

An ancillary session at the 2017 Family Medicine Forum

## **Understand, Empower, Treat:** *Revolutionizing obesity care*

Thursday, November 9, 2017 | 12:30-13:30

Session ID no. 186109-074

**After attending this session, participants will be able to:**

- Explore the multifactorial pathophysiology of obesity as a chronic disease and describe the rationale for its management.
- Compare currently available Canadian pharmacotherapy options for the management of obesity.
- Discuss practical approaches to the initiation and maintenance of obesity management in clinical practice.



### **Tina Kader, MD, FRCP, CDE**

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**This program has been certified by the College of Family Physicians of Canada and the Quebec office for up to 1.00 Group Learning credits.**

This program was supported in part by educational funding from Novo Nordisk Canada Inc.

## Understand, Empower, Treat: *Revolutionizing obesity care*

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### Faculty/presenter disclosure

- **Faculty:** Tina Kader, MD, FRCPC, CDE
- **Relationships with commercial interests:**
  - **Advisory Board:** AstraZeneca, B-I, Eli Lilly, Novo Nordisk, Sanofi, Takeda
  - **Speakers' bureau:** AstraZeneca, B-I, Eli Lilly, Novo Nordisk, Sanofi, Takeda
  - **Consulting Fees:** n/a
  - **Other:** none

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### Disclosure of commercial support

- This program has received financial support from Novo Nordisk Canada Inc. in the form of an educational grant
- This program has received in-kind support from Novo Nordisk Canada Inc. in the form of logistical support
- **Potential for conflict(s) of interest:**
  - Dr. Kader has received honoraria from Novo Nordisk Canada Inc., whose product(s) are being discussed in this program
    - Novo Nordisk Canada Inc.: liraglutide (Saxenda®)
  - Novo Nordisk Canada Inc. developed products that will be discussed in this program:
    - Liraglutide
  - Dr. Kader will receive an honorarium from the CPFC for this talk

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### Mitigating potential bias

- All content has been reviewed by a physician steering committee, pharmacist expert reviewers, the College of Family Physicians of Canada, and the FMOQ (Fédération des médecins omnipraticiens du Québec)
- All data has been sourced from evidence that is clinically accepted
- All support used in justification of patient care recommendations conform to generally accepted standards, the 5 As of obesity management from the Canadian Obesity Network, and the 2006 Canadian clinical practice guidelines on the management and prevention of obesity

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### Planning committee

- Ali Zentner, MD, FRCPC, DipABOM
- Andre Belanger, MD, CCFP
- David A. Macklin, MD, CCFP
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- Ken Burns, B.Sc.PhM
- Catherine Schill, B.Sc.PhM

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### Program objectives

*After attending this program, participants will be able to:*

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# WHAT is obesity?

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**Obesity is more a lifestyle issue than a chronic disease state.**

A. True

B. False

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### Obesity is recognized as a chronic disease and global health issue

"Obesity is a chronic and often progressive condition not unlike diabetes or hypertension."  
-Canadian Obesity Network

"...obesity is a primary disease, and the full force of our medical knowledge should be brought to bear on the prevention and treatment of obesity as a primary disease entity."  
-American Association of Clinical Endocrinologists (2012)

"Obesity is a chronic disease, prevalent in both developed and developing countries, and affecting children as well as adults."  
-World Health Organization (2000)

"Recognizing obesity as a disease will help change the way the medical community tackles this complex issue that affects approximately one in three Americans."  
-American Medical Association (2013)

"Obesity is a chronic medical disease requiring enhanced research, treatment and prevention efforts."  
-Canadian Medical Association (2015)

© Canadian Obesity Network. *What is Obesity?* Photograph. Downloaded from [www.obesitynetwork.ca](http://www.obesitynetwork.ca) on November 17, 2014. © *Journal of the American Medical Association* 2012; 306:842-8. © 2005 Obesity as a Disease Working Group. Obesity as a Disease Working Group. All rights reserved.

