Shifting Paradigms: Adopting a ‘Health not Weight’ Approach

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Presentation Overview

Contemplating the research:

- Exploring the “problem of obesity”: Interpreting the research
- Diverging fields of obesity research
- Common findings: What we know
- Benefits of adopting a ‘Health not Weight’ approach
- ‘Health not Weight’ in the NL context

Exploring the “Problem” of Obesity

Diverging fields of obesity research. Considering:

1. The relationship between obesity and health
2. Focus on stigma
3. Implementing an approach that “Does no Harm”

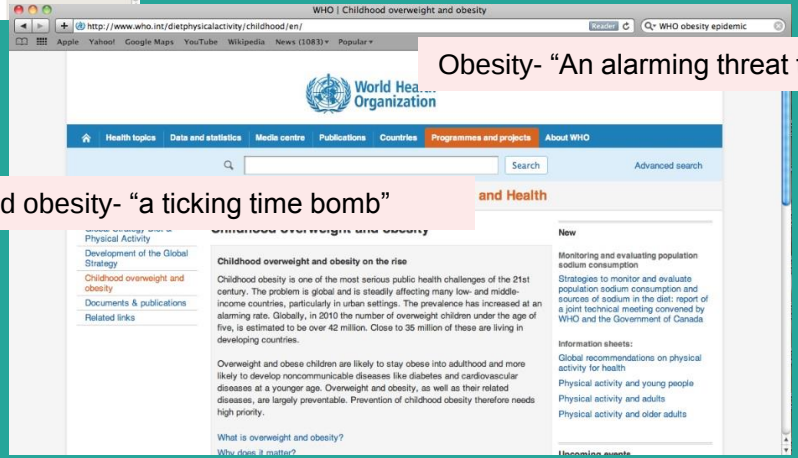
Diverging Fields of Obesity Research

Obesity as Disease

- WHO (2000)- defined obesity as a chronic disease
    - Epidemic, Pandemic
- Utilize energy in/energy out model
- Resulting from individual behaviour
- ‘Co-morbidities’ associated with increased health and financial burdens
- Issues of mental health, lower academic achievement directly attributed to obesity
- Proposed solution: weight loss/treatment and prevention

(Auclair et al, 2016; Castro et al, 2014; Pulgaron, 2013; World health Organization, 2015)

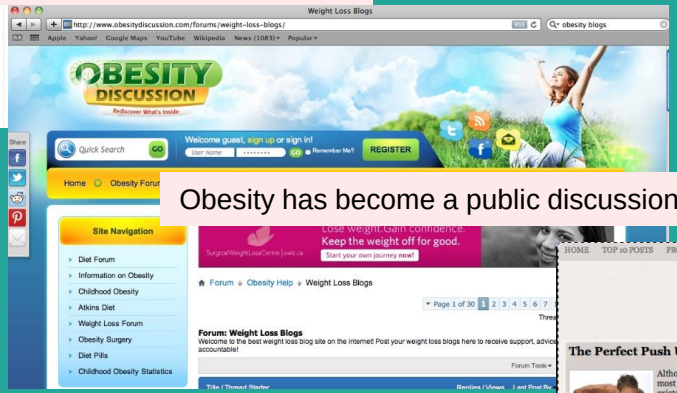
Obesity- “dramatic rise over last 25 years”



Obesity- “An alarming threat to global health”

Childhood obesity- “a ticking time bomb”

Obesity constructed as an individual problem



Obesity has become a public discussion

Science and public debate intertwine

Obesity as Disease

- DIABETES CANADA

"*A healthy lifestyle and weight can help prevent and/or manage diabetes; improve blood glucose (sugar), blood pressure, and blood lipids; reduce the risk of complications, such as heart attack and stroke; and improve general well-being and energy levels. Although many things can make managing weight a challenge, including stress, some medical conditions and certain medications, the key to reaching and staying at a healthy weight is to make positive lifestyle changes, including healthy eating (according to Canada's Food Guide), and adding exercise to your daily".*

Health Canada

...activity

...Stroke

... is an important ...and brain health, ... is a challenging ...a positive attitude ...h it in the end".

