# POSITION ON HEALTHY EATING

## **An Integrated Population Health Approach**

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"... Sometimes it feels like this. There I am standing by the shore of a swiftly flowing river, and I hear the cry of a drowning man. So I jump into the river, put my arms around him, pull him to shore and apply artificial respiration. Just when he begins to breathe, there is another cry for help. So I jump into the river, reach him, pull him to shore, apply artificial respiration, and then just as he begins to breathe, another cry for help. So back in the river again, reaching, pulling, applying, breathing and then another yell. Again and again, without end, goes the sequence. You know, I am so busy jumping in, pulling them to shore, applying artificial respiration, that I have no time to see who is upstream pushing them all in."<sup>i</sup>

McKinlay, 1979

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#### 1.0 Introduction

This report outlines the position of Northern Health (NH) regarding healthy eating. Northern Health recognizes that healthy eating supports physical, mental, and social wellbeing, and is more complex than individual food choice. It is impacted by environmental and systemic factors at the individual, community, and societal levels. This paper explores the current context of healthy eating in Canada, provides a broad and inclusive definition of healthy eating, and describes six components of healthy eating. Considering a population health approach, we suggest specific strategies that support Northern Health's position on healthy eating. The paper explores healthy eating across the lifespan and in a variety of settings, and the role of community partners to improve the health, wellbeing and quality of life of those who live, work, learn, play, and are cared for in Northern BC.

#### 2.0 Food and Health

"Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity." *World Health Organization, 2006* 

"Health is a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities." <sup>iii</sup> *Ottawa Charter for Health Promotion, 1986.* 

Healthy eating contributes to the overall health of individuals, families, and communities. An unhealthy diet is a risk factor for chronic diseases and conditions such as osteoporosis, hypertension, cardiovascular disease, anaemia, and diabetes.<sup>iv</sup> Across an individual's lifespan, healthy eating supports daily living by promoting physical, mental, and social wellbeing. Healthy eating promotes:

- Physical wellbeing by balancing quality and quantity of nutrients, and energy from a variety of foods to meet nutrition requirements. In turn, this supports daily activity, optimal growth and development, a strong immune system, and the minimization of nutrition-related disease, illness, and morbidity.<sup>v, vi, vii</sup>
- **Mental wellbeing** by supporting mental alertness, optimal brain function and development, and hormonal balance. This includes supporting a healthy relationship with food, a positive body image and outlook on life, and feelings of comfort, satisfaction, and pleasure.<sup>viii, ix, x, xi, xii</sup>
- **Social wellbeing** by facilitating social bonds with family and friends by encouraging sharing, connecting and social interactions in the acts of food preparation, eating together, and feeding. Healthy eating can contribute to skill development and support the practice and continuity of tradition and culture (i.e. celebrations and social events).<sup>xiii, xiv, xv, xvi, xvii</sup>

While healthy eating may be considered to be a modifiable risk factor, many variables at the individual, community and societal levels influence not only *what* people eat, but also *how* they eat. The next section will explore a range of these variables.

#### 2.1 Current Context Regarding Healthy Eating

Health Canada holds responsibility for reviewing current evidence and setting federal policy, standards and guidelines regarding healthy eating. The <u>Healthy Eating</u> <u>Strategy</u> describes key goals and actions to achieve healthy eating in Canada. In January 2019, as part of the Healthy Eating Strategy, Health Canada released the new <u>Canada's Dietary Guidelines</u> (i.e. Canada's food guide). This guidance, which applies to healthy Canadians over two years of age,<sup>1</sup> promotes healthy "The important public health issue is the availability and cost of healthy and nutritious food. Access to good, affordable food makes more difference to what people eat than health education." xviii

Wilkinson & Marmot, 2003

eating, overall nutritional well-being, and supportive food environments. These guidelines support the work of health professionals and policy makers in developing and evaluating policies, programs, tools, and education resources. They have been translated into <u>simple</u>, <u>relevant</u>, and evidence-informed messages targeted to Canadians.

Practically, Canadians over the age of two years are encouraged to eat a variety of foods each day from three food groupings: vegetables and fruits, wholegrain foods, and protein foods. Additional guidance includes recognizing that food is about more than nutrition, encouraging the development of food skills (planning, shopping, cooking), and eating together. There is also an emphasis on promoting water as a primary beverage and focusing on choosing quality (unsaturated) fats rather than fat reduction.

Consideration needs to be given to pleasure, the practice of family and cultural traditions, and flexibility in healthy eating. This flexibility is demonstrated and supported by the absence of recommended serving sizes or daily serving quotas in the guidance for the public. While Health Canada plans to provide specific guidance on healthy eating patterns for health professionals and policy makers in late 2019, this information is not intended to be provided as directive advice for consumers. Also, in appreciation for the diverse Indigenous groups in Canada, Health Canada is working with stakeholders to explore the development of additional tools to support First Nations, Inuit, and Métis populations.

To date, the majority of population-based dietary assessments use standards like Canada's food guide to present data that suggests poor food and nutrient intakes, such as comparing the consumption of vegetables and fruit intake to recommended daily amounts. However, there is value in asking if the right parameters are being measured, given that there are many important factors outside of individual food choice that can impact overall dietary patterns. These factors can be referred to as **the determinants of healthy eating**. In 2005, Raine<sup>xix</sup> organized some of the current thinking regarding the determinants of healthy eating into two categories: individual and collective determinants. Raine notes that eating behaviours can only be understood when the context is examined. For example, factors such as household income or geographical location influence dietary patterns. Additional thinking in subsequent years has further developed the understanding of the determinants of healthy eating. <sup>xx</sup> This thinking is summarized in Table 1.

<sup>&</sup>lt;sup>1</sup> Children under two years of age have unique nutrition needs, which are outlined in Northern Health's Infant-Toddler Nutrition Guidelines for Health Professionals, and British Columbia's Pediatric Nutrition Guidelines (Six Months to Six Years) for Health Professionals.

