Key Messages

**Obesity is a Chronic Condition**

Obesity is a chronic and often progressive condition not unlike diabetes or hypertension. Successful obesity management requires realistic and sustainable treatment strategies. Short-term “quick-fix” solutions focusing on maximizing weight loss are generally unsustainable and therefore associated with high rates of weight regain.

---

**Obesity Management is About Improving Health and Well-being, and not Simply Reducing Numbers on the Scale**

The success of obesity management should be measured in improvements in health and well-being rather than in the amount of weight lost. For many patients, even modest reductions in body weight can lead to significant improvements in health and well-being.
Early Intervention Means Addressing Root Causes and Removing Roadblocks

Successful obesity management requires identifying and addressing both the ‘root causes’ of weight gain as well as the barriers to weight management. Weight gain may result from a reduction in metabolic rate, overeating, or reduced physical activity secondary to biological, psychological or socioeconomic factors. Many of these factors also pose significant barriers to weight management.

Success is Different for Every Individual

Patients vary considerably in their readiness and capacity for weight management. ‘Success’ can be defined as better quality-of-life, greater self-esteem, higher energy levels, improved overall health, prevention of further weight gain, modest (5%) weight loss, or maintenance of the patient’s ‘best’ weight.

A Patient’s ‘Best’ Weight May Never be an ‘Ideal’ Weight

An ‘ideal’ weight or BMI is not a realistic goal for many patients with obesity, and setting unachievable targets simply sets up patients for failure. Instead, help patients set weight targets based on the ‘best’ weight they can sustain while still enjoying their life and reaping the benefits of improved health.
ASK for permission to discuss weight

Weight is a sensitive issue. Many patients are embarrassed or fear blame and stigma.

Be Non-judgmental

Do NOT blame, threaten, or provoke guilt in your patient.
Do NOT make assumptions about their lifestyles or motivation (your patient may already be on a diet or have already lost weight).
Do acknowledge that weight management is difficult and hard to sustain.

Explore Readiness for Change

Determining your patient’s readiness for behaviour change is essential for success.
Use a patient-centred collaborative approach.
Initiating change when patients are not ready can result in frustration and may hamper future efforts.
Use Motivational Interviewing to Move Patients Along the Stages of Change

Ask questions, listen to patients’ comments and respond in a way that validates their experience and acknowledges that they are in control of their decision to change.

If patients are NOT ready to address their weight, be prepared to address their concerns and other health issues and then ask if you can speak with them about their weight again in the future.

Sample Questions on How to Begin a Conversation About Weight:

“Would it be alright if we discussed your weight?”

“Are you concerned about your weight?”

“Would you be interested in addressing your weight at this time?”

“On a scale of 0 to 10, how important is it for you to lose weight at this time?”

“On a scale of 0 to 10, how confident are you that you can lose weight at this time?”

Create a Weight-Friendly Practice

FACILITIES: handicapped accessibility, wide doors, large restrooms, floor-mounted toilets.

WAITING ROOM: sturdy, armless chairs, appropriate reading material.

EXAM ROOM: oversized gowns, scales over 350 lbs/160 kg, wide and sturdy exam tables, extra-large blood pressure cuffs, longer needles and tourniquets, long-handled shoe horns.
ASSESS obesity related risk and potential ‘root causes’ of weight gain

Assess Obesity Class and Stage

Obesity Class (I-III) is based on BMI and is a measure of how BIG the patient is.

Obesity Stage (0-4) is based on the MEDICAL, MENTAL, and FUNCTIONAL impact of obesity and is a measure of how HEALTHY the patient is.

Waist circumference provides additional information regarding CARDIOMETABOLIC risk.

Assess for Obesity Drivers, Complications, and Barriers

Use the 4Ms framework to assess Mental, Mechanical, Metabolic, and Monetary drivers, complications, and barriers to weight management.

