HOT TOPIC CONFERENCE
Obesity & Mental Health
JUNE 26 – 28, 2012
Intercontinental Centre Toronto, 225 Front Street West, Toronto, ON

Final Program
Through research, education and support, Lundbeck Canada is committed to improving the quality of life for those suffering from psychiatric and neurological disorders. Based in Montreal, Lundbeck Canada has been part of the Canadian pharmaceutical industry for more than 15 years and markets novel medications for the treatment of depression, anxiety, schizophrenia and Alzheimer’s disease. And Lundbeck Canada will soon play a leading role by offering Canadians innovative cancer treatments.

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To be truly healthy it takes more than medication. And to show how strongly we believe in this philosophy, not a single mention of pharmaceuticals is made on the entire website, inspire your patients to make healthy changes.

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LEARNING OBJECTIVES

To provide participants with a sound understanding of the scientific and methodological issues in obesity and mental illness research and practice. Build your knowledge and understanding in the areas of:

• Clinical assessment and management of patients with obesity and mental illness
• Current evidence and best practices in psychological and behavioural interventions
• Current evidence on emerging pharmacological treatments for obesity and mental illness
• Current understanding the neuropsychobiology of ingestive behaviour and mental health disorders
• Interdisciplinary obesity research and practice.
• Bias and stigma associated with obesity and mental illness
• Research priorities in the emerging field of obesity and mental illness.

The International Association for the Study of Obesity (IASO) is a not-for-profit organisation linking over 50 regional and national associations with over 10,000 professional members in scientific, medical and research organisations. It is an umbrella organisation representing 56 countries. Over the last decade, IASO has established itself as a dynamic, professionally managed organisation which has become a ‘nerve centre’ for everyone from governments, professionals and media, wanting the latest information on prevalence data and new developments in scientific research into the prevention and management of obesity.

Our mission statement: “To improve global health by promoting the understanding of obesity and weight-related diseases through scientific research and dialogue, whilst encouraging the development of effective policies for their prevention and management.” To find out more, please visit our website: www.laso.org

The Canadian Obesity Network – Réseau canadien en obésité (CON-RCO) is a broad network of over 8000 organizations and individuals from many sectors and disciplines who are committed to stemming the tide of obesity in Canada and to reducing the mental, physical and economic burden of obesity on Canadians. The mission of CON-RCO is to act as a catalyst for addressing obesity in Canada and to foster knowledge translation, capacity building, and partnerships among stakeholders so that researchers, health professionals, policy makers and other stakeholders may develop effective solutions to treat, and to prevent obesity. CON-RCO’s three strategic goals are to: 1) Address the Social Stigma Associated with Obesity; 2) Change the Way Professionals Think about Obesity and Interact with Obese individuals; and 3) Improve Access to Obesity Prevention, Treatment and Management. Since 2006, CON-RCO has trained over 3,000 health professionals, students, policy makers and industry stakeholders on issues relevant to obesity prevention and management, launched two widely used literature alerting services, published an award-winning magazine (CONDUIT), organized Canada’s only recurring scientific conference dedicated to obesity, and much more. CON-RCO is a non-profit organization hosted by the University of Alberta and Alberta Health Services in Edmonton, Alberta. Find out more at www.obesitynetwork.ca.

The Centre for Addiction and Mental Health (CAMH) is Canada’s largest mental health and addiction teaching hospital, as well as one of the world’s leading research centres in the area of addiction and mental health. CAMH combines clinical care, research, education, policy development, prevention and health promotion to transform the lives of people affected by mental health and addiction issues.

CAMH is fully affiliated with the University of Toronto, and is a Pan American Health Organization/World Health Organization Collaborating Centre.

Founded 2005, CAMH’S mission is to:
• Encourage its members in the development of health policies consistent with CAMH’S value system of compassion, integrity and commitment and to engage in an advisory role and promote the adoption of such policies by the appropriate governments.
• Provide guidance and mentoring to all International Medical Graduates (IMGs) keen on entering the Canadian healthcare system, and to support, advice, junior doctors in training, that are already in the system.
• To be the umbrella organization for all associations of Physicians of Indian Heritage in representing their interests consistent with CAMH’S vision.
• To provide networking opportunities to facilitate both professional and community growth.
• To facilitate engagement and community activities to provide assistance to the underprivileged and those in need.
Although obesity and mental illness are major health issues that affect millions of Canadians, the links between them are not well understood. We know that excess weight, beyond its adverse physiological consequences, also affects self-esteem, body image and eating behaviours while promoting depression and anxiety. The opposite is also true – a disproportionate number of patients living with mental health challenges struggle with obesity, diabetes, heart disease and premature mortality, all of which are linked.

The sheer size and complexity of the issues underlying these conditions presents unique challenges for both clinicians and the research community. To this end, the Canadian Obesity Network-Réseau canadien en obésité, the International Association for the Study of Obesity and the Centre for Addiction and Mental Health have brought together some of the world’s most insightful experts to provide practical guidance for health professionals, as well as to identify research priorities, on this complex topic.

It is our hope that this Hot Topic Conference will shed some much-needed light on the management of obesity and mental illness and improve your ability to make a difference in your patients’ lives, while illuminating your scientific interest in the topic.

Enjoy your time in Toronto. We look forwarded to learning and sharing with you over the next three days.

**Nick Finer, MD**  
Chair, Education & Management Task Force, International Association for the Study of Obesity

**Rohan Ganguli, MD**  
Executive Vice-President, Clinical Services, Center for Addiction and Mental Health (CAMH)

**Arya Sharma, MD, FRCPC**  
Scientific Director, Canadian Obesity Network

**Valerie Taylor, MD, PhD**  
Psychiatrist-in-Chief, Women’s College Hospital, Scientist, Women’s College Research Institute
GENERAL INFORMATION

REGISTRATION HOURS:
TUESDAY       JUNE 26, 2012       11:00 – 6:00 pm
WEDNESDAY     JUNE 27, 2012       7:30 – 4:00 pm
THURSDAY      JUNE 28, 2012       7:30 – 12:00 pm

Certificate of Attendance: Upon having attended the Hot Topic Conference Obesity and Mental Health, delegates will receive a certificate of attendance. Certificates can be picked up at the end of the conference or will be sent out by mail. This event is accredited for 4 SCOPE points and is CPD certified.

AREA INFORMATION:
The Registration desk, located in the Ballroom lobby can provide information on activities occurring throughout our scheduled program.

VENUE
Located in the heart of downtown on Front Street, the 4-Diamond InterContinental Toronto Centre brings together an ideal downtown location, plush accommodations, state of the art technology, meeting facilities and the very best in customer service. The hotel is connected to the Metro Toronto Convention Centre, and just steps away from the CN Tower, the Air Canada Centre and the Rogers Center

Hotel information: InterContinental Toronto Centre
225 Front Street West
Toronto, Ontario M5V 2X3
Toll Free: 1(800) 422-7969
Tel: (416) 597-1400
Fax: (416) 597-8162

Check-in: 3:00 pm  Check-out: 12:00 noon

Getting there: The closest airport to the InterContinental Toronto Centre is the Toronto Bishop Airport (YTZ) and takes approximately 10 minutes to arrive by taxi. The Toronto International Pearson Airport (YYZ) is approximately 30–45 minutes by taxi.

Parking: Allow one of the courteous valet attendants to park your car in Toronto for up to $40 per day. The hotel parking service includes in and out privileges and can be posted to your room folio, or choose to self-park in the adjoining lot at the Metro Toronto Convention Centre for $23 per day (with no in and out privileges). Charges cannot be posted to your room.

Wellness: Complimentary health club access to all guests staying at the InterContinental Toronto Centre which includes state of the art cardiovascular and weight training equipment. A heated, indoor pool is also available to all guests staying at the InterContinental Toronto Centre. Access to the pool is through The Spa.
### Daily Schedule

#### Tuesday, June 26, 2012

- **11:00** Registration Desk opens (Ballroom foyer); LUNCH (provided)
- **13:00** Opening Ceremonies (Ballroom B)  
  CON, IASO Welcome  
  David S. Goldbloom, Chair, Mental Health Commission of Canada
- **13:30** Etiological Assessment of Obesity and the Role of Mental Health  
  Arya M. Sharma, Edmonton, Canada
- **14:00** The Neurobiology of Appetite: Hunger as Addiction  
  Alain Dagher, Montreal, Canada
- **14:30** Neural Integration of Metabolic, Cognitive, and Emotional Signals in the Control of Ingestive Behavior  
  Hans-Rudolf Berthoud, Baton Rouge, USA
- **15:00** A Psychogenetic Analysis of Appetite and Overeating  
  Caroline Davis, Toronto, Canada
- **15:30** Poster Presentations/Exhibitor Display/Coffee Break (Ballroom A)
- **16:00** The Effect of Obesity in Mood Disorders  
  Roger McIntyre, Toronto, Canada
- **16:30** ADHD and Obesity  
  Caroline Davis, Toronto, Canada
- **17:00** Borderline Personality Disorder and Obesity  
  Randy Sansone, Dayton, USA
- **17:30** Binge Eating and Bulimia  
  Allan Kaplan, Toronto, Canada
- **18:00** Networking Reception (Ballroom A&B)

#### Wednesday, June 27, 2012

- **8:00** Stress, Obesity and Mental Health: The Ghrelin Connection  
  Zul Merali & Alfonzo Abizaid, Ottawa, Canada
- **8:30** Gut Hormones for Treating Obesity  
  Nick Finer, London, UK
- **9:00** An Overview of Current Surgical Treatments for Obesity  
  Teodor Grantcharov, Toronto, Canada
- **9:30** Pregnancy and the Post-Partum Period: A Vulnerable Window for Adult and In-Utero Risk of Obesity and Mental Illness  
  Valerie Taylor, Toronto, Canada
- **10:00** Poster Presentations/Exhibitor Display/Coffee Break (Ballroom A)
- **10:30** Motivational Interviewing in Bariatric Patients  
  Michael Vallis, Halifax, Canada
- **11:00** Psychological and Psychiatric Predictors of Response and Failure to Bariatric Surgery  
  Anthony N. Fabricatore, Pennsylvania, USA
- **11:30** Behaviour Change for Weight Loss: State of the Science  
  Rohan Ganguli, Toronto, Canada
- **12:00** LUNCH
- **1:00** Body Image Across Weight Status  
  Shelly Russell-Mayhew, Calgary, Canada
- **1:30** Changing Social Standards Associated with Weight and Body Image  
  Fannie Dagenais, Montreal, Canada
- **2:00** Assessing Quality of Life in Obesity  
  Ronette Kolotkin, Durham, USA
- **2:30** Perspectives of Persons Living with Obesity: Factors that Contribute to Quality of Life and Engagement in Everyday Life  
  Mary Forhan, Hamilton, Canada
- **3:00** Poster Presentations/Exhibitor Display/Coffee Break (Ballroom A)
## DAILY SCHEDULE

### WEDNESDAY, JUNE 27, 2012 (continued)

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>3:30</td>
<td>Presentation of the Toronto Charter for Mental Health and Obesity</td>
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<tr>
<td>4:00</td>
<td>Roundtable discussion on Toronto Charter for Mental Health and Obesity</td>
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<td>Chair: Valerie Taylor, Toronto, Canada</td>
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<tr>
<td>5:30</td>
<td>Program Concludes for the Day</td>
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### THURSDAY, JUNE 28, 2012