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## Prevalence and current landscape



**X2**

Worldwide obesity has more than **DOUBLED** since 1980<sup>1</sup>

**>50%**

of the world's adult population was living with overweight/obesity in 2014<sup>2</sup>

**2.8 million**

people die/year from overweight or obesity<sup>2</sup>



**6 million**

Canadians are living with obesity<sup>3,4</sup>

**1 in 4**

Canadian adults

**1 in 10**

Canadian children

1. WHO. 2015. Obesity and overweight fact sheet. Available at: <http://www.who.int/mediacentre/factsheets/fs104/en/>. 2. WHO. 2014. 10 facts on obesity. Available at: <http://www.who.int/mediacentre/factsheets/fs104/en/#>. 3. Canadian Obesity Network. 2015. Obesity in Canada. Available at: <http://www.obesitynetwork.ca/obesity-in-canada-2015>. 4. Public Health Agency of Canada. 2011. Obesity in Canada. A joint report from the Public Health.

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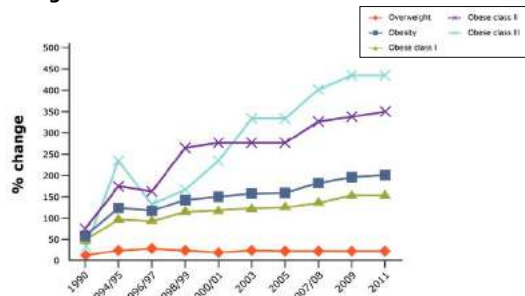
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## Prevalence of overweight and obesity in Canada is increasing



Adapted from Tiedts LK, et al. CMAJ Open 2014.

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## Weight bias

- Refers to:
  - Attitudes/actions towards people with obesity that negatively affect clinical interactions
  - Stigmatizing patients because of their obesity
  - Applying stereotypes to a person because of their obesity which translate into prejudices, unfair treatment and discrimination
- Weight bias and stigmatizing usually occurs when people believe that excess weight is **controllable** and **due to a lack of personal responsibility**
- Prevalence has increased by **66%** in the last 10 years; similar to racial discrimination in terms of its negative effects on an individual and on a society
- 53%** of patients have received inappropriate comments from their doctors about their weight
- 84%** of patients believe their weight is blamed for all their medical complaints

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### Weight bias in clinical practice

- Addressing weight bias in clinical practice is challenging because it is **pervasive** and **more socially acceptable** than other types of bias
- Two types of weight bias exist in practice:
  - **Explicit:** Deliberate and consciously expressed (e.g., telling a patient they are "fat and unmotivated")
  - **Implicit:** Subconscious and hidden (e.g., chairs that don't fit, a scale that won't weigh, lack of a large blood pressure cuff)

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### Discussion Point

How has weight bias played a role in your practice?

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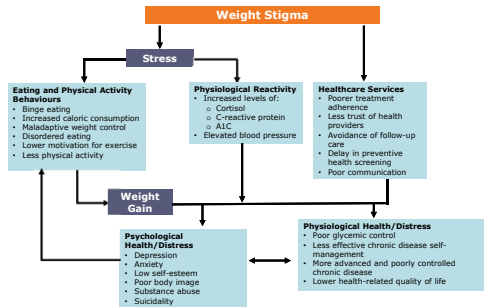
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### Negative effects of weight bias



Pull R, Preiss G, Nagengast J, Kyle T. Overcoming Weight Bias in the Management of Patients With Diabetes and Obesity. *Clinical Diabetes*. 2019; Jan; 44-50.

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### Strategies to overcome weight bias

- Acknowledge it exists on both levels
- Not all obese patients want to talk about weight loss; do not assume this is open for discussion
- Create a weight-friendly environment (e.g., chairs, gowns, scales and cuffs)
- When discussing obesity emphasize its complex pathophysiology involving genetics, physiology and environment
- WATCH YOUR LANGUAGE!

Puhl, et al 2011. *Obesity Research*, 19(12): 788-805; Puhl, et al 2006. *Obesity* 14(10): 1802-1815

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## WHY should we treat obesity?