<table>
<thead>
<tr>
<th>Obesity Class</th>
<th>BMI</th>
<th>kg/m²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underweight</td>
<td>≤18.5</td>
<td></td>
</tr>
<tr>
<td>Normal Weight</td>
<td>18.6</td>
<td>- 24.9</td>
</tr>
<tr>
<td>Overweight</td>
<td>25.0</td>
<td>- 29.9</td>
</tr>
<tr>
<td>Obesity Class I</td>
<td>30.0</td>
<td>- 34.9</td>
</tr>
<tr>
<td>Obesity Class II</td>
<td>35.0</td>
<td>- 39.9</td>
</tr>
<tr>
<td>Obesity Class III</td>
<td>≥ 40</td>
<td></td>
</tr>
</tbody>
</table>

Waist Circumference Risk Threshold: Europid: ♂≥94 cm; ♀≥ 80 cm; Asian and Hispanic: ♂≥90 cm; ♀≥ 80 cm

Obesity Stages (EOSS*):

- Stage 0: No Apparent Risk Factors
- Stage 1: Preclinical Risk Factors
- Stage 2: Established Co-Morbidity
- Stage 3: End-Organ Damage
- Stage 4: End-Stage

*Edmonton Obesity Staging System
The 4Ms of Obesity

Mental
- Cognition
- Depression
- Attention Deficit
- Addiction
- Psychosis
- Eating Disorder
- Trauma
- Insomnia

Mechanical
- Sleep Apnea
- Osteoarthritis
- Chronic Pain
- Reflux Disease
- Incontinence
- Thrombosis
- Intertrigo
- Plantar Fasciitis

Metabolic
- Type 2 Diabetes
- Dyslipidemia
- Hypertension
- Gout
- Fatty Liver
- Gallstones
- PCOS
- Cancer

Monetary
- Education
- Employment
- Income
- Disability
- Insurance
- Benefits
- Bariatric Supplies
- Weight-Loss Programs

Assess for Root Causes of Weight Gain

- Is weight gain due to slow metabolism?
  - Age
  - Hormones
  - Genetics
  - Low Muscle Mass
  - Weight Loss
  - Medication
  - Address root causes of low metabolism

- Is weight gain due to increased food intake?
  - Socio-Cultural Factors
  - Physical Hunger
  - Emotional Eating
  - Mental Health Issues
  - Medication
  - Address root causes of overeating

- Is weight gain due to reduced activity?
  - Socio-Cultural Factors
  - Socio-Economical Limitations
  - Physical Limitations / Pain
  - Emotional Factors
  - Medication
  - Address root causes of reduced activity
ADVISE on obesity risks, discuss benefits & options

Advise on Obesity Risks

Obesity risks are more related to OBESITY STAGE than to BMI.

Focus of treatment should be on IMPROVING HEALTH and WELL-BEING rather than simply losing weight.

Explain Benefits of Modest Weight Loss

The first goal is to STABILIZE weight and PREVENT further weight gain.

Substantial health benefits can be derived with MODEST (5-10%) weight loss.

Greater than 15% weight loss may require consideration of surgical options.

Explain Need for Long-Term Strategy

Relapse or weight regain is virtually inevitable when ‘treatment’ (including lifestyle changes) stops.

This means that all treatment strategies must be FEASIBLE and SUSTAINABLE.

Interventions focusing on ‘quick fixes’ and unsustainable strategies will result in weight regain.
Advise on Treatment Options

Average sustainable weight loss with behavioural intervention is about 3-5% of initial weight.

**SLEEP, TIME, AND STRESS**
management interventions can significantly improve eating and activity behaviours.

**DIETARY INTERVENTIONS** should focus on decreasing caloric intake by improving eating pattern, nutritional hygiene, and portion size. Extreme and ‘fad’ diets are generally not sustainable in the long-term.

**PHYSICAL ACTIVITY** or exercise alone is generally not a successful weight-loss strategy. Rather than focusing on ‘burning’ calories, activity interventions should aim at reducing sedentariness and increasing daily physical activity levels to promote fitness, overall health, and general well-being.

**PSYCHOLOGICAL** interventions can improve self-esteem, reduce emotional eating, and promote non-food coping strategies.

**LOW CALORIE DIETS** (medically supervised) and meal replacements can be safe and effective approaches for patients requiring a greater degree of weight loss.

**ANTI-OBESEITY MEDICATIONS**, in conjunction with behavioural interventions, can help patients achieve and sustain 5-10% weight loss. Discontinuation of medications generally results in weight regain.

**BARIATRIC SURGERY** should be considered for all patients requiring more than 15% sustainable weight loss. Modern laparoscopic bariatric surgery is both safe and effective, and substantially reduces morbidity and mortality. All surgical patients require multidisciplinary presurgical assessment and long-term medical, nutritional, and psychosocial support.
AGREE on realistic weight-loss expectations and on a SMART plan to achieve behavioural goals

Agree on Weight Loss Expectations

Unrealistic weight-loss expectations can lead to DISAPPOINTMENT and NON-ADHERENCE.