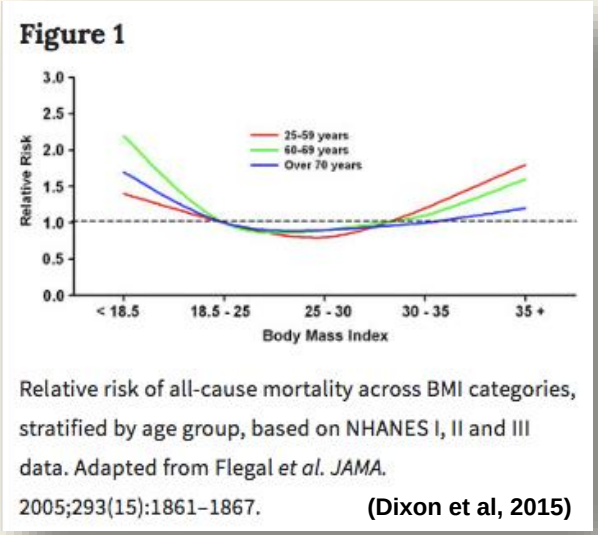
It is now beyond doubt that obesity is a pandemic disease that poses a great challenge to global health because it leads to many comorbidities affecting life expectancy.

(Bifulco, M., & Pisanti, S., 2013, p.4664)

However….Consider Life Expectancy and the ‘Obesity Paradox’

- Increased risk of mortality- Underweight (BMI <18.5; (RR) = 1.73, *P* < 0.001) and obesity class II+ (BMI >35; RR = 1.36, *P* <0.05)
- Decreased risk of mortality- Overweight (BMI 25 to <30; (RR) = 0.83, *P* < 0.05)
- No increased risk of mortality for obesity class I (BMI 30–35; RR = 0.95, *P* >0.05).

(0rpana et al, 2010, Flegal et al, 2013)



- Optimal BMI for lowest mortality not a constant; varies with age, ethnicity and the presence of established disease
- Over 70 years of age appear to have an optimal BMI for mortality in the overweight and class I obese range
- Obesity Paradox

(Dixon et al, 2015)

What we also know:

- Prevention and treatment have been consistently ineffective
- Inconsistency in research:
  - Measures/ criteria vary (behavioral, pharmacological, e-health)
  - Treatments and approaches to prevention are not consistent
  - Weight loss measures tend to be short-term
  - Few long term measures, little success noted
  - Issues with attrition have been noted
  - Measures of harm are inconsistent- evidence of harm

(Hesketh & Campbell, 2010; Mühlig, et al, 2014; Nguyen, Kornman, & Baur, 2011; Skelton & Beech, 2011; Tsai, & Wadden, 2009; Yanovski, & Yanovski, 2014)

Obesity as Disease: SDH approach

- Obesity causation influenced by the social determinants of health
  - Environment (obesogenic environment)
  - Genetics
  - Education
  - Social support
  - Socioeconomic status and…..
- Obesity results in stigma
- Proposed Solution: reduce obesity through policy, behavioral methods, address stigma

(Bryant, Hess, & Bowen, 2015; pont et al, 2017; Sacks, Swinburn, & Lawrence, 2009)

Policy?

Policies tend to focus on:

- Addressing energy inbalance
- Lifestyle
- Individual behaviour

RESEARCH AND PRACTICE

Systems Science and Obesity Policy: A Novel Framework for Analyzing and Rethinking Population-Level Planning

Lee M. Johnston, MA, MPH, Carrie L. Matteson, PhD, and Diane T. Finegood, PhD

Objectives. We demonstrate the use of a systems-based framework to assess solutions to complex health problems such as obesity.

Methods. We coded 12 documents published between 2004 and 2013 aimed at influencing obesity planning for complex systems design (9 reports from US and Canadian governmental or health authorities, 1 Cochrane review, and 2 Institute of Medicine reports). We sorted data using the intervention-level framework (ILF), a novel solutions-oriented approach to complex problems. An in-depth comparison of 3 documents provides further insight into complexity and systems design in obesity policy.

Results. The majority of strategies focused mainly on changing the determinants of energy imbalance (food intake and physical activity). ILF analysis brings to the surface actions aimed at higher levels of system function and points to a need for more innovative policy design.

