6</sup>

#### **Mindful Eating**

Mindful eating describes behaviours that focus a patient's attention on the process of eating, rather than on food choices.<sup>4</sup> Mindful eating provides a nonjudgmental strategy to help patients understand what food means to them. Mindful eating also means being present in the moment of eating—being highly attentive to all sensory involvement and decisions related to eating. Patients ask themselves questions such as the following:

- What do I plan to eat today?
- How many meals or snacks will I have?

- Is my food attractively presented?
- Am I taking the time I need to be present during the meal or snack?
- How does the food smell?
- What does it feel like to chew and swallow?
- What are the tastes and textures I'm experiencing?

Mindful eaters decide in advance what and how much they plan to eat and strive to adhere to this plan, rather than making these decisions at the time of the meal. Patients are encouraged to eat slowly and remove all distractions (e.g., TV, books, newspapers, telephone calls, text messages, etc.). They also are encouraged to reflect on some of the effects that result when they eat mindlessly. Mindful eating behaviours help one reacquaint oneself with the physical cues of hunger and satiety.<sup>5</sup>

### **Solution-focused Therapy**

Traditional counselling techniques focused on a problem or illness and its causes. Sessions were dominated by lengthy histories. Practitioners, positioned as experts and focused on their own goals for the patient, were prescriptive in their patient care planning. As McConkey has indicated, solution-focused therapy is a future-oriented technique that focuses on the patient's ultimate goals for eating behaviours (<http://www.solutiontalk.ab.ca>). With solution-focused therapy, patients are valued partners in the counselling dyad. Their personal strengths and resourcefulness are acknowledged and they are active in developing strategies to resolve their own problems. Lengthy histories and a focus on causes become less necessary in the effort to forge new behaviours.

Assumptions with this therapy are that change is constant, rapid change is possible, and small changes will lead to bigger changes. The practitioner's role is to help identify, expand, and reinforce desirable behaviour changes. The patient's specific goals are determined in a positive, process-oriented, here-and-now context, using plain language.

Whereas traditional interview questions tended to involve reporting, solution-focused therapy involves three types of questions designed to elicit strategies that will lead the counselling dyad toward effective solutions: the miracle question, the exception questions, and the scaling question.

An example of the miracle question is "Suppose a miracle happens and these problems are resolved. How would you know? What would be different?"

The exception question helps one reflect upon all the influential factors that occur when one is not experiencing the problem: "How is this happening now? When doesn't this problem happen? What are you doing differently?"

The scaling question helps patients identify where, on a continuum, they would place themselves in relation to a problem and determine where they want to go in the future in terms of their health goals. It asks patients to place themselves on a scale between the ultimate goal and the worst-case scenario: "Where are you now? What will be the first sign that you have moved up a point?"



### **Motivational Interviewing**

Originally, motivational interviewing was developed within the context of addictions. Subsequently, it has been applied to other population health scenarios. Motivational interviewing is the name given to a set of patient-centred counselling strategies and assumptions that integrate an expanded set of active listening skills, a solution focus, and stages of change theory.<sup>6</sup>

Practitioners strive to elicit the patient's intrinsic motivations for behavioural change and help the patient identify strategies that are most likely to be met with success.

### **References**

1. Curry-Bartley K. The art and science of listening. *TICN* 1986;1:14-24.
2. Prochaska JO, DiClemente CC, Norcross JC. In search of how people change. Applications to addictive behaviours. *Am Psychol* 1992;47:1102.
3. Becker MH, Maiman LA, Kirscht JP, Haefner DP, Crachman RH. The health belief model and prediction of dietary compliance: a field experiment. *J Health Soc Behav.* 1977;18:348-66.
4. Hammond M. Ways dietitians are incorporating mindfulness and mindful eating into nutrition counseling. *The Digest: A Dietetic Practice Group of the American Dietetic Association* 2007 Fall:1-9.
5. Wasink B. Environmental factors that increase the food intake and consumption volume of unknowing consumers. *Annu Rev Nutr.* 2004;24:455-79.
6. Miller WR, Rollnick S. *Motivational interviewing: preparing people for change.* 2nd ed. Cardiff, UK: Guilford Publications; 2002.
7. Licavoli L. Dietetics goes into therapy. *JADA.* 1999;95:751-2.