



Ontario Dietitians in Public Health Health and Wellbeing Philosophy and Approach to Weight

This document was developed by the Registered Dietitians of the Southwestern Ontario Public Health Nutrition Network who are part of Ontario Dietitians in Public Health (ODPH). ODPH would like to acknowledge their work and contribution to this position statement. ODPH is the independent and official voice of over 200 Registered Dietitians working in Ontario's public health system.

ODPH members have identified professional concerns across the province on the prevalence of weight stigmatization and its impact on health. It was recognized that there was a need for a coordinated approach to guide public health in supporting health promotion efforts, while minimizing the harmful consequences of using weight-centred language and a weight focus (i.e. weight loss). ODPH supports the following alternate health promotion philosophy and health behaviour model as a best practice approach to foster health and wellbeing at the population level and to minimize harm caused by the consideration of an individual's weight as a behaviour (individual choice), rather than an outcome of many complex interacting factors, many out of an individual's control.

The concepts in this position align well with the Ontario Public Health Standards (2018) including Health Equity, Healthy Growth and Development, School Health, and Chronic Disease Prevention and Well-being.

Position Statement:

Public Health is committed to shifting the conversation away from the traditional weight-centred approach to a health and wellbeing approach based on eight guiding principles:

1. **Do No Harm:** There is significant evidence of detrimental health effects of focusing obesity prevention programs and efforts on weight at the population level.^{1,2}
2. **Overall Health:** Health and well-being have many dimensions including physical, mental, emotional, social, spiritual, economic, environmental and educational.³ Though it is a risk factor for several chronic diseases, obesity is only one indicator and not a simple predictor of a person's health status.⁴
3. **Body Diversity:** Accept and respect the diversity of body shapes and sizes.²
4. **Health for All:** Promote health and wellbeing for ALL people; everyone has the right to good physical and mental health. Recognize that broader social and environmental factors can facilitate or hinder individual behaviour. Improvements

in health status can be achieved by engaging in healthier behaviours, independent of weight loss.^{2,4,5} Public Health efforts will work to decrease inequalities in health created by weight based discrimination.

5. **Being Active:** Promote individually appropriate, enjoyable, life and health-enhancing physical activity and the development of physical literacy skills.^{2, 6} Reduce sedentary behaviours (including screen time).²
6. **Eating Well:** Promote eating in a manner which balances individual nutritional needs, hunger, satiety, pleasure, cultural uniqueness, and economic means. Eating well includes spending time together cooking meals and snacks and taking time to sit down and enjoy them with family or friends in a way that brings joy to eating.⁷
7. **Feeling Good about Oneself:** Promote mental health in a manner that fosters resilience, confidence, and appreciation of the individual's unique strengths and abilities. People who feel good about themselves and their bodies are more likely to have healthy self-esteem and adopt healthy lifestyle attitudes and behaviours.⁸
8. **Self-Care:** Integrate a holistic view of health which includes getting adequate sleep, stress management, and taking care of physical and mental health (including accessing preventative health services, and prioritizing self care). These factors all contribute to overall health and wellbeing.^{9,10,11,12}

The eight guiding principles are adapted from the NAAFA, Child Advocacy Toolkit, “*We come in all sizes*” and the Association for Size Diversity and Health HAES Guiding Principles.^{13,14}

The purpose of this position statement is to establish a commitment to minimizing the harm associated with weight-bias and discrimination. Public Health is a leader within the community promoting health in an equitable and respectful way using evidence to plan programs and promote health. As such, scientific evidence should inform chronic disease prevention programming.

- Weight-bias and discrimination are social injustices that lead to health inequities.^{4,8,16-22} Public Health seeks to understand and address these social inequities through unbiased and appropriate programs and services.
- Public Health messaging and recommendations for the public will align with the health and wellbeing approach; that is, messages will be consistent, evidence-informed recommendations with a focus on health and well-being rather than weight.^{2,4,5,15} All health unit communications will be weight-inclusive and reinforce the key messages within the health and wellbeing approach summarized in Appendix 1. In addition to any written messaging, images selected for communications materials will be inclusive of all shapes and sizes and will not exacerbate weight-bias and negative stereotypes of individuals

with obesity.^{15,16}

- Public Health seeks to understand and address these social inequities through unbiased and appropriate programs and services. Public Health will assume a leadership role in educating and training staff and community partners (e.g., Boards of Health, child care centres, schools, workplaces, health care centres, municipalities, food premises and institutions like hospitals, Family Health Teams, and Community Health Centres) on a health and wellbeing approach that does not perpetuate weight bias.
- Public Health will encourage health care providers to avoid unnecessary weighing of individuals across the lifespan in clinical and community settings and ensure all weighing is done in a respectful, non-triggering manner. Eating disorders occur in all body sizes and shapes.^{23,24} Do not make assumptions about eating or activity habits based on weight or appearance. Unsolicited advice about weight is often poorly received; when initiating discussions about weight, providers should start by asking permission.²⁵ Public health provides recommendations on healthy behaviours but recognizes that an individual's behaviours depend on their own life circumstance, experiences, and social determinants of health (including income, and other barriers).
- Any external requests for information with respect to weight will be handled according to the health and wellbeing approach as described above. Therefore, Public Health will not support:
 - Requests to participate in weight-centred approaches that focus on body weight or weight loss/gain (e.g., The Biggest Loser in workplaces);
 - Requests using language which may stigmatize individuals related to their weight or appearance (e.g., programs or services that equate losing weight with getting more beautiful or desirable); and,
 - Approaches using nutrient restrictive food plans (e.g., high protein diets, low carbohydrate diets, cleansing diets).
- All public health efforts to improving health and wellbeing will go beyond the individual and acknowledge and address the broader social determinants of health. Public health is committed to addressing barriers to healthy eating, physical activity, getting adequate sleep and feeling good about oneself. Public health will utilize population health approaches that address environments and policies (at all levels of government) designed to build health-supportive environments.²⁶⁻²⁹ See appendix 2 for examples of this planned shift.
- Public health will support efforts to develop and implement alternate indicators of success other than traditional weights and measures at the population and individual level. Surveillance systems that track chronic disease rates, hospitalization rates, environmental determinants (e.g., access to healthy food, built environment), and behaviour indicators (e.g., dietary patterns, physical

