



## Weight-Loss Diets and Programs: Healthy or Harmful?

Weight loss behaviours, such as dieting, are popular in the general population and widely encouraged in public health policy and health care practice as a solution for the “problem” of obesity and as a way to mitigate chronic health conditions, such as high blood pressure, heart disease, and type 2 diabetes. However, evidence is growing that indicates weight loss approaches are not only ineffective, but they also cause harm to mental and physical health.

**Northern Health takes a “do no harm” position on weight and healthy eating.**

Circulation of misinformation regarding weight-loss and dieting within Northern Health is cause for concern. This fact sheet offers an alternate approach that focuses on health promotion instead of weight management. It also promotes consistent messaging across Northern Health and provides additional resources on the topic.

### Dieting ≠ Healthy Eating

One’s **diet** is the food and drink regularly consumed; however, within mainstream society, **dieting** usually describes weight loss regimens. For example:

- VLCD - very low calorie diets
- Macronutrient modifications - high protein/low carb; low fat; low protein; etc.
- Diet aids - any substance or tool intended to assist with weight loss - e.g. diet pills
- Overconsumption of one ‘miracle’ food - e.g. The Grapefruit Diet
- ‘Magic’ combinations or rules - e.g. no fluids with solids
- HCG - human pregnancy hormone
- Elimination of one or more food groups

**Healthy eating** supports social, physical and mental well-being, and is enjoyable and balanced.

**Eating competence** can build a comprehensive foundation for healthy eating.<sup>1</sup> The four components of eating competence are:

- Positive **attitudes** about eating and food;
- Flexible **food acceptance** attitudes and skills;
- Recognition, trust and response to **internal regulators** of hunger, fullness, and feelings of satiety; and
- **Food management skills** to plan, prepare, and have regular meals and snacks.

**Did you know?** Even though most nutrition efforts place responsibility on individuals to make better choices, factors outside of individual control have a big impact on what food options are available and the choices we make!

- **Physical factors:** Location and accessibility of food (e.g. grocery stores, farmers’ markets, etc.) and the availability of safe, affordable, culturally acceptable, and nutritionally adequate food. Many remote communities in Northern Health struggle with these issues.

- **Socio-cultural factors:** Increased demands on our time and resources can erode a healthy work-life balance and promote eating foods that are energy dense but low in nutrition. A “weight-loss culture” within workplaces, social circles, families, and society at large increases pressure to diet.
- **Political factors:** Food system policies can influence the way food is grown, processed, packaged and marketed so that much of what is in food stores does not facilitate healthy eating choices.