**Plenary Talks (Ballroom B)**  
**Poster/Exhibitors/Breaks (Ballroom A)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>8:00</td>
<td>Plenary Talks – (Ballroom B), Posters/Exhibitors/Breaks – (Ballroom A)</td>
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<tr>
<td></td>
<td>Disorders of Consumption: Learnings from Smoking Cessation</td>
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<td></td>
<td>Peter Selby, Toronto, Canada</td>
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<tr>
<td>8:30</td>
<td>Preventing Obesity Through Mental Health Promotion: Linking Research, Practice and Policy</td>
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<td>Gail McVey, Toronto, Canada</td>
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<td>9:00</td>
<td>Analysis of the Canadian Community Health Survey (2000–2010): Obesity and Mental Health</td>
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<td>in Aboriginal Population</td>
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<td>Piotr Wilk, London, Canada</td>
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<td>9:30</td>
<td>Antipsychotics and Weight Gain</td>
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<td>Rohan Ganguli, Toronto, Canada</td>
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<tr>
<td>10:00</td>
<td>Poster Presentations/Exhibitor Display/Coffee Break (Ballroom A)</td>
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<tr>
<td>10:30</td>
<td>Metabolic Monitoring for Adults Prescribed Antipsychotic Medications</td>
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<td>Tony A. Cohn, Toronto, Canada</td>
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<tr>
<td>11:00</td>
<td>Canadian Guidelines on Monitoring and Management of Metabolic Side Effects of Second Generation Antipsychotic Medications in Children</td>
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<td>Tamara Pringsheim, Calgary, Canada</td>
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<td>11:30</td>
<td>Adaptation of Lessons Learned from the Field of Eating Disorders</td>
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<td>Annick Buchholz, Ottawa, Canada</td>
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<td>12:00</td>
<td>Closing Remarks &amp; Summary Session</td>
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<tr>
<td></td>
<td>Chair: Valerie Taylor, Toronto, Canada</td>
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<tr>
<td>12:30</td>
<td>Program Concludes; LUNCH (provided)</td>
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PLENARY ABSTRACTS

Title: Neural Integration of Metabolic, Cognitive, and Emotional Signals in the Control of Ingestive Behavior
Presenter: Dr. Hans-Rudolf Berthoud

The hypothalamic circuitry, long recognized and meticulously uncovered in the post-leptin era, is commonly referred to as homeostatic regulator of body weight. It powerfully defends against nutritional deficits. Whether it is equally strong in the defense of energy surplus remains a matter of debate. While some argue that obesity can only be the result of a pathologically corrupt homeostatic regulator, others believe that the homeostatic regulator is just fine, but simply overwhelmed by the modern nutritional environment. This latter view suggests that the omnipresence of conditioned food cues, the high obtainability of energy-dense foods, minimal physical food procurement costs, and a sedentary lifestyle, predisposes some individuals to overeating and weight gain in spite of the homeostatic regulator. Because many of these factors act through cognitive and emotional-affective and executive functions of the brain, the discussion has shifted from the hypothalamus to include cortico-limbic systems, particularly those processing pleasure, reward, incentive motivation, satisfaction, delayed gratification, impulsivity, cost-benefit calculations, and conscious decision making. Better understanding of how these systems are organized and how they interact with the metabolically-driven controls in the hypothalamus and brainstem will go a long way in the search for behavioral and pharmacological tools to counteract the modern environmental pressures.

Supported by NIDDK 47348 and NIDDK 072081.

Learning Objectives:
1. How the modern environment exerts considerable pressure to eat beyond metabolic need by acting on neural systems of cognition, emotion, motivation, and decision making.
2. How cognitive and emotional functions are modulated by the metabolic state in a bottom-up fashion.
3. How food intake and thus the homeostatic regulator is modulated by cognition, motivation, and decision-making in a top-down fashion.

Title: Adaptation of Lessons Learned from the Field of Eating Disorders
Presenter: Dr. Annick Buchholz

Researchers and clinicians from the fields of eating disorders and obesity have recently come together to discuss the shared risk factors in the development of these conditions. This talk will review evidenced-based frameworks and key treatment approaches from the field of eating disorders and discuss its applications to working with individuals and families struggling with weight management issues. Treatment approaches such as externalizing the problem, promoting positive body image, de-emphasizing weight as a goal in treatment, understanding ambivalence, and working closely with families in treatment will be discussed.

Learning Objectives:
1. To learn key treatment approaches from the field of eating disorders and its application to weight management.
2. To recognize the importance of size acceptance and body esteem in treatment.
3. To recognize the role of mental health professionals in the treatment of weight management issues.
**Title: Metabolic Monitoring for Adults Prescribed Antipsychotic Medications**  
**Presenter: Dr. Tony A. Cohn**

**Title: Changing Social Standards Associated with Weight and Body Image**  
**Presenter: Ms. Fannie Dagenais**

In Canada, almost 25% of youth are overweight. Meanwhile, an estimated 60% of young people are dissatisfied with their body image. This preoccupation with weight is also present in adults – one survey reveals that 80% of Canadian women want to lose weight. In our society, being dissatisfied with one’s body and wanting to lose or control weight is a standard. The single model of beauty, touched-up images of bodies in the media, advertising for weight loss products, the emphasis on appearance and performance, the association between thinness and success, beauty and health, the prejudice against obesity, the medical discourse around obesity, all are factors that shape this social standard. To change the standard, it is essential to act at multiple levels. The speaker will present examples of interventions in Québec, lead by the non-profit organization ÉquiLibre, which contribute to the transformation of social norms surrounding weight and body image. She will demonstrate how you can work simultaneously on two fronts: preventing weight gain as well as excessive preoccupation with weight. These actions are aligned with the Québec Charter for a Healthy and Diverse Body Image, an initiative supported by the Ministère de la Culture, des Communications et de la Condition féminine du Québec, in collaboration with several ministries including the Ministère de la Santé et des Services sociaux du Québec.

**Learning Objectives:**
Participants will be able to:
1. position body image as a key public health issue to consider in the fight against obesity
2. identify the main factors that shape social norms regarding weight and body image
3. learn about a multi-level strategy to transform social norms (Québec Charter for a Healthy and Diverse Body Image)

**Title: The Neurobiology of Appetite: Hunger as Addiction**  
**Presenter: Dr. Alain Dagher**

While the study of binge eating disorder (BED) has burgeoned in the past decade, an understanding of its psychobiological underpinnings is still in the early stages. This talk will present research suggesting that BED may be an overeating syndrome characterized by a hyper-responsiveness to reward, and a strong dopamine signaling in the neuro-circuitry that regulates pleasure and appetitive behaviours. Identifying aetiologically separate subtypes of obesity has important implication for personalized treatment approaches.

**Learning Objectives:**
1. To emphasize the need to identify subtypes of obesity in order to help personalize treatment approaches.
2. To describe the clinical similarities between binge eating disorder and other addiction disorders
Title: ADHD and Obesity
Presenter: Dr. Caroline Davis

Title: Psychological and Psychiatric Predictors of Response and Failure to Bariatric Surgery
Presenter: Dr. Anthony Fabricatore
Persons with extreme obesity are at elevated risk of psychiatric disorder. This presentation will review findings regarding the psychological and psychiatric factors relevant to weight loss and other markers of success (and failure) with bariatric surgery. Additionally, roles for the mental health professional on the bariatric surgery team will be discussed.

Title: The (un)pleasant intensity of taste: a glimpse into obesity
Ana B. Fernandes¹, Vitor B. Paixão¹, Teresa L. Branco², Sandra S. Martins², Rui M. Costa¹, Albino J. Oliveira-Maia¹,³
¹Champalimaud Neuroscience Programme, Champalimaud Centre for the Unknown, Lisboa, Portugal. ²Faculdade de Educação Física e Desporto, Universidade Lusófona de Humanidades e Tecnologias, Lisboa, Portugal. ³Department of Psychiatry and Mental Health, Centro Hospitalar de Lisboa Ocidental, Lisboa, Portugal.

The relevance of orosensory factors for the pathophysiology of obesity were suggested by the report of changes in taste sensitivity in obese patients, after gastric bypass surgery. However, it is unclear if such changes are specific to this intervention. Here we report on taste intensity and pleasantness for sweet (sucrose), bitter (quinine), sour (citric acid) and salty (sodium chloride) tastants, measured in severely obese patients, before and/or after a diet and exercise weight-loss program. Other measurements, such as the Beck Depression Scale, were also conducted. When compared to non-obese controls, we found that quinine and sucrose have a more intense and, respectively, unpleasant (bitter) or pleasant (sweet) taste in obese subjects. However, the effect for sweet taste seems to be, at least partially, dependent on the relationship between obesity and depression. Preliminary analyses in patients tested before and after weight-loss further suggest that these taste changes are reversible. Additional experiments are now necessary to directly compare taste changes after surgical and behavioral weight-loss programs.

Title: Gut Hormones for Treating Obesity
Presenter: Dr. Nick Finer
The gut and its peptide hormone secretions are increasingly recognised as intimately involved in glucose metabolism, appetite and body weight regulation. Gut peptide analogues are increasingly seen as potential therapeutic targets for obesity and diabetes. GLP-1 analogues, already licensed for treating type 2 diabetes are in advanced development as effective anti-obesity drugs. They appear to have a high safety profile, with few unwanted CNS effects. Combination drugs may present safe and synergistic treatments.

Title: Perspectives of Persons Living with Obesity: Factors that Contribute to Quality of Life and Engagement in Everyday Life
Presenter: Dr. Mary Forhan
Individuals living with class III obesity experience challenges in their everyday lives caused by a combination of biopsychosocial and ecological factors. Such barriers are associated with restricted participation in meaningful, everyday activities known to influence mental health and well-being. Results from a program of research exploring the lived experience of adults seeking treatment for class III obesity will be presented. Using a mixed-methods approach, the research was guided by the World Health Organizations’ international classification of functioning and explored through the lens of rehabilitation science and practice. This presentation is targeted to researchers and practitioners.
Title: Behaviour Change for Weight Loss: State of the Science
Presenter: Dr. Rohan Ganguli
All current mainstream psychological (non-drug and non-surgical) interventions for obesity use techniques based on the behavioral principles of conditioning and reinforcement, which will be briefly explained in the first portion of this presentation. The rest of the session will cover a high level review of the results of randomized clinical trials of interventions for weight loss in various populations, including overweight/obese but otherwise healthy people, persons with diabetes and other obesity-related conditions, and persons suffering from mental illness. The role of different behavioral strategies, diets, and other approaches will be critically reviewed. Finally, lessons from the available knowledge will be presented and implications for clinical practice will be discussed. In conclusion areas for further research will also be suggested.

Learning Objectives:
At the end of this presentation, those in attendance will:
1. Have a better understanding of the evidence available for the efficacy of psychological interventions in effecting behavioral changes associated with weight loss
2. Have a better understanding of the role of randomized trials in establishing efficacy and effectiveness of interventions
3. Have a better understanding of the role of diet(s) and exercise in the reducing the risk of heart disease and diabetes
4. Have a better understanding of the gaps in the evidence base with regard to the efficacy of interventions, and strategies to close these gaps

Title: Antipsychotics and Weight Gain
Presenter: Dr. Rohan Ganguli
Persons with schizophrenia, bipolar disorder, and other psychotic illnesses, have rates of obesity 2-3 times that of the general population. They also have 2-3 times the rates of diabetes, heart disease, and premature mortality, when compared to the general population. The increased prevalence of these chronic conditions are due to multiple factors, but it has become clear that certain antipsychotics, particularly some of the newer antipsychotics, mood stabilizers, and antidepressants, contribute to the increased risk of obesity. This presentation will review the evidence from controlled clinical trials regarding the risk of weight gain for different psychotropic medications. It will also propose prescribing strategies, which would minimize the exposure to these risks.

