

# HEALTH Matters

A RESOURCE TO HELP KEEP YOU INFORMED

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## Obesity : A Chronic Disease!



**In Canada, we are in the midst of an obesity pandemic.** According to 2004 Canadian Community Health Survey nearly 59% of Canadians are currently overweight (BMI  $\geq 25\text{kg/m}^2$ ) or obese (BMI  $\geq 30\text{kg/m}^2$ ). Consumers and health care professionals tend to treat obesity as a lifestyle or cosmetic issue rather than a chronic disease. Overweight and obesity predispose individuals to develop type 2 diabetes, hypertension, dyslipidemia, coronary artery disease, stroke, osteoarthritis and certain forms of cancers (1). Current data estimates that 80% to 90% of type 2 diabetes cases are attributable to overweight and obesity. Clinical evidence shows that a modest, therapeutic weight loss of 5%-10% of total body weight, or 5kg in an

obese person who weighs 100kg and is 160cm tall (11lbs in a person who weighs 220lbs and is 5'2") is considered important (2). Many overweight and obese patients will face challenges to achieve weight loss (often 20%) that is cosmetically promoted in our society. **The true measure of success is not the weight loss, but rather in the weight maintenance.** Therapeutic weight loss (5%-10%) through lifestyle intervention can have a significant health benefits, with adjunct pharmacotherapy (such as orlistat or sibutramine) providing additional benefits when patients fail to reach their target with lifestyle changes alone. Consumers have access to a multitude of natural products claiming to provide drastic weight loss. Despite the claims, many just do not work. In recent years **Hoodia** has been very popular among weight loss supplement. Despite lots of hype, there is no reliable evidence that **Hoodia** actually works for reducing weight or that it is safe. Meanwhile, Health Canada maintains its banned on products containing **Ephedra** or **ephedrine**. Canadian retailers are reminded not to sell unauthorized products containing **Ephedra** or **ephedrine** also labeled as Ma Huang, Chinese Ephedra, Ma Huang extract, Ephedra, Ephedra Sinica, Ephedra extract, Ephedra herb powder, Sida Cordifolia or Epitonin. There are international reports of serious adverse reaction associated with unauthorized products containing Ephedra/ephedrine in combination with other stimulants that were purchased online. Another weight loss product promoted on TV and in the newspaper is called **PGX** (polyglycoplex). **PGX** contains soluble fibres such as **glucomannan** from the konjac plant. It forms a viscous gel when mixed with food or water in the stomach. The mixture expands to help feel full. **PGX** might also help slow digestion so glucose is released into the blood stream more slowly. **Natural Medicines Comprehensive Database** rates **glucomannan** as possibly effective for lowering blood glucose in diabetes patients. But there is no proof that **PGX** helps patients lose weight.

**Obesity is a chronic disease for which there is no cure or magic pill.** A group of 7 Canadian obesity experts convened over a year ago (April 2009) to understand weight loss, weight management in Canada and identify the gaps and barriers that challenge Canadians attempting to achieve a therapeutic weight loss (5%-10% body weight) to realize significant health benefits. The panel was also responsible for making recommendations for improving access to evidence-based approaches for obesity self-management.

The panel identified several important challenges to effective management of obesity, including education, access to evidence-based therapies and behavioural support. The panel agreed that there is a need for safe, proven pharmacotherapies. The panel concluded that health care professionals are well placed and should be encouraged to provide ongoing behavioural support as well as education about the disease and the role of evidence-based treatments in obesity management. As a health care professional, there is a role we can play in sensitizing our patients to a therapeutic weight loss. Lets move away from the stereotype and the Hollywood-style weight loss that most of the time lead to deception and more weight gain!

**OVERWEIGHT  
AND OBESITY  
PREDISPOSE  
INDIVIDUALS TO  
DEVELOP**

**Type 2 diabetes**

**Hypertension**

**Dyslipidemia**

**Coronary Artery  
Disease**

**Stroke**

**Osteoarthritis**

**and certain forms  
of Cancers**

If you have requests,  
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# Recap on Drugs used for the Management of Obesity <sup>(4)</sup>

## Orlistat (Xenical®) 120mg capsules:

Orlistat is a reversible lipase inhibitor available in Canada as a prescription drug for the management of obesity. It works by blocking breakdown and absorption of dietary fats (by up to 30%) which reduces calorie intake. The majority of adverse event reports involve the familiar gastrointestinal effects of orlistat associated with its mechanism of action, which may include oily stools, flatulence and anal leakage. Orlistat's side effects are diet-dependent. Using orlistat with a high-fat diet increases the risk of side effects. Between 1999 and 2008, the Food and Drug Administration of the United States (FDA) received 32 reports of serious liver injury in patients taking orlistat (3). No definite association between liver injury and orlistat has been established at this time. The FDA currently advises that consumers should continue to take orlistat products as directed. Orlistat 60mg (Alli®) is available to U.S consumers over the counter through pharmacies. In Canada the recommended daily dose is one 120mg capsule three times a day with each main meal (during or up to 1 hour after the meal). If a meal is occasionally missed or contain no fat, the dose of Xenical® may be omitted.



## Sibutramine (Meridia®) 10 and 15mg capsules

Sibutramine is a serotonin and noradrenaline reuptake inhibitor which has pharmacological effects similar to the antidepressant venlafaxine (Effexor®). They both inhibit reuptake of norepinephrine, serotonin, and dopamine. Sibutramine primarily acts by increasing the sense of satiety after meals, thereby allowing patients to decrease portion size and avoid snacking between meals. Sibutramine is contraindicated in patients with a history of coronary artery disease, heart failure, arrhythmias, uncontrolled hypertension (145/90mmHg) or cerebrovascular disease. The recommended dosage is 10-15mg daily. Most common side effects are dry mouth, constipation, insomnia, may increase heart rate and blood pressure which should be monitored closely. The initial response to sibutramine predicts long-term benefit. Early responders who lose 4 pounds (approximately 1.8kg) in the first month of treatment are most likely to achieve long-term weight loss. It is recommended to discontinue sibutramine in patients who do not respond early.

## Bupropion (Wellbutrin Sr®) 150mg capsules:

Not approved in Canada for obesity, bupropion is classified as a Noradrenergic Appetite Suppressants and may be used off label to lose weight. It is indicated primarily as an anti-depressant (Wellbutrin Sr®) and an aid to stop smoking (Zyban®). The maximum daily dose should not exceed 300mg to minimize seizure risk. Dry mouth, constipation, agitation, insomnia and anxiety are the main side effects. Seizures occur rarely and risk increases with dose. Subsequently, patients suffering for depression who are overweight or obese may benefit from bupropion.

(1) CMAJ, APRIL 10, 2007, VOL 176, NO.8 . 2006 Canadian clinical practice guidelines on the management and prevention of obesity in adults and children

(2) Arya M.Sharma, James D. Douketis-14. Pharmacotherapy for obesity -adults. P.68. 2006 Canadian clinical practice guidelines on the management and prevention of obesity in adults and children

(3) Orlistat (marketed as Alli and Xenical). Early communication about an ongoing safety review. Available: [www.fda.gov/safety/MedWatch/SafetyInformation/SafetyAlertsforHumanMedicalProducts/ucm180025.htm](http://www.fda.gov/safety/MedWatch/SafetyInformation/SafetyAlertsforHumanMedicalProducts/ucm180025.htm)

(4) [www.e-therapeutics.ca](http://www.e-therapeutics.ca) Endocrine and Metabolic Disorders: Obesity