activity patterns, achievement of sleep recommendations) and overall mental health will be favoured measures. Public health will not support the practice of weighing individuals (e.g., participate in Body Mass Index Screening Programs) outside of a clinical setting.^{26,30}

- At a population health level, body mass index (BMI) may be used as part of surveillance efforts to track body weight patterns over time, and potential level of health risk associated with weight. The Ontario Public Health Standards require epidemiological analysis of surveillance data relating to healthy weights (typically collected using BMI).³¹ Surveillance data should not be used as a measure of individual health status. Public health acknowledges that research emphasizes that healthy weights are individualized and that health behaviours are important regardless of BMI.³²⁻³⁴ Therefore, if public health is required to report on population BMI, an explanation of these limitations at the individual level must be included.³²

Summary of Literature

Current State of Obesity

In recent years, the prevalence of childhood and adult obesity has been steadily increasing in Canada. Growing prevalence of obesity has ignited concerns on its impact on the incidence of chronic disease, particularly cardiovascular disease and type 2 diabetes.²⁶ Cardiovascular disease is the leading cause of death in Ontario, while type 2 diabetes is the seventh leading cause.³⁵

Concern over increasing overweight and obesity rates are not new, however, despite decades of research and interventions, overweight and obesity rates have not changed significantly.^{16,35,36} Interventions to date have featured weight-centred approaches that emphasize restrictive eating and physical activity for the sole purpose of weight loss.^{2,4,5} Research has shown that this approach has not resulted in sustained and long-term changes in weight.^{2,4,5} Also, many interventions have focussed on the treatment of overweight and obesity versus its prevention.^{29,30} This is of concern given knowledge that excess body weight accumulation is resistant to existing treatments, and that prevention across the lifespan is the most promising strategy.^{29,30}

Obesity and Health

While many serious and costly chronic health conditions have been associated with obesity, the cause and effect relationships of obesity are complex and not completely understood.^{12,37} Significant health improvements and improved management of chronic diseases are associated with improvements in lifestyle behaviours independent of weight loss.^{4,5,38} Furthermore, individuals classified in the obese weight category may be metabolically healthy while others at a “normal” weight may have elevated risks (e.g., high cholesterol, high blood pressure, elevated blood glucose).^{4,38} This suggests that placing the focus solely on weight rather than other indicators of

health can be misleading.^{2,4,16,38,39}

The etiology of obesity is complex and involves interplay between social, cultural, economic, political, environmental, and individual factors.^{12,29,37} Despite these multiple causes, societal perception of obesity and public health efforts have historically focused on the individual factors of eating well and being active as possible solutions for obesity. Unfortunately, little progress has been made in achieving wide scale behaviour change.^{29,38} In addition, despite a profitable diet industry and focus on weight loss initiatives, few if any interventions have shown promise in sustaining long term weight loss.^{2,4} Given the sparse evidence of effective long term interventions to address obesity, it may be futile and unethical to promote weight loss as a goal to improved health.⁴

During the past 30 years, societal changes have resulted in environments that promote physical inactivity, decreased sleep duration and the consumption of energy dense foods.^{40,41} Many factors are external to individual control and are the result of unhealthy environments such as an increased sedentary jobs that encourage physical inactivity during work hours, environments that limit active transportation, increased food and beverage portion sizes, and widespread accessibility of ultra-processed foods.⁴⁰

Given the current evidence, the most effective means to support healthy weights at the population level requires a shift from individual focused, weight-centered approaches, to a healthy behaviours approach that addresses the environmental barriers and impacts of the community on health.^{2,4,5,15,29,40,41,42} Evidence supports investing in upstream strategies including policies and programs that foster health supportive environments, thus making it easier for people to eat well, live actively, sleep well and feel good about themselves (e.g., food policy, transportation and urban design policy, school start times).^{9,29,40,43,44}

Weight Bias in Society

Weight stigma is pervasive, and exists in healthcare settings, education, employment, interpersonal relationships and the media.^{16,29,45,46} Research has demonstrated that individuals with obesity are regarded as physically unattractive, undesirable, and are seen as personally responsible for their weight due to lack of willpower, overeating, and insufficient exercise.^{21,25}

Research has found that health care professionals exhibit weight bias/discrimination toward their patients.^{16,47} Negative attributes of individuals with obesity including lazy, weak-willed, non-compliant, and unattractive have been found to be common perceptions among physicians, nurses, registered dietitians, and fitness professionals.^{16,38,45,47} These negative attitudes from health professionals are of significant concern because patients who report feeling judged may avoid clinical care and screening and are less likely to seek successful weight management or achieve sustained weight loss.^{1,2,8,15,16,20}