Learning Objectives:
At the end of this presentation, attendees will:
1. Have a better understanding of the relative risk of weight gain and obesity-related metabolic conditions such as diabetes and heart disease, associated with psychotropic medications
2. Have a better understanding of initial prescribing strategies to minimize risk of metabolic adverse events
3. Have a better understanding of strategies to switch medications to limit the consequences of unwanted weight gain

Title: An Overview of Current Surgical Treatments for Obesity
Presenter: Dr. Teodor Grantcharov
PLENARY ABSTRACTS CONTINUED

Title: Binge Eating and Bulimia
Presenter: Dr. Allan Kaplan
This focus of the this presentation is to review the phenomenology and etiology of the two commonest recognized eating disorders, bulimia nervosa and binge eating disorder, and their relationship to obesity.

Learning Objectives:
1. To recognize the behavioral and psychopathologic symptomatology of both bulimia nervosa and binge eating disorder.
2. To understand the biopsychosocial etiologic contributions to these two eating disorders.
3. To understanding the relationship between these two eating disorders and obesity.

Allan S Kaplan MSc MD FRCP(C)
Chief of Clinical Research, Center for Addiction and Mental Health
Director Eating Disorder Community Treatment Program, Toronto General Hospital
Vice Chair Research, Department of Psychiatry
Director, Institute of Medical Science
Professor of Psychiatry, University of Toronto

Title: Assessing Quality of Life in Obesity
Presenter: Dr. Ronnie Kolotkin
Assessing quality of life in obesity may be just as important as, or even more important than, measuring body weight or body mass index. Three methods have been used to assess quality of life in obesity: clinical and qualitative interviews, weight-related measures of quality of life, and general measures of health-related quality of life. Key findings from each of these assessment methods will be presented. Suggestions for future research include the assessment of quality of life broadly defined (i.e. not health-related) and the assessment of happiness within the framework of positive psychology, neither of which has been studied in the context of obesity.

Learning Objectives:
1. Understanding the importance of studying quality of life in obesity.
2. Understanding different assessment methods.
3. Learning about factors that affect quality of life and the types of changes that may occur with weight loss.

Title: The Effect of Obesity in Mood Disorders
Presenter: Dr. Roger McIntyre
Replicated evidence indicates that individuals with bipolar disorder (BD) are differentially affected by overweight, obesity, and abdominal obesity. The hazards posed by excess weight in the BD population on illness presentation, clinical course, and outcome have underscored the need to prioritize the prevention and treatment of overweight in this vulnerable population. Emerging evidence indicates that overweight/obesity may adversely affect neurocognitive performance in individuals with BD and may also be inversely associated with other addictive behaviours (e.g. substance use disorders). The contribution of distal adversity (e.g. childhood physical, sexual abuse) as a vulnerability factor for obesity has not been sufficiently reported or characterized. This presentation will review recent evidence describing the neurocognitive effects of overweight/obesity as well as the impact of early childhood adversity. This presentation will also present results from two recently completed studies documenting the effect of obesity on white matter integrity and as well the impact of bariatric surgery on the course of BD. The presentation will finish with results from a recent interventional study suggesting precognitive effects of intranasal insulin in BD.
Title: Preventing Obesity Through Mental Health Promotion: Linking Research, Practice and Policy  
Presenter: Dr. Gail McVey  

It is imperative that in our quest to prevent childhood obesity we avoid the costly mistake of triggering the competing public health issues of disordered eating, weight-related bullying and associated depression, anxiety and social exclusion. Professionals need to capitalize on opportunities for greater integration by agreeing to adopt a common set of child and youth health indicators and to settle on an integrated approach to prevention across the broad spectrum of weight-related problems. Nowhere is this common vision more important than in the messaging delivered to children and youth about healthy weights. A brief overview of a professional development program of research on mental health promotion and weight bias awareness carried out with public health practitioners in Ontario with expert input from Alberta and its contributions to a national prevention strategy is presented.

Learning Objectives:  
1. Understand the association between weight bias and mental health outcomes.  
2. Identify the role of mental health promotion in the prevention of obesity and weight-related problems.  
3. Identify key aspects of professional development that optimize the delivery of obesity prevention.

Title: Stress, Obesity and Mental Health: The Ghrelin Connection  
Presenter: Dr. Zul Merali & Dr. Alfonso Abizaid  

In this presentation we propose that metabolic hormones, with particular emphasis on ghrelin, play an important role in the mechanisms that allow organisms to meet the energetic challenges of stress. Ghrelin, a hormone produced by the stomach, and one that increases appetite and adiposity, is not only secreted when energy stores are low, but also in response to stressors. Chronic stress leads to chronically elevated levels of this hormone in tandem with increases in appetite and weight gain. These effects are prevented by pharmacological blockade of ghrelin receptors, and absent in mice with targeted mutations to the ghrelin receptor. These ghrelin receptor deficient mice, however, are more susceptible to stress-induced depressive like behaviors. This suggest that stress increases ghrelin concentrations in part to generate feeding behaviors and decrease the use of fat stores as fuels. Over prolonged periods of time, these responses may lead to obesity. Without the presence of ghrelin, however, organisms may be more likely to develop depressive like symptoms in the face of stress.

Title: Canadian Guidelines on Monitoring and Management of Metabolic Side Effects of Second Generation Antipsychotic Medications in Children  
Presenter: Dr. Tamara Pringsheim  

Second generation antipsychotic use is rising rapidly in Canada and worldwide. There is good evidence that second generation antipsychotic medications are associated with metabolic side effects in children, including weight gain, increased waist circumference and body mass index, and elevations in cholesterol, triglycerides, glucose and insulin levels. These metabolic complications can have long-term adverse effects on cardiovascular health. With the more widespread use of antipsychotic medications in children, there is a need for formal guidelines on how to monitor children for adverse effects of these medications. The Canadian Alliance for Monitoring Safety and Effectiveness of Antipsychotic Medications in Children (CAMESA) guidelines seek to provide health care providers with evidence based recommendations on what, when and how to monitor children started on an antipsychotic medication for metabolic and extrapyramidal side effects. Companion guidelines have also been created which provide evidence based recommendations on the management of metabolic and extrapyramidal side effects if they are detected over the course of monitoring drug safety. This lecture will discuss the rationale for the development of the CAMESA guidelines, a description of the process for guideline development, and provide a review of the recommendations generated.
Title: Body Image Across Weight Status  
Presenter: Dr. Shelly Russell-Mayhew  
Body dissatisfaction and weight and shape concern are two components of body image that have particular relevance for obesity and mental health. Body dissatisfaction is a consistent correlate of obesity in youth. In and of itself, this is a negative consequence of obesity but perhaps equally as important, body dissatisfaction often leads to dieting/unhealthy weight control practices. Dietary restraint, or the vigilant restriction of caloric intake, in turn is associated with obesity and is predictive of future weight gain in youth. Overweight children are even more concerned about weight than their normal-weight counterparts and normal-weight children with high weight and shape concern report higher body dissatisfaction and depressive symptoms. A focus on the promotion of healthy body image for children of all weight statuses could reduce the impact of multiple negative psychological outcomes. This is particularly important because of evidence that perceived weight rather than actual weight is more predictive of psychological distress and body satisfaction predicts less weight gain over time.

Title: Borderline Personality Disorder and Obesity  
Presenter: Dr. Randy A. Sansone  
Borderline personality disorder is an Axis II dysfunction that is characterized by inherent difficulties with self-regulation. Therefore, this disorder may coexist in syndromes that are characterized by self-regulation difficulties. As for relationships between personality pathology and eating pathology, studies in various eating disorder samples clearly suggest that restrictive personality styles are associated with restrictive eating pathology whereas impulsive personality styles are associated with impulsive eating pathology. Given that obesity is, in part, related to the excess ingestion of calories, it appears likely that in some individuals, obesity may represent an impulsive form of eating pathology and therefore demonstrate higher-than-expected rates of borderline personality disorder. Present data indicate that slightly over one-quarter of obese individuals in personality disorder studies suffer from borderline personality disorder. In this comorbid cohort, there may be a number of clinical implications, particularly in terms of assessment, treatment strategies, and outcome.

Title: Disorders of Consumption: Learnings from Smoking Cessation  
Presenter: Dr. Peter Selby  
The determinants of behaviour at any given point in time is determined by the net effects of the current and embodied opportunities and constraints in global, macro, mezzo, and micro environments interacting with biological and psychological abilities of the individual. Disorders of consumption such as smoking and excess eating share common pathways and are modifiable through policy and clinical interventions. High reach interventions are likely to have a bigger impact on health than only a high risk approach to obesity. Mitigation of unintended side effects is also important to prevent disparity in the disease burden.

Learning Objectives  
1) Eating and smoking have similar determinants  
2) Interventions such as taxation, smoke free policies, reduced access have led to decreased consumption of cigarettes  
3) Clinical interventions are necessary to prevent disparities  
4) Vector control is an important part of any strategy to address disorders of consumption.
Title: Etiological Assessment of Obesity and the Role of Mental Health  
Presenter: Dr. Arya Sharma  
Individuals presenting with obesity often also present with mental health problems ranging from mood to attention deficit or addiction disorders. In addition, they often have eating disorders, poor self-esteem and body image and other challenges that affect their eating and activity behaviours. Thus, routine assessment and management of mental health problems should be part of obesity management practice.

Learning Objectives:  
To appreciate the close link between mental health problems as drivers and barriers to weight management.

Title: Pregnancy and the Post-Partum Period: A Vulnerable Window for Adult and In-utero Risk of Obesity and Mental Illness  
Presenter: Dr. Valerie Taylor

Title: Motivational Interviewing in Bariatric Patients  
Presenter: Dr Michael Vallis  
Achieving a best weight is very challenging given how much focus is placed on ideal weight. If we are to support healthy sustained change it is critical to work with individuals to establish healthy achievable goals. Motivational interviewing (MI) is an evidence-based interviewing style that can help people set realistic goals and deal with the ambivalence between realistic and ideal goals. This session will overview the principles of motivational interviewing and the role that MI can play in effective behaviour change.

Learning Objectives:  
1. Understand and identify the challenges in achieving health behaviour change  
2. Become familiar with the defining characteristics of motivational interviewing as a means of supporting behaviour change  
3. Become familiar with readiness assessment and how to improve readiness when it is lacking

Title: Analysis of the Canadian Community Health Survey (2000–2010): Obesity and Mental Health in Aboriginal Population  
Presenter: Dr Piotr Wilk
SPEAKERS

ALFONSO ABIZAID, Carleton University
Title: Stress, Obesity and Mental Health: The Ghrelin Connection (Co-Presenter)

Alfonso Abizard received his Ph.D in Psychology at Concordia University and was awarded the Governor’s Gold Medal Award for Research Excellence in 2003. He went on to be a Postdoctoral Associate at Yale University School of Medicine. Dr Abizard is currently an associate professor and graduate chair at Carleton University for the Department of Neuroscience. His current funding comes from the Natural Sciences and Engineering Research Council of Canada, Canadian Fund for Innovation, and Canadian Institute for Health Research.

HANS-RUDOLF BERTHOUD, Pennington Biomedical Research Centre
Title: Neural Integration of Metabolic Cognitive, and Emotional Signals in the Control of Ingestive Behavior

Hans-Rudolf Berthoud obtained his PhD from the Swiss Federal Institute of Technology Zurich on the Physiology of Feeding. He joined the faculty at the University of Geneva, Medical School, Switzerland, and after a stage at the Department of Psychology of Purdue University, he moved to the Pennington Biomedical Research Center, Louisiana State University System, where he is the George H. Bray Professor and head of the Neurobiology of Nutrition Laboratory. Dr Berthoud has presented numerous distinguished invited lectures and organized and chaired International symposia. He is co-executive editor of the journal Appetite and serves on the editorial boards of Endocrinology, the American Journal of Physiology, the International Journal of obesity, and Obesity Facts. Dr. Berthoud is primarily interested in the role of the nervous system in the processes maintaining energy homeostasis and nutrient intake.