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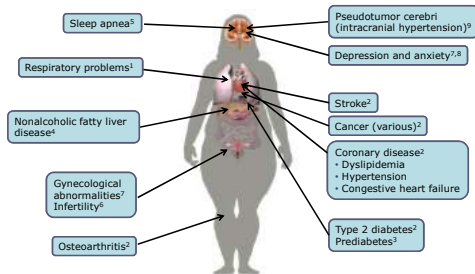
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### Obesity is a chronic disease that is associated with multiple comorbid conditions



1. *Statistics Canada Health Reports*, Vol. 17, No. 3, Catalogue no. 82-623-XIE, 2. *Guil DP et al. BMC Public Health*, 2009;9:88. 3. *Shahin S et al. Int J Diabetes Dev Countries*, 2011;131:60-66. 4. *Charro TS et al. Gastroenterology*, 2001;120:2023-2030. 5. *J Clin Endocrinol*, 2002;93:185-191. 6. *Spertus ML et al. Arch Med Sci*, 2013;9:409-405. 7. *Wong, Chen E. *Obesity**, 1999;7(10):1133-1139. 8. *Chen E et al. *Am J Clin Nutr**, 2009;89(2):217-26. 9. *Demel AB et al. *Ann J Epidemiol**, 2007;148:833-41.

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**Good eating habits, exercise and motivation are enough to lose and maintain weight.**

- A. True
- B. False

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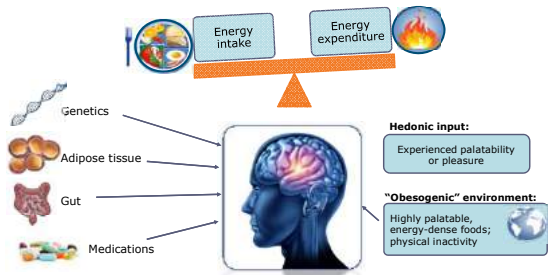
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**Many modifiable and non-modifiable factors contribute to obesity**



1. World's SC et al. *Int J Obes Relat Metab Disord*. 2002;26 Suppl 4:S5-S10. 2. Ludwig DS. *JAMA*. 2014;311:2167-2176. 3. Spillins PK et al. *Am J Clin Nutr*. 2010;92:1071-1085. 4. Garvey WT et al. *Endocr Pract*. 2014;20:207-209. 5. Bray GA and Ryan DH. *Ann NY Acad Sci*. 2008;1132:1-11.

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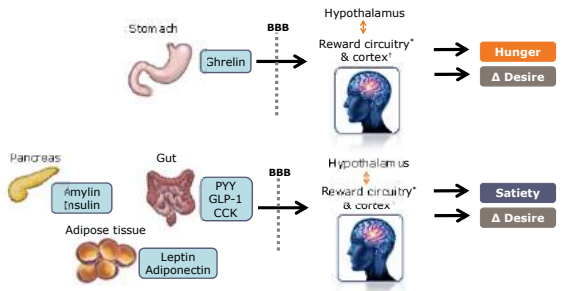
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**Hunger, satiety and desire are regulated by a number of hormones**



BBB = blood-brain barrier; CCK = cholecystokinin; GLP-1 = glucagon-like peptide-1; PYY = peptide YY.  
\*The brain's reward circuitry, especially in the ventral tegmental area and nucleus accumbens, appears to be the dorsolateral pre-frontal cortex.

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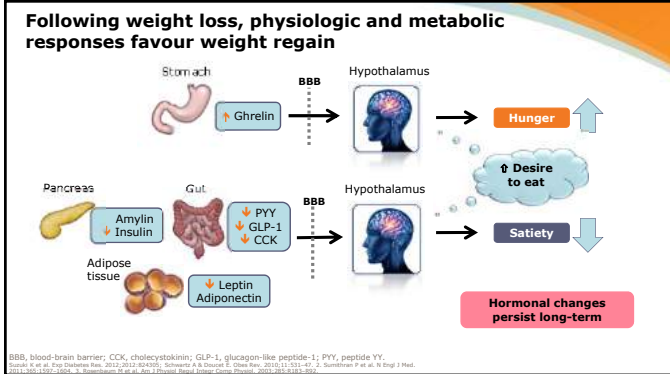
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### A weight loss of **X%** is associated with health benefits.

- A. 5-10%
- B. 10-15%
- C. 15-20%
- D. 20-25%

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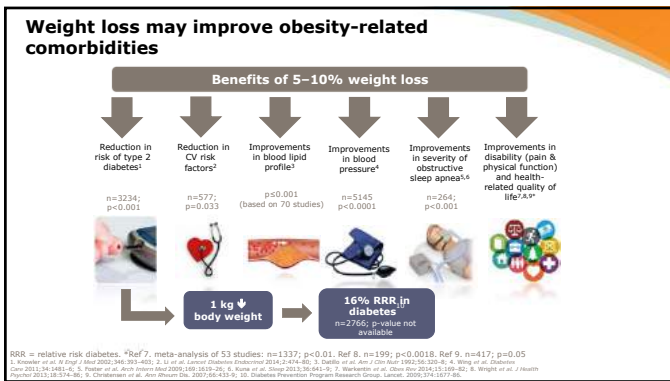
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## WHO should we treat?