## Myths and Facts

Myth	Fact <sup>2</sup>
Weight is a measure of health: overweight means unhealthy and “normal” weight means healthy.	<ul style="list-style-type: none"> <li>• Healthy bodies exist in a variety of shapes and sizes.</li> <li>• Weight is not an inclusive and complete measure of health.</li> <li>• 20-30% of people who are obese (as defined by Body Mass Index, BMI) may be metabolically healthy with no increased risk of diabetes and heart disease.</li> <li>• Being thin does not mean being metabolically healthy. A 2008 study of American adults that used BMI to categorize weights, found a substantial proportion of the “normal weight” population were metabolically unhealthy and a substantial proportion of the “overweight and obese” population were metabolically healthy.<sup>3</sup></li> <li>• There are health risks associated with being overweight and underweight.</li> <li>• Evidence suggests that the association between weight and health risk may better be attributed to weight cycling than adiposity itself. Weight cycling is the repeated loss and regain of body weight.</li> <li>• Overweight and mild obesity can have protective effects for health especially as we age.</li> </ul>
Dieting is the best way to lose weight and keep it off.	<ul style="list-style-type: none"> <li>• Long-term follow-up studies show that most people regain the weight lost as a result of dieting efforts, regardless of maintenance of their diet and exercise program.</li> <li>• Between one- and two-thirds of people on calorie restricted diets regain more weight than they lost.</li> <li>• Those who sustain weight loss over time are the rare exception and weight loss is usually no more than 10%.</li> <li>• Many studies show that dieting is a strong predictor of future weight gain.</li> </ul>
Weight loss is the only way for people who are overweight or obese to improve their health.	<ul style="list-style-type: none"> <li>• Evidence suggests that behavior change and not weight loss plays a greater role in health improvements. For example, most studies on type 2 diabetes show improvement in glycemic control as a result of lifestyle changes before weight or fat is lost.</li> <li>• Studies show that lifestyle changes can reduce blood pressure and blood lipids, and improve insulin sensitivity independent of weight loss.</li> <li>• Eating competence has been positively associated with lower biomarkers for cardiovascular disease, regardless of body weight.<sup>4</sup></li> <li>• A focus on weight loss can actually do harm to mental and physical health (see the table below on harms from dieting).</li> <li>• Health at Every Size (HAES) is a growing trans-disciplinary movement that shifts focus from weight to health. Evidence indicates that this approach is associated with statistically and clinically relevant improvements in physiological measures, health behaviours and psychosocial outcomes.</li> </ul>
BMI (Body Mass Index) is the best measure of a healthy weight.	<ul style="list-style-type: none"> <li>• BMI is intended as a population-based screening tool. Weight categories are arbitrary and have changed over time.</li> <li>• BMI is an estimate, not a direct measure, of body fat based on weight and height. A person’s weight is made of muscle, fat, fluids, bone, etc.</li> <li>• BMI is not a conclusive indicator of health at the individual level and does not reflect the presence of underlying metabolic-related health concerns.</li> <li>• The Edmonton Obesity Staging System<sup>5</sup> is an alternative decision support tool that helps determine treatment at all stages for adults. This framework that bases medical decision-making on more than BMI is being utilized nationally and internationally.</li> </ul>
Weight loss is as simple as eating less and moving more.	<ul style="list-style-type: none"> <li>• Being overweight or obese is not simply an imbalance of energy in/energy out. There are multiple interconnected factors (biological, environmental, social and cultural) that influence body weights.</li> </ul>

## Harms of Dieting

While evidence shows that there may be short-term metabolic benefits from weight loss, long-term studies indicate there are negative physical, mental and social impacts from weight cycling and the culture of weight loss.<sup>6</sup>

Physical	<ul style="list-style-type: none"> <li>• increased cardiovascular risks, insulin resistance and dyslipidemia</li> <li>• increased cardiovascular mortality</li> <li>• high blood pressure</li> <li>• changed metabolic rate</li> <li>• alterations in body fat distribution</li> <li>• increased inflammation</li> </ul>	<ul style="list-style-type: none"> <li>• incident hypertension</li> <li>• malnutrition</li> <li>• reduced bone mass and increased risk for osteoporosis</li> <li>• increased cortisol from chronic psychological stress</li> <li>• release of persistent organic pollutants (POPs) stored in fat increases risk of various chronic diseases</li> </ul>
Mental and emotional	<ul style="list-style-type: none"> <li>• lower self-esteem</li> <li>• depression</li> <li>• anxiety</li> </ul>	<ul style="list-style-type: none"> <li>• increased vulnerability for eating disorders</li> <li>• preoccupation with food or body size, shape and/or weight</li> </ul>
Social	<ul style="list-style-type: none"> <li>• lower quality of health care due to stigmatization and discrimination against fat individuals</li> <li>• widespread anxiety about weight and body image</li> </ul>	<ul style="list-style-type: none"> <li>• disrupted connection with family and friends due to self-imposed limits on participation because of negative body image</li> <li>• disrupted connection with family meals and cultural traditions due to food restrictions</li> <li>• prejudice, discrimination and bullying based on weight in a variety of everyday settings</li> </ul>

## How to focus on health instead of weight

The following are some tools and processes to support improved health for individuals, families, and communities.