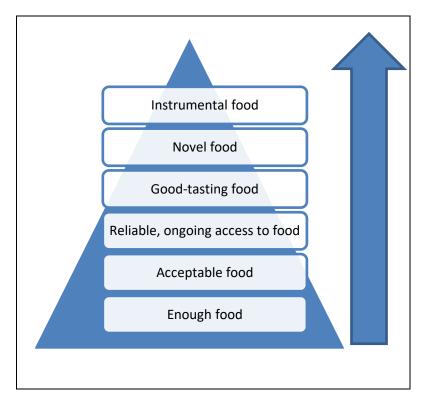
Table 1:	Determinants of Healthy Eating <sup>xxi,xxii,xxii,xxiii, xxiv, xxv</sup>
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Individual	Collective	
<ul> <li>Knowledge, beliefs, attitudes, literacy, and skills</li> <li>Food preferences</li> <li>Physical health</li> <li>Mental health</li> <li>Household access to food</li> </ul>	<ul> <li>Culture (connection to, preferences, acceptability, food procurement, sharing processes)</li> <li>Social/networks (family, peers, media)</li> <li>Socioeconomic (income, education, gender)</li> <li>Physical environment (food availability, food accessibility, food safety, food quality, food/nutrition education)</li> <li>Economic environment (food labelling, food composition, income assistance rates)</li> </ul>	

The relationship between, and impact of, the collective and individual determinants on healthy eating needs to be considered. Each influences food choice. Gombert et al (2017)<sup>xxvi</sup> apply a "capabilities approach" to food choices, which is an approach that considers that the environments in which people live (i.e. collective determinants) have a greater impact on health than individual behaviour or choice.

Similarly, Satter's "Hierarchy of Food Needs"<sup>xxvii</sup> demonstrates that drivers like household food insecurity impact food management behaviours. Satter notes that selecting food in order to achieve a health outcome is at the apex of food choice (i.e. "instrumental food") and is only possible if individuals have met needs at earlier levels (i.e. reliable, ongoing access to enough, acceptable food) (see Figure 1).





Satter's pillar of access to enough, acceptable food is also defined as "food security". Within BC, household food insecurity is a growing concern. Northern residents are disproportionately affected by food insecurity.<sup>xxix</sup>

**Table 2:** Comparison of Household Food Insecurity Rates: Northern British Columbia and British Columbia<sup>xxx</sup>

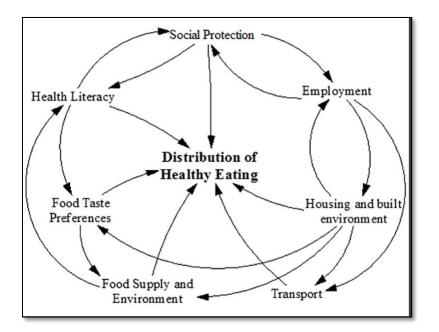
	Northern BC	BC
Households receiving social assistance	79%	76%
Households with children	25%	15%
Households without children	13%	11%
All households	16%	12%

In addition to higher food insecurity rates in Northern BC, food costs are also higher. For a reference family of four people, the average cost of food provincially is \$1, 019/month and in Northern BC is \$1038.<sup>xxxi</sup> Single mother households (with children under 18 years of age), Indigenous peoples, and the marginally housed and homeless are disproportionately affected by household food insecurity, due to a variety of factors, including poverty, racialization, and marginalization. Importantly, 65% of food insecure households are working households (i.e. their main source of income is salaries or wages). Household income impacts access to food, emphasizing that healthy eating is more than personal food choice.

Another factor that impacts healthy eating is equitable access to the food system. Friel et al (2017)<sup>xxxii</sup> propose a "systems approach" to healthy eating. In particular, they emphasize

understanding and addressing inequity, which is the absence of fairness or justice, in achieving healthy eating. Their HE<sup>2</sup> (Healthy Equitable Eating) system proposes that the core mechanism of equitable versus inequitable distribution of healthy eating rests on the levels of **accessibility**, **availability**, **acceptability** and **affordability** of healthy food (i.e. food security). The authors attempt to summarize the complex relationships between 67 variables of food access into seven sub-systems: (1) Food supply and environment, (2) Housing and the built environment, (3) Transport, (4) Employment, (5) Social protection, (6) Healthy literacy, and (7) Food preference. Figure 2 demonstrates how these subsystems may influence one another and, ultimately, impact access to healthy eating.

**Figure 2:** Feedback between Sub-Systems and the Social Distribution of Healthy Eating<sup>xxxiii</sup>



A deeper understanding of these sub-systems, and their impact on individual food choice, will support a more comprehensive understanding of what healthy eating means, at the individual, family, community, and society levels. This deeper understanding will help support actions to ensure more equitable access to healthy eating. Future research to explore these sub-systems is greatly anticipated.

In addition to the aforementioned determinants of healthy eating, various populations may face unique cultural and environmental considerations. For example, newcomers to Canada may face additional difficulties in accessing healthy foods, as integration into a new food system can be challenging. Willows (2005) <sup>xxxiv</sup> added an Indigenous lens to the determinants of healthy eating, by also considering the cultural contexts and lived experiences of Indigenous peoples in Canada. The attempt to assimilate Indigenous peoples has had far reaching negative effects on their food ways. For example, experiences in residential schools and the accompanying trauma associated with food and nutrition in these settings has influenced current eating patterns, including relationships with food, cultural food practices, food security, and overall health and wellness. <sup>xxxv, xxxvi</sup> This demonstrates how the collective determinants of healthy eating can profoundly affect the individual determinants. However, despite the ongoing negative impacts of

colonization, it is important to acknowledge the strength, diversity, and resilience of newcomers and Indigenous peoples in Canada, by honouring the creative ways that different communities approach food issues. <u>The Truth and Reconciliation Commission of Canada</u> offers more information on the impact of colonization on Indigenous populations in Canada, and outlines 94 calls to action, intended to redress the legacy of colonization and to move forward with reconciliation.<sup>xxxvii</sup>

#### 2.2 Healthy Eating: An Integrated Concept

As explored in previous sections, healthy eating is about more than just individual food choice. Rather, healthy eating is a complex concept. Considering these complexities and the Northern context, Northern Health defines healthy eating as a focus on nourishment to support optimal growth, development, and vitality:

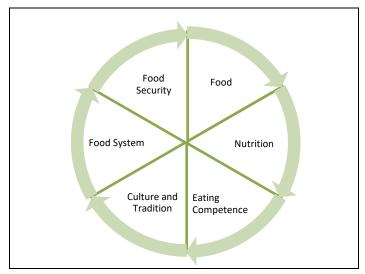
Healthy eating is getting enough, good-for-you and good tasting food to provide energy for everyday living and to support short-term and long-term health and wellness.<sup>xxxviii</sup> (Northern Health, 2012)

For healthy eating to support healthy communities, food is obtained from relatively local sources, produced in sustainable ways, and access is assured and equitable. For healthy eating to be possible, Northern residents require equitable access to the individual and collective determinants of healthy eating.

