

Diabetes & Obesity Update 2012
Learning Objectives
September 8-20, 2012

Program Learning Objectives:

- Review recent (5 years) clinical advances in Diabetes and Obesity
- Explore the clinical interface between Diabetes and Obesity
- Consider ways to integrate relevant learning into clinical practice
- Consider relevant natural medicine and therapies used by patients with obesity and diabetes
- Review current topics relevant to a Physician's Health

Diabetes Session Titles and Objectives:

1. Diabetes and pre-diabetes: prevalence, trends, screening and diagnosis

At the end of the presentation, the participant will be able to:

- a. Recognize the diabetes epidemic and health implications
- b. Understand the concept of pre-diabetes and identify who is at risk for diabetes
- c. List the screening and diagnostic tests for diabetes
- d. Understand the link between obesity and type 2 diabetes, and cardiometabolic risk

2. Health behaviour interventions in the office management of diabetes (nutrition and exercise therapy)

At the end of the presentation, the participant will be able to:

- a. Understand the principles of health behaviour interventions in diabetes
- b. Implement dietary and physical activity prescription in office practice
- c. Incorporate interdisciplinary team approach in non-drug management of diabetes
- d. Develop strategies to encourage long-term adherence to health behaviour interventions

3. Current and emerging pharmacotherapy of diabetes

At the end of the presentation, the participant will be able to:

- a. List the glycemic targets
- b. Understand the pathogenesis of vascular complications of diabetes
- c. Understand the mechanisms of actions of antihyperglycemic agents
- d. Individualize choice of antihyperglycemic agents to achieve glycemic targets
- e. Understand the benefits of metabolic legacy

4. **Do's and Don'ts of insulin therapy**

At the end of the presentation, the participant will be able to:

- a. Understand insulin action and different types of insulins
- b. Initiation of insulin therapy in type 2 diabetes
- c. Understand and apply basic principles of insulin adjustment
- d. Understand the risk of hypoglycemia and develop management plan to reduce hypoglycemia in type 2 diabetes

5. **Management of cardiovascular disease risk in diabetes**

At the end of the presentation, the participant will be able to:

- a. Understand the benefits of optimizing glycemic control to reduce cardiovascular disease
 - i. risk
- b. Identify which patients with diabetes are at risk for cardiovascular disease
- c. Understand when to screen and manage vascular complications
- d. How to incorporate regular surveillance of complications in the office practice

6. **What's new in the management of dyslipidemia and hypertension?**

At the end of the presentation, the participant will be able to:

- a. Understand how to stratify cardiovascular risk using The Framingham risk engine
- b. Apply evidence-based approaches to diagnose and manage lipid disorders in patients
 - i. with diabetes
- c. List diet and pharmacological management strategies for hypercholesterolemia and
 - i. mixed dyslipidemia
- d. Apply evidence-based Canadian Hypertension treatment guidelines to practice

7. **Nuts and bolts in surveillance and management of diabetic microvascular complications in clinical practice**

At the end of the presentation, the participant will be able to:

- a. List the microvascular complications of diabetes
- b. Understand the concept of metabolic legacy
- c. Incorporate surveillance strategy in clinical practice to screen and diagnose
 - i. complications
- d. Manage diabetes in special populations including pre-pregnancy counselling

Obesity Session Titles and Objectives:

1. Obesity as a population issue.

Objectives:

- a. Prevalence of the epidemic
- b. Environmental-societal causes
- c. Changing societal views
- d. Role of the physician as a citizen

2. Obesity as a patient issue – Some recognizable types

Objectives:

- a. Description of “Metabolic Syndrome”
- b. Description of the Metabolically Normal Obese Patient
- c. Discussion about epigenetic causes: The Diet Resistance State – evidence and implications, especially its role in patient advocacy
- d. Discussion of point mutations: MCR-4, R225W mutation of the gene encoding AMP-activated protein kinase (AMPK)³

3. Obesity as a patient issue – Comorbidities and Staging of Obesity

Objectives

Co-morbidity headings for discussion

- a. Metabolic
- b. Structural
- c. Malignancies
- d. Psychiatric

Discussion of association of co-morbidities with some of the types of obesity

Staging of obesity

- a. Historic considerations
- b. WHO categories
- c. Edmonton Obesity Staging System

4. Obesity as a patient issue – Setting the stage for treatment

Objectives

- a. The 5 A’s Checklist: Ask, Assess, Advise, Agree, Assist
- b. Barriers to weight management:
 - a. The stages change and assisting in change
 - b. Knowing what success looks like

5. Obesity as a patient issue - The long-term interventions – usually only long-term treatments are relevant

Objectives:

- a. Behavioral:
 - a. With respect to eating behaviour
 - b. With respect to physical activity
- b. Drug treatment
- c. Surgery

6. Obesity as a patient issue - Special considerations about assessing, preparing and following the patient through bariatric surgery

Objectives

- a. NIH Assessment criteria
- b. Ontario Bariatric Network Criteria
- c. Pre-op. protocol
- d. Post-op. protocol, incl. vitamin therapy

7. Odds and Ends

Objectives

- a. Troubleshooting when obesity treatment fails
- b. Dealing with smoking and obesity treatment

Workshops:

1. Case-based approach to the diagnosis and management of an obese person with high cardiometabolic risk
2. Case-based approach to selection of appropriate pharmacotherapy and bariatric surgery to optimize glycemic control

Journal Club (1.5 hr each):

1. Mingrone G et al. Bariatric Surgery versus Conventional Medical Therapy for Type 2 Diabetes. N Engl J Med 2012;366:1577-85
2. Hall KD, Sacks G, Chandramahan D, et al. Quantification of the effect of energy imbalance on bodyweight. Lancet 2011;378: 826–37
3. Dent R, Blackmore A, Peterson J, Habib R, Kay GP, Gervais A, Taylor V, Wells G. Changes in Body Weight and Psychotropic Drugs: A Systematic Synthesis of the Literature. PLoS ONE.

Physician Health

- Four, one hour sessions on topics relevant to physician health