### Apply a graduated approach to healthy lifestyle changes<sup>7</sup>

- Allows individuals to assess and realize progression and provides encouragement to continue with healthy behavior changes.
- Encourage patience - making healthy changes part of an everyday routine can take time but are the most sustainable! Long-term sustainability is key.
- Make the process clear. Recognize individual starting points and levels of readiness.
- Help individuals set incremental SMART goals as well as ultimate or long-term goals. SMART goals are Specific, Measurable, Attainable, Realistic, and Time-bound.
- Provide community-based resources to assist individuals.

### Support individuals to develop competent eating by:<sup>8</sup>

- Enjoying a wide variety of food. Healthy eating includes being flexible and having an accepting attitude towards food.
- Cultivating an awareness of their body's cues: hunger (physical sensation of desiring food), fullness (physical sensation of satisfying hunger) and satiety (having had enough of the foods you enjoy).
- Eating mindfully. Mindful eating includes taking time and reducing distractions while eating.
- Taking time to eat and enjoy meals. Slowing down helps one connect with their body and listen to its cues for hunger, fullness and satiety.
- Eating regularly throughout the day. This might mean three meals with snacks in-between or five to six mini-meals.
- Using *Canada's Food Guide* to help plan meals and snacks. Try to include choices from at least two food groups for each snack. Try to include choices from three to four food groups at each meal.
- Eating meals with family or friends is linked to better health and eating habits. Food is more than fuel - it has social and cultural importance as well and can be a source of enjoyment.

### Encourage an Active Lifestyle by:<sup>9</sup>

- Increasing activity doing everyday tasks - every move counts!
- Any form of regular physical activity is important and beneficial. More daily physical activity provides greater health benefits for all ages.
- Trying activities that you enjoy like walking, swimming, gardening, yoga, hiking, snowshoeing or x-country skiing - alone or with family and friends. Being active doesn't have to mean going to the gym.

- Enjoying the benefits from being active: more energy, lower stress, stronger bones, better sleep, improved body image and a lower risk for some diseases.

### Encourage the cultivation of a positive body image by:

- Remembering that 50-80% of body shape and size is determined by genes.
- Accepting and respecting yours and others' bodies. Healthy bodies come in all shapes and sizes.
- Focusing on what you like about yourself - include all aspects of who you are.
- Going easy on yourself; be happy with small changes you make to be healthier.
- Developing media literacy and consider limiting exposure to media that promotes unrealistic body-sizes and unhealthy choices.

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## Additional Resources

### Phone or email:

- Dietitian Services at HealthLink BC: Call 8-1-1 to speak to a dietitian or go to [www.healthlinkbc.ca/dietitian](http://www.healthlinkbc.ca/dietitian) to email your questions
- PAL - Physical Activity Line: Call 1-877-725-1149 or email [info@physicalactivityline.com](mailto:info@physicalactivityline.com) for free practical and trusted physical activity and healthy living information

### Books:

- *Secrets of Feeding a Healthy Family: How to Eat, How to Raise Good Eaters, How to Cook* by Ellen Satter
- *Health at Every Size* by Linda Bacon, PhD

### Online:

- [Northern Health Position Statements](#) and [Snapshot Summaries](#)
- [Healthy Families BC | Helping BC Families](#)
- [Eating Well with Canada's Food Guide](#)
- [Eating Well with Canada's Food Guide for First Nations, Inuit and Métis](#)
- Health Canada's [Eat Well and Be Active Educational Toolkit](#)
- [Canadian Physical Activity Guidelines](#)
- [Make Your Day Harder](#) | My Favourite Medicine (video)
- [23 and 1/2 Hours](#) | My Favourite Medicine (video)
- [Media Arts: Canada's Centre for Digital and Media Literacy](#)
- [Association for Size Diversity and Health \(ASDAH\)](#)
- Ellyn Satter: [How to Eat](#)