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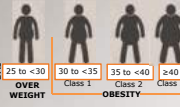
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### Assessing obesity and weight-related risks

<p><b>1</b></p> <p><b>Obesity, by definition:</b></p> <p>Measure <b>height</b> Measure <b>weight</b> Calculate <b>BMI</b></p> <p><b>BMI = kg/m<sup>2</sup></b></p> 	<p><b>2</b></p> <p><b>Abdominal adiposity:</b></p> <p>Measure <b>waist circumference*</b></p> <p>*If BMI is &gt;25 and &lt;35 kg/m<sup>2</sup></p> <p>European, Sub-Saharan African, Eastern Mediterranean and Middle Eastern (Arab)</p> <p>94 cm   80 cm</p> <p>South Asian, Chinese, Japanese, South and Central American</p> <p>90 cm   80 cm</p>	<p><b>3</b></p> <p><b>Other weight-related health risks and comorbidities:</b></p> <p>Assess <b>obesity-related health risks</b></p> <p>Diabetes: <b>FPG, A1C</b> Hypertension: <b>Blood pressure (BP)</b> Dyslipidemia: <b>Lipid profile</b> NAFLD: <b>ALT</b></p> <p><i>Other weight-related comorbidities</i></p>
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ALT = alanine aminotransferase; BMI = body mass index; FPG = fasting plasma glucose; NAFLD = non-alcoholic fatty liver disease. \*Adapted from Stevens RD et al. J Am Coll Cardiol. 2014;63:2385-2393. Liu DCW et al. CMAJ. 2007;176:1103-6. CDA Guidelines. Can J Diabetes. 2013;37(suppl 1):S1-S12.

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### Advantages and disadvantages of BMI

Advantages of BMI	Disadvantages of BMI
Does usually correlate with fat mass in the absence of significant exercise program	Does not account for fat tissue and adipocytes as a hormonal entity with certain metabolic properties—certain fat tissue can be "sicker" than others
Often correlates with risk particularly in patients with higher BMI (greater than 40 kg/m <sup>2</sup> )	May not correlate with metabolic disease in all individuals particularly in certain ethnocultural communities
Has a use to define the extent of overweight or obesity	Does not consider muscle mass, breast mass

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### Assessing obesity and weight-related risks: Edmonton Obesity Staging System (EOSS)

- 4 Measure of how healthy a person is
- Based on the medical, mental, and functional impact of obesity



Sharma AM, Kushner RF, De J Oline Lund. 2009;13:269-95. Additional information at: <http://www.edmontonobesity.ca/PDF/EOSS/EOSS%20-%20Edmonton%20obesity%20staging%20tool.pdf#OC=ASPERES>

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### Discussion Point

**Should all patients be encouraged to lose weight?**

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### Obesity History

#### I. History

- LOOK AT THE CHRONICITY OF WEIGHT GAIN, patterns, triggers of weight gain, duration
  - Increased risk of obesity – birth weight greater than 9.9 lbs and mother with gestational diabetes
  - Overweight during childhood and adolescents
  - Weight gain during life events (pregnancy, trauma, menopause)

#### II. Assessment

- Readiness for weight loss
- Previous weight-loss attempts
- Current patterns of eating, exercise

#### III. Patient Enquiry

- Barriers currently towards treatment
- Medication that may contribute to weight gain
- Other comorbidities

McTigue KM, Harris JL, Hovav E, et al. Screening and Interventions for Obesity In adults: summary of evidence for the U.S. Preventive Services Task Force. Ann Intern Med 2003;139:922-48

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### Impact of obesity <sup>3</sup>

- Obesity affects several domains of health and well-being (the "4Ms")<sup>1</sup>