In the workplace, weight-based discrimination can manifest in several ways. For example, individuals with obesity may be offered lower financial compensation and often experience discrimination in hiring and employment decisions.^{1,,20,29,45,48,49} Additionally, these individuals may hear negative comments and jokes about their weight from coworkers.^{1,49,50} Other actions of weight-based discrimination are less obvious and people may not be aware of their behaviour. For example, individuals with obesity report that they are often ignored by others. Weight-based discrimination is stressful and negatively affects mental health and overall quality of life.⁵⁰

Among youth, weight-based bullying is often reported as one of the most frequent types of victimization and harassment experienced in the school environment.^{19,51} Weight bias from teachers and educators is frequently reported by individuals who are overweight or obese.¹ Research has demonstrated that weight bias among educators may influence academic performance in individuals with obesity as early as elementary school.¹ One study of physical education (PE) teachers found they expressed anti-fat attitudes and perceived students who are overweight to have poorer social, reasoning, physical and cooperation skills compared to students who are not overweight.¹ Additionally, middle school students who are overweight reported receiving occasional negative comments from teachers that led them to feel upset and avoid participating in PE class.¹ There is a well-established correlation between obesity and low educational attainment, particularly for women.^{25,29} Traditionally, lower education was viewed as a cause of overweight/obesity, however, there is evidence a more complex relationship exists where educational attainment is impaired by the stigma and discrimination experienced by individuals who are overweight or obese.²⁰

Furthermore, discrimination in interpersonal settings and in day-to-day interactions has been reported.^{1, 45} Family members and friends are identified as frequent sources of weight stigma.¹ Stigma experienced most commonly includes being the target of weight-based teasing, name calling, and inappropriate comments from parents and siblings.¹ Children whose parents perceive them to be overweight have been shown to be more likely to gain weight rather than lose weight.⁵² In day to day interactions, seemingly positive comments about weight (i.e. “you’ve lost weight, you look so good!”) are also stigmatizing because it labels people as good or bad based on their weight.²

The media continues to portray individuals with obesity as targets of jokes and derogatory remarks, and images used in the media often perpetuate stereotypes of these individuals.^{1,46} For example, many media outlets depict an individual who is overweight or obese consuming larger portions of fast food and/or looking dishevelled and unkempt.^{1,25,50} Additionally, in entertainment media, characters who are overweight are often depicted engaging in stereotypical eating behaviours, are rarely seen in romantic relationships and are more likely than “normal” weight characters to be the object of ridicule.¹ In children’s media, it has been found that positive messages about being thin and negative messages about being overweight (including depictions as evil, unattractive and unfriendly) are common.¹ For example, in the popular Harry Potter novels, the villain Dudley Dursley’s weight is used to personify stereotypes about weight including greed, gluttony, laziness, and stupidity.

Consequences of Weight Stigma

Weight bias has mental, physical, social, and economic health consequences.^{1,45} Individuals who experience weight stigma are more likely to have poor overall mental health, depression, low self-esteem, anxiety, increased perceived stress, and increased substance use.^{1,17,19,53} Coping with weight stigma may lead to adverse health behaviours including overeating, disordered eating, and avoidance of physical activity.^{1,19,29,54} Furthermore, weight stigma has been linked to negative cardiovascular health outcomes for adolescents, such as high blood pressure, potentially due to the role of stigma as a chronic stressor.⁵⁵ Research has supported the association with weight-related teasing and bulimic behaviours, binge eating, and other unhealthy weight-control behaviours in overweight children, adolescents, and adults.^{1,29} Social and economic outcomes include social rejection (bullying), poorer academic outcomes and disadvantages in employment and promotions.¹

Research also demonstrates that serious physical and mental harm is generated through restrictive eating which often occurs with associated weight cycling.^{2,19,55} In fact, there is growing evidence that the mental and physical harm caused by weight cycling and weight bias may be more damaging than being overweight or obese, posing a significant threat to population health.^{2,4,16,17,56} Significant literature has connected weight cycling to higher mortality, higher risk of osteoporotic fractures and gallstone attacks, hypertension, chronic inflammation and some forms of cancer.^{2,56} Greater emotional distress has also been connected to weight cycling, especially in those who expected to be more successful personally and socially when thin.²

Preventing Weight Discrimination

ODPH's message is to promote wellness and protect health through inclusive and equitable programs and services for our population at large. We work to "create supportive environments, free from discrimination and with mutual respect and dignity".⁵⁷ Keeping our corporate values and responsibility at the core of this healthy behaviours approach will be pivotal in light of what we understand about the failure of traditional weight loss approaches, the perpetuation of weight bias with the use of these approaches, and the overwhelming need to look beyond the individual to the broader social, cultural, economic, political and environmental contexts in which we live, learn, work and play.

Given the harmful effects of weight bias, 'healthy weight' strategies require a focus on overall wellness, with mental health and well-being getting equal consideration with physical health in all actions addressing obesity. Shifting the focus from body weight to general health and wellness for all, with a particular emphasis on mental health, needs to be the approach to avoid serious unintended consequences.^{4,16,39}

According to Tylka *et al.* (2014)², "an approach to public health that incorporates a weight-inclusive approach may not only circumvent the adverse health and well-being

consequences linked to the weight-normative approach but also may enhance population health.” Research has demonstrated that body satisfaction and freedom from weight-based stigma are linked to reduced risk for unhealthy dieting practices, sedentary behaviours, eating disturbances and weight gain among youth.² In addition, these messages are more acceptable to the public and have been found to be rated more favourably than messages focusing on weight.²