A reasonable weight-loss target with behavioural and medical interventions is 0.5 to 1.0 kg per week for a total of 5 to 10% of initial weight, after which weight loss will generally plateau.

A greater or more rapid weight loss with non-surgical interventions does not result in better long-term outcomes.

For some patients, PREVENTION or SLOWING of WEIGHT GAIN may be the only realistic weight target.
Agree on Sustainable Behavioural Goals and Health Outcomes

Focus on sustainable behavioural changes rather than on specific weight targets.

Behavioural goals should be SMART:

- Specific
- Measurable
- Achievable
- Rewarding
- Timely

Self-monitoring with a lifestyle journal helps initiate and sustain behavioural change.

Agree on Treatment Plan

Treatment plans should be REALISTIC and SUSTAINABLE.

Obesity treatment should begin with ADDRESSING the DRIVERS of weight gain (e.g. stress, lack of time, depression, sleep apnea, chronic pain, etc.).

The SUCCESS of treatment should be measured in improvements in HEALTH and WELL-BEING (e.g. improve blood pressure, increase fitness, increase energy, increase mobility, etc.).
ASSIST in addressing drivers & barriers, offer education & resources, refer to provider, and arrange follow-up

Assist Patient in Identifying and Addressing Drivers and Barriers

Drivers and barriers may include ENVIRONMENTAL, SOCIOECONOMICAL, EMOTIONAL, or MEDICAL factors.

Obesogenic MEDICATIONS (e.g. atypical antipsychotics, anti-diabetics, anti-convulsants, etc.) may make obesity management difficult.

PHYSICAL BARRIERS that limit access (transportation, turnstiles, limited seating, etc.) in institutional settings, work places, and recreational facilities, may deter from active participation in everyday life.

Provide Education and Resources

Patient EDUCATION is central to self-management.

Help patients identify and seek out CREDIBLE weight-management information and resources.
Refer to Appropriate Provider

Evidence supports the need for an INTERDISCIPLINARY team approach to obesity management.

Choice of appropriate provider (e.g. physician, nurse, dietitian, psychologist, social worker, exercise physiologist, PT/OT, surgeon, etc.) should reflect identified DRIVERS and COMPLICATIONS of obesity as well as BARRIERS to weight management.

Arrange Follow-Up

Given the chronic relapsing nature of obesity, LONG-TERM follow-up is ESSENTIAL.

Success is directly related to FREQUENCY of provider contact.

Weight-regain (relapse) should not be framed as ‘failure’ – rather, it is the natural and EXPECTED consequence of dealing with a chronic condition.
Professional Resources

Sign up at www.obesitynetwork.ca to become a member of the Canadian Obesity Network, Canada’s national obesity NGO with access to additional obesity education, resources, and networking opportunities with national obesity experts.

The Online Best Evidence Service In Tackling obesitY+ (OBESITY+) provided by McMaster University's Health Information Research Unit (accessible at www.obesitynetwork.ca) provides access to the current best evidence about the causes, course, diagnosis, prevention, treatment, and economics of obesity and its related metabolic and mechanical complications.

The Canadian Association of Bariatric Physicians and Surgeons (www.cabps.ca) represents Canadian specialists interested in the treatment of obesity and severe obesity for the purposes of professional development and coordination and promotion of common goals.

Dietitians of Canada (www.dietitians.ca) is the national professional association for dietitians, representing almost 6000 members at the local, provincial and national levels. Practice-based Evidence in Nutrition (PEN), designed for busy health professionals, is an online database available by subscription that provides evidence-based answers to everyday food and nutrition practice questions.

The Canadian Society for Exercise Physiology (www.csep.ca) is a voluntary organization composed of professionals interested and involved in the scientific study of exercise physiology, exercise biochemistry, fitness and health. Visit to download Canadian Physical Activity and Sedentary Behaviour Guidelines.

Key References


Padwal RS, Pajewski NM, Allison DB, Sharma AM. Using the Edmonton obesity staging system to predict mortality in a population-representative cohort of people with overweight and obesity. CMAJ. 2011;183:E1059-66


Patient Resources
Public Health Agency of Canada

This site (www.publichealth.gc.ca) has important information for patients on healthy active living and on numerous obesity-related health problems including hypertension, diabetes, sleep apnea, mental illness, and arthritis.