Conclusions. Although many policymakers acknowledge obesity as a complex problem, many strategies stem from the paradigm of individual choice and are limited in scope. The ILF provides a template to encourage natural systems thinking and more strategic policy design grounded in complexity science. (*Am J Public Health.* 2014;104: 1270–1278. doi:10.2105/AJPH.2014.301884)

Obesity is widely recognized as a complex problem emerging from a system composed of many diverse, interacting variables.[1–3] Several factors make the obesity system difficult to shift, including but not limited to the presence of feedback loops and delays, an abundance of nonlinear, overlapping interdependencies, and the heterogeneity of individuals and organizations.[3,4] Policymakers and planners have responded to the obesity epidemic by producing a large number of frameworks, strategies, and action plans. Although past efforts have been criticized for emphasizing individual lifestyle change as the solution,[5,6] recent efforts have embraced socioecological models of intervention, emphasizing the obesogenic environment and its impact on individual weight gain.[3,7] The many options available to policymakers have the potential to result in what Lang and Rayner[8(p1044)] termed a "policy cacophony" of noise drowning out effort.

Efforts to shift the systems that support the emergence of chronic disease and obesity are starting to benefit from a focused effort to apply systems science,[9] as has been done with other pressing public health issues such as tobacco.[9] Obesity, tied up with difficult ideological and political questions regarding responsibility and stigma,[6,10–13] is a particularly wicked social problem for which reductionist science may be less helpful. Systems science can complement socioecological models of health promotion by examining not just the causes of obesity but also interactions across its contributing subsystems.[14] The UK government's Foresight program contributed to the perception of obesity as a complex problem with the development of an obesity system map highlighting the diversity of factors involved in subsystems such as food production and consumption, individual physical activity and the physical activity environment, social and individual psychology, and physiology.[3] The heuristic value of the Foresight map in demonstrating the complexity of obesity and the interdependencies between the system's variables is an example of a systems science tool that may help to advance the conversation about what actions need to be taken.

Although the Foresight map helps to focus dialogue on the complex nature of obesity, it does not immediately lead to discussion of solutions appropriate for this complex problem. We recently developed a systems science framework that may be a useful and accessible means of operationalizing systems thinking toward solutions. The intervention-level framework (ILF) was adapted from Donella Meadows'[15] list of 12 places to intervene in complex systems. Meadows, a pioneering environmental scientist, spent decades analyzing the complexities of economic growth and environmental sustainability, and she grew frustrated with the unintended consequences that resulted when simple solutions were applied to complex problems. We collapsed the original 12 points of intervention into 5 more mutually exclusive levels that retain all of the original ideas but allow for the sorting of content in a reproducible fashion. These levels account for system operation at the levels of paradigm, goals, system structure, feedback and delays, and structural elements. To date, the ILF has been used in framework analyses of content concerning actions to improve food systems, wherein it was useful in elucidating points of conflict and convergence to make them more healthy, green, fair, and affordable.[16]

In this article, we explore the application of the ILF to the obesity system by analyzing recent strategies and reports aimed at influencing policy and planning. Our interest was in developing a deeper, more integrated understanding of how best to act in addressing the complex problem of obesity. Using a systems lens, we sought to advance our understanding of the various system levels and the specific interventions required to support large-scale change. We also sought to further the application of systems-based frameworks in the analysis of complex health problems in a manner accessible to public health practitioners and policymakers lacking expertise in systems science methodologies.