We must apply health promotion strategies that take actions on the determinants of weight and the determinants of health and well-being using approaches and messages that do not inadvertently perpetuate myths and stigma related to weight. The underlying conditions that predispose our residents to poor health (e.g., genetics, poverty, homelessness, mental health issues, food insecurity) must be kept in the forefront of all strategies. A responsible approach is to also focus on policy development that would change the environment with which individuals are making their decisions that affect their health.²⁹

Appendix 1: Shift from Weight-Centred Approach to Health and Wellbeing Approach at the Individual Level (2)

Weight-Centred Approach	Health and Wellbeing Approach
-------------------------	-------------------------------

Restrictive Eating/Dieting	Eat Well
Following a restrictive or rigid eating plan.	Taking pleasure in eating.
Counting calories, carbohydrate or fat grams.	Eating a variety of foods to meet energy and nutrient needs.
Skipping meals.	Eating healthy meals and snacks daily and taking the time to eat slowly.
Ignoring signals of hunger and fullness.	Listening to physical cues of hunger and fullness.
Thinking of foods as “good” or “bad”.	Enjoy a variety of foods.
Focusing on the number on a scale as the only measure of success.	Achieving and maintaining healthy eating habits is one of the measures of success.
Exercise	Be Active
Believing “no pain”, “no gain” during exercise.	Participating in activity for the joy of feeling your body move.
Focusing on burning calories or burning fat.	Valuing the health benefits of being active instead of focusing on weight loss or change of body shape.
Frequently weighing self after exercise and associating a ‘successful workout’ with weight loss.	Practicing activities that are moderate and fun as well as those that are more vigorous, regardless of weight loss.
Thinking that you always need to sweat while being active to receive any health benefit.	Enjoying physical activities as part of your daily lifestyle.
Feeling like you “should” or “have to” be active.	Being active your own way every day (e.g., walking the dog, gardening, taking the stairs).
Dissatisfaction with Self	Feel Good About Yourself
Setting unrealistic goals for body shape and size—striving to be a perfect “10”.	Accepting and recognizing that healthy bodies come in a range of weights, shapes and sizes.
Obsessing or being preoccupied with weight.	Appreciating your strengths and abilities (physical, cognitive, emotional, social).
Weight-Centred Approach	Health and Wellbeing Approach
Being fat phobic and discriminating against people with overweight and obesity.	Relaxing and enjoying the unique characteristics you, and others, have to offer.

Accepting the fashion, diet and tobacco industry's definition of the "ideal body".	Being critical of messages that focus on unrealistic images of thinness or muscularity as symbols of success and happiness.
Trusting the "diet" and ignoring your own judgement of what is healthy.	Trusting yourself and body by responding to internal cues without judgement or criticism.
Thinking that self-esteem and body acceptance will improve with weight loss.	Knowing that eating well, being active and getting enough sleep will increase improve mood and increase self-esteem.

Adapted from Hastings & Prince Edward Counties Health Unit. Eat Well, Be Active, and Feel Good About Yourself. 2010.

Appendix 2: Shift from Unsupportive and Unhealthy Environment to a Supportive and Health Promoting Environment:

Un-supportive and Unhealthy Environment	Supportive and Health Promoting Environment
In Healthcare	In Healthcare
Setting unrealistic goals for body shape and size during preconception, pregnancy, and postnatal events	Setting realistic goals to adopt healthy behaviours regardless of body shape.
Counting calories, carbohydrate or fat grams in order to have better “control” over weight gain during pregnancy	Eating mindful and enjoyable eating with a variety of healthy options.
Feeding infants on a pre-determined and rigid schedule so as to avoid having infant gain too much weight too quickly	Continue to promote responsive feeding/cue based feeding (e.g., “Trust me. Trust my tummy” messaging campaign).
Focusing on the number on the scale as the only measure of success in infant and child growth and development	<p>Promote the accurate use of the WHO’s growth charts and CPS weight monitoring guidelines for the monitoring of infant, child and youth healthy growth and development.</p> <p>Ensure unbiased and appropriate approaches when addressing individual growth patterns encouraging families to address health behaviours, not weight. Implement the evidence informed nutrition screening tools, NutriSTEP® and Nutri-eSTEP® that focus on dietary behaviours rather than weight.</p> <p>Promote assessment of movement and sleep behaviours and recommendations from the Canadian 24 hour Movement Guidelines for the Early Years and for Children and Youth 5-17 years.</p>
Weighing clients in open areas within earshot of others	Respectfully asking clients if they would like to be weighed and ensuring weight is measured in a confidential and respectful manner with no comments made about increase/decrease.
Un-supportive and Unhealthy	Supportive and Health Promoting

Environment	Environment
Uncomfortable chairs that are restrictive for sizes, and limited availability of equipment suitable for individuals who are overweight/obese (i.e. hospital gowns, blood pressure cuffs).	Appropriate seating for all sizes and adequate equipment available without hassle or judgement to those who need it.
Assuming health concerns are a result of excess weight.	Adequately assessing client's health concerns giving full attention to other potential factors/causes.
Promoting achievement of a "normal weight" as the ultimate goal	Promoting lifelong healthy eating, being active, getting enough good quality sleep, and positive body image for health.
At Home	At Home
Adult role models engaging in "weight-centred" approaches at home, including propagation of weight bias.	Adult role models focus on healthy behaviours, including healthy eating, physical activity, sleep, and positive mental health without focus on weight.
Using food as a reward or withholding food as punishment.	Using non-food rewards (e.g., stickers) and positive parenting strategies.
Access to large quantities of and wide variety of nutrient poor foods/beverages in the home, including sugar-sweetened beverages.	Limited access to nutrient poor foods/beverages in the home, including sugar- sweetened beverages.
Low access to generous quantities of and wide varieties of nutrient dense foods/beverages, especially fruits/vegetables.	Adequate access to and wide variety of nutrient dense food, especially fruits/vegetables.
Low frequency of home prepared meals with consistent reliance on pre-packaged, processed, and fast food. Lack of opportunity for children to develop food preparation skills and knowledge.	Consistent availability of foods prepared in the home and, where appropriate, children included in the preparation of meals.
Guilt or shame experienced when enjoying "treat" or forbidden foods.	Mindful enjoyment of less healthy foods in moderation without feelings of guilt or shame.
Enable physical inactivity at home (e.g., limit outdoor physical activity due to safety concerns).	Enable physical activity at home (e.g., encourage and support active outdoor play both independently and as a family).