Northern Health acknowledges that healthy eating includes various components: food, nutrition, eating competence, culture and traditions, food systems, and food security (Figure 3).<sup>xl</sup> Each of these interrelated components is further explored in the sections below, starting with "food" and "nutrition" and then moving to more complex factors that impact food choice and nutritional status.

"An unhealthy diet is less often a matter of personal choice and more often a function of social and economic inequalities."xxxix

Ontario Healthy Communities Coalition, 2006



#### Figure 3: Components of Healthy Eating

#### Food

Food is a complex blend of components that support the body's utilization of nutrients. While science supports the connection between nutrients and health, food is the best source of nutrients; therefore an emphasis on food selection rather than nutrients alone is key. Food also fulfills other needs, such as pleasure and the fulfillment of traditional practices, as will be discussed below.

#### Nutrition

Optimal nutrition status is associated with a balanced diet based on nutritious/nutrientdense foods, commonly measured by Dietary Reference Intakes (DRIs). DRIs inform the development of food based dietary guidelines. DRIs are the amount of nutrients needed to prevent deficiencies and lower the risk of chronic disease.<sup>xii</sup> Meeting DRI recommendations will supply the majority of Canadians with a balance of nutrients to support health from the beginning to the end of life.<sup>xlii</sup>

#### Eating Competence

Healthy eating extends beyond food and nutrients, and includes "how" we eat. Healthy relationships with food and approaches to eating are described with the Satter Eating Competence Model. This model includes four components:

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

Higher levels of eating competence are correlated with better diets, positive attitudes about eating, self-acceptance, metabolic health (i.e. blood pressure, serum cholesterol),<sup>xliii</sup> and supportive child feeding practices.<sup>xliv</sup> Eating competence is supported within the context of regular family-style meals and planned, sit-down snacks, and the enactment of a <u>Division of Responsibility in Feeding</u>.

Family meals<sup>2</sup> are positively associated with intake of fruits, vegetables, grains, and calcium-rich foods, and negatively associated with soft drink consumption.<sup>xlv</sup> Further, eating together is also associated with family connectedness and various positive measures for children and youth, such as better social adjustment, improved mental health, protection from high-risk behaviours, and better school performance.<sup>xlvi, xlvii</sup>

<sup>&</sup>lt;sup>2</sup> Family meals are most simply defined as coming together with the people you live with to share food and conversation. The "people you live with" might just be you if you live alone, or you may have roommates, a partner, children, or another living situation. Meals can include some or all of these individuals. Typically, it means sharing the same food, whether it's at breakfast, lunch, dinner, or snack time. Meals can be eaten at a table, on a picnic blanket, on a tailgate, or wherever interaction between participants is supported.

In order to "do no harm", health promotion strategies should support the components of eating competence, eating together, and the Division of Responsibility in Feeding, rather than focus primarily on food and nutrients.

#### Culture & Tradition

Beyond providing physical nourishment, food fulfills social, cultural, and traditional roles in our lives.<sup>xlviii</sup> In recognition that Northern BC is home to peoples from diverse cultures and traditions, the socio-cultural and historical value of food and food practices must be considered in healthy eating.

For example, one author notes that:

...the consumption of traditional foods is more than just about eating; it is the endpoint of a series of culturally meaningful processes involved in the harvesting, processing, distribution, and preparation of these foods. For many Aboriginal peoples, these processes require the continued enactment of culturally important ways of behaving, which emphasize cooperation, sharing, and generosity.<sup>xlix</sup>

While cultural continuity has positive effects on health, it is important to also acknowledge that cultures are not static, rather are adaptive and continually evolving. Thus, foods that are considered culturally meaningful can vary considerably among individuals and communities, and across time.<sup>1</sup>

#### Food Systems

A food system includes all processes involved in feeding a population, such as growing, harvesting, processing, packaging, transporting, marketing, consuming, and disposing of food.<sup>II</sup> Since the 1950s, food systems have fundamentally changed. Specific changes include where, how, and who produces our food, where and how our food is processed, and where and how our food is eaten.<sup>III</sup>

A robust food system is connected to the determinants of healthy eating. The availability of high-quality, safe food directly impacts health. Resiliency, self-sufficiency, safety, sustainability, and health promotion are key characteristics of a food system that protects Canadians and promotes health<sup>liii</sup>. As a result of modern processing, packaging, and marketing practices, much of what is in grocery stores may not facilitate "the healthy eating choice as the easy choice".<sup>liv, lv, lvi</sup> Additionally, the current dominant Canadian food system presents an industrialized model of food production, which can have detrimental effects on Indigenous food systems.

**Indigenous food sovereignty** is the right of all Indigenous peoples to access healthy and culturally appropriate food, and to define their own food and agricultural systems.<sup>Ivii</sup> It explores specific cultural considerations of the food system and food security for Indigenous peoples in Canada. While all Canadians have the right to define their food system, and to access culturally appropriate foods, the following discussion relates to the sovereignty of Indigenous land and food systems in Canada, as this is of particular significance to the Northern context.

The <u>BC Food Sovereignty Framework</u> explores key principles of *protecting, conserving* and *restoring* Indigenous food systems.<sup>Iviii</sup> This includes consideration of the sacredness of the land, plants and animals and a focus on food for the people (i.e. self-determination).

The goal of Indigenous food sovereignty is to increase personal autonomy over the food system by encouraging a closer connection between food production and consumption.<sup>lix</sup> Food sovereignty supports a just and participatory food system, which influences policies that negatively impact traditional land and food systems, and calls for localization and independence of traditional land and food systems<sup>lx</sup>.

#### Food Security

Food security is the ability, for all people at all times, to obtain a safe, personally acceptable, and nutritionally adequate diet through a sustainable and equitable food system *(adapted from Agriculture & Agri-food Canada, 1998).<sup>1xi</sup>* Food security considers both community food security and household food insecurity:<sup>1xii</sup>

**Community food security** exists when all members can obtain a safe, personally acceptable, nutritious diet through a sustainable food system that maximizes self-reliance and social justice<sup>lxiii,lxiv</sup>. This definition also implies the existence of:

- Food access the assured and equitable ability to acquire enough food.
- **Food safety** the safety of foods being sold (i.e. non-contaminated/free from spoilage) and the safe preparation and storing of foods to avoid food-borne illness.
- **Sufficiency** the ability to acquire enough high quality food to sustain healthy growth and development and to prevent illness and disease.
- **Sustainability** food is produced, processed, and distributed in a manner that supports local society and does not compromise the land, air, or water for future generations.
- **Personally acceptable foods** recognition of cultural acceptance and the ability to obtain, prepare, distribute, and eat food without compromising human dignity.<sup>lxv</sup>
- **Social justice** fair and profitable income for those who earn their living from the food system; the absence of the injustices and inequity of food insecurity and hunger.