#### The 4Ms of obesity

Mental	Mechanical	Metabolic	Monetary
<ul style="list-style-type: none"><li>• Cognition</li><li>• Depression</li><li>• Attention deficit</li><li>• Addiction</li><li>• Psychosis</li><li>• Eating disorder</li><li>• Trauma</li><li>• Insomnia</li></ul>	<ul style="list-style-type: none"><li>• Sleep apnea</li><li>• Osteoarthritis</li><li>• Chronic pain</li><li>• Reflux disease</li><li>• Incontinence</li><li>• Thrombosis</li><li>• Intertrigo</li><li>• Plantar fasciitis</li></ul>	<ul style="list-style-type: none"><li>• Type 2 diabetes</li><li>• Dyslipidemia</li><li>• Hypertension</li><li>• Gout</li><li>• Fatty liver</li><li>• Gallstones</li><li>• Polycystic ovary syndrome</li><li>• Cancer</li></ul>	<ul style="list-style-type: none"><li>• Education</li><li>• Employment</li><li>• Income</li><li>• Insurance</li><li>• Benefits</li><li>• Disability</li><li>• Weight-loss programs</li><li>• Bariatric supplies</li></ul>

1. The 4 Ms of obesity management - practitioner guide. Canadian Obesity Network 2011. Accessed November 25, 2014. [http://www.obesitynetwork.ca/files/Practitioner\\_Guide\\_Perennial\\_04e.pdf](http://www.obesitynetwork.ca/files/Practitioner_Guide_Perennial_04e.pdf)

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## HOW do we treat obesity? *Behavioural interventions*

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### Starting the conversation

- You do not just hand a patient a diet
  - Patients could teach you a thing or two about dieting
- Your job is to **build a bridge** between knowledge and action
- Can use tools and approaches to help:
  - Food diary
  - Exercise prescription
  - Motivational communication is key

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### The 5As framework

- Minimal intervention
- Respects autonomy in a non-judgmental way
- Recognizes obesity as a chronic condition

**ASK** for permission to discuss weight and explore readiness

**ASSESS** obesity related risks and 'root causes' of obesity

**ADVISE** on health risks and treatment options

**AGREE** on health outcomes and behavioural goals

**ASSIST** in accessing appropriate resources and providers

The 5 As of obesity management, Canadian Obesity Network 2011. Accessed November 25, 2014 at <http://www.theobesitynetwork.ca>

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### Motivational interviewing (MI)

- Different than the traditional expert-recipient relationship between clinician-patient → **"Person-centred partnership"**
- Honours the patient as the decision-maker
  - It combines the knowledge of the clinician with the patient's knowledge to enable the patient to choose the best clinical path
- 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
  - Motivation is a shared responsibility
  - MI is evocative

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### MI is a valuable behavioural intervention

- **External** and **internal pressures** to change are often overwhelming
  - Patients are dealing with this specific problem, but have a life as well
- This can result in **frustration**, which can create a chronically ambivalent state as patients underestimate their own ability and confidence

**MI helps to remove these pressures**

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### Key strategies in MI

- Open-ended questions
  - Cannot be answered with a "yes" or "no"
  - Patient has to contemplate and form an answer
- Reflective listening
  - "It sounds like..."
- Summarizing
  - Clarifying understanding and creating a framework for decisional balance
- Affirming
  - "I hear and understand your challenges," rather than praising

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### Helpful tips for incorporating MI into practice

- Remember: MI is a **collaborative** conversation style
  - Goal is to strengthen the therapeutic relationship
- **Interpersonal skills** are important
- **Change talk** (from the patient) is critical
  - Need ("I should..." or "I might...")
  - Commitment ("I will..." or "I am...")
- Praise should **congratulate the patient's abilities**, rather than the action
  - i.e., patient has *learned* that he is capable of losing weight and that can continue, vs. patient has lost a few pounds
- Continue to **clarify understanding** with reflection and summarizing
  - If the patient answers "yes" or "no," MI is not being incorporated correctly!

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## HOW do we treat obesity? *Pharmacotherapy*

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**There are effective pharmacotherapy options available for weight management.**

- A. True
- B. False

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**Overview of available pharmacotherapy options**

