







FOSTERING RESILIENCE

AS A

HEALTH PROMOTION APPROACH
TO DISORDERED EATING IN YOUTH





# GLOBAL HEALTH PROBLEM – THE OBESITY "EPIDEMIC"

- Obesity presently costs society almost \$150 billion annually in increased health care expenditures (Lichtenstein & Ludwig, 2010)
- Obesity is the cause of 3.8% of disability-adjusted life years (DALYs) worldwide (Ng et al., 2014)
- In 30 years, a substantial increase in obesity prevalence in children and adolescents:
  - 2013, Developed countries 23.8% of boys and 22.6% of girls (Ng et al., 2014)

#### **Contributors & Outcomes**

- Changes in calorie intake, diet composition, physical activity and changes in gut microbiome are potential contributors to the increase in obesity over the past 30 years (Ng et al., 2014; Waters et al., 2011)
- Leads to reduced health-related quality of life, especially the dimensions
  of physical and social well-being (Lichtenstein & Ludwig, 2010; Wynne et al., 2014)

### STUBBORNESS OF OVERWEIGHT & OBESITY

- Cochrane 2011 report on "interventions for preventing obesity in children" (55 studies)
  - Many were able to improve children's nutrition or physical activity to some extent
  - Few saw an effect of the programme on children's level of fatness
  - Few studies looked at whether programmes were harmful, e.g., body image concerns, unhealthy dieting, etc. (Waters et al., 2011)
  - Couldn't explain the heterogeneity of results.
- 2009-2011 Canadian Health Measures Survey
  - ➤ Different methodologies for classifying BMI (WHO, International Obesity Taskforce, etc.)
  - > Prevalence of overweight & obesity has NOT increased in Canada over the past decade
  - Still a public health concern negative health outcomes that persist into adulthood

#### Tensions:

- Contradictory evidence for obesity-related health effects (Raphael et al., in print)
- Physiological approach diverts attention away from social determinants of health

Stigmatization of "fat"

Why the lack of success in public health programmes?

#### YOUTH VIEW OF HEALTH AND WELLNESS

- "Perceptions of physical health do not seem to be differentiated from emotional well-being, but rather seem to be shaped by youth's overall sense of functioning as measured by quality of their family relationships, school achievement and self-esteem" (Vingilis, Wade & Adlaf, 1998, p. 95).
- Youth "wellness" is complex, and "is increasingly viewed as a complete state of being, consisting not merely of the absence of illness or disorder but also the presence of positive factors such as life satisfaction, self-acceptance, and social contribution" (Suldo & Shaffer, 2008, p. 53).
- Approaches to youth health need to be holistic, situating them within their social ecologies (Piko & Bak, 2006).



# CHICKEN & EGG – ARE WE STARTING WITH THE RIGHT ASSUMPTION?

#### DOES OBESITY LEAD TO MENTAL HEALTH ISSUES? ("chicken and egg")

- Nascent research emerging on co-morbidity between depressive states and obesity (Berk et al., 2013; Hayward et al., 2014; Jacka et al., 2010; Fulkerson et al., 2004; Wynne et al., 2014)
- 3/4 of lifetime psychiatric disorders emerge in adolescence (Jacka et al., 2010)
- Accounting for 23.8% adjusted life-years (DALYs) in children 15 to 19:
  - Includes unipolar depressive disorders, schizophrenia, bipolar disorder and panic disorder (Gore et al., 2011)
  - Unipolar depressive disorders in children 15 to 19 is the **leading cause of global disability** at 9.9% adjusted life-years (DALYs): 11.7% for girls, 8.0% for boys (Gore et al., 2011)



#### STUDY OBJECTIVE & METHODS

- This ecologic study sought to identify the meaningful connections between youths' psychosocial health and "disordered eating"
  - a continuum with obesity at one end of the spectrum and anorexia at the other.
- An intersectional approach was deployed to analyse these complex drivers.
- A scoping review on co-morbidity between mental health and DE identified links between biologic, psychological and social factors.
- Next, a review of public health and educational programming designed to combat obesity revealed whether they addressed psychological and social factors as well as healthy eating and exercise.