ANNICK BUCHHOLZ, Children’s Hospital of Eastern Ontario
Title: Adaptation of Lessons Learned from the Field of Eating Disorders

Dr. Annick Buchholz is a clinical psychologist and has been involved in the development of the new Centre for Healthy Active Living (CHAL) at the Children’s Hospital of Eastern Ontario (CHEO). The CHAL team uses a Health at Every Size (HAES) clinical framework, devaluing the focus of losing weight in treatment, and providing an alternative focus on mental health and its links to healthy eating and physical activity. Dr. Buchholz is the lead in outcomes management and research at the Centre. Prior to her work with CHAL, she was involved in the development of the eating disorders’ day treatment and inpatient programs at CHEO; and, along with her colleagues in eating disorders, implemented outcomes measurement for both these programs. Dr. Buchholz has been involved in the development and evaluation of the prevention program ‘BodySense’, a program aimed at promoting healthy body image in athletes. She is a co-investigator on the REAL study, ‘Research on Eating and Adolescent Lifestyles, an Ottawa-based longitudinal study examining shared risk factors between eating disorders and obesity in youth.'
TONY A. COHN, University of Toronto
Title: Metabolic Monitoring for Adults Prescribed Antipsychotic Medications

Dr. Tony Cohn is a staff psychiatrist at the Centre for Addiction and Mental Health (CAMH) and Lead Physician and founding Director of the Mental Health and Metabolism Clinic at CAMH. He is a clinician with postgraduate training in Nutritional Science. His research and clinical work is focused on the relationship between serious mental illness (SMI) and metabolic disturbance. In 2010 he was the recipient of a national award from the Information Technology Association of Canada for the Metabolic Health Monitor, an electronic surveillance tool designed for individuals with SMI treated on antipsychotic medications.

FANNIE DAGENAIS, Equilibre
Title: Changing Social Standards Associated with Weight and Body Image

Fannie Dagenais is a nutritionist and has been EquiLibre’s Executive Director since 2004. It was in 1998 that her interest in weight issues really started, leading her to get involved as a volunteer for the organization as Secretary of the Board of directors and later Vice-president. She then accepted the position of Director and spokesperson, being able to entirely devote herself to her passion. Her strategies and communications skills, developed when working as an adviser for National Public Relations, were quickly put to work to ensure better positioning of the organization and its programs. During her time as Director, she had the opportunity to orchestrate large-scale projects in order to ensure the dissemination of intervention programs in health centres and school networks. Her role as spokesperson has led her to work with different media- including print, radio and television, and has also presented several conferences on the innovative approach established by the organization regarding healthy weight management. Ms. Dagenais holds a bachelor’s degree in nutrition and completed her Master’s degree, focused on consumers eating habits. She serves on the boards of the Conseil Québécois sur le Poids et la Santé (CQPS) and the Réseau Action santé.

ALAIN DAGHER, McGill University
Title: The Neurobiology of Appetite: Hunger as Addiction

Dr. Dagher received his MD from the University of Toronto in 1989. He completed a residency in neurology at McGill University and a fellowship in movement disorders and brain imaging at the Hammersmith Hospital. He has been an attending neurologist at the Montreal Neurological Institute since 1997. His clinical specialty is movement disorders, with a focus on Parkinson’s Disease. His main research interest is functional brain imaging using fMRI and PET scanning to understand the function of the basal ganglia, frontal lobes and dopamine in motivated behaviors. This research has touched on the cognitive deficits in Parkinson’s Disease, stress and anxiety, schizophrenia, drug addiction, obesity, and pathological gambling and other behavioral addictions.
CAROLINE DAVIS, York University
Title: A Psychogenetic Analysis of Appetite and Overeating ADHD and Obesity

Dr. Davis has had 25 years of academic and research experience in the field of disordered eating behaviours. Her investigations have focused on the clinical and psychological vulnerability factors for these disorders – and more recently, on genetic and neuropsychological indices of risk. Her current work focuses on the strong parallels between compulsive overeating/food addiction and more conventional addiction disorders like substance abuse. This work has highlighted the prominent links between overeating behaviours and Attention Deficit/Hyperactivity Disorder. She has published extensively on these topics, and has also disseminated her research at numerous scientific conferences. In addition, she has attracted substantial external funding from CIHR and SSHRC.

ANTHONY N. FABRICATORE, University of Pennsylvania
Title: Psychological and Psychiatric Predictors of Response and Failure to Bariatric Surgery

Anthony N. Fabricatore, Ph.D., is a licensed psychologist and obesity researcher. He is Senior Director of Research and Development at Nutrisystem, Inc., a commercial provider of weight loss programs in the U.S. and Canada, where he heads the company’s clinical trials program. He also holds an appointment as Assistant Professor of Psychology in Psychiatry at the Perelman School of Medicine at the University of Pennsylvania. Dr. Fabricatore’s clinical and research efforts have focused primarily on the behavioral treatment of obesity and diabetes, and on the psychological aspects of bariatric surgery.

NICK FINER, University College Hospital
Title: Gut Hormones for Treating Obesity

Prof. Finer is a Consultant in Endocrinology within the Department of Bariatric Medicine and Surgery, at University College Hospital, London and honorary Professor in the Department of Medicine at University College London. He is affiliated with the Vascular Physiology Unit (Prof. J Deanfield) at Great Ormond Street Hospital for Sick Children. His main clinical and research interests address obesity treatments (lifestyle, pharmacological and surgery). Prof. Finer trained at UCLH, St George’s and Guy’s Hospital, London becoming consultant Endocrinologist at Luton & Dunstable Hospital in 1988 where with colleagues he established a medical and surgical bariatric service. From 2002 until 2009 he was Senior Clinical Research Associate at Cambridge University and Affiliated Investigator at the Institute of Metabolic Science Metabolic Research Laboratories, Clinical Director of the Wellcome Trust Clinical Research Facility where he remains a Visiting Specialist at Cambridge University Hospitals NHS Trust. Prof. Finer is a founding fellow of SCOPE, co-chair of the International Association for the Study of Obesity Task Force on Management and Training, and a member of the EASO Obesity Management Task. He chairs the English Experts in Severe and Complex Obesity (ESCO) group. He was Chairman of the UK Association for the Study of Obesity from 1993–1996 and a past member of the Royal College of Physician’s Standing Committee on Nutrition and a co-opted member of several NICE appraisals; he was Programme Director for Endocrinology Training in the Eastern region of England from 2006–8. Prof. Finer’s editorial responsibilities include editor-elect of Clinical Obesity, editorial board member of the International Journal of Obesity, British Journal of Diabetes and Vascular Medicine, and associate editor Obesity Research and Clinical Practice. He has published more than 100 peer-reviewed articles in journals including British Medical Journal, Lancet, International Journal of Obesity, Clinical Endocrinology, Obesity (Research), and Diabetologia.
MARY FORHAN, McMaster University
Title: Perspectives of Persons Living with Obesity: Factors that Contribute to Quality of Life and Engagement in Everyday Life

Dr. Forhan is an occupational therapist and researcher. She has more than 18 years of clinical experience in the areas of psychosocial and physical rehabilitation. Dr. Forhan completed her clinical training at the University of Toronto (1990) and received her PhD in rehabilitation science from McMaster University (2010). She is a Fellow of two CIHR strategic training programs: one in quality of life research and the other in transdisciplinary research in primary health care. Dr. Forhan is currently a post-doctoral fellow at the University Health Network-Toronto Rehabilitation Institute, Cardiac Rehabilitation and Secondary Prevention Program supported by a Junior Personnel Award from the Heart and Stroke Foundation, Canada. Her research is focused on exploring the impact of obesity on participation in everyday living, which includes engagement in primary and specialty health care.

ROHAN GANGULI, University of Toronto
Title: Behavior Change for Weight Loss: State of the Science and Antipsychotics and Weight Gain

Dr. Rohan Ganguli is currently Professor of Psychiatry and Canada Research Chair at the University of Toronto, and Senior Scientist at the Centre for Addiction and Mental Health in Toronto. He is also Adjunct Professor of Psychiatry, Pathology, and Health and Community Systems at the University of Pittsburgh, in the US. Dr. Ganguli’s career, over the last 32 years, has focused on the development of treatment programs and services for individuals suffering from serious mental illnesses like schizophrenia, bipolar disorder, and other psychotic illnesses, with a special focus on non-psychiatric medical issues including the risk of cardiovascular disease, diabetes, and premature mortality. He has received research grant funding from several sources including the Canadian Institutes for Health Research (CIHR), the Public Health Agency of Canada (PHAC), the National Institutes of Health (NIH) in the US, the Stanley Research Foundation, and the National Alliance for Research in Schizophrenia and Depression. His current research is aimed at reducing the risk of diabetes and heart disease, using behavioural and pharmacologic interventions. Over his career, he has received several scientific awards including a Research Scientist Award from the NIH, An Established Investigator Award from NARSAD, and a Canada Research Chair from CIHR. He has also been recognized for his advocacy work on behalf of persons with serious mental illness with an “Exemplary Psychiatrist Award” from the National Alliance for the Mentally Ill (NAMI, 1994), was chosen by NAMI as “Psychiatrist of the Year – 2003”, and “Professional of the Year” in 2008.
TEODOR GRANTCHAROV, University of Toronto
Title: An Overview of Current Surgical Treatments for Obesity

Dr. Teodor Grantcharov completed General Surgery residency at the University of Copenhagen, and a doctoral degree in Medical Sciences at the University of Aarhus in Denmark. He then completed a fellowship in Minimally Invasive Surgery at the Western Pennsylvania Hospital, Temple University School of Medicine in Pittsburgh. Dr. Grantcharov is a staff surgeon at St. Michael’s Hospital and an Associate Professor at the University of Toronto. He is the Medical Director of the Patient Simulation center at St. Michael’s Hospital. His clinical interest is the area of minimally invasive surgery, with a focus on foregut disease including cancer and bariatric surgery. Dr. Grantcharov’s area of academic interest is in the field of minimally invasive surgery and surgical simulation. He has become internationally recognized as a leader in this area with a focus on virtual reality computer simulation as a tool for training and evaluation of laparoscopic surgical skills. Dr. Grantcharov has more than 70 peer-reviewed publications and more than 100 invited presentations in Europe, South and North America. He sits on numerous committees with the Society of the American Gastrointestinal and Endoscopic Surgeons (SAGES), The European Association of Endoscopic Surgery (EAES) and the American College of Surgeons (ACS). He is Associated Editor of the Journal of Graduate Medical Education, Surgical Endoscopy and British Journal of Surgery.

ALLAN S. KAPLAN, University of Toronto
Title: Binge Eating Disorder and Bulimia

Dr. Allan S Kaplan is currently Chief of Clinical Research at the Center for Addiction and Mental Health, Vice Chairman for Research and Professor in the Department of Psychiatry, and Director of the Institute of Medical Science, the largest graduate school in the Faculty of Medicine at University of Toronto. He received his medical, psychiatric and graduate school training at the University of Toronto. He has worked in the field of eating disorders for 30 years, has lectured widely on various topics in the field, published 150 peer reviewed articles, two books, 50 book chapters and over 200 abstracts. He was the inaugural Chair-holder of the Loretta Anne Rogers Chair in Eating Disorders at the University Health Network, the first endowed Chair in eating disorders in the world. He is also the Past President of both the Academy for Eating Disorders, the largest organization of eating disorder professionals in the world, and the International Eating Disorder Research Society. He has been a continuously funded peer reviewed investigator since 1992, and has received grant support from the National Institute of Mental Health in the USA and the Canadian Institutes of Health Research in Canada. His research over the last 15 years has focused on innovative pharmacologic approaches to anorexia nervosa and on the genetics of anorexia and bulimia nervosa.
RONETTE “RONNIE” KOLOTKIN, Obesity and Quality of Life Consulting  
**Title: Assessing Quality of Life in Obesity**  
Dr. Ronette “Ronnie” Kolotkin is a clinical psychologist, researcher, and consultant who specializes in the treatment of obesity and the study of quality of life in obesity. From 1984 to 1999 she served as the Director of the Behavioral Health Program at Duke University’s Diet and Fitness Center. Since 1999, she has continued her work in the field of obesity through her consulting company, Obesity and Quality of Life Consulting, and she is a Consulting Professor at Duke University in the Department of Community and Family Medicine. Dr. Kolotkin is the developer of the Impact of Weight on Quality of Life questionnaire (IWQOL-Lite), a widely used questionnaire that assesses quality of life in obese persons and has been translated into over 60 languages. She has also developed a questionnaire for assessing the impact of weight on quality of life in adolescents (IWQOL-Kids), currently translated into four languages. Dr. Kolotkin has published over 60 scientific articles, most of which pertain to quality of life and obesity.

ROGER S. MCINTYRE, University of Toronto  
**Title: The Effect of Obesity in Mood Disorders**  
Dr. Roger McIntyre is currently a Professor of Psychiatry and Pharmacology at the University of Toronto and Head of the Mood Disorders Psychopharmacology Unit at the University Health Network, Toronto, Canada. Dr. McIntyre is involved in multiple research endeavours which primarily aim to characterize the association between mood disorders and medical comorbidity. This research involves elucidating metabolic adverse events associated with the use of psychotropic medications, the impact of medical comorbidity on the course of mood disorders, and the effect of glucose homeostasis on neurocognition. Dr. McIntyre is extensively involved in medical education. He is a highly sought-after speaker at both national and international meetings. He has received several teaching awards from the University of Toronto, Department of Psychiatry and has been a recipient of the joint Canadian Psychiatric Association (CPA) / Council of Psychiatric Continuing Education Award for the Most Outstanding Continuing Education Activity in Psychiatry in Canada. Dr. McIntyre is a contributor to the CPA guidelines for the treatment of depressive disorders and the Canadian Network for Mood and Anxiety Treatments (CANMAT) guidelines for the management of bipolar disorder. Dr. McIntyre has published extensively in leading peer-reviewed journals and textbooks. Dr. McIntyre is also a reviewer for many journals including the American Journal of Psychiatry, Biological Psychiatry, Journal of Clinical Psychiatry and The New England Journal of Medicine. Dr. McIntyre completed his medical degree at Dalhousie University. He received his Psychiatry residency training and Fellowship in Psychiatric Pharmacology at the University of Toronto.
**GAIL MCVEY**, University of Toronto

**Title: Preventing Obesity Through Mental Health Promotion: Linking Research, Practice and Policy**

Dr. Gail McVey is a Psychologist and Health Systems Research Scientist in the Community Health Systems Resource Group at The Hospital for Sick Children, Associate Professor in the Dalla Lana School of Public Health at the University of Toronto and Director of the Ontario Community Outreach Program for Eating Disorders. Dr. McVey has published studies on longitudinal research involving school-based prevention programs designed to promote wellness and prevent disordered eating among children and youth. Dr. McVey has co-hosted national and international symposia with stakeholders from research, practice and policy to investigate ways to align prevention efforts across the fields of eating disorders and obesity. She is co-editor, together with Drs. Michael Levine, Niva Piran, and Bruce Ferguson, of an edited volume entitled Preventing eating and weight-related disorders: Linking collaborative research, advocacy, and policy change. Her current program of public health intervention research targets adult influencers and involves the development, implementation, and evaluation of a professional developmental model designed to support practice change in the prevention of obesity with a focus on weight bias awareness, mental health promotion and a balanced approach to healthy eating/healthy weight messaging. Together with Joanne Beyers, Sari Simkins, Katie Walker, Shelly Russell-Mayhew, Jenny Godley, this Ontario-Alberta research program is being carried out with an interdisciplinary team of academic researchers and health promoters from public health.

**ZUL MERALI**, University of Ottawa

**Title: Stress, Obesity and Mental Health: The Ghrelin Connection (Co-Presenter)**

Zul Merali (PhD) is President and CEO of the University of Ottawa Institute of Mental Health Research at The Royal. He is also full professor in the faculties of Medicine (Departments of Cellular and Molecular Medicine and Psychiatry) and Social Sciences (Psychology) at the University of Ottawa, as well as research professor at the Institute of Neuroscience at Carleton University. Dr. Merali's research endeavours, supported by grants from CIHR and NSERC, strive to characterize the body's response to stressful and appetitive events, and the relationship of stressors (including early-life trauma) to mood and anxiety disorders. Another focus of his research is also to determine how pharmacological interventions (pharmaceutical and nutriceutical) may attenuate stress-induced pathophysiology. In this vein, he and his colleagues have been attempting to isolate anti-anxiety compounds from a variety of rare plants. Dr. Merali’s research investigations extend from the behavioural to the cellular and molecular levels, and involve experimental animals as well as human subjects. Dr. Merali has published over a hundred scientific papers, more than 20 book chapters and over 100 conference presentations.

**TAMARA PRINGSHEIM**, University of Calgary

**Title: Canadian Guidelines on Monitoring and Management of Metabolic Side Effects of Second Generation Antipsychotic Medications in Children**

Tamara Pringsheim is a neurologist and clinical epidemiologist at the University of Calgary. She is the leader of the Canadian Alliance for Monitoring Safety and Effectiveness of Antipsychotic Medications in Children (CAMESA) guideline group. The CAMESA guidelines provide evidence based recommendations on how to monitor for metabolic and extrapyramidal side effects of antipsychotic medications in children, and how to manage side effects if they occur. The CAMESA guidelines have been endorsed by the Canadian Pediatric Society, and supported by the Canadian Institutes of Health Research.
SHELLY RUSSELL-MAYHEW, University of Calgary
Title: Body Image Across Weight Status

Dr. Russell-Mayhew is a Registered Psychologist and Associate Professor of Educational Studies in Counselling Psychology, Faculty of Education at the University of Calgary. Prior to becoming an academic, she worked in the area of eating disorders in clinical, administrative/policy, co-coordinator and prevention positions. Her current research focuses on the prevention of weight-related issues. Current projects include a SSHRC funded investigation into the shared risk factors for obesity and eating disorders; exploring social justice as an organizing construct in advancing our understanding of eating disorders and obesity; studying the interprofessional networks of national eating disorder and obesity organizations; and designing and evaluating professional development training for public health and education in the areas of body image, mental health and weight-bias.

RANDY A. SANSONE, Wright State University
Title: Borderline Personality Disorder and Obesity

Dr. Randy A. Sansone is a professor in the Departments of Psychiatry & Internal Medicine at Wright State University School of Medicine and Director of Psychiatry Education at Kettering Medical Center in Dayton, Ohio. Dr. Sansone has published over 300 peer-reviewed professional articles, co-edited two books (Self-Harm Behavior and Eating Disorders, Personality Disorders and Eating Disorders), and co-authored one book (Borderline Personality in the Medical Setting). He is on the editorial boards of 6 professional journals and co-authors a regular column on the interface between psychiatry and primary care for the journal, Innovations in Clinical Neuroscience.

PETER SELBY, University of Toronto
Title: Disorders of Consumption: Learnings from Smoking Cessation

Dr. Selby is the Clinical Director of the Addictions Program and Head of the Nicotine Dependence Clinic at the Centre for Addiction and Mental Health (CAMH). He is an Associate Professor in the Departments of Family and Community Medicine, Psychiatry, Faculty of Medicine and the Dalla Lana School of Public Health at the University of Toronto. He is the executive director and creator of the TEACH project – a continuing education certificate program in Applied Counseling for Health with a focus on smoking cessation, through the University of Toronto. Dr. Selby’s research, as a Principal Investigator at the Ontario Tobacco Research Unit, includes smoking cessation especially in smokers with co-morbid conditions, and web-based interventions, and as a Principal Investigator of the STOP study, investigations include the effectiveness of NRT and medications in different types of intervention settings. He helped start the program for pregnant substance using women at St. Joseph’s Health Centre providing both addiction medicine and obstetric care. He continues his clinical research with pregnant women who use substances and is the PI of a knowledge translation program (PREGNETS) to increase the adoption of evidence-based interventions with pregnant smokers.
ARYA M. SHARMA, University of Alberta
Title: Etiological Assessment of Obesity and the Role of Mental Health

Arya M. Sharma is Professor and Chair of Obesity Research and Management at the University of Alberta. He is also the Medical Director of the Edmonton Regional Weight Wise Program, the Scientific Director of the federally-funded Canadian Obesity Network and currently President of the Canadian Association of Bariatric Physicians and Surgeons. His research focuses on the aetiology and an evidence-based approach to managing obese patients. Dr. Sharma is on the editorial boards of several international journals and has authored or coauthored more than 250 scientific articles. He has also lectured widely on the aetiology and management of hypertension, obesity, and related cardiovascular disorders. Dr. Sharma maintains a widely-read blog where he regularly posts his ideas and thoughts on obesity prevention and management: www.drsharma.ca

VALERIE H. TAYLOR, Women’s College Hospital
Title: Pregnancy and the Post-Partum Period: A Vulnerable Window for Adult and In-utero Risk of Obesity and Mental Illness

Dr. Valerie Taylor is the psychiatrist-in-chief in the department of medicine at Women’s College Hospital and a scientist at Women’s College Research Institute. Dr. Taylor’s academic focus is on obesity, metabolic syndrome and mental health in both adults and children. She is interested in the developmental origins and common pathophysiology of obesity, diabetes and depression, the concept of food addiction and the impact of pharmacotherapy on weight and behavior. She also has an interest in women’s mental health and has written and researched on the overlap between mental illness in women and medical outcomes. By examining the complex relationships between mental health, obesity and chronic disease, Dr. Taylor’s research seeks to understand why people with mental illness are likely to die 15-years younger than the average lifespan. With this information, she is committed to creating more evidence-based tools that help people to manage their weight effectively, and in a way that is safe and healthy for their minds and bodies. Dr. Taylor is the recipient of numerous grants and research awards and fellowships. She completed her FRCPC training in psychiatry at McMaster University in 2004, followed by a two-year postdoctoral research fellowship in mood disorders with the Faculty of Psychiatry and Behavioral Neuroscience in 2006, a clinical Investigator four-year fellowship in 2007 and a PhD in medical science in 2008. In addition to leading and co-authoring numerous peer-reviewed publications and book chapters, Dr. Taylor is the author of The Cognitive Behavioral Workbook for Weight Management: A Step by Step Program for Real People.
MICHAEL VALLIS, Dalhousie University
Title: Motivational Interviewing in Bariatric Patients

Dr. Vallis is a registered clinical psychologist employed at Capital Health, Halifax, and cross-appointed to Dalhousie University as Associate Professor in Psychiatry and Adjunct Professor in Psychology, where he practises health psychology. A native of Dartmouth, he obtained his undergraduate training from Dalhousie University (B.Sc. Honours, 1977), and his postgraduate training in clinical psychology from the University of Western Ontario, London (M.A.-1979; Ph.D.-1983). After holding clinical positions at the Clarke Institute of Psychiatry, Toronto (1982–1985) and the Credit Valley Hospital, Mississauga (1985–1988) he returned to Nova Scotia in 1988. Dr. Vallis has held academic appointments at the University of Toronto (Lecturer, Dept. of Psychiatry, 1984–1988) and currently is Associate Professor, Department of Psychiatry, and Adjunct Professor, Department of Psychology, Dalhousie University. His main area of expertise is in adult health psychology, with an emphasis on diabetes, Gastroenterology, cardiovascular risk and obesity. Dr. Vallis provides clinical service to Capital Health and is active in research and teaching. Clinically, he has been part of the Diabetes Management Centre and the GI Unit at the QEII HSC, formerly the Camp Hill Medical Centre, since 1988, and more recently is part of the Capital Health Obesity Network. Clinical intervention focuses around behaviour change and adaptation to chronic disease, with a specific focus on motivation, behaviour modification and emotion management. Dr. Vallis has recently launched the Behaviour Change Institute within the Capital Health. The purpose of this institute is to provide competency based training in motivational enhancement, behaviour modification and emotion management interventions within primary care settings. He has an active publication record and has on-going research programs in the following areas; motivational enhancement, hepatitis C, and diabetes and cardiovascular risk modification.

PIOTR WILK, University of Western Ontario
Title: Analysis of the Canadian Community Health Survey (2000–2010): Obesity and Mental Health in Aboriginal Population

Dr. Wilk’s primary area of interest is health and well being of children. He is currently conducting a number of studies on child-, family, and neighbourhood-level determinants of childhood obesity and is engaged in research on developing a culturally-appropriate obesity intervention for First Nations and Métis children. Other interests: Population health; Social determinants of health; Aboriginal health; Research methodology (longitudinal designs, multi-level models); Program and policy evaluation.
Title: Prevalence of and Associated Factors of Childhood Obesity among High School Children in Pakistan — Evidence from a Developing Country
Authors: Ahmed J.1, Laghari A.2, Mehraj V.3
1Department of Community Health Sciences, Aga Khan University, Stadium Road, P.O.Box-3500, Karachi-74800 Sindh, Pakistan. 2Department of Pathology & Microbiology, Aga Khan University. 3Health Sciences Academy, Ministry of Health Islamabad.

Introduction: Childhood obesity is now a global problem and this epidemic is increasing in the developing world. It has also become an important public health problem among Pakistani children due to rapid urbanization, inequitable development and changes in life style in last few decades. The schools in developing countries lack policies on physical education and scarce attention is given to the physical activity needs of the children.

Material and Methods: This cross sectional study was conducted on 501 students selected through simple random sampling from 10 high schools from an urban setting. We used the age and sex specific BMI cut off points of W.H.O to estimate obesity. Interviews were conducted to inquire about food frequency, physical activity and other factors.

Results: Prevalence of overweight and obesity was 23% and 15%, in boys; and 16% and 8% respectively in girls. Children spent a mean of 20 hours on media on a typical week, 60% of them travelled inactively to schools, 50% schools did not have facilities for sports and 44% of the schools did not offer classes on physical education. In multivariate analysis girls were 77% protected against obesity, OR=0.33 (CI=0.16–0.68) and children in middle socioeconomic tertile were 3.43 times more likely to be obese. Rating oneself as poor athlete meant 5.5 times more likelihood of obesity and eating fruit more than 4 times a week meant 55% (OR=0.45 CI=0.22–0.91) less likelihood of obesity. Those who wanted to loose weight had 7.75 times more likelihood of obesity.

Conclusions: Childhood obesity is determined by the factors in the home, school and society and a multidisciplinary approach is needed to prevent this rising epidemic in developing countries. Interventions have to focus on influencing school physical education policies and a providing a conducive social infrastructure for active mode of living.

Title: Mental health as a predictor of body weight change in Swedish adults
Authors: Al-Emrani F.1,2, Stafström M.1 and Östergren P.1
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Background: The relationship between mental health and BMI has previously been reported to be inconsistent.

Aim: To assess the association between mental health and BMI change among men and women adults.

Methods: This study, based on The Scania Public Health Cohort, included 7867 subjects, 3461 (44%) men and 4404 (56%) women aged 18 to 65 and categorized into two age groups (18–29 and 30–65). Mental health status, assessed on the GHQ-12 scale, was dichotomized into good and poor. Weight change was calculated by subtracting the BMI at baseline from that at the follow-up. Independent sample t-tests compared the aggregate mean body weight at baseline across independent variables. We then dichotomized, with a cut-off at the upper quartile, the weight change and analysed the association between mental health status and weight change, adjusted for confounders.

Results: Subjects with poor mental health did not have a higher mean BMI at baseline than those respondents with good mental health status. As a matter of fact, among the older women, those having good mental health status were significantly heavier than those of poor. However, in multivariate logistic regression mental health was significantly associated with belonging to the upper quartile of weight increase over time among middle-aged men (OR 1.6; 95% CI1.26–2.03) and in both women age groups (OR 1.85; 95% CI 1.16–2.89 and OR 1.22; 95 % CI 1.02–1.46).

Conclusions: Findings suggested that poor mental health would be considered a predictor of weight change among middle-aged.
**Title: Obesity and foot care in an Arab population with Diabetes**

Authors: Al-Ozairi A.¹, Al-ozairi E.²,³ and Cooke D.⁴

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**Introduction:** When depression is co-morbid with type 2 diabetes and obesity, this is related to poorer glycemic control, decreased physical activity and poor self-care. However, there is a paucity of data on diabetic foot care in context of co-morbid depression and obesity. This study aimed to examine the relationships between these variables and identify predictors of depression in an Arab Kuwaiti, type 2 diabetes outpatient population.

**Methods:** 400 patients with type 2 diabetes, 64% of whom were clinically obese, were recruited consecutively through an outpatient clinic in Kuwait. Questionnaires to assess depression (PHQ9) and diabetes self-care behaviours (SDSCA) were completed. Demographic and clinical data were recorded. Univariate and multivariate analyses were conducted.

**Results:** In univariate analysis, higher rates of depression, as assessed by PHQ9, were significantly correlated with larger waist circumference ($r=0.2$, $p<0.01$) but not with BMI. Larger waist circumference was significantly associated with less self-reported exercise ($r=-0.15$, $p=.013$). Greater BMI was associated with less engagement with foot self-care but this only approached significance ($r=-0.1$, $p=0.58$). Higher levels of depression were significantly associated with lower levels of self-reported exercise ($r=-0.2$, $p<0.01$) and less blood glucose testing ($r=-0.1$, $p<0.05$). Multivariate analysis to predict depression scores were not significant and explained little of the variance.

**Conclusions:** Interventions that support people with diabetes to achieve better foot care and are tailored to account for co-morbid depression and obesity are required. Further research is needed to assess the relevance of the World Health Organisation (WHO) BMI classification for Arab populations.

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**Title: Obesity, Diabetes and Depression in Arab Women**

Authors: Al-Ozairi A.¹, Taghadom E.² and Al-ozairi E.²,³

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**Introduction:** In women, depression has been found to be strongly associated with co-morbid type 2 diabetes and obesity in the Western population. This is thought to be related to poorer self care, and poorer glycemic control. This study aimed to examine the relationships between these variables and identify predictors of depression in a female Arab Kuwaiti, type 2 diabetes outpatient population.

**Methods:** 500 female patients with type 2 diabetes and 69% of whom were clinically obese were recruited consecutively through an outpatient clinic in Kuwait. Current depression was defined as having a score of $>10$ on the nine item Patient Health Questionnaire. Weight, height, waist circumference were measured and BMI calculated. Demographic and clinical data were recorded. Univariate and multivariate analyses were conducted.

**Results:** In univariate analysis, higher rates of depression were significantly correlated with abdominal obesity ($r=0.5$, $p<0.01$) but not BMI ($p = 0.4$). Abdominal obesity and depression were significantly associated with less exercise ($r=-0.3$, $p=.013$; $r=-0.4$, $p<0.01$) and depression was associated with less blood glucose testing ($r=-0.4$, $p<0.03$). Younger age (<45) was significantly associated with depression ($r=-0.4; p=0.015$). Multivariate analysis to predict depression scores were not significant and explained little of the variance.

**Conclusions:** Interventions that support Arabic women with obesity and co-morbid depression to achieve lifestyle modification are required. Further research is needed to elucidate the at risk characteristics in the female Arab population as they vary significantly from the Western Population.
**Title:** Quality of life of obese patients treated in non-unified treatment trajectories at the Centre Hospitalier Universitaire de Sherbrooke (CHUS).

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1Department of Medicine, Division of Clinical Science, Gatineau, Quebec, Canada. 2Nursing School, University of Sherbrooke, Sherbrooke, Quebec, Canada 3Department of Medicine, Division of Endocrinology, University of Sherbrooke, Sherbrooke, Quebec, Canada.

The goal of this study is to describe the quality of life (QoL) of patients treated at the obesity and bariatric surgery clinics of the CHUS, before the treatment trajectories became unified in 2011. Focus groups were conducted to explore QOL and analyses were completed by comparing scores on the Impact of Weight on QoL questionnaire (IWQOL-Lite). Fifty-nine patients participated: 59.3% from the medical trajectory (mean BMI 42), 18.6% from pre-surgery trajectory (mean BMI 51) and 22% from the post-surgery trajectory (mean BMI of 36), mainly woman (61.1%) with a mean age of 49 years (SD=13). Content analysis of focus groups revealed that empowerment and involvement are marked by both success and challenges, where gains in quality of life in some areas are not matched with equivalent gains in others areas. ANOVAs showed significant differences of IWQOL-Lite between the trajectories [p<0.01] and revealed that patients in the pre-surgery trajectory have a poorer QoL Significant differences were found for the Self-Esteem subscale, where patients in the pre-surgery trajectory scored lower than those post-surgery (p<0.05), and on the Public distress subscale, where patients in the pre-surgery trajectory scored lower than those in the medical trajectory (p<0.05). We conclude that taking into account the role of various areas of patient’s quality of life would help tailor treatment plans to individuals’ strengths and challenges, hence improving treatment and self-care efficiency.

**Title:** Weight related bullying: Prevalence, effects, and treatment in adolescents with severe complex obesity

**Authors:** Dettmer, E., Knox, D., Luca, P., Grewal, P., Jeffrey, A., Bar-Dayan, A., Birken, C. and Hamilton, J.

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The Sick kids Team Obesity Management Program (STOMP) was established in 2010. It is a 2-year interdisciplinary program that focuses on extensive psychological intervention to support behavior change. Currently 100 adolescents with severe complex obesity are enrolled. An alarming number of these patients and their parents report that the teens have been, or are currently, the victim of weight related bullying in a variety of settings. Overt bullying such as verbal comments and physical aggression (e.g. throwing of rocks, pushing, etc.) are reported as most frequent during elementary school years. Weight related bias then often turns to social exclusion such as not being asked to go out with friendship groups in high school. Bullying is also reported as prevalent in many public venues, the media, and within the home. Teens and their parents report a high level of related suicidal ideation, depression, anxiety, and school avoidance. Statistics from the STOMP data pool will be presented including the number of teen and/or parents reporting bullying as well as the relationship of these experiences to mental health diagnoses. In conclusion, ideas of how bullying may affect these patients and their efforts to obtain and maintain a healthy weight throughout life will be presented along with team efforts in aiding these patients in recovery.
Title: The Association Between Body Mass Index and Suicide is Gender Biased
Authors: ElSheikh W.1, DeJesus J.1, Kabali C.1, Rangarajan S.1, Sadkowski M.2, Vair J.3, Sholer H.3, Garton S.3, Aslam S.1, Thabane L.1,4 and Samaan Z.1,3,5
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Background: Suicide is a serious event occurring in the majority of cases in the context of psychiatric disorders. Understanding the causes of suicide is largely illusive despite the identification of several risk factors. Studies suggested possible association between Body Mass Index (BMI) and suicide. Here we investigate the association between suicide and BMI in individuals admitted to hospital for psychiatric disorders.

Methods: We reviewed psychiatric admissions from 2008–2011 to a hospital in Hamilton, Ontario, 692 patients reported suicide attempt (SA) within 30 days prior to admission and 2430 patients did not report history of SA were included in the study. We explored the association between SA and BMI (overweight [BMI 25–30], obese [BMI>30] vs. normal [BMI<25]) adjusting for age and gender. All statistical analyses were performed using SAS (V. 9.2).

Results: Our analysis of 1654 males (333 with SA and 1321 without SA) and 1468 females (359 with SA, and 1109 without SA) suggests BMI was associated with SA among males only. Men who are overweight were at less risk of SA compared to normal weight men (adjusted odds ratio [OR] 0.7; 95% CI 0.5, 0.9; p= 0.012). The odds of SA were similar in all BMI categories for women. Our results show that there is decreased risk of suicide in men with higher BMI.

Conclusions: Our results show that the association between BMI and suicide varies by gender. This finding suggests that the association between BMI and suicide may have biological (sex) and social role and interaction (gender) between men and women.

Title: Exploring the association between obesity and attention-deficit/hyperactivity disorder (ADHD): A review article
Authors: Enver A.1 and Tytus R.2
1Faculty of Health Sciences, McMaster University, Hamilton, Ontario, Canada. 2Hamilton Health Sciences, McMaster University, Hamilton, Ontario, Canada.

Aim: There is a growing volume of literature suggesting a link between obesity and attention-deficit/hyperactivity disorder (ADHD), with recent empirical evidence indicating a bidirectional association. The purpose of this paper is to further understand the association between obesity and ADHD and the possible causality between them.

Methods: A literature review of existing evidence will be performed in exploring the relationship between obesity and ADHD. Evidence from multiple sources including, but not limited to, clinical trials, randomized controlled trials, and systematic reviews will be utilized. Sources will be critically appraised in order to accurately assess the merits of their respective findings.

Results: Initial results from sought evidence revealed that those with ADHD have been found to display higher BMI scores and greater rates of obesity than subjects without ADHD. Similarly, obese patients seeking treatment demonstrated an increased prevalence of ADHD when compared to the general population. Proposed forms of causality include: obesity and/or related factors that can manifest as ADHD; obesity and ADHD both sharing a common biological basis in a subset of patients; and, that ADHD, particularly the impulsivity and inattentiveness associated with it, causes obesity through the development of abnormal eating behaviors.

Conclusions: Initial findings suggest that a significant—and possibly causal—link exists between obesity and ADHD. However, more research is needed to confirm and fully understand this association.
Title: Impact of Changes in Water Intake on Mental Mood State
Authors: Guelinckx I.1, Klein A.1, Metzger D.2, Perrier E.1 and Pross N.2
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Aim: Dehydration can lead to mood impairments and complaints of headache, sleepiness and concentration difficulties. The study aim was to evaluate the effects of a water intake change on mood in 19 high volume (HIGH; 2–4L) and 29 low volume drinkers (LOW; <1.2L).

Method: During 2 baseline days HIGH consumed 2.5L of water/day and LOW 1L/day. During 3 controlled intervention days HIGH restricted water intake to 1L/day and LOW increased to 2.5L water/day. Several mood scales (Bond & Lader VAS, Profile of mood states, Karolinska Sleepiness Scale, Thirst & Emotional VAS) were administered at different time points during the study. An ANOVA model including treatment, time point and treatment by time point as fixed effects on mean values (i.e.; baseline data vs mean of 3 intervention days) for each mood scale was performed.

Results: Compared to baseline, the increased water consumption in LOW resulted in a significant decrease in fatigue/inertia (p<0.001), confusion/bewilderment (p=0.05) and thirst (p<0.001) and a trend to lower sleepiness (p=0.07). In HIGH the restricted water intake resulted in a significant increase in thirst (p<0.001) and a decrease in contentedness (p<0.05), calmness (p<0.01), positive emotions (p<0.05) and vigor/activity (p<0.001).

Conclusion: A switch in water intake has significant effects on mood, especially sleep/wake feelings. Improvements in sleep/wake feelings and in well-being might reduce the barrier to increased physical activity. Therefore water consumption should not only be recommended to obese individuals because it fits into a low-calorie diet, but also because of the beneficial effect on their mental mood state.

Title: Does food addiction distinguish a specific subgroup of overeating women?
Authors: Ouellet AS.1, Marion LP.1, St-Louis ME.1, Tousignant B.1, Turmel S.1, Ferland F.2, Gagnon-Girouard MP.1 and Bégin C.1
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Neural and behavioral similarities have been evidenced between excessive food consumption leading to obesity and addiction to other substances. In accordance, food addiction was defined following the criteria used to diagnose substance dependence. The aim of this study was to identify, among a sample of overweight women with overeating difficulties (n = 19), a subgroup of women suffering from food addiction, and to compare these women to women suffering from substance-use disorder (SUD) (n = 29) and to a control group (n = 17) on characteristics related to addiction (reward sensitivity, impulsivity, emotion regulation, personality traits). We hypothesized that women with food addiction would be (1) similar to women with SUD, and (2) different from women with overeating without food addiction and from control women. Participants completed questionnaires assessing food addiction (Yale Food Addiction Scale) and other variables related to addiction. Results showed that 42% of women with overeating difficulties fulfilled the criteria for food addiction (n=8). In general, women suffering from SUD and women with food addiction reported the most extreme scores, showing greater reward sensitivity and impulsivity, as well as lower self-determination, than women with overeating difficulties without food addiction and women from the control group. However, women with SUD, as well as women with eating difficulties (with or without food addiction) reported more difficulties to regulate emotions than control women. Overall, women with overeating difficulties fulfilling the criteria for food addiction seem to be more similar to women suffering from SUD than to other women with overeating difficulties, except for emotion regulation.
Title: Perfectionism and eating behaviours in psychosis
Authors: Hassan, S.1, 2, Ganguli, R.1, 3, Flett, G.L.2 and Hewitt, P.L.4
1Centre for Addiction and Mental Health, Toronto, Ontario, Canada. 2Department of Psychology, York University, Toronto, Ontario, Canada. 3Department of Psychiatry, University of Toronto, Toronto, Ontario, Canada. 4Department of Psychology, University of British Columbia, Vancouver, B.C., Canada.

Individuals with psychotic illnesses have rates of obesity 2–3 times higher and life span 20% shorter than the general population. Sedentary lifestyle, poverty, and atypical antipsychotic medication use have been proposed as reasons for increased obesity. Perfectionism has been associated with disordered eating behaviours in several previously studied populations. In particular, self-oriented perfectionism, socially prescribed perfectionism, and perfectionistic self-presentation have been linked with disordered eating and lower self-esteem. Perfectionism and eating behaviour have not yet been investigated in those with psychosis. To address this gap in the literature, two convenience samples (N1 = 69, 71.0% male, mean age = 45.87; N2 = 34, 61.8% male, mean age = 25.26) were recruited and body mass index (BMI) data collected. Participants also completed the DEBQ and abbreviated versions of Hewitt & Flett’s MPS and PSPS. N2 completed Rosenberg’s Self-Esteem Scale. In older individuals (N1), SPP correlated with restricted eating behaviour (r = .27, p = .03). In younger participants (N2), lower BMI was associated with higher SPP (r = -.39, p = .026), non-display (r = -.35, p = .046), and PSP (r = -.47, p = .006). BMI was also related to restricted eating (r = .41, p = .017). Lower self-esteem was related to emotional (r = -.49, p = .005) and external (r = -.41, p = .021) eating behaviour. The results suggest that the social aspects of perfectionism may play a role in weight gain in younger individuals with psychosis, and in the use of restrictive eating behaviours in older individuals. The implications of these results for practice will be discussed.

Title: The Association Between Depressive Symptoms, Body Mass Index, and Asthma Control In Adult Asthmatics
Authors: Jacob A.1, Boudreau M.1, Lavoie K.1 and Bacon S.1
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Background: Depressive symptoms have been shown to be prevalent in patients with obesity and in patients with asthma. Being overweight is also associated with poor asthma control. Despite these relationships, no studies have measured the interaction between depressive symptoms and BMI on asthma control.

Methods: A total of 798 patients with physician diagnosed asthma were recruited from the outpatient asthma clinic at Hôpital du Sacré-Coeur de Montréal. Patients provided demographic and medical history information, and completed a battery of questionnaires including the Beck Depression Inventory-II (BDI) and the Asthma Control Questionnaire (ACQ). BMI was calculated from patient’s self-reported height and weight.

Results: General linear model analyses, adjusting for age, sex, and ICS dose, revealed a significant association between BMI and ACQ (β=.017, p<.050) and between BDI and ACQ (β=.044, p<.001). In addition, BDI was associated with BMI (β=.068, p<.010). However, when associations between BDI, BMI and ACQ were examined in the same model, BDI (β=.043, p<.001), but not BMI (β=.009, p=.226), was associated with ACQ. In addition, there was no significant interaction effect between BDI and BMI on ACQ (β<.001, p=.667).

Conclusion: Results indicate that having higher levels of depressive symptoms and higher BMI are associated with worse asthma control. When included in the same model, increased depressive symptoms, but not BMI, was associated with poorer asthma control, suggesting that depressive symptoms may mediate the association between BMI and asthma control. Future studies should examine the role of depressive symptoms in weight control as well as in asthma control.
Title: Metabolic Syndrome and Mental Health
Authors: Duncan J.1 and Lenio M.1
1Outpatient Services Program, Waypoint Centre for Mental Health care, Penetanguishene, Ontario, Canada.

Metabolic Syndrome and obesity affects 25–34% of the population of industrialized countries including Canada. Individuals suffering from Mental illness are at twice this risk and when psychotropic medications are prescribed the risk rises to 66–70%. Evidence abounds that Metabolic Syndrome and Obesity are the precursor and thus a “sentinel” for Type II Diabetes and Cardiovascular disease, both of which cause immeasurable suffering for an individual and his/her family and also costs the health care system billions of dollars every year.

Under the clinical leadership of Dr. Duncan and with the support and passion of a highly committed 11 member multidisciplinary team a Metabolic Clinic was developed at the Out-Patient Department of Waypoint Centre for Mental Health Care to provide education and strategies to our vulnerable clientele in their quest to avert the potentially disastrous consequences of Metabolic Syndrome and Obesity. The program was designed in collaboration with clients, and is intended to be user-friendly and practical. Anecdotal and statistical evidence indicate that the program is highly effective. This program won Innovation in Health care Expo award for Excellence in Innovation and Health Care category Improving Patient/Resident Centeredness in 2010 under title of Tips & Tricks to Improve your Metabolic Health. A clinician’s handbook was produced with the award funding. We are presently doing a 1 year study group for Community clients. Waypoint is seeking to apply the acquired knowledge from this endeavor to the design of interventions for the in-patient clientele.

Title: The Association Between Support Group Attendance and Weight Loss After Gastric Bypass Surgery
Authors: Lipschitz L.1, Ortiz J.2,3, Ragheb H. 2,3, Wnuk S.4, Hawa R.5, & Sockalingam S.6
1University of Toronto, Department of Psychology, Toronto, Ontario, Canada. 2University of Toronto, Toronto, Ontario, Canada. 3Inwentash Faculty of Social Work, Toronto Western hospital, Toronto, Ontario, Canada. 4Toronto Western Hospital, Toronto, Ontario, Canada. 5University of Toronto, Department of Psychiatry, Toronto Western Hospital, Toronto, Ontario, Canada. 6University of Toronto, Department of Psychiatry, University Health Network, Toronto, Ontario, Canada.

Support groups are often considered an important component of bariatric surgery care for patients; however, there is limited evidence on their impact on weight loss outcomes. We hypothesized that high support group attendance is associated with weight loss and maintenance after bariatric surgery.

One-hundred and twenty one patients and support members voluntarily attended between 1 and 18 of the 24 support group sessions offered at the Toronto Western Hospital Bariatric Surgery Program. Participants were classified as high support group attenders (attended more than 5 sessions) and low support group attenders (attended 5 or less sessions). The primary outcomes were the change in Body mass Index (BMI) and percentage of total weight loss (%TWL) from pre-surgery to 6 months and 12 months after bariatric surgery. Change of BMI and %TWL outcomes were compared between high and low group attenders at 6 and 12 months post-surgery using independent sample t-tests (p<0.05).

BMI change of high group attenders was significantly greater compared to low group attenders at six months post-surgery (16.46 vs. 12.81, t = 2.92 (42), p = .006) and 12 months post-surgery (20.51 vs. 16.39, t = 2.57 (32), p = .015). The %TWL of high group attenders was significantly higher six months post-surgery (32.3% vs. 26%, t = 2.9 (42), p = .006) and 12 months post-surgery (40.6% vs. 34.5%, t = 2.65 (32), p = .012). Our study supports high support group attendance as it can enhance and maintain weight loss outcomes after bariatric surgery.
Title: Implementing a Lifestyle Intervention for Diabetes Management in High Support Housing: A Project of the Public Health Agency of Canada, Canadian Diabetes Strategy
Authors: Ganguli, R', Jenkins, A.T.1 and MacKinnon, K.R.1
1University of Toronto and the Centre for Addiction and Mental Health (CAMH), Toronto, Ontario, Canada.

The prevalence of diabetes risk factors, pre-diabetes, and type 2 diabetes mellitus (T2DM) is known to be higher among individuals with serious mental illness (SMI). Schizophrenia is recognized as a risk factor for T2DM by the Canadian Diabetes Association. Persons with SMI are also at increased risk for ischemic heart disease, and premature mortality. Obesity is a common link for much of these increased risks. Lifestyle interventions (LI) focusing on weight control, by means of diet and physical activity are universally recommended by all guidelines, for both T2DM and ischemic heart disease. Regrettably, persons with SMI have been systematically excluded from scientific studies of LI. This project will attempt to identify facilitators and barriers to successful implementation and maintenance of a lifestyle intervention program that promotes healthy eating and physical activity for persons with SMI living in high-support community housing. Using both quantitative and qualitative measures in a 24-month quasi-experimental design, the research team will engage staff and residents to identify issues encountered before and after the implementation of the lifestyle intervention. This data will be collected through focus groups with staff and semi-structured interviews with residents to elicit suggestions on modifying the standard LI. For study participants with T2DM and SMI, measures of blood sugar control (HbA1c) will also be collected, for 12 months, to examine the impact of the LI on residents’ health. If successful, the results will be disseminated so as to benefit the large number of persons with SMI and T2DM living in the community.

Title: Eating Behaviour in Individuals with Psychotic Illnesses
Authors: Park, N.1,3, Hassan, S.1, and Ganguli, R.1,2
1Schizophrenia Program, Centre for Addiction and Mental Health, Toronto, Ontario, Canada. 2Department of Psychiatry, University of Toronto, Toronto, Ontario, Canada. 3Department of Psychology, University of Toronto, Toronto, Ontario, Canada

Individuals with psychotic illnesses have rates of obesity 2–3 times higher than the general population. Their life span is also 20% shorter, with cardiovascular disease as the most frequent cause of death. Hypotheses for the increased risk of obesity include lifestyle factors, poverty (which restricts access to healthy food), and the side effects of certain antipsychotic medications. However, individual differences in eating behaviour have not yet been investigated in those with psychosis. The study was approved by the Research Ethics board. A convenience outpatient clinic sample was recruited (N=64, 71% Male; mean age 45.9). The Dutch Eating Behaviour Questionnaire was administered along with measurement of height and weight. Emotional eating and body mass index (BMI) were significantly correlated (r = 0.361, p < .006). Additionally, there were significant differences among males and females, with females endorsing higher rates of emotional eating (r = 0.388, p < .003). The relationship between emotional eating and BMI suggests that interventions aimed at reducing emotional distress via adaptive coping strategies and increasing distress tolerance abilities may benefit those obese individuals, as well as those at risk for obesity. Understanding of individuals’ specific emotional triggers can assist clinicians, and those taking antipsychotic medication for serious mental illness, with managing eating behaviours associated with weight gain. Assessing this component of disordered eating might help to individualize the treatment approach to weight loss in this population, as well as identify subgroups for whom novel treatment strategies can be developed.
Title: Bariatric Patient Support Group: Format and Group Therapeutic Factors
Authors: Ragheb, H.1, Ortiz, J.2, Lipschitz, L.3, Wnuk, S.4, Sockalingam, S.5, Hawa, R.6

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Aim: Although clinicians acknowledge the benefits of support groups for bariatric surgery patients (BSP), little is known about the preferred format and beneficial elements within these groups. This pilot study aims to examine patients’ preferred group format, and key group therapeutic factors (GTF) in a BSP sample.

Methods: We administered a questionnaire to 23 Toronto Western Hospital pre-and postoperative BSP, who attended at least one support group session. The self-rated questionnaire was developed based on prior patient feedback, as well as, Yalom’s group psychotherapy theory. Using a 5-point Likert scale, patients rated how often have 10 GTF been provided in the support group. A priori, we classified patients into two groups: Group 1 included pre-and early post-operative patients (n=13), and Group 2 included 1+ year post-operative patients (n=10). Data was analyzed using descriptive statistics and student t-tests (p<0.05).

Results: Most patients (63%) reported a preference to attend both all-inclusive support group meetings, in addition to surgical stage-specific meetings. Examination of GTF revealed that Group 1 perceived receiving more opportunities of emotional support (p=0.0004), hope and motivation (p=0.0075), empowerment (p=0.017), and interpersonal learning (p=0.0328) than did Group 2. All other factors had no statistically significant difference between the groups.

Conclusion: In summary, most BSP preferred having a combined support group format: specified groups sessions based upon their weight loss stage and evolving needs, as well as, heterogeneous group sessions. This preference was reinforced by perceived differences between the two groups, in providing GTF. Further research is needed to clarify this association.
Title: Neuropsychological Correlates of Declarative Memory in Bariatric Surgery Patients with and without Mood Disorders
Authors: Restivo MR.1,3, McKinnon MC.2,3, Frey BN.2,3, Hall GB.4, and Taylor VH.2,5,6
1Neuroscience Program, McMaster University, Hamilton, Ontario, Canada. 2Department of Psychiatry and Behavioural Neuroscience, McMaster University, Hamilton, Ontario, Canada. 3Mood Disorder Program, St. Joseph’s Healthcare Hamilton, Hamilton, Ontario, Canada. 4Department of Psychology, Neuroscience and Behaviour, McMaster University, Hamilton, Ontario, Canada. 5Department of Psychiatry, University of Toronto, Toronto, Ontario, Canada, and 6Psychiatry Department, Women’s College Hospital, Toronto, Ontario, Canada.

Background: There is now emerging evidence for an association between subtle cognitive dysfunction and widespread endocrine disturbances such as obesity. Given that patients with mood disorders experience higher rates of obesity than the general population, this may play a role in the cognitive dysfunction often seen in these patients. This study examined the impact of obesity on declarative (recognition) memory in patients with mood disorders, an area known to be susceptible to impairment in mood disorder patients.

Methods: This study compared declarative memory in obese subjects (BMI > 35 kg/m2) with Major Depressive Disorder or Bipolar Disorder, obese subjects without a mood disorder and healthy non-obese controls prior to intervention at the St. Joseph’s Healthcare bariatric surgery program. Subjects (ages 18 – 60) were administered a standardized battery of neuropsychological tests aimed at establishing performance on tests of declarative and intellectual functioning. Warrington’s Recognition Memory Task was performed in a 3T functional magnetic resonance imaging (fMRI) scanner; neural activation patterns during both encoding and recognition processes were compared within groups to determine if recognition memory performance was associated with specific patterns of neural activation.

Results: Obesity exerts a moderate negative effect on declarative and recognition memory; this effect is further exacerbated in patients with a mood disorder (adjusted for age and gender).

Conclusions: Obesity may have a negative impact on memory that is exacerbated in the presence of a mood disorder. Given that different psychiatric drugs confer different risks of weight gain, this study will impact treatment in this vulnerable population.

Title: Family Support, Mental Health, and Weight Loss Program Participation in an Adolescent and Pre-Adolescent Population
Authors: Scinta W.1,2 and Morley C.3
1Medical Director, Medical Weight Loss of NY, Manlius, New York, USA. 2Research Assistant Professor, Department of Family Medicine, S.U.N.Y. Upstate Medical University, Syracuse, New York, USA. 3Assistant Professor & Vice Chair for Research, Department of Family Medicine, Assistant Professor of Public Health & Psychiatry, S.U.N.Y. Upstate Medical University, Syracuse, New York, USA.

Context and Aim: A comprehensive medical weight loss program (biguanide, lifestyle modification, family-based behavioral modification) has been developed as an alternative to bariatric surgery. Our objective was to test the effect of full family support and mental health likelihood of adolescent and pre-adolescent patient drop-out from the program.

Methods: Retrospective Case series comparing adolescent and near-adolescent (aged 7–19 years) overweight or obese program enrollees, comparing program completers (achieving BMI ≤85th percentile for age and gender), and present enrollees (n=25) vs. program drop-outs (n=28) on lack of family support (LFS) and presence of mental health symptoms (MH) using χ² statistics. LFS and MH were then entered as predictors of drop-out, with age, initial weight, and gender as covariates, in a binary logistic regression model.

Results: MH (n=4) was marginally associated with drop out (χ²=3.863, p=.049); LFS (n=25) was significantly associated with dropping out (χ²=14.018, p<.001). Binary logistic regression revealed that having at least one of the two predictors (LFS or MH) increased odds of drop-out nearly 15-fold (O.R.=14.667, p<.001). Gender, age, and initial weight were not significant predictors of drop-out.

Conclusions: Relatively few patients presented with mental health symptoms in this sample, but MH had an effect, with all patients with MH dropping out. Family Support appears to be a major predictor of juvenile patient adherence to a comprehensive weight loss program.
Title: Vagus Nerve Stimulation as a treatment for hyperphagia in Prader-Willi Syndrome
Authors: Manning, K.E.¹, McAllister, C.J.¹, Ring, H.A.¹, Finer, N.², Sylvester, K.³ and Holland, A.J.¹
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Background: Prader-Willi syndrome (PWS) is a genetic disorder involving hyperphagia arising from aberrant satiety signalling. The central involvement of the vagus nerve in satiety, alongside serendipitous weight loss observed during Vagus Nerve Stimulation Therapy® (VNS; Cyberonics, TX, USA) for other conditions (Pardo et al. 2007), suggests that enhancing vagus signalling may be beneficial in PWS. The safety, acceptability and efficacy of VNS as a novel therapeutic intervention for hyperphagia in PWS is being assessed.

Methods: Three individuals with PWS (2 female, 1 male) were recruited and screened for suitability before surgical implantation of VNS. VNS was switched on three months post-implantation, initially set at 0.25mA output current and incrementally increased to 1.5mA as appropriate to each individual. Participants attend monthly visits, with several outcome measures taken to assess safety, acceptability and efficacy. Safety: sleep apnoea incidents, ECG, side-effect consultations. Acceptability: self-report and side-effect diaries. Efficacy: weight, body composition, hormone levels, body image, carers’ reports, fMRI responses to food images and measures of eating rate and quantity.

Results: No effects of VNS on sleep apnoea or heart rate have been observed. Participant reports suggest few side-effects, with voice changes at higher output currents found acceptable. Data concerning weight is currently unclear, but participant and carer reports suggest beneficial effects on mood and behaviour.

Conclusions: Preliminary findings indicate that VNS is safe and acceptable in PWS. To date, effects on the characteristic overeating in PWS are unclear. More strikingly, positive effects on mood and behaviour have been reported which require investigation. This study is ongoing.

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