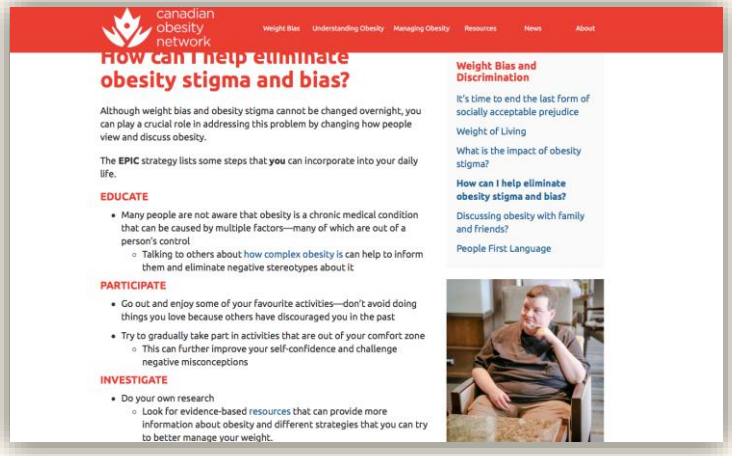
METHODS

We located obesity strategies and policy documents developed by and for North

Obesity as Disease: SDH approach

- Canadian Obesity Network

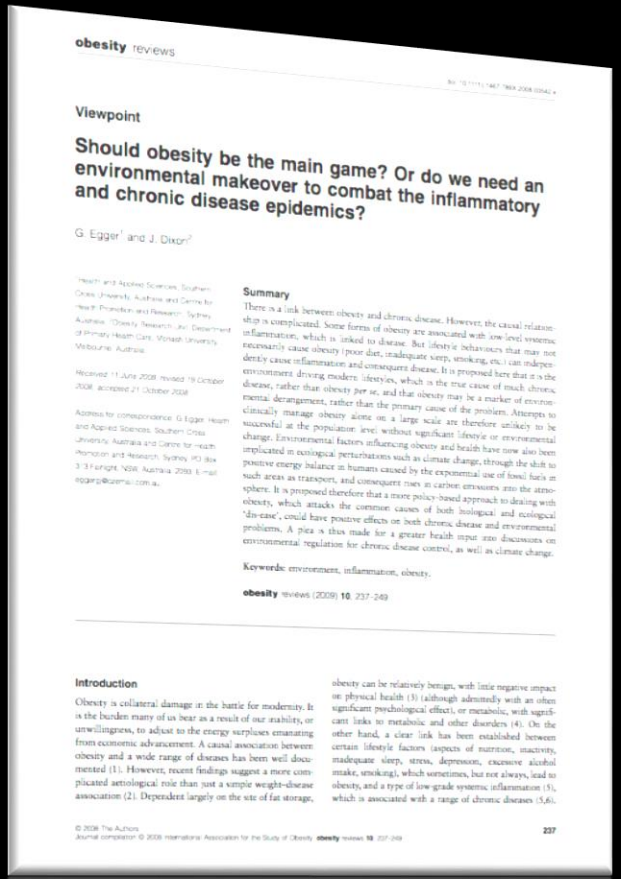
"Obesity is a chronic and often progressive condition"



Re-thinking Prior Conclusions

- Questioning the causal relationship between obesity and chronic disease
- The environment as true cause of much chronic disease, rather than obesity *per se*
- Recommend a policy-based approach to address common causes of biological and ecological ‘disease’

(Egger & Dixon, 2009)



obesity reviews

Viewpoint

Should obesity be the main game? Or do we need an environmental makeover to combat the inflammatory and chronic disease epidemics?

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Summary

There is a link between obesity and chronic disease. However, the causal relationship is complicated. Some forms of obesity are associated with low-level systemic inflammation, which is linked to disease. But lifestyle behaviours that may not necessarily cause obesity (poor diet, inadequate sleep, smoking, etc.) can independently cause inflammation and consequent disease. It is proposed here that it is the environment driving modern lifestyles, which is the true cause of much chronic disease, rather than obesity *per se*, and that obesity may be a marker of environmental derangement, rather than the primary cause of the problem. Attempts to clinically manage obesity alone on a large scale are therefore unlikely to be successful at the population level without significant lifestyle or environmental change. Environmental factors influencing obesity and health have now also been implicated in ecological perturbations such as climate change, through the shift to positive energy balance in humans caused by the exponential use of fossil fuels in such areas as transport, and consequent rises in carbon emissions into the atmosphere. It is proposed therefore that a more policy-based approach to dealing with obesity, which attacks the common causes of both biological and ecological ‘dis-ease’, could have positive effects on both chronic disease and environmental problems. A plea is thus made for a greater health input into discussions on environmental regulation for chronic disease control, as well as climate change.

Keywords: environment, inflammation, obesity.

obesity reviews (2009) **10**, 237–249

Introduction

Obesity is collateral damage in the battle for modernity. It is the burden many of us bear as a result of our inability, or unwillingness, to adjust to the energy surpluses emanating from economic advancement. A causal association between obesity and a wide range of diseases has been well documented (1). However, recent findings suggest a more complicated aetiological role than just a simple weight–disease association (2). Dependent largely on the site of fat storage, obesity can be relatively benign, with little negative impact on physical health (3) (although admittedly with an often significant psychological effect), or metabolic, with significant links to metabolic and other disorders (4). On the other hand, a clear link has been established between certain lifestyle factors (aspects of nutrition, inactivity, inadequate sleep, stress, depression, excessive alcohol intake, smoking), which sometimes, but not always, lead to obesity, and a type of low-grade systemic inflammation (5), which is associated with a range of chronic diseases (5,6).