**Household food insecurity** exists when a household worries about or lacks the financial means to buy healthy, safe, and personally acceptable food. A key contributor to household food insecurity is *lack of sufficient income* to purchase food.<sup>lxvi</sup>

Healthy eating is enabled by a just food system that supports community food security and food sovereignty. Additionally, the food system must be accessible to all community members, and thus healthy eating is also enabled by policy initiatives that decrease household food insecurity. If food security is compromised, healthy eating is compromised. Therefore, creating policies and taking actions that support culturally safe and equitable access to the food system is important for all Northerners.

#### 3.0 Northern Health Position

Northern Health seeks to optimize health and wellness and improve quality of life by promoting healthy eating among all residents, by working with internal and external partners to support and promote:

- A broad, balanced, inclusive, and responsive definition of healthy eating that is informed by a systems approach.
- The right of all to achieve healthy eating.
- Physical and social environments, programs, and policies that support healthy eating along the continuum of life.
- Use of a "do no harm" approach to healthy eating to promote eating competence, positive relationships with food and eating, and positive body image; and to discourage the development of disordered eating attitudes and behaviours and the perpetuation of weight stigma and bias.

Northern Health will enable healthy eating by:

- Promoting a comprehensive and equitable approach to healthy eating that considers food, nutrition, eating competence, culture and traditions, food security, and food systems, and how these factors influence healthy eating.
- Supporting internal policies, practices, programs, and initiatives to create supportive environments and services for staff, clients/patients/residents, and communities.
- Collaborating with external partners to support policies, practices, programs, and initiatives that:
  - Enable the development and maintenance of sustainable food systems.
  - Create accessible healthy eating environments where people live, learn, work, and play.

### 4.0 Strategies to Achieve this Position

The Ottawa Charter for Health Promotion is a worldwide resolution of the World Health Organization. Signed in Ottawa in 1986, this global agreement calls for action towards health promotion through five areas of strategic action. In concert, these strategies can create a comprehensive approach to addressing risk factors, such as promoting healthy eating.

This section presents examples that support the five strategic action areas of the Ottawa Charter to achieve the same goals outlined in this position paper. Examples are evidencebased and come from an environmental scan of strategies proven effective in the north and other places.

#### 4.1 Build Healthy Public Policy

A broad range of *local, regional, provincial*, and *federal* organizations have a role to play in building healthy public policies that promote healthy eating in Northern BC. Some examples include:

Support for a <u>Canadian food policy</u>, a coordinated, cross-sector policy that seeks to improve all Canadians' access to affordable, high quality, and safe food, which supports a sustainable and just food system, and improved nutritional status of Canadians. A comprehensive food policy would help to ensure that healthy eating, as described in Canadians.

"The interconnected nature of the determinants of inequities in healthy eating implies the need for an integrated response comprising whole-of government policy and community level action ... having mechanisms in place to balance the interests of powerful commercial groups, foster the participation of lessadvantaged social groups, and ensure transparency in all decision-making processes ...

Friel et al, 2015

- Support Indigenous communities in policy creation around Indigenous food sovereignty, by engaging in dialogue and supporting community–driven, Nation-based food security work (i.e. <u>Indigenous</u> <u>Food Systems Network</u>).
- Policies that support healthy built environments, including protecting agricultural land, increasing the capacity of local food systems, and providing accessible transportation options to healthy food retail services (i.e. PHSA's <u>Healthy Built</u> <u>Environment Linkages Toolkit</u>).
- Policies to support local and culturally appropriate food growth, harvesting, management, production, and integration into food supply chains for a variety of settings (e.g. community programs, restaurants, markets, vending, and healthcare facilities).
- Policies to promote improved availability of nutritious foods in geographically isolated places.
- Policies to support all people having equitable access to nutritious foods (e.g. support for the new <u>BC poverty reduction strategy</u>; universal school meal programs).
- Policies to limit the advertising of unhealthful eating practices and foods, in formal and informal ways, including media (e.g. social media), sports sponsorship, and use of incentives or rewards (e.g. <u>Restricting marketing of unhealthy food and</u> <u>beverages to children in Canada;</u> not using branded food or food coupons as a reward for participation in community events).
- Support for the implementation and enforcement of evidenced-informed nutrition policies in institutional settings, such as schools, public buildings, and recreation centers.
- Policies to reduce barriers to breastfeeding by promoting, protecting, and supporting breastfeeding (e.g. <u>Quebec's Making your municipality more breastfeeding friendly</u>, <u>Breastfeeding Committee for Canada's Baby-Friendly Initiative</u>).

#### 4.2 Create Supportive Environments

People interact with different settings in daily life – places where they live, work, learn, play, and are cared for. These places should be considered when seeking to create supportive environments. Within each of these environments, we can work to promote healthy eating. Examples include those that:

#### Home, community and care settings

- Promote the importance of eating together. Protect regular sit-down meal and planned snack times (e.g. <u>Better Together BC</u>).
- Promote a Division of Responsibility of feeding by adults and children; adults decide what, when, and where foods will be served, and children decide whether they will eat and how much they will eat (i.e. the Ellyn Satter Institute's (

"Our ultimate goals should be to structure neighbourhoods, homes, and institutional environments so that healthy behaviours are optimal defaults."<sup>Ixviii</sup>

Story et al. 2008

and how much they will eat (i.e. the Ellyn Satter Institute's Guidelines for Feeding).

- Promote healthy eating in care settings (for children, youth, adults), through the establishment of healthy eating environments and provision of nutritious, acceptable, and safe foods:
  - Early learning and care settings (e.g. <u>Healthy Eating in the Childcare Setting –</u> <u>Division of Responsibility Model</u>, <u>Appetite to Play: Healthy Eating & Physical</u> <u>Activity in the Early Years</u>; <u>Increasing Indigenous Children's Access to</u> <u>Traditional Foods in Early Childhood Programs</u>)
  - Adult residential and day care settings (e.g. <u>Making the Most of Mealtime: Research Institute for Aging</u>)
  - High quality food programming which supports creating safe, inclusive, trauma-informed, and dignified spaces and supports (e.g. Vancouver Coastal Health Food Standards tools)
- Plan for shared cooking, eating, and food storage spaces in housing projects and community care facilities.