Un-supportive and Unhealthy Environment	Supportive and Health Promoting Environment
Enable sedentary behaviours at home (e.g., no restrictions on screen time, TV in bedrooms).	Inhibit sedentary behaviours at home (e.g., limits on screen access and time), avoid screen time at least 1 hour before bedtime.
At Schools	At Schools
Adult role models engaging in weight-centred approaches at school, including propagation of weight bias.	Adult role models focus on healthy behaviours including healthy eating, physical activity, sleep and positive mental health without focus on weight.
<p>Teachers promote healthy eating and physical activity to prevent weight gain and don't address weight based stigma/bullying in students.</p> <p>Teaching information in class about eating disorders, dieting and ideal body stereotypes as seen in the media.</p>	<p>Teachers and role models talk to children about adopting healthy behaviours, positive body image and self-esteem without focusing on weight and adequately address weight bias amongst students.</p> <p>Schools create a zero tolerance policy for weight bias/bullying.⁵⁸</p>
Routes to school that are perceived by parents to be too far for active transportation or unsafe for active transportation so reliance on car.	Active and safe routes to school (e.g., schools within reasonable distance to walk, cycle or wheel to school; sidewalks, bicycle paths in good repair; traffic calming; crossing guards).
<p>Low availability of nutrient dense food/beverages and high availability of nutrient poor food/beverages.</p> <p>Fundraising with nutrient-poor food/beverages.</p>	<p>Policies that promote healthy food availability (e.g., policies affecting the sale of food in schools, food for celebrations in the classroom and at school events, and produce-based fundraising).</p> <p>Teachers use non-food rewards (e.g., stickers).</p> <p>Programs that promote healthy food availability based on Ministry policies (e.g., Student Nutrition Programs, hot lunch/catered lunch program).</p>
Higher costs for nutrient dense food/beverages in comparison to nutrient poor food/beverages.	Subsidized funding to reduce the cost of healthier options available in schools.

Un-supportive and Unhealthy Environment	Supportive and Health Promoting Environment
Inadequate physical activity opportunities during the day.	Policies that promote physical literacy and physical activity before, during and after school (i.e. physical activity integration throughout the school day).
Poor or limited physical activity facilities within schools or within close proximity to schools.	Schools that have close access to gyms, fields, paved areas, track, arenas, pools.
High fast food density close to schools.	Policies limiting fast food density close to schools.
Curricula that inadequately addresses healthy eating, food skill development and physical activity.	Curriculum that incorporates healthy lifestyle education into the school curriculum, including developing practical food skills (e.g., school gardens, cooking classes and peer mentoring). Schools committed to transferring knowledge and skills home by involving parents (e.g., implementing organized walk to school programs or establish supervised community walking routes).
Use of nutrient poor foods for teaching purposes in curriculum, including cross-curricular examples (e.g., graphing students favourite junk food, procedural writing on steps to make an ice cream sundae).	Promotion of healthy eating by using nutrient dense foods such as vegetables and fruit for teaching purposes, manipulatives and props, including cross-curricular approaches (e.g., math, art, literacy).
<p>Teaching staff or other school community members scrutinize school lunches and make comments to children about the lunch and snack choices brought to school regarding what is “healthy” and what is not.</p> <p>Teachers rewarding children for healthy food choices or taking away nutrient-poor choices.</p>	<p>Teaching staff or other school community members acknowledge that many factors (e.g., children’s likes, cultural background, income, knowledge) influence what gets packed in lunches.</p> <p>Teachers provide education to their school and school community as a whole about healthy eating and healthy school lunches, rather than singling out individual students.</p>

Un-supportive and Unhealthy Environment	Supportive and Health Promoting Environment
Extra-curricular activities scheduled in the early morning or late evening, interfering with sleep needs of children and/or teens.	Schedule extra-curricular activities in a manner that supports students' ability to meet the sleep duration recommendations for their age group.
In Child Care Centres	In Child Care Centres
Adult role models engaging in "weight-centred" approaches at child care centres, including propagation of weight bias.	Adult role models engaging in "Healthy Behaviour" approaches at child care centres, including using weight sensitive approaches.
Low availability of nutrient dense food/beverages and high availability of nutrient poor food/beverages.	Environmental and policy interventions that promote healthy nutrition environments in childcare programs that comply with the recommendations as per the <i>Menu Planning and Supportive Nutrition Environments in Child Care Settings – Practical Guide December 2017</i> . ⁵⁹
Inadequate physical activity opportunities.	Policies that support physical literacy and favour minimal sitting with requirements for wide ranges of opportunities to be active while in care, including adult-led activities and time for active free play indoors and outdoors.
Poor or limited physical activity spaces.	Child care centres that have close access to safe indoor and outdoor open spaces to run and play.
At Work	At Work
"Weight-centred" approaches being utilized in the workplace (e.g., Biggest Loser campaigns).	"Healthy Behaviours" approaches being utilized in the workplace (e.g., signage encouraging employees and visitors to take the stairs, providing information to staff about healthy sleep habits).
A workplace that does not support the integration of physical activity and nutrition breaks into the workday.	A workplace that has policies in place that support and promote regular physical activity, nutrition and rest breaks (e.g., paid breaks, lunch room access, bike racks, fitness rooms, quiet rooms).