## References

- <sup>1</sup> Northern Health. (2012). *Northern Health Position on Healthy Eating: An integrated population health approach*. Prince George, BC: Northern Health. Retrieved from [https://www.northernhealth.ca/Portals/0/About/PositionPapers/documents/HealthyEatingPosition\\_V1\\_2012\\_01\\_31WEB.pdf](https://www.northernhealth.ca/Portals/0/About/PositionPapers/documents/HealthyEatingPosition_V1_2012_01_31WEB.pdf); and Satter, E. (2007). Eating Competence: Definition and evidence for the Satter Eating Competence Model. *Journal of Nutritional Education and Behaviour*, 39:S142-S153. Retrieved from <http://www.ellynsatter.com/resources/4837%20Satter.pdf>
- <sup>2</sup> For more information and references, see the 2013 summary report *From Weight to Well-Being: Time for a Shift in Paradigms?* by the Provincial Health Services Authority ([http://www.phsa.ca/NR/rdonlyres/2E9592B9-C3EE-4F47-A723-4DB330553E87/65872/W2WBSummaryReport\\_20130208FINAL1.pdf](http://www.phsa.ca/NR/rdonlyres/2E9592B9-C3EE-4F47-A723-4DB330553E87/65872/W2WBSummaryReport_20130208FINAL1.pdf)); and Northern Health. (2012). *Northern Health Position on Health, Weight and Obesity: An Integrated Population Health Approach*. Prince George, BC: Northern Health. Retrieved from [http://www.northernhealth.ca/Portals/0/About/PositionPapers/documents/HealthWtObesityPosition\\_20120730\\_WEB.pdf](http://www.northernhealth.ca/Portals/0/About/PositionPapers/documents/HealthWtObesityPosition_20120730_WEB.pdf); and Bacon, I. & Aphramor, L. (2011). Weight Science: Evaluating the Evidence for a Paradigm Shift. *Nutrition Journal*, 10(9): 1-13 (<http://www.nutritionj.com/content/10/1/9>)
- <sup>3</sup> Wildman, R.P., Muntner, P., Reynolds, K., McGinn, A.P., Rajpathak, S., Wylie-Rosett, J., & Sowers, M.R. (2008). The obese without cardiometabolic risk factors clustering and the normal weight with cardiometabolic risk factor clustering: prevalence and correlates of 2 phenotypes among the US population (NHANES 1999-2004). *Archives of Internal Medicine*, 168: 1617-1624. Retrieved from <http://archinte.jamanetwork.com/article.aspx?articleid=770362>
- <sup>4</sup> Psota, T.L., Lohse, B., & West, S.G. (2007). Associations between Eating Competence and Cardiovascular Disease Biomarkers. *Journal of Nutrition Education and Behavior*, 39(5): s171-s178.
- <sup>5</sup> For more information see *Northern Health Position on Health, Weight and Obesity: An Integrated Population Health Approach*; and Sharma, A.M. & Kushner, R.F. (2009). A proposed clinical staging system for obesity. *International Journal of Obesity*, 33(3), 289-295. Retrieved from <http://www.nature.com/ijo/journal/v33/n3/abs/ijo20092a.html>
- <sup>6</sup> See Bacon et al., 2011; French, S.A. & Jeffery, R.W. (1994). Consequences of Dieting to Lose Weight: Effects on Physical and Mental Health. *Health Psychology*, 13(3): 195-212.
- <sup>7</sup> Northern Health. (2012). *Northern Health Position on Sedentary Behaviour and Physical Inactivity*. Prince George, BC: Northern Health. Retrieved from [http://www.northernhealth.ca/Portals/0/About/PositionPapers/documents/SedBehaviourPhysicalInactivity\\_V1\\_20120131WEB.pdf](http://www.northernhealth.ca/Portals/0/About/PositionPapers/documents/SedBehaviourPhysicalInactivity_V1_20120131WEB.pdf)
- <sup>8</sup> *Northern Health Position on Healthy Eating*, 2012.
- <sup>9</sup> *Northern Health Position on Sedentary Behaviour and Physical Inactivity*, 2012.

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Also, see the *Northern Health Position on Health, Weight and Obesity* and the *Northern Health Position on Healthy Eating*, available at <http://www.northernhealth.ca/AboutUs/PositionStatementsAddressingRiskFactors.aspx>