	Orlistat (Xenical®)	Liraglutide (Saxenda®)
Drug class	Gastric and pancreatic lipase inhibitor	GLP-1 receptor agonist
Indication	≥30 kg/m <sup>2</sup> or ≥27 kg/m <sup>2</sup> + comorbidity	≥30 kg/m <sup>2</sup> or ≥27 kg/m <sup>2</sup> + comorbidity
Contra-indications	<ul style="list-style-type: none"> <li>• Chronic malabsorption syndrome</li> <li>• Cholestasis</li> </ul>	<ul style="list-style-type: none"> <li>• Multiple Endocrine Neoplasia syndrome (MEN2), medullary thyroid cancer (MTC)</li> <li>• Pregnancy/breastfeeding</li> </ul>
Most common adverse events	<ul style="list-style-type: none"> <li>• Oily spotting, stool, evacuation</li> <li>• Flatus with discharge</li> <li>• Fecal urgency, increased defecation</li> </ul>	<ul style="list-style-type: none"> <li>• Nausea, vomiting, dyspepsia</li> <li>• Diarrhea, constipation</li> <li>• Abdominal pain</li> </ul>

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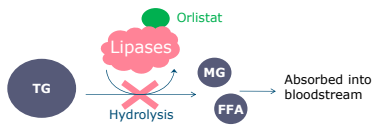
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**Orlistat mechanism of action**

- Reversible inhibitor of lipases
- Acts non-systemically in the lumen of the stomach and small intestine to inactivate lipases from hydrolyzing dietary fat
- Undigested triglycerides are not absorbed → resulting caloric deficit results in weight loss
  - At recommended dosage, inhibits dietary fat absorption by approximately 30%



FFA, free fatty acid; MG, monoglycerides; TG, triglycerides  
 Xenical® (Orlistat) Product Monograph, Hoffmann-La Roche, Ltd. 2012

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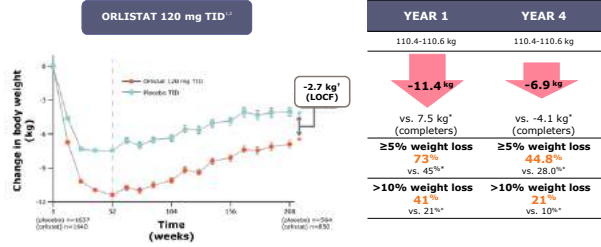
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### Weight reductions with pharmacotherapy: Orlistat XENDOS trial



\*p<0.001; †p<0.001 by LOCF analysis (last observation carried forward)

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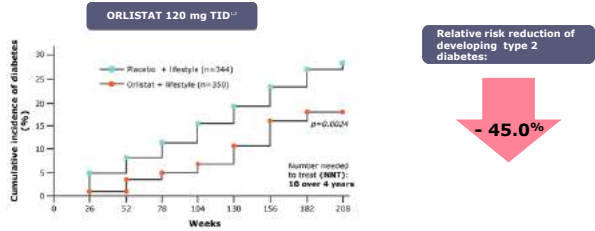
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### Reduced risk of developing type 2 diabetes with pharmacotherapy: Orlistat



Mean age: 43.0-43.7 years; All patients with IGT (PG <6.7 mmol/L)

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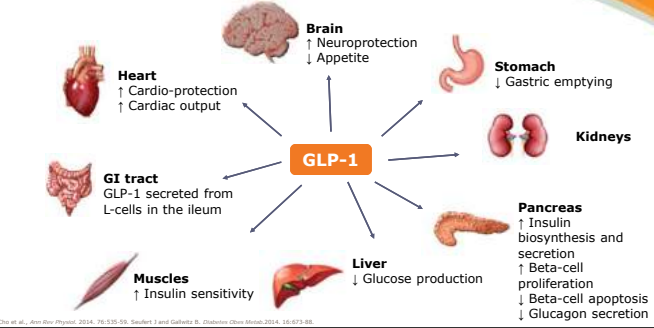
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### Physiological GLP-1 exerts many effects in the body



Chen et al., Ann Rev Physiol 2014; 76:535-59; Seufert J and Galante B. Diabetes Obes Metab 2014; 16:673-86

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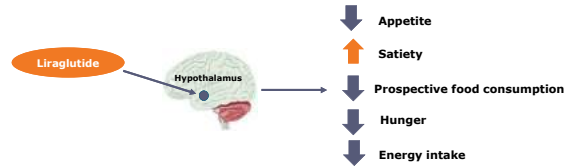
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### Liraglutide mechanism of action

- Glucagon-like peptide-1 (GLP-1) is a physiological regulator of appetite and food intake
  - GLP-1 receptors are present in several areas of the brain involved in appetite regulation
- Liraglutide is a human GLP-1 agonist with 97% homology to endogenous human GLP-1
  - Liraglutide signal is highly localized—accesses the hypothalamus directly to mediate satiety and fullness