Un-supportive and Unhealthy Environment	Supportive and Health Promoting Environment
A workplace where low nutrient dense food is consistently available (e.g., in vending machines, at meetings).	<p>A workplace that has policies in place that supports a healthy food environment (e.g., has nutrient dense options in the vending machine, foods provided at meetings promote health). When planning food for meetings:</p> <ul style="list-style-type: none"> - Consider if it is necessary (e.g., the meeting is taking place during a meal time) to have food - Emphasize vegetables, fruits, whole grains and protein rich foods - Serve tap water, coffee, tea (and possibly unsweetened milk or milk alternatives) only - Avoid serving competitive foods (e.g., high sugar, fat and sodium options)
In the Community	In the Community
A built environment that promotes physical inactivity and unhealthy food intake patterns (e.g., unsafe parks and neighbourhoods, food deserts, homes in close proximity to fast food restaurants, disconnected trails, lack of well maintained sidewalks).	A built environment that promotes physical activity and healthy food intake patterns such as well maintained sidewalks, safe road speeds, and street connectivity [i.e., multiple and direct route options to promote walkability; sufficient number of neighbourhood parks; aesthetically pleasing neighbourhoods; playgrounds; playing fields; recreation centres; multi-use paths that encourage active play; and foodscapes that improve dietary intake (e.g., decreased density to fast food/convenience stores and increased access to grocery stores, fresh produce markets, and gardens)]
Recreational activities scheduled in the early morning or late evening, interfering with sleep needs of children and/or teens.	Schedule recreational activities in a manner that supports ability to meet the sleep duration recommendations for age group.
Un-supportive and Unhealthy Environment	Supportive and Health Promoting Environment

Poor access to adequate housing and high-quality, culturally acceptable and reasonably priced “healthy food”.	Policies that ensure all residents have adequate income to secure safe and healthy housing and adequate income to buy high-quality, culturally acceptable and reasonably priced “healthy food” (e.g., living wage).
Constant exposure of children to nutrient poor food and beverage marketing using social media such as TV, internet, billboards, posters and product endorsements.	Regulations protecting children from food and beverage marketing.
Food labels and nutrition information at restaurants that is not transparent or easily understood by the average consumer/customer.	Regulations that make food labels easier to interpret and mandatory requirements for disclosure of nutritional content of food and beverages sold in restaurants.
Communities that lack food security strategies and instead rely on charity programs or mainstream food production/distribution channels.	Communities that mobilize around food security to foster new ways to address hunger and poor nutrition in its citizens (e.g., organizing local farmers’ markets, community gardens, and community kitchens).
Communities with households experiencing food insecurity (inadequate or insecure access to food due to financial constraints) rely on charitable food programs (e.g., food banks and free community meal programs) and community food programs (e.g., good food boxes, community gardens, community kitchens, school feeding programs, prenatal nutrition programs) to assist households that cannot afford to purchase sufficient food.	Communities mobilize around the problem of food insecurity recognizing that this problem cannot be solved with food responses. Concerted efforts are undertaken to advocate to all levels of government for adequate incomes for all community members. Advocacy efforts could be related to social assistance rates that reflect actual living costs, basic income guarantee for working age people, enhanced financial support programs for postsecondary students or incentives for employers to pay living wages to employees.

Appendix 3: Definitions

Body Mass Index (BMI):

Overweight and obesity are classified through use of the body mass index (BMI), a derived variable calculated by dividing a person’s measured body weight (in kilograms) by the square of his/her height (in metres). A BMI equal to or greater than 25 is

overweight; a BMI equal to or greater than 30 is obese.

Built Environment:

The phrase "built environment" refers to the human-made or modified physical surroundings in which people live, work, and play. These places and spaces include our homes, communities, schools, workplaces, parks/recreational areas, business areas, and transportation systems, and vary in size from large-scale urban areas to smaller rural developments.

Health and Wellbeing Approach:

An approach that focuses on improving overall health, including physical and mental well-being, regardless of weight.

Resilience:

Resiliency refers to an individual's ability to properly adapt to stress and adversity. Stress and adversity can come in the shape of family or relationship problems, health problems, or workplace and financial stressors, among others.

Self-esteem:

Self-esteem reflects a person's overall subjective emotional evaluation of his or her own worth. It is a judgment of oneself as well as an attitude toward the self.

Social Determinants of Health:

The social determinants of health influence the health of populations. They include income and social status; social support networks, education, employment/working conditions; social environments; physical environments; personal health practices and coping skills; healthy child development; gender; and culture.

Weight Bias:

Weight bias refers to negative weight-related attitudes, beliefs, assumptions and judgments toward individuals who are overweight and obese.

Weight-Centred Approach:

The conventional "healthy weights" approach that attributes disease risk to fatness and encourages weight loss through restrictive eating and physical activity for the sole purpose of weight loss.

Weight Cycling:

The repeated loss and regain of body weight, usually as a result of chronic dieting.

References

1. Puhl RM, Heuer CA. The Stigma of Obesity: A Review and Update. *Obesity*. 2009;17(6).
2. Tylka TL, Annunziato RA, Burgard D, *et al*. The Weight-Inclusive versus Weight-Normative Approach to Health: Evaluating the Evidence for Prioritizing

- Well-Being over Weight Loss. *Journal of Obesity*. 2014.
3. Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June, 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of the World Health Organization, no. 2, p. 100) and entered into force on 7 April 1948.
 4. Bacon L, Aphramor L. Weight Science: Evaluating the Evidence for a Paradigm Shift. *Nutrition Journal*. 2011;10(9).
 5. Clifford D, Ozier A, Bundros J *et al*. Impact of non-diet approaches on attitudes, behaviours, and health outcomes: a systematic review. *Journal of Nutrition Education and Behaviour*. 2015;47(2):143-55.
 6. Ontario Society of Physical Activity Promoters in Public Health. Key Messages and Policy Recommendations for Physical Literacy. 2014.
 7. HealthLinkBC. The Meaning of Healthy Eating in British Columbia. 2013. Available at: <http://www.healthlinkbc.ca/healthyeating/professionals/>
 8. Puhl R, Suh Y. Health Consequences of Weight Stigma: Implications for Obesity Prevention and Treatment. *Current Obesity Reports*. 2015; 4:182-190.
 9. Ontario Agency for Health Protection and Promotion (Public Health Ontario), Berenbaum E., Wu JH-C. Evidence Brief: Effects of inadequate sleep on health of 0-19 year olds. Toronto, ON: Queen's Printer for Ontario; 2015
 10. Schneiderman N, Ironson G, Siegel S. Stress and Health: Psychological, Behavioural and Biological Determinants. *Annual Reviews in Clinical Psychology*. 2005. 1: 607-628.
 11. Shankar N, Park C. Effects of stress on students' physical and mental health and academic success. *International Journal of School and Educational Psychology*. 2016. 4 (1): 5-9.
 12. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Addressing obesity in children and youth: evidence to guide action for Ontario. Toronto, ON: Queen's Printer for Ontario; 2013.
 13. Association for size diversity and health. HAES® Principles. Available at <https://www.sizediversityandhealth.org/content.asp?id=152>
 14. NAAFA, Child Advocacy Toolkit, We come in all sizes. 2011. Available at www.naafaonline.com
 15. Phelan SM, Burgess DJ, Yeazel MW. Impact of weight bias and

- stigma on quality of care and outcomes for patients with obesity. *Obesity Reviews*. 2015;16:319-326.
16. Rebecca Puhl and Chelsea A. Heuer. Obesity Stigma: Important Considerations for Public Health. *American Journal of Public Health*. 2010; 100(6): 1019-1028..
 17. Papadopoulus S, Brennan L. Correlates of Weight Stigma in Adults with Overweight and Obesity: A Systematic Literature Review. *Obesity*. 2015; 23(9).
 18. Sikorski C, Luppia M, Luck T *et al*. Weight Stigma “Gets Under the Skin” – Evidence for an Adapted Psychological Mediation Framework – A Systematic Review. *Obesity*. 2015;23(2).
 19. Puhl R, Suh Y. Stigma in Eating and Weight Disorders. *Current Psychiatry Reports*. 2015;17(10).
 20. Fikkan J, Rothblum E. Is Fat a Feminist Issue? Exploring the Gendered Nature of Weight Bias. *Sex Roles*. 2012; 66(9):575-92.
 21. Sikorski C, Luppia M, Kaiser M *et al*. The stigma of obesity in the general public and its implications for public health – a systematic review. *BMC Public Health*. 2011;11(661).
 22. Brewis AA. Stigma and the perpetuation of obesity. *Social Science and Medicine*. 2013; 118:152-8.
 23. Lebow J, Sim L, Kransdorf L. Prevalence of a History of Overweight and Obesity in Adolescents With Restrictive Eating Disorders. *Journal of Adolescent Health*. 2014; 19-24.
 24. Neumark-Sztainer, D. Higher Weight Status and Restrictive Eating Disorders: An Overlooked Concern. *Journal of Adolescent Health*. 2015; 56, 1-2.
 25. Pearl, R.L. Weight bias and stigma: public health implications and structural solutions. *Social Issues and Policy Review*. 2018; 12, 146-182.
 26. Healthy Kids Panel (HKP). No Time to Wait: The Healthy Kids Strategy. 2013. Available at http://www.health.gov.on.ca/en/common/ministry/publications/reports/healthy_kids/healthy_kids.aspx
 27. Ministry of Health Promotion. Healthy Eating, Physical Activity, and Healthy Weights Guidance Document. Queen's Printer for Ontario, 2010.

28. World Health Organization. *The Ottawa Charter for Health Promotion*. Geneva, Switzerland: WHO; 1986 Nov 21 Available from: <http://www.who.int/healthpromotion/conferences/previous/ottawa/en/index.html>
29. Gearhardt AN, Bragg MA, Pearl RL *et al*. Obesity and public policy. *Annual Review of Clinical Psychology*. 2012;8:405-30.
30. Registered Nurses Association of Ontario. *Primary Prevention of Childhood Obesity*, 2nd Edition. 2014. Available at <http://rnao.ca/bpg/guidelines/primary-prevention-childhood-obesity>
31. Ministry of Health and Long Term Care. (2018). Population health assessment and surveillance protocol.
32. Association for Public Health Epidemiologists in Ontario (2013). Core indicators for public health in Ontario: nutrition and healthy weights. Toronto: APHEO. Retrieved from <http://www.apheo.ca/index.php?pid=140>
33. Allison D, Padawil R, Pajewski N, Sharma, A. Using the Edmonton obesity staging system to predict mortality in a population-representative cohort of people with overweight and obesity. *Canadian Medical Association Journal*. 2011;10(1503). Available at <http://www.cmaj.ca/content/183/14/E1059>
34. Nuttall FQ. Body Mass Index: Obesity, BMI and Health: A Critical Review. *Nutrition Today*. 2015; 50(3):117-28.
35. Public Health Ontario. (2016). PHO snapshots, self-reported adult combined overweight and obese, age-standardized rate (both sexes), 2013-14, Ontario. Toronto: Public Health Ontario. Retrieved from <http://www.publichealthontario.ca/en/DataAndAnalytics/Snapshots/Pages/Health-Behaviours---Nutrition-and-Healthy-Weights.aspx>
36. Rudd Center for Food Policy & Obesity, Yale University. *Weight Bias: The Need for Public Policy*. 2008. Available at www.naafaonline.com/dev2/about/.../WeightBiasPolicyRuddReport.pdf
37. Ontario Agency for Health Protection and Promotion (Public Health Ontario). *Obesity a burden across the life course*. Toronto, ON: Queen's Printer for Ontario; 2014.
38. Brown RE, Kuk JL. Consequences of obesity and weight loss: a devil's advocate position. *Obesity Reviews*. 2015;16:77-87.
39. Provincial Health Services Authority. *From Weight to Well-Being: Time for a Shift in Paradigm?* 2013. Available at www.phsa.ca/populationhealth

40. Ministry of Health Promotion. (2010). *Healthy Eating, Physical Activity & Healthy Weights* (Publication No. ISBN: 978-1-4435-2912-9). Toronto, ON: Canada, Queen's Printer for Ontario.
41. Ontario Chronic Disease Prevention Alliance. (2010). *Evidence-Informed Messages, Healthy Eating*. Toronto, ON: Canada. Retrieved from http://ocdpa.ca/sites/default/files/publications/OCDPA_EM_HealthyEating_Full_Package.pdf
42. Mizock L. The Double Stigma of Obesity and Serious Mental Illness: Promoting Health and Recovery. *Psychiatric Rehabilitation Journal* 2012; 35(6): 466-9.
43. Jeong M, Gilmore JS, Bleakley A *et al.* Local news media framing of obesity in the contest of a sugar-sweetened beverage reduction media campaign. *Journal of Nutrition Education and Behaviour*. 2014; 46(6): 583-8.
44. Owens, J. *et al.* Policy statement. School Start Times for Adolescents. *Pediatrics*. 2014;134(3):642-649. Available from: <http://pediatrics.aappublications.org/content/pediatrics/early/2014/08/19/peds.2014-1697.full.pdf>
45. Spahlholz J, Baer N, König HH, *et al.* Obesity and discrimination – a systematic review and meta-analysis of observational studies. *Obesity Reviews*. 2016; 17(1):43-55.
46. Flint SW, Snook J. Disability, Discrimination and Obesity: The Big Questions? *Current Obesity Reports*. 2015; 4(4).
47. Jung F, Luck-Sikorski C, Wiemers N *et al.* Dietitians and Nutritionists: Stigma in the Context of Obesity. A Systematic Review. *PLoS One*. 2015; 10(10).
48. Canadian Obesity Network. Canadian Summit on Weight Bias and Discrimination Summit Report. 2011. Public Health Agency of Canada.
49. Roehling MV, Pichler S, Bruce TA. Moderators of the effect of weight on job-related outcomes: a meta-analysis of experimental studies. *Journal of Applied Social Psychology*. 2013; 43(2): 237-52.
50. OSNPPH. Education on Weight Bias. Toolkit: Creating a Healthy Workplace Nutrition Environment. 2015. Available from: <https://www.osnpph.on.ca/upload/editor/cuser/2080/Workplace-Toolkit/Section-5/Education-on-Weight-Bias.pdf>
51. van GM, Vedder P, Tanilon J. Are overweight and obese youths more often bullied by their peers? A meta-analysis on the correlation between weight status and bullying [Review]. *International Journal of Obesity*. 2014; 38(10):1263-7.

52. Robinson E, Sutin A. Parental Perception of Weight Status and Weight Gain Across Childhood. *Pediatrics*. 2016; 137(5): 1-7.
53. Harriger JA, Thompson JK. Psychological consequences of obesity: Weight bias and body image in overweight and obese youth. *International Review of Psychiatry*. 2012; 24(3): 247-253.
54. Ratcliffe D. Obesity and Internalized Weight Stigma: A Formulation Model for an Emerging Psychological Problem. *Behavioural and Cognitive Psychotherapy*. 2015; 43:239-252.
55. Puhl RM, Latner JD. Stigma, obesity, and the health of the nation's children. *Psychol Bull*. 2007; 144:557-580.
56. Marshall C, Lengyel C, Utioh A. Body dissatisfaction among middle-aged and older women. *Canadian Journal of Dietetic Practice and Research*. 2012; 73(3):e341-e247.
57. Montani J-P, Schutz Y, Dulloo AG. Dieting and weight cycling as risk factors for cardiometabolic diseases: who is really at risk? *Obesity Reviews*. 2015; 16 (Suppl. 1): 7-18.
58. Supporting Minds: An Educator's Guide to Promoting Students' Mental Health and Well-being. 2013; Ministry of Education.
59. Ontario Society of Nutrition Professionals in Public Health. Menu Planning and Supportive Nutrition Environments in Child Care Settings – Practical Guide. December 2017.