#### Work

- Promote comprehensive workplace health approaches, which emphasize healthy eating environments (e.g. Region of Waterloo's <u>Creating a Healthy Workplace</u> <u>Nutrition Environment Toolkit</u>).
- Provide nutritious food and drink in workplaces, inclusive of meetings, conferences, celebrations, and special events (e.g. <u>Eat Smart, Meet Smart</u> guidelines).
- Offer nutritious food choices in workplace cafeterias and vending machines according to established guidelines (e.g. <u>Healthier Choices in Vending Machines in</u> <u>BC Public Buildings</u>).
- Accommodate the needs of parents who breastfeed or <u>chestfeed</u> their babies and/or express breastmilk during work hours (e.g. <u>Breastfeeding and the Duty to</u> <u>Accommodate</u>; <u>Canadian Human Rights Commission</u>: <u>Policy on Pregnancy and</u> <u>Human Rights in the Workplace</u>).

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#### School

A <u>Comprehensive School Health</u> approach supports healthy eating across four pillars, which are (1) relationships and physical environments, (2) teaching and learning, (3) healthy school policy, and (4) community partnerships (see NH's <u>Guiding Document on Healthy Schools: A Comprehensive School Health Approach</u>). Many strategies that fit with these pillars are explored in the NH <u>Healthy Eating at School</u> webpage. Some examples include those that:

- Consider the infrastructure or physical capacity of a space to have freshly prepared food on site and served to students.
- Support access to healthy foods in school cafeterias, canteens, vending machines, and meal and snack programs (e.g. <u>Tips and Recipes for Quantity Cooking</u>, <u>Guidelines for Food & Beverage Sales in BC Schools</u>, <u>Breakfast Club of Canada</u>).
- Allow for enough time and space for students to sit and eat their lunch.
- Consider implementing a "Play First Lunch".
- Support fundraising programs and school events which do not negatively impact healthy eating targets (e.g. <u>Fresh to You Fundraiser</u>, <u>Bake Better Bites: Recipes and Tips for Healthier Baked Goods</u>).
- Promote age-appropriate nutrition education curriculum and training for educators that supports a "do no harm" approach to healthy eating, body image, media literacy, and physical activity (e.g. BC Dairy Association's <u>lesson plans</u> and <u>teacher</u> <u>workshops</u> for K-12).
- Promote initiatives that provide students with hands-on food experiences (e.g. <u>Farm</u> to School BC, <u>BC School Fruit and Vegetable + Milk program</u>, <u>Spuds in Tubs</u>, <u>school</u> gardens).
- Promote learning of local and culturally relevant food systems (e.g. <u>Indigenous</u> <u>Foodscapes initiatives</u>, <u>Local Food to School – Haida Gwaii</u>, <u>Nuu-chah-nulth</u> <u>Feasting Toolkit</u>).
- Offer basic food and cooking classes as compulsory learning in school or as part of afterschool programming to build food skills (e.g. <u>Cook it. Try it. Like it!</u>).
- Emphasize that all bodies deserve respect. Teach children that healthy bodies come in all shapes and sizes, promote healthy body image, and implement measures to address weight-based bullying (e.g. <u>Promoting Positive Body Image Using</u> <u>Comprehensive School Health</u>, <u>Being Me: Promoting Positive Body Image</u> lesson plans and teacher resource).

#### Leisure

- Promote nutritious food choices (inclusive of food and beverages in vending machines) in recreational facilities (e.g. <u>Healthier Choices in Vending Machines in</u> <u>BC Public Buildings</u>).
- Support local food programs by facilitating access to appropriate spaces and resources for food preparation, preservation, and storage.
- Promote participation in community gardens and incorporate food gardens into public spaces (e.g. British Columbia's <u>Dig It Community Garden Guide: How Local</u> <u>Governments can Support Community Gardens</u>).

- Promote eating together in indoor and outdoor leisure settings (e.g. picnic tables in parks).
- Promote breastfeeding-friendly spaces (i.e. Perinatal Services BC's <u>Breastfeeding Welcome</u> poster, Northern Health's <u>Breastfeeding-Friendly Spaces</u> decal campaign).

#### 4.3 Strengthen Community Action

Successful actions to promote healthy eating are planned and implemented through partnerships and collaboration. Often public, private, and non-governmental organizations can be involved at local, regional, provincial, and federal levels. Examples of community action include those that:

- Advocate for income-based solutions to reduce household food insecurity (e.g. Implications for a Basic Income Guarantee for Household Food Insecurity).
- Support the development of food security strategies within Northern BC that work to increase equitable access to food (e.g. Food Security Working Group with the Northern Environmental Action Team).
- Engage community-based stakeholders to raise awareness around food costing, food quality, availability, and accessibility (e.g. FRESH-IT: food retail environment shaping health intervention toolkit; <u>Food Costing in British Columbia</u>).
- Identify stakeholders and work with them to create opportunities for community member engagement with the food system at various levels: growing, harvesting, preparing, trading, sharing, receiving, and learning about food (i.e. <u>Vancouver</u> <u>Coastal Health Food Asset Map</u>; <u>Washington Food Systems Directory</u>).
- Work with stakeholders to create awareness around the importance (nutritional, economic, cultural, and environmental) of more localized food systems.
- Partner with local governments and agricultural organizations to support local food production, harvesting, and consumption (i.e. <u>Market Safe training program; BC</u> <u>Farmer's Market Nutrition Coupon Program</u>,).
- Support innovative programs that seek to improve access to local food within healthcare settings, such as hospitals and long-term care settings (i.e. <u>NOURISH</u> <u>Healthcare</u>, <u>Feed BC</u>).
- Offer and promote grants to support local food initiatives and poverty reduction work (e.g. NH's <u>IMAGINE grants</u>, farm to school grants, <u>Community Poverty Reduction</u> <u>Fund</u>, <u>Poverty Game Changers: Williams Lake</u>).
- Work with stakeholders such as stores, workplaces, and community partners to make healthy foods more accessible (e.g. <u>Northwest BC Food Action Network</u> and FRESH-IT).
- Support community initiatives related to breastfeeding, including providing space, publicity, and resources for breastfeeding support groups.