© Biomerieux. (Liraglutide). Product Monograph, Novo Nordisk Canada Inc, June 2015, 2. Seckler A et al., J. Clin. Invest. 2014;124(12):4473-88

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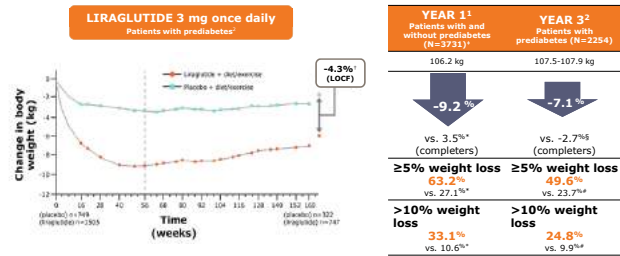


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### Weight reductions with pharmacotherapy: Liraglutide SCALE™ Obesity and Prediabetes trial



\*p<0.001; <sup>†</sup>p<0.0001 by LOCF analysis (last observation carried forward); <sup>‡</sup>Weight loss was similar regardless of prediabetes status; <sup>§</sup>p<0.0001; <sup>¶</sup>p-value not available.  
<sup>1</sup> Biomerieux et al. NEJM 2015;373(13):1121-32; <sup>2</sup> De Rosa et al. Lancet 2017; doi:10.1016/S0140-6736(17)30560-7. [Each ahead of print]

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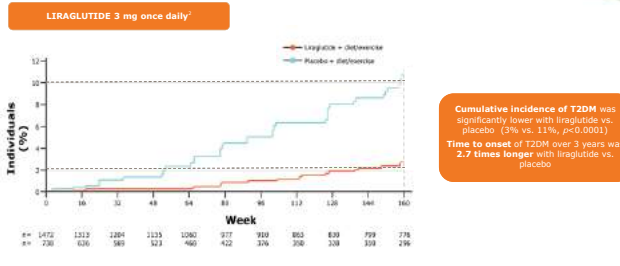


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### Reduced risk of developing type 2 diabetes with pharmacotherapy: Liraglutide



Mean age: 47.3-47.5 years; All patients had prediabetes at baseline. Full analysis sets. Numbers on line figure correspond to the accumulated number of diagnosed individuals. T2DM, type 2 diabetes mellitus.  
<sup>1</sup> Biomerieux et al. NEJM 2015;373(13):1121-32; <sup>2</sup> De Rosa et al. Lancet 2017; doi:10.1016/S0140-6736(17)30560-7. [Each ahead of print]

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## HOW do we treat obesity? Bariatric Surgery

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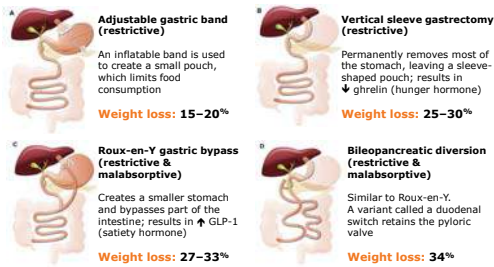
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### Surgical options to consider if other weight-loss attempts have failed



1. Potho et al. Can J Cardio. 2015;31:153-166; 2. ASMBS Bariatric Surgery Procedures 2014. Available at: <http://asmbs.org/patients/bariatric-surgery-procedures>

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### Indications for bariatric surgery

- BMI  $\geq 40$  kg/m<sup>2</sup> without coexisting medical problems or
- BMI  $\geq 35$  kg/m<sup>2</sup> and 1+ severe obesity-related comorbidities (T2DM, HTN, OSA, OHS, NAFLD, NASH, pseudotumor cerebri, GERD, asthma, venous stasis dz, severe urinary incontinence, debilitating OA, considerable impaired QoL)
- And have failed attempts at diet/exercise, are motivated and well informed

T2DM: type 2 diabetes; HTN: hypertension; OSA: obstructive sleep apnea; NAFLD: non-alcoholic fatty liver disease; NASH: non-alcoholic steatohepatitis; GERD: gastroesophageal reflux disease; OA: osteoarthritis; QoL: quality of life.