Phrase of the week

‘as clear as mud’

Meaning:

Very difficult to understand.

Example:

“Do you understand all that?”

“No, there’s too much information. It’s as clear as mud to me!”

Cambridge English

Critical Perspectives

- Including: Critical Obesity Scholarship, Fat Studies, Critical Public Health
- Obesity as a Social Construction
- The ‘science of obesity’ is not without moral and ideological bias
- Conflation of obesity/disease and thinness/health contributes stigma
- Presence of obesity discourse in research, health and education, and policy documents reinforcing stigma and weight bias

(Beausoleil, 2009; Gard & Wright, 2005; Monaghan, L. F., Colls, & Evans, 2013;Rail, G., & Jette, S., 2015; Ward, 2016)

Weight Stigma and Bias

Weight Stigma:
When body size, particularly weight that is higher than “normal”, is devalued in a social context.

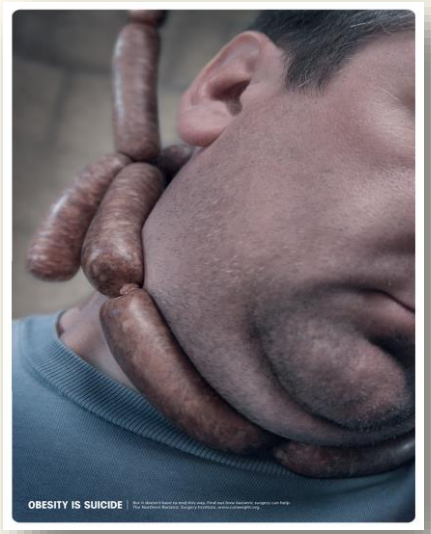
(Puhl & Brownell, 2006)

Weight Bias:
Negative attitudes about weight that often result in false and negative stereotypes that lead to the unequal, or unfair treatment of people because of weight.

(Puhl & Heuer, 2009)

Factors Contributing to Weight Bias

- Health Promotion Campaigns



Discourses Contributing to Weight Bias

- **Obesity Discourses:**
  - focus on weight over health
  - construct obesity as disease
  - reinforce judgement based upon weight
  - promote the valuing of thinness
  - support societal messages that obesity is the mark of a defective person
  - portray obesity in negative ways through media, health promotion policy/campaigns

(Lebesco, 2011; Rail, Holmes & Murray, 2010; Ward, Beausoleil & Heath, 2017; Wright, 2009; Wright & Halse, 2014)

What are people telling us?

- Adopting Common Constructions of health
  - People take up the notion of health=thinness
  - Adopt a fat identity
  - Increase in body dissatisfaction leads to unhealthy dieting practices
- Experiencing stigma
- We understand the health ‘rules’
- Resistance: “I am healthy”

Why Shift to a ‘Health not Weight’ Approach?

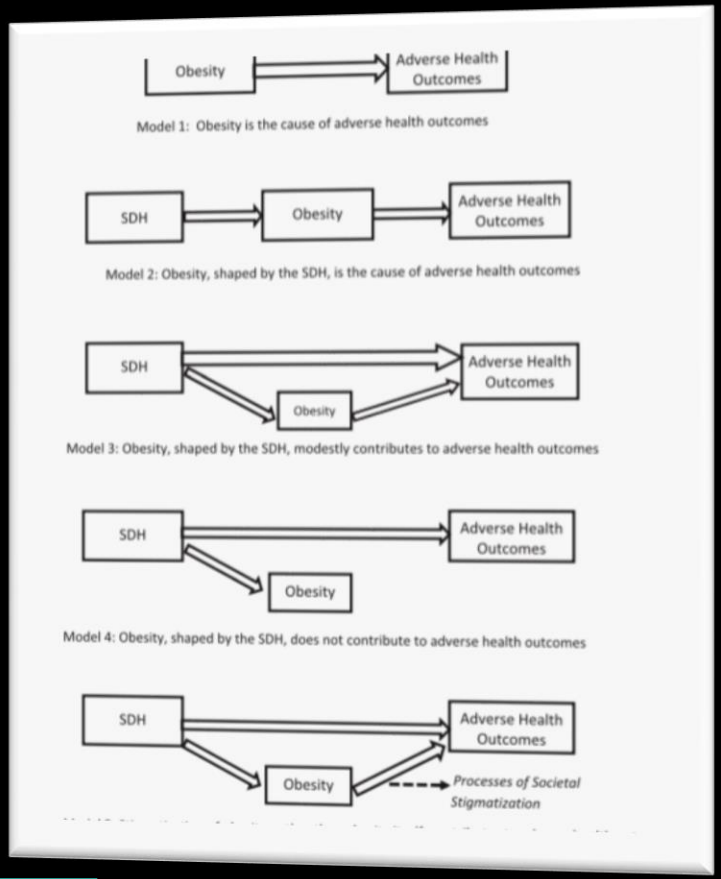
- Obesity treatment/prevention is ineffective
- Obesity discourses are causing harm, leading to fear of fat
- Fitness may be more predictive of fatness
- Focus on weight → increased body dissatisfaction + lower self esteem
- Body Dissatisfaction → lower physical activity, unhealthy behaviors, Weight gain