#### 4.4 Develop Personal Skills

A variety of resources and support systems can help individuals and families build better health outcomes through awareness, engagement, education, and capacity building. Many stakeholders can focus on the different levels of behaviour change and tailor programs accordingly. Quality programs and campaigns which encourage the development of personal skills towards promoting healthy eating include those that:

- Incorporate eating competence into nutrition education, to support positive attitudes about food, eating, physical activity, and body image; food acceptance skills; responsiveness to appetite, hunger, fullness, and satiety to determine how much to eat, as opposed to relying on externally prescribed cues (i.e. portion sizes or diets); and skills to feed and eat well with enjoyable and personally acceptable meals and snacks.
- Support community-based, culturally-appropriate programming that promotes skill development related to meal planning, food preparation, preservation, and other food skills (e.g. Health Canada's <u>Improving Cooking and Food Preparation Skills</u> and <u>Canada Prenatal Nutrition Program; Food Skills for Families</u>).
- Promote quality breastfeeding supports for expectant and breastfeeding families (e.g. <u>La Leche League Canada</u>, <u>Prince George Breastfeeding Café</u>, <u>NH</u> <u>breastfeeding resources</u>, other local supports).
- Promote quality, evidence-informed online resources to support skills related to meal planning, grocery shopping, label reading, and food safety (e.g. Government of Canada's <u>EatWell Plate</u>, <u>Canada's food guide</u>, and <u>Understanding Food Labels</u>, Healthy Families BC's <u>Shopping Sense virtual grocery store tour</u>, Save-On-Foods' dietitian led <u>Nutrition Tours</u>, the Government of BC's <u>Caring about Food Safety</u>).
- Promote credible, evidenced-informed online resources to support knowledge related to healthy eating across the lifespan (e.g. NH's <u>Population Health Nutrition</u> <u>webpages</u>, <u>HealthLink BC's Healthy Eating webpages</u>).
- Promote free and timely access to information and tailored support regarding food and nutrition (i.e. <u>Dietitian Services at HealthLink BC</u> or local dietitians).

#### 4.5 Reorient Health Services

A broad range of people can assist in reorienting health services. For example, health professionals, local government, community planners, sport and recreation professionals, general practitioners, allied health professionals, and volunteers can influence healthy eating. Effective strategies include those that:

- Support practitioners and health care staff to have culturally safe conversations about food with Indigenous peoples and communities (e.g. <u>Setting the Table for a Healthy Food Conversation</u>).
- Support the development of a food security and nutrition surveillance strategy (i.e. <u>Model Core Program Paper on Food Security</u>).
- Recommend screening acute care and primary care clients for poverty and household food insecurity, and linking them to benefits, resources, and services (e.g. Centre for Effective Practice's <u>Poverty Intervention Tool</u>).

- Implement standards to promote, protect, and support breastfeeding (i.e. The Breastfeeding Committee for Canada's <u>Baby-Friendly Initiative 10 steps and WHO</u> <u>Code Outcome Indicators for Hospitals and Community Health Services</u>).
- Promote a comprehensive approach to health: acknowledge the determinants of healthy eating and support the development of lifelong eating competence, rather than focusing on individual food choices and modification of body weight (see NH's <u>Position on Health, Weight and Obesity</u>).
- Promote the implementation of evidence-informed best practices and resources for use by health professionals and community-based stakeholders (e.g. NH's <u>Infant</u> <u>Toddler Nutrition Guidelines for Health Professionals</u>, PHSA's <u>Pediatric Nutrition</u> <u>Guidelines (Six Months to Six Years) for Health Professionals</u>).

#### 5.0 Conclusion

In conclusion, Northern Health is refreshing its position on healthy eating for the improved health and well-being of Northern British Columbians. We recognize healthy eating as a modifiable risk factor for the development and progression of a wide variety of chronic diseases and we also recognize that access to healthy eating is influenced by many variables, many of which are outside the control of the individual. This paper also presents evidence-based strategies that are undertaken in other places and are effective at promoting healthy eating. The strategies support the comprehensive framework presented by the Ottawa Charter and support Northern Health's position. A comprehensive approach targeting the determinants of healthy eating will support Northern residents to achieve optimal health.

#### 6.0 References

<sup>i</sup> McKinlay, J. 1979. A Case for Refocusing Upstream: The Political Economy of Illness. In Patients, Physicians and Illness: A Sourcebook in Behavioural Science and Health; Gartley, J, Ed;: Free Press: New York, NY, USA, 1979; pp9 – 25.

<sup>ii</sup> World Health Organization. (2006). Constitution of the World Health Organization – Basic Documents, Forty-fifth edition, Supplement, October 2006.

<sup>iii</sup> World Health Organisation. (1986). Ottawa Charter for Health Promotion: First International Conference on Health Promotion Ottawa, 21 November 1986. Retrieved from https://www.healthpromotion.org.au/images/ottawa\_charter\_hp.pdf

<sup>iv</sup> Institute of Medicine. 2006. Dietary Reference Intakes: The Essential Guide to Nutrient Requirements. Washington, DC: National Academy Press.

<sup>v</sup> McDonald, JE. 1994. A Pocket Guide to Physical Examination and Nutritional Assessment. Toronto, ON: WB Saunders of Canada.

<sup>vi</sup> WHO/FAO. 2003. *Diet, Nutrition, and the Prevention of Chronic Diseases: Report of a Joint WHO/FAO Expert Consultation.* Geneva, Switzerland: WHO. Available online: <u>http://www.fao.org/DOCREP/005/AC911E/AC911E00.HTM</u>. Accessed 4 Jan 2012.

<sup>vii</sup> Otten, JJ, JP Hellwig, LD Meyers (eds). 2006. *Dietary Reference Intakes: The essential guide to nutrient requirements*. Available online: <u>http://www.nap.edu/catalog.php?record\_id=11537</u>. Accessed 4 Jan 2012.

viii McIntosh, EN. 1995. American food habits in historical perspective. Westport, CT: Praeger Publishers.

<sup>ix</sup> Neumark-Sztainer D, M Wall, M Story, and JA Fulkerson. 2004. Are Family Meal Patterns Associated with Eating Behaviours Among Adolescents? *Journal of Adolescent Health* 35: 350-359.