Canadian Obesity Network

Additional patient educational and information materials on obesity management can be ordered in bulk from CON by contacting info@obesitynetwork.ca

Information on other obesity related health problems can be found at:
Canadian Mental Health Association www.cmha.ca
Heart Disease: www.heartandstroke.ca
Hypertension: www.hypertension.ca
Diabetes: www.diabetes.ca
Arthritis: www.arthritis.ca
Sleep Apnea: www.lung.ca
Fatty Liver Disease: www.liver.ca
Reproductive Health: www.cwhn.ca
Bariatric Surgery: www.asmbs.org
Incontinence: www.canadiancontinence.ca
Chronic Pain: www.canadianpainsociety.ca
Psychology: www.psychologyfoundation.org
Abdominal Adiposity: www.myhealthywaist.org

For additional information and resources on obesity prevention and management, please refer to our website at www.obesitynetwork.ca

This booklet was developed by Arya M. Sharma, MD/PhD, FRCPC, and Michael Vallis, PhD, with the CON-RCO Canadian Obesity Network Primary Practice Working Group.*

This booklet is published by the Canadian Obesity Network with support from the Public Health Agency of Canada and the Canadian Institutes of Health Research.

*Working Group Members:
Geeta Achuthan, MD, MCFP (Regina, SK), Andrew Cave, MD, FCFP, FRCGP (University of Alberta, AB), Eleanor Bentnerud, RN, BN, MN, (South Calgary Primary Care Network, AB), Denise Campbell-Scherer, MD, PhD, CCFP (University of Alberta, AB), Cyd Couchevese, OMM, CD, MD, MCFP, D Av Med, CHE, (Canadian Armed Forces), Heather Davis, MD, FRCPC, (Halifax, NS), Robert Dent, MD, FRCPC, (Ottawa Hospital, ON), Eric Ducet, PhD, (University of Ottawa, ON), Angela Estey, RN, MSc, (Alberta Health Services), Mary Forhan, OT Reg (Ont), PhD (McMaster University, ON), Yoni Freedhoff, MD, CCFP, (Bariatric Medical Institute, Ottawa, ON), Tracey Hussey MSc, RD, (Hamilton Family Health Team, ON), Brenda Gluska, (Ontario Ministry of Health and Long Term Care), Shahnaz Karmali, MD, FRCSC, (University of Alberta, AB), Sara Kirk, PhD, (Dalhousie University, NS), Marie-France Langlois MD, FRCPC, CSPQ (Université de Sherbrooke, QC), David C. W. Lau, MD, FRCPC, (University of Calgary, AB), Anthony Levinson, MD, FRCPC, (McMaster University, ON), Patricia Marturano, (The College of Family Physicians of Canada), Raj Padwal, MD, FRCPC, (University of Alberta, AB), Helena Piccini-Vallis, MD, CCFP, (Halifax, NS), Paul Poirier, MD, PhD, FRCPC, (Université Laval, QC), Valerie Taylor, MD, PhD, FRCPC, (University of Toronto, ON), Rick Tytus, MD, CCFP, (Hamilton Academy of Medicine), Shahebina Waliji MD, CCFP, (Calgary Weight Management Centre, AB), Sean Wharton MD, FRCPC, (Wharton Medical Clinic, ON), Ron Wilson MD, CCFP, (Vancouver, BC).

Notice and Disclaimer:
No part of these materials may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without prior written permission from the Canadian Obesity Network - Réseau canadien en obésité (CON-RCO). The opinions in this booklet are those of the authors and do not necessarily represent those of CON-RCO. This booklet is provided on the understanding and basis that none of the publisher, the authors, or other persons involved in its creation shall be responsible for the accuracy or currency of the contents, or for the results of any action taken on the basis of the information contained in this book or for any errors or omissions contained herein. No reader should act on the basis of any matter contained in this booklet without obtaining appropriate professional advice. The publisher, the authors, and other persons involved in this booklet disclaim liability and responsibility resulting from any ideas, products, or practices mentioned in the text and disclaim all and any liability and responsibility to any person, regardless of whether such person purchased this booklet, for loss or damage due to errors and omissions in this book and in respect of anything and of the consequence of anything done or omitted to be done by such person in reliance upon the content of this booklet.
Canadian Obesity Network
www.obesitenetwork.ca

Royal Alexandra Hospital | Room 102, Materials Management Centre
10240 Kingsway Avenue, Edmonton, AB T5H 3V9 | Phone: (780)735-6764
Fax: (780)735-6763 | info@obesitenetwork.ca