## BODY MASS AND IMAGE LINKED TO HEALTH-RELATED QUALITY OF LIFE: A VICIOUS CIRCLE

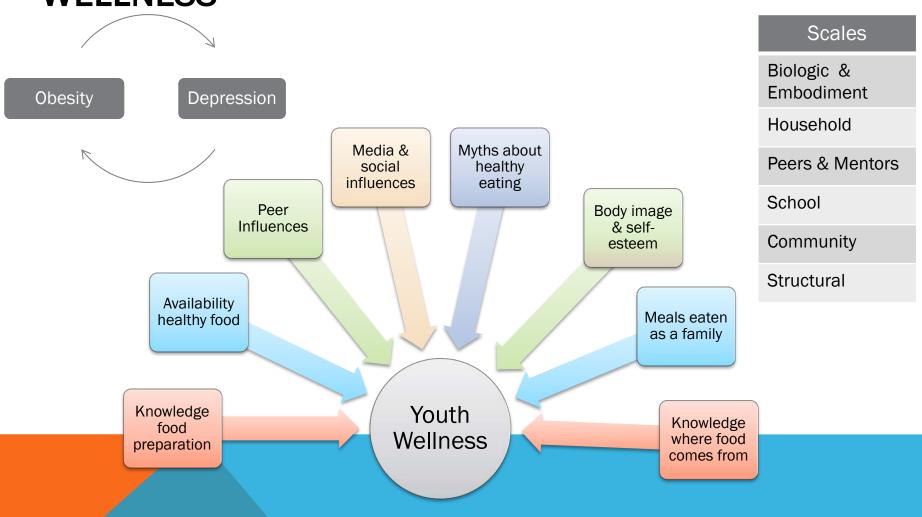
- Obesity linked to body image concerns, weight-related teasing, low self-esteem, dieting, eating disordered behaviours, binge eating, depression and interpersonal difficulties (Fulkerson et al., 2004; Wynne et al., 2014)
- Depressive symptoms in males and females significantly associated with poor weight and body satisfaction scores (Fulkerson et al., 2004)
- Dieting significantly associated with depressive symptoms in females (Fulkerson et al., 2004)
- Caring about eating healthy food is negatively associated with depressive symptoms in males and females (Fulkerson et al., 2004)
- Higher depressed mood associated with less frequent consumption of regular meals, contributing to low energy and worsening mood (Fulkerson et al., 2004)
- Physical activity significantly negatively associated with depressive symptoms in males, but not for females (Fulkerson et al., 2004)
- High fat diet in males associated with moderate-depressive symptoms (Fulkerson et al., 2004)
- Inverse association between "whole" diet, i.e., the Mediterranean Diet, and behavioural problems (Jacka et al., 2010)
- A positive association between the high fat and sucrose diet, i.e. the "Western Diet" and increased poor internalizing and externalizing behaviour (Jacka et al., 2010)
- Adolescents with higher levels of depressed mood may not take care of themselves programs are needed to promote eating regular health meals and reducing barriers to healthy eating (Fulkerson et al., 2004)

#### **ECOLOGIC APPROACH TO HEALTH**

The Institute of Medicine defines the ecological model as "a model of health that emphasizes the linkages and relationships among multiple factors (or determinants) affecting health." (Ruderman, 2013)

- Individual factors (e.g., genetics, behaviours)
- Interpersonal factors (peer influence, family characteristics, social supports)
- Institutional and community environments (schools, service systems, transportation)
- Broader social, economic, political influences

# CONNECTIONS BETWEEN FOOD AND YOUTH WELLNESS



Resilience: identity, self-efficacy, empowerment, belonging, cohesion

## INTERVENTIONS TO DATE

- Unhealthy nutrition and physical inactivity are behaviours that can be resistant to change if targeted in isolation (Hayward et al., 2014)
- "Increasing evidence shows that diet and exercise alone have no long term impact on Body Mass Index (BMI) or reducing waist circumference in children and youth. Interventions focused on fostering resilience may therefore be more effective for addressing chronic diseases than standard healthy eating and physical activity-based interventions... We need to start promoting resilience, which is thriving in the face of adversity, before we start promoting healthy eating." (UM Today, 2015)
- "Across all participant groups [in the Young People's Study], nutrition was considered from a punitive, obesity prevention perspective, rather than a health promoting, nourishing perspective." (Vidgen & Gallegos, 2014)

#### FOOD FOR THOUGHT: THE SOCIAL ACT OF EATING

- "It may be that adolescents with depressive symptoms either avoid the social interactions associated with regular meals or they are in environments where such meals are not available and may contribute to feelings of loneliness and isolation." (Fulkerson et al., 2004, p. 872)
- Having a meal as a family at least 3 x week reduced the odds of mental health issues, even when adjusting for parental social class (Rothon, Goodwin & Stansfeld, 2011)
- "For individuals and families experiencing disadvantage, the ability to prepare and share food was described by service providers in the Expert Study as being associated with a feeling of being in control of their lives and their capacity to care for others." (Vidgen & Gallegos, 2014, p. 57)
- Need to transform meal preparation "from an intimidating chore into a manageable and rewarding pursuit." (Lichtenstein & Ludwig, 2010, p. 1857)
- Currently, food literacy approaches are highly individualistic and apolitical. But there
  is tremendous opportunity for social activism, to change the way youth eat, to
  empower them to change policy and as consumers, what the food industry provides.
  (Sumner, 2013)

### FOOD FOR THOUGHT: FOOD EDUCATION

- "The lack of significant inroads into preventing either obesity or [Common Mental Disorders] in adolescence supports the need for an alternate approach more able to deal with these complex drivers." (Hayward et al., 2014, p. 3)
- Require long-term interventions and funding, e.g., school-based programs, for effect longevity
- Comprehensively target multiple risk factors
- Psychosocial support
- Environmental change
- Community engagement
- Peer mentoring and support (Eskicioglu et al., 2014)
- "A renovated home economics curriculum could equip young adults with the skills essential to lead long healthy lives and reverse the trends of obesity and diet-related diseases. This instruction will also help youth re-establish a healthy relationship with food, protecting them from the constant onslaught of weight-loss diets and body-buildinfads." (Lichtenstein & Ludwig, 2010, p. 1858)

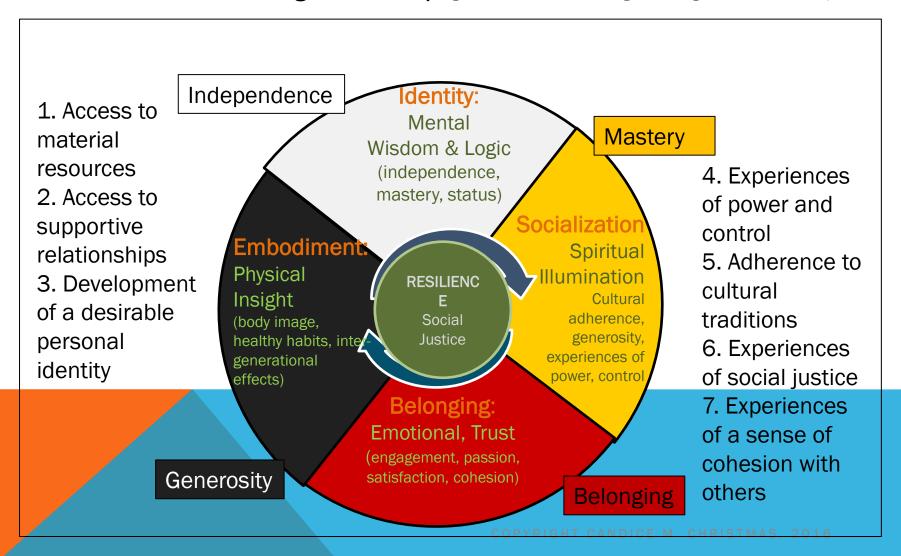
Support of integrated programmes within schools so vulnerable children are not unhelpfully seprarted from their peers (Cheney et al., 2014)

#### YOUTH MENTAL HEALTH

- Strong connections for social and emotional health (Brooks & Begley, 2013; Vidgen & Gallegos, 2014)
- Youth value family/household meals (Brooks & Begley, 2013; Vidgen & Gallegos, 2014; ; Woodruff & Kirkby, 2013)
- Agents of change: can act as positive role models for peers and other children, including their own children one day, and ensure healthy foods are readily available as they become active consumers (Lichtenstein & Ludwig, 2010; Sumner, 2013)
- Resilience in youth must be understood "as an artefact of both individuals' capacities to navigate their way to health resources and their communities' capacity to provide those resources in culturally meaningful ways" (Vidgen & Gallegos, 2014; Ungar et al., 2008, p. 3)
- Young People Study being "good with food" included the themes of empowerment and self-determination (Vidgen & Gallegos, 2014) and self efficacy (Woodruff & Kirkby, 2013)
- "Programs that simultaneously promote culturally embedded and meaningful expressions of power and control, identity, relationships, and cohesion are likely to help young people navigate to health resources effectively." (Ungar et al., 2008, p. 11)

## VISUALIZING PATHWAYS TO RESILIENCE IN THE MEDICINE WHEEL - "THE CIRCLE OF COURAGE" (BRENDTRO, BROKENLEG & VAN BOCKERN, 1999)

7 mental health-enhancing "tensions" (Ungar, Brown, Liebenberg, Cheung & Levine, 2008)



#### CONCLUSION

- There exist inverse associations between diet quality and depression across cultures that exist over and above the influence of socioeconomic, family, and other potential confounding factors. The dangers of drawing attention to weight rather than wellness are real, especially the narrow health measure of Body Mass Index.
- In order to address DE in youth, interventions that foster resilience and the social aspects of eating may be more effective than standard healthy eating and physical activity-based interventions. Gendered effects warrant exploration of gender-specific programming.
- Few studies investigate youths' views and perceptions regarding risk and protection related to DE and what motivates them to take better care of themselves. Ecologic methodologies can help to better understand the complexities of the "whole" person, especially in our increasingly diverse civil society, to build the knowledge needed to change social norms that shape behaviour, promoting health equity.