<sup>x</sup> Mellin, AE, D Neumark-Sztainer, J Patterson, and J Sockalosky. 2004. Unhealthy weight management behaviour among adolescent girls with Type 1 Diabetes Mellitus: the role of familial eating patterns and weight-related concerns. *Journal of Adolescent Health* 35: 278-289.

<sup>xi</sup> Satter, EM.2007. Eating Competence: Definition and evidence for the Satter Eating Competence Model. *Journal of Nutritional Education and Behavior* 39 (supplement): S142-S153.

x<sup>ii</sup> Lohse, B, E Satter, T Horacek, T Gebreselassie, and MJ Oakland. 2007. Measuring Eating Competence: psychosometric properties and validity of the ecSatter Inventory. *Supplement to Journal of Nutrition Education and Behaviour* 39(5S): S154-S166.

xiii Larson, RW, AR Wiley, and KR Branscomb (eds). 2006. Family Mealtime as a Context of Development and Socialization. *New Directions for Child and Adolescent Development, no 111*. San Francisco, CA: Jossey-Bass, Wiley Periodicals, Inc.

xiv McIntosh, EN. 1995. American Food Habits in Historical Perspective. Westport, CT: Praeger Publishers.

<sup>xv</sup> National Center on Addiction and Substance Abuse. 2006. The Importance of Family Dinners III. New York, NY: Columbia University. Available online: <u>https://www.centeronaddiction.org/addiction-research/reports/importance-of-family-dinners-2006</u>

<sup>xvi</sup> Council of Economic Advisers. 2000. Teens and Their Parents in the 21<sup>st</sup> Century: An examination of trends in teen behavior and the role of parental involvement. *White House Conference on Teenagers*. 2 May 2000. Washington, DC. Available online: <u>https://clintonwhitehouse4.archives.gov/media/pdf/Teens\_Paper\_Final.pdf</u>

<sup>xvii</sup> Eisenberg, ME, RE Olson, D Newmark-Sztainer, M Story, and LH Bearinger. 2004. Correlations Between Family Meals and Psychosocial Well-Being Among Adolescents. *Archives of Pediatric Adolescents* 158 : 792-796. Available online: <u>http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list\_uids=15289253</u>

<sup>xviii</sup> Wilkinson, R., & Marmot, M. (Eds.). (2003). Social determinants of health: The solid facts [2nd ed.]. Denmark: World Health Organization.

<sup>xix</sup> Raine, KD. (2005). Determinants of Healthy Eating in Canada: An Overview and Synthesis. Canadian Journal of Public Health, 96, Supplement 3, S8 – S14.

<sup>xx</sup> Story, M, KM Kaphingst, R Robinson-O'Brien, and K Glanz. 2008. Creating Healthy Food and Eating Environments. *Annual Review of Public Health* 29: 253-272. Available online: <u>https://www.annualreviews.org/doi/10.1146/annurev.publhealth.29.020907.090926</u>. Accessed 20 December 2011.

<sup>xxi</sup> Raine, KD. (2005). Determinants of Healthy Eating in Canada: An Overview and Synthesis. Canadian Journal of Public Health, 96, Supplement 3, S8 – S14.

<sup>xxii</sup> Willows, ND. (2005). Determinants of Healthy Eating in Aboriginal Peoples in Canada: The Current State of Knowledge and Research Gaps. Canadian Journal of Public Health, 96, Supplement 3, S32 – S36.

<sup>xxiii</sup> Friel, S, Pescud, M, Malbon, E, Lee, A, Carter, R, Greenfield, J, Cobcroft, M, Potter, J, Rychetnik, L, Meertens, B. (2017). Using Systems Science to Understand the Determinants of Inequities in Healthy Eating. PLoS ONE, 12(11), e0188872.

xviv Paquette, M-C. 2005. Perceptions of healthy eating: State of knowledge and research gaps. Canadian Journal of Public Health 96(S3), S15 – S19. Available online: https://www.academia.edu/35084153/Perceptions of Healthy Eating State of Knowledge and Research Gaps.

https://www.academia.edu/35084153/Perceptions\_of\_Healthy\_Eating\_State\_of\_Knowledge\_and\_Research\_Gaps Accessed 03 April 2020.

<sup>xxv</sup> Friel, S, Hattersley, L, Ford, L, O'Rourke, K. (2015). Addressing inequities in healthy eating. Health Promotion International, 30(2): ii77-ii88. Available online: <u>https://www.ncbi.nlm.nih.gov/pubmed/26420812</u>. Accessed 15 February 2018.

<sup>xxvi</sup> Gombert, K, Douglas, F, Carlisle, S, McArdle, K. (2017). A Capabilities Approach to Food Choices. Food Ethics, 1: 143 – 155.

xxvii Satter, E. (2007). Hierarchy of Food Needs. Journal of Nutrition Education and Behaviour, 39, S187 – S188.

xxviii Satter, E. (2007). GEM NO.447: Hierarchy of Food Needs. J Nutr Educ Behav, 39:S187-S188. Available online: <u>http://www.jneb.org/article/S1499-4046(07)00091-7/pdf</u>. Accessed 19 April 2018. <sup>xxix</sup> Li. N., Dachner, N. Tarasuk, V., Zhang, R., Kurrein, M., Harris, T., Gustin, S., Rasali, D. (2016). Priority health equity indicators for British Columbia: Household food insecurity report. Available online: <u>http://ckfoodpolicy.ca/wp-</u> content/uploads/2017/05/BCPriority-health-equity-indicators-PROOF.pdf

<sup>xxx</sup> BC Centre for Disease Control. (2018). *Food Costing in BC 2017*. Vancouver, BC: BC Centre for Disease Control, Population & Public Health Program

<sup>xxxi</sup> BC Centre for Disease Control. (2018). *Food Costing in BC 2017*. Vancouver, BC: BC Centre for Disease Control, Population & Public Health Program

<sup>xxxii</sup> Friel, S, Pescud, M, Malbon, E, Lee, A, Carter, R, Greenfield, J, Cobcroft, M, Potter, J, Rychetnik, L, Meertens, B. (2017). Using Systems Science to Understand the Determinants of Inequities in Healthy Eating. PLoS ONE, 12(11), e0188872.

<sup>xxxiii</sup> Friel, S, Pescud, M, Malbon, E, Lee, A, Carter, R, Greenfield, J, Cobcroft, M, Potter, J, Rychetnik, L, Meertens, B. (2017). Using Systems Science to Understand the Determinants of Inequities in Healthy Eating. PLoS ONE, 12(11), e0188872.