(Friend et al, 2012; Neumark-Sztainer, et al, 2012; Nelsen, Jensen & Steele, 2011; Bacon & Aphramor, 2011)

"[M]ounting evidence has linked many current obesity reduction approaches with harm to mental and physical health and well-being. Facile "energy in = energy out" equations, that ignore mental health and wellbeing and the broad socio-environmental determinants of health that powerfully influence individual behaviours, can result in unintended negative consequences, particularly weight-bias." (BC Provincial Health Services Authority, 2013, p. 9).

Adopting a ‘health not weight’ approach

Models of Obesity and Health Outcomes by: Medvedyuk, Ahmednur, & Raphael (2017)



- (Medvedyuk, Ahmednur, & Raphael, 2017)

What Does this Shift Mean for Practice?

- Recognizing that all people are influenced by SDH
- Chronic Disease affects the entire population
- Weight no longer viewed as the primary determinant- Complex
- A shift to a supportive ‘positive’ health promotion/safe spaces for all
- Working with educators and health professionals to address weight bias
- Consider new criteria/indicators of health

Locally: ‘Health not Weight’ Collaborative

●Members

Bernadette Doyle-Follett

Tracy English

Anne Wareham

Pam Ward

Erin Cameron

Erin McGowan

Holly Foley

Lori Robbins

Sarah Nutter

Carolyn Taylor

• Organizations

Policy

•Eastern Health

Practice

•Janeway Lifestyle Program
•Eating Disorder Foundation of NL
•Body Diversity NL
•Health Innovation through Promotion & Practice Collaborative

Research

•MUN-Human Kinetics and Recreation
•MUN- Medicine: Community Health &Humanities
•Centre for Nursing Studies

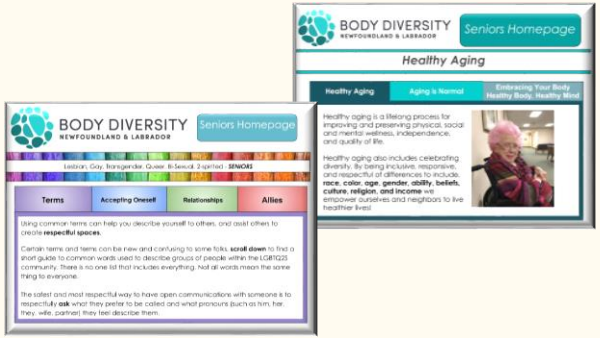
Current Initiatives

- WHO growth charts –focus on growth over time
- Thinking about your Weight? What about your Health?
- Creating awareness in Eastern Health region:
    1. Promoting Health Not Weight presentations
    2. Promoting Health, Not Weight Public Health Nurse working group
    3. Community requests

Current Initiatives

Body Diversity NL (formerly Body Image Network)

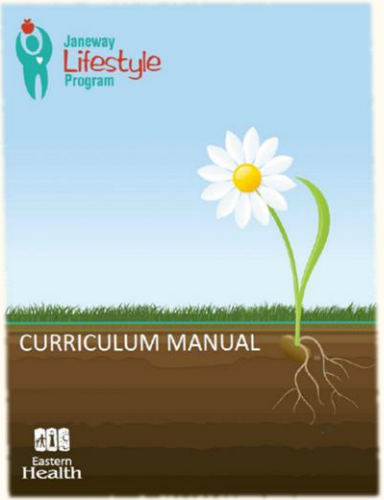
- Toolkit
- Presentations to provincial government on health positive messaging and removing “obesity” from government documents
- Review and revise health curriculum
- Safe and Caring Schools
- New website under construction
- Student involvement