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### Relative contraindications to bariatric surgery

- Severe HF, unstable CAD, end-stage lung disease, active cancer, cirrhosis
- Bulimia nervosa, binge-eating disorder
- Active substance abuse
- Severely impaired intellectual capacity
- Pregnant or planning to be within 12 months
- Smoking (some consider this complete contraindication)
- Active PUD (defer surgery until healed)
- Age >65 years (limited evidence—program dependent)
- BMI >60 kg/m<sup>2</sup> (refer to specialized centre)
- Crohn's disease relative contraindication for RGB, BPD

ASBMS Fact Sheet Metabolic and Bariatric Surgery, November 2013. Accessed at: <https://asbms.org/wp-content/uploads/2014/05/Metabolic-Bariatric-Surgery.pdf>, SAGES Guidelines for Clinical Application of Laparoscopic Bariatric Surgery, 2008.

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### Comorbidity resolution

- American Society of Metabolic and Bariatric Surgery (ASMBS) data for all procedures:

Condition/Disease	% Resolved or Improved	% Resolved
Type 2 Diabetes	86	76.8
Hypertension	78.5	61.7
Obstructive Sleep Apnea	85.7	83.6
Hyperlipidemia	78.5	61.7

- Roux en Y has greater type 2 diabetes remission at mean 83% versus mean 53% for Sleeve gastrectomy
- No significant difference was found remission between 3 techniques for HTN, GERD, OSA

Prusoff et al. Laparoscopic Sleeve gastrectomy compared with other bariatric surgical procedures: a systematic review of randomized trials, 2013. Surg for Obes. ASMBS Fact Sheet Metabolic and Bariatric Surgery, November 2013. Accessed at: <https://asbms.org/wp-content/uploads/2014/05/Metabolic-Bariatric-Surgery.pdf>.

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### Effect on life expectancy

- Patients with BMI ≥30 kg/m<sup>2</sup> have 50-100% increased risk of premature death
- Bariatric surgery increases lifespan:
  - RGB can increase life expectancy by 89%
  - Risk of premature death reduced by 30-40%
    - 60% ↓mortality from Cancer (especially breast and colon)
    - 56% ↓mortality from CAD
    - 92% ↓mortality from DM2

ASBMS Fact Sheet Metabolic and Bariatric Surgery, November 2013. Accessed at: <https://asbms.org/wp-content/uploads/2014/05/Metabolic-Bariatric-Surgery.pdf>.

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### Mortality

- American Society of Bariatric and Metabolic Surgery:
  - overall mortality rate ~0.1% (in comparison: Cholecystectomy ~0.7%, hip replacement ~0.93%)
- SAGES: overall mortality ~0.1% for gastric banding, 0.5% RGB, 1.1% BPD

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**Questions?**

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# Understand, Empower, Treat:

## Revolutionizing obesity care

Ancillary Session at the Family Medicine Forum | CERT+ Session ID# 186109-074

### Evaluation Form

**Date:** Thursday, November 9, 2017 at 12:30 p.m.

**Location:** Palais des congrès, Montreal

Please rate the question in this evaluation according to the following scale:

1-Strongly disagree	2-Disagree	3-Neutral	4-Agree	5-Strongly agree
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#### The Program

The program content enhanced my knowledge.	1	2	3	4	5
The program was relevant to my practice.	1	2	3	4	5
The program met the stated learning objectives.	1	2	3	4	5
The program addressed a gap in my knowledge.	1	2	3	4	5
The program was well organized.	1	2	3	4	5
Adequate time was allotted for interaction and discussion.	1	2	3	4	5

#### The Presenter

The presenter delivered the content clearly.	1	2	3	4	5
Questions and discussions were well moderated.	1	2	3	4	5
Time was efficiently managed.	1	2	3	4	5

Please indicate which CanMEDS-FM roles you felt were addressed during this educational activity.

(select all that apply)

- Family Medicine Expert     Collaborator     Scholar     Manager  
 Communicator     Health Advocate     Professional

Did the activity respect the « Ethical code of CME Providers<sup>1</sup> »?     Yes     No

If not, please explain (Ref.: 1. <http://www.cemcq.qc.ca>)

Did you perceive any degree of bias in any part of the program?     Yes     No

If yes, please explain:

Please describe what you felt was the most effective part of the program.

Please identify an important concept/idea that you learned.

How will you change your practice based on what you learned today?

1.

2.

Do you have any other learning needs related to this topic?

Other comments or suggestions about any aspect of the program: