



of Pediatric Obesity
Management
Management
Network
Canadian Obesity Network



ASSESS



ACPE



ADVISE





Key Principles



Obesity management is about improving health and well-being, and not simply reducing numbers on the scale

Weight management success should be measured in changes in health behaviours and improvement in overall health – how/what you eat, how you move and how you cope, rather than the number on the scale.

Changing health behaviours can lead to significant improvements in health and well being with little or no change in body weight.



Weight bias can be a barrier to weight management

Weight bias in children can negatively impact self-esteem, quality of life and lead to social isolation.

Children with obesity are often victims of bullying and stigmatization.

Fear of judgment can prevent parents from seeking health care support for their children.

Making assumptions about a family's health behaviours can lead to an ineffective intervention.



Interventions should include addressing 'root causes' of obesity and removing roadblocks for families to make healthy changes

Successful weight management requires identifying and addressing (1) the 'root causes' of unhealthy weight gain and (2) barriers to health and well-being.

Unhealthy weight gain may result from poor eating habits or reduced physical activity secondary to biological, psychological or socioeconomic factors.

Weight related complications (e.g. sleep apnea, hypertension, hyperlipidemia, diabetes) can also pose significant barriers to weight management.



A Child's 'Best' BMI May Never Be His or Her 'Ideal' BMI

An "ideal" BMI is not a realistic goal for many children with obesity, and setting unachievable targets can set-up children and families for failure.

Obesity is often a chronic condition. A child's "best" BMI is achieved through sustained positive health behaviours.

It is important to help children and their families improve body image and move towards body size acceptance.



Success is different for every child and family

Families differ considerably in their readiness and capacity for weight management.

Success can be defined as better quality-of-life, greater self-esteem, higher energy levels, improved overall health, prevention of further weight gain, modest weight loss, or maintenance of the children's "best" BMI.



ASK for permission to discuss weight

Weight is a sensitive issue. Many children and parents may be embarrassed or fear blame and stigma, so 'asking' is an important first step.



Be Non-Judgemental

Do NOT blame, threaten, or provoke guilt in children or parents.

Do NOT make assumptions about children's lifestyles or motivation; they may already be living a healthy lifestyle or have started to make changes.

Do acknowledge that weight management is difficult and hard to sustain.



Explore Readiness for Change

Determining children's and parents' readiness for behaviour change is essential for success. Recognize that children & their parents may be at different stages.

Use a family-centred, collaborative approach.

Initiating change when children and/or parents are not ready can result in frustration and may hamper future attempts to make healthy changes.



Use Motivational Interviewing to Move Families Along the Stages of Change

Ask questions, listen to responses, and reply in a way that validates experiences and acknowledges that children and parents are in control of their treatment plan.

If they are NOT ready for change, be prepared to address their concerns and other health issues. Then, ask if you can speak with them about health behaviours in the future.



Sample Questions on How to Begin a Conversation about Weight:

"Are you concerned about your (child's) health?"

"Are you concerned about your (child's) weight?"

"Would it be alright if we discussed your (child's) weight?"

Depending on the age and developmental stage of children, it may be more appropriate to speak with parents alone.



Create a Weight-Friendly Practice

Facilities: wide doors, large restrooms, floor-mounted toilets.

Scales: over 350lb/160kg capacity, wheel-on accessible, located in private area and used with sensitive weighing procedures.

Waiting room: sturdy, armless chairs, appropriate reading material - no glossy fashion magazines.

Exam room: appropriate-sized gowns, wide and sturdy exam tables, extra-large blood pressure cuffs, longer needles and turniquets, long-handled shoe horns.



ASSESS obesity related risk and potential 'root causes' of weight gain

Assess Obesity Status and Stage

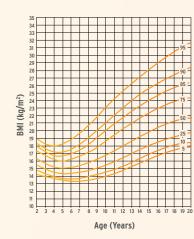
impact of obesity on children's overall health.

Obesity status in children is defined using BMI growth charts specific for age and gender.

CDC > 95th percentile WHO > 97th percentile

Obesity Stage is based on the 4Ms (Mental, Mechanical, Metabolic and Milieu), which quantify the

Obesity Status - BMI for age percentiles



Obesity Stages (EOSS-P*)

Stage 3: Established Chronic Disease

Stage 2: Clinical Co-Morbidity

Stage 1: Preclinical Risk Factors

Stage 0: No Apparent Risk Factors

*Edmonton Obesity Staging System - Pediatrics

Assess Obesity Drivers, Complications, and Barriers

Use the 4Ms framework to assess Mental, Mechanical, Metabolic, and Milieu drivers, complications, and barriers to weight management. Within the framework, be sure to assess for physical activity, sedentary behaviours, and eating behaviours.

Consider the following when assessing for etiology of obesity: low growth velocity (endocrine), dysmorphic features/neurocognitive delay (genetic syndrome), onset before 6-months of age (monogenic), and brain tumors (hypothalamic obesity). However, the most common form of obesity is "acquired."

The 4Ms of Obesity



Mental

Anxiety
Depression
Body Image
ADHD
Learning Disorder
Sleep Disorder
Eating Disorder
Trauma



Mechanical

Sleep Apnea MSK pain Reflux Disease Enuresis Encopresis Intertrigo



Metabolic

IGT/Type II Diabetes
Dyslipidemia
Hypertension
Fatty Liver
Gallstones
PCOS
Medication
Genetics



Milieu

Parent Health/Disability
Family Stressors
Family Income
Bullying/Stigma
School Attendance
School Support
Neighbourhood Safety
Medical Insurance
Accessible Facilities
Food Environment
Opportunities for Physical Activity



ADVISE on obesity risks, discuss treatment benefits & options

Advise on Obesity Risks

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

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

Explain Benefits of Modest Weight Loss

The first goal is to STABILIZE BMI

Changes in health behaviours can result in substantial health benefits including improvements in:

Lipid profile

- Sleep
- Blood glucose control
- Body image
- Blood pressure control
- Self-esteem

Fitness

Coping

Explain Need for Long-Term Strategy

Relapse is virtually inevitable when any intervention stops.

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

Interventions focusing on "quick fixes" and unsustainable strategies will result in an inability to maintain health behaviours over time.

Advise on Family-Based Treatment Options



SLEEP management interventions can significantly improve eating and activity behaviours as well as mood and school performance.



EATING BEHAVIOURS should focus on eating & drinking hygiene. Extreme and "fad" diets are not sustainable in the long-term.



PHYSICAL ACTIVITY interventions should aim at reducing sedentariness and increasing daily physical activity levels to promote fitness, overall health, and general well-being, rather than focusing on "burning calories".



SEDENTARY BEHAVIOUR

should be limited by minimizing recreational screen time to less than 2 hours per day, choosing active transportation over motorized, and increasing active play and active family time.



MENTAL HEALTH treatment referrals can help manage underlying /co-morbid psychological issues.

Interventions can improve body-esteem, self-esteem, reduce emotional eating, and promote healthy coping strategies.



BARIATRIC SURGERY may be considered for adolescents who've reached their final adult height, with BMI > 40, and with obesity related health complications. Candidates and their families are required to have completed a multi-disciplinary 6-month presurgical intervention.



AGREE on a realistic SMART plan to achieve health behaviour outcomes



Agree on Sustainable Behavioural Goals

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

Behavioural goals should be SMART:

- Specific
- Measurable
- Achievable
- Rewarding
- Timely



Agree on Behaviour Change Outcomes

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

For some children, PREVENTION or SLOWING of WEIGHT GAIN may be the best goal.



Agree on Treatment Plan

Management plans should be REALISTIC and SUSTAINABLE. Be mindful of need to set goals with both children and parents as their goals may differ.

Management plans should begin with ADDRESSING the DRIVERS of unhealthy weight gain (e.g. anxiety, sleep apnea, fatty liver, family stressors, etc.)

The SUCCESS of treatment should be measured in improvements in HEALTH and WELL-BEING (e.g. self-esteem, body image, sleep, fitness, blood glucose, etc.)



ASSIST in addressing drivers & barriers, offer education & resources, refer to provider, and arrange follow-up



Assist Families in Identifying and Addressing Drivers and Barriers

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

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

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



Provide Education and Resources

Family EDUCATION is central to successful management.

Help children and their families identify CREDIBLE weight management information and resources.



Refer to Appropriate Provider

Evidence supports the need for an INTERDISCIPLINARY team approach.

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

Arrange Follow-Up

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



Success is directly related to FREQUENCY of provider contact.

Weight cycling and weight gain should not be framed as "failure" - rather, they are the natural and expected consequence of dealing with chronic condition.

Professional Resources

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

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

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

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

The Canadian Society for Exercise Physiology (www.csep.ca) is a voluntary organization composed of professionals interested and involved Sedentary Behaviour Guidelines.

Key References:

Faber A & Mazlish E (2012). How to Talk So Kids Will Listen & Listen So Kids Will Talk. Scribner.

Freedhoff Y & Sharma AM (2012). Best Weight. Pabst, Wolfgang Science.

Freemark M (2010). Pediatric Obesity: Etiology, Pathogenesis, and Treatment. Springer.

Glennon W (1999). 200 Ways to Raise a Girl's Self-esteem: An Indespensable Guide for Parents, Teachers & Other Concerned Caregivers. Conari Press.

Lau DC, Douketis JD, Morrison KM, & Hramiak IM, Sharma AM, Ur E; Obesity Canada Clinical Practice Guidelines Expert Panel. 2006 Canadian Clinical Practice Guidelines on the Management and Prevention of Obesity in Adults and Children. CMAJ. 2007;176:S1-13.

Laliberte M, McCabe RE, Taylor V (2009). The Cognitive Behavioral Workbook for Weight Management: A Step-by-Step Program. New Harbinger Publications.

Albers S & Cheung L (2012). Eating Mindfully: How to End Mindless Eating and Enjoy a Balanced Relationship with Food (Second Edition.).

New Harbinger Publications.

Vos MB (2009). The No-Diet Obesity Solution for Kids. AGA Institute Press.

Patient Resources

The Canadian Obesity Network website has a number of resources for pediatricians and their patients including an interactive map of Canadian Pediatric Weight Management Programs in Canada. www.obesitynetwork.ca/pediatrics

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

Information on other obesity related health problems can be found at:

Canadian Obesity Network: www.obesitynetwork.ca Children's Hospital of Eastern Ontario's (CHEO) and the Centre for Healthy Active Living www.cheo. on.ca/en/centrehealthyactiveliving Canadian Mental Health Association: www.cmha.ca Mental Health: www.ementalhealth.ca Eating Disorders: www.nedic.ca Sleep disorders: www.candiansleepsociety.com

Sleep Apnea: www.lung.ca Fatty Liver Disease: www.liver.ca Polycystic Ovanan Syndrome:

www.hormone.org/polycystic

Hypertension: www.hypertension.ca

Diabetes: www.diabetes.ca

Other useful links:

Healthy Eating: www.dietitians.ca
Physical Activity: www.participaction.com

Psychology: www.cpa.ca

Physiotherapy: www.thesehands.ca

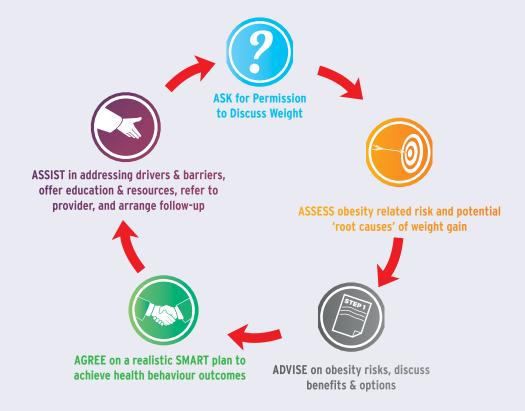
Occupational Therapy: www.coat.ca Bariatric surgery: www.asmbs.org For additional information and resources on obesity prevention and management, please refer to our website at www.obesitynetwork.ca

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