Current Initiatives

Janeway Lifestyle Program

- Good Health for EveryBODY program (GHEB)
- Health Behaviour Matters, including office checklist and how to talk about weight www.Easternhealth.ca/jlp
- Clinical program (local and provincial)



Current Initiatives

Eating Disorder Foundation of NL

- BodySense
- The Body Project

Research

•Relevant Projects:

- Childhood Obesity Treatment Program
- Female Reproductive health
- The Body Project
- Nursing Practice
- Bariatric Surgery
- Aging
- 5A’s – Medical Education

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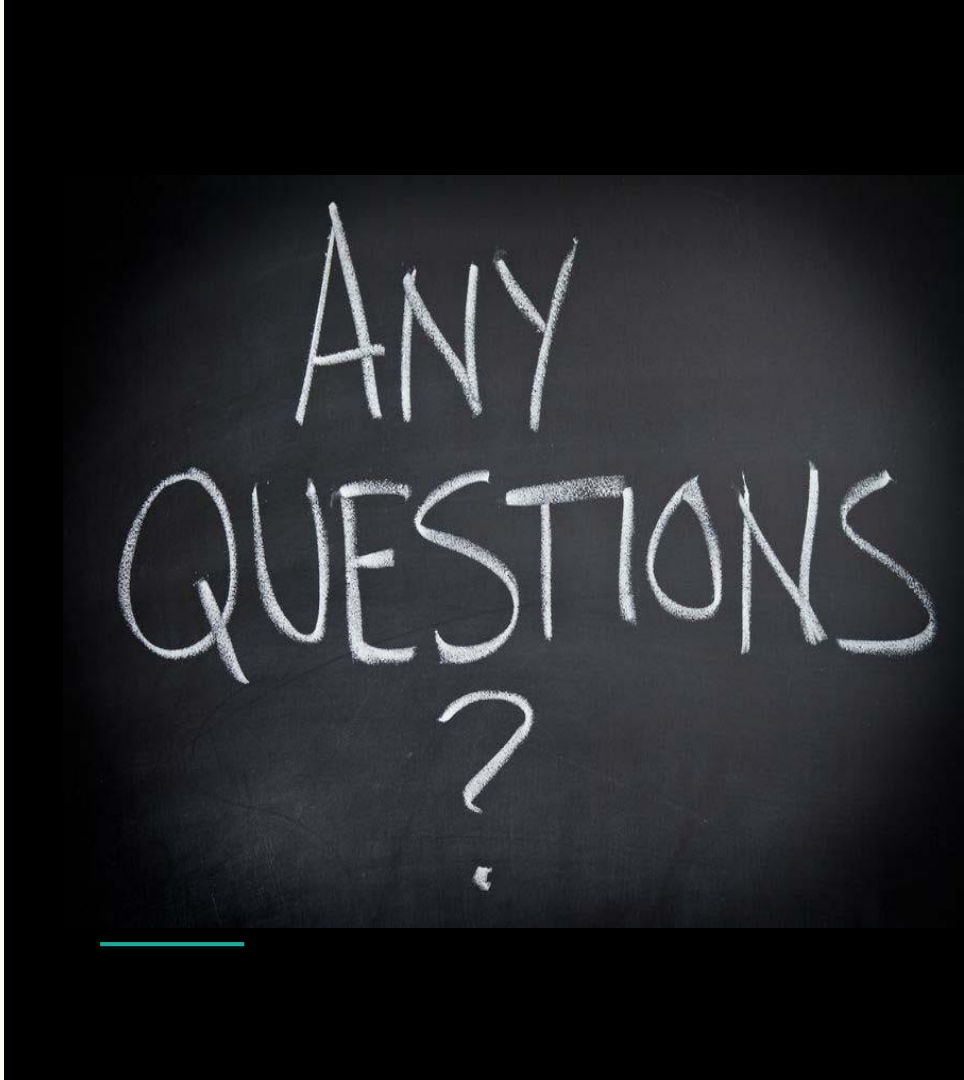

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