<sup>xxxiv</sup> Willows, ND. (2005). Determinants of Healthy Eating in Aboriginal Peoples in Canada: The Current State of Knowledge and Research Gaps. Canadian Journal of Public Health, 96, Supplement 3, S32 – S36.

<sup>xxxv</sup> Mosby, I., Galloway, T. (2017). "Hunger was never absent": How residential school diets shaped current patterns of diabetes among indigenous peoples in Canada. 189:E1043-5. doi: 10.1503/cmaj.170448

<sup>xxxvi</sup> Mosby, I., Galloway, T. (2017). "The abiding condition was hunger": assessing the long-term biological health effects of malnutrition and hunger in Canada's residential schools. *British Journal of Canadian Studies*; 30(2). Doi: 10.3828/bjcs.2017.9

xxxvii Truth and Reconciliation Commission of Canada: Calls to Action. (2015). Available online: <u>http://trc.ca/assets/pdf/Calls\_to\_Action\_English2.pdf</u>

xxxviii Northern Health Authority. 2012. Northern Health Position on Healthy Eating. Prince George, British Columbia.

xxxix Ontario Healthy Communities Coalition. 2006. Healthy Food, Healthy Community: A Community Action Guide, Second Ed. Ontario. Available online: <u>https://en.calameo.com/read/0008767984500706b5786</u>.

<sup>xl</sup> Lutz, AE, ME Swisher, and MA Brennan. 2007. Defining Community Food Security. Gainesville, FL: University of Florida Extension Office, Institute of Food and Agriculture Sciences. Available online: <u>http://edis.ifas.ufl.edu/pdffiles/WC/WC06400.pdf.</u> <u>Accessed 4 Jan 2012</u>.

x<sup>li</sup> Alberta Health Services. 2008. Dietary Reference Intakes. Available online: <u>http://www.healthlinkalberta.ca/Topic.asp?GUID=%7B3E3E8DBF-1CCD-442B-ACF2-3C867FFC043B%7D</u>. Accessed 27 Dec 2011. Link changed to <u>https://myhealth.alberta.ca/health/pages/conditions.aspx?Hwid=aa160433 in 2020.</u>

<sup>xlii</sup> Otten, JJ, JP Hellwig, LD Meyers (eds). 2006. *Dietary Reference Intakes: The essential guide to nutrient requirements*. Available online: <u>http://www.nap.edu/catalog.php?record\_id=11537</u>. Accessed 4 Jan 2012.

x<sup>IIII</sup> Psota, TL, B Lohse, and SG West. 2007. Associations between eating competence and cardiovascular disease biomarkers. *Journal of Nutrition Education and Behavior* 39(5S): S171-S178. Available online: https://www.ncbi.nlm.nih.gov/pubmed/17826698

x<sup>liv</sup> Satter, EM.2007. Eating Competence: Definition and evidence for the Satter Eating Competence Model. *Journal of Nutritional Education and Behavior* 39 (supplement): S142-S153.

x<sup>Iv</sup> Neumark-Sztainer, D, PJ Hannan, M Story, J Croll, and C Perry. 2003. Family meal patterns: associations with sociodemographic characteristics and improved dietary intake among adolescents. *Journal of the American Dietetic Association* 103(3): 317-322.

<sup>xlvi</sup> Eisenberg, ME, RE Olson, D Newmark-Sztainer, M Story, and LH Bearinger. 2004. Correlations between family meals and psychosocial well-being among adolescents. *Arch Pediatr Adolesc Med*Aug; 158 (8): 792-6.

<sup>xivii</sup> Fulkerson JA, M Sotry, A Mellin, N Leffert, D Neumark-Sztainer, and SA French. 2006. Family dinner meal frequency and adolescent development: relationships with developmental assets and high-risk behaviours. *J Adolesc Health* 39(3): 337-45.

<sup>xiviii</sup> Glanz, K, M Basil, E Maibach, J Goldberg, and D Snyder. 1998. Why Americans Eat What They Do: Taste, nutrition, cost, convenience, and weight control concerns as influences on food consumption. *Journal of the American Dietetic Association* 98 (10): 1118-1126.

xlix Willows, ND. 2005. Determinants of Healthy Eating in Aboriginal Peoples in Canada. *Canadian Journal of Public Health* 96 (S3): S32-S36. Page S33.

<sup>1</sup> Luppens, L and E Power. 2018. "Aboriginal isn't just about what was before, it's what's happening now:" Perspectives of Indigenous peoples on the foods in their contemporary diets. *Canadian Food Studies*. 5 (2): 142-161.

<sup>ii</sup> eXtension. 2011. Food Systems Introduction. Available online: <u>https://extension.missouri.edu/publications/dm271</u>. Accessed 30 Dec 2011. Link changed to the above in 2015.

<sup>III</sup> Roberts, W. 2008. The No-Nonsense Guide to World Food. Oxford, England: New Internationalist Publications Ltd.

<sup>IIII</sup> Powell, L.J., Newman L., Kurrein, M. (2016). Agriculture's Connection to Health: A summary of evidence relevant to British Columbia. Vancouver, BC.: Provincial Health Services Authority, Population and Public Health Program. Available online: <u>http://www.bccdc.ca/pop-public-health/Documents/AgConnectiontoHealth\_Exec%20Summary\_April2016.pdf</u>

<sup>iv</sup> First Research. 2005. Industry Profile: Grocery Stores and Supermarkets. Available online: <u>http://www.edsuite.com/proposals/proposals\_169/88\_1\_intel\_-grocery\_stores.pdf</u>. Accessed 16 Dec 2011.

<sup>Iv</sup> Hayes, D and R Laudan. 2008. *Food and Nutrition.* Tarrytown, New York: Marshall Cavendish.

<sup>Ivi</sup> Food Marketing Institute. 2010. Industry Overview: Supermarket Facts. Available online: <u>http://www.fmi.org/facts\_figs/?fuseaction=superfact</u>. Accessed 9 Dec 2011.

<sup>Ivii</sup> Coté C. (2016). "Indigenizing" Food Sovereignty. Revitalizing Indigenous Food Practices and Ecological Knowledges in Canada and the United States. Humanities, 5(57), doi: 10.3990/h5030057.

<sup>wiii</sup> Morrison, D. (2008). BC. Food Systems Network: Working Group on Indigenous Food Sovereignty. Available online: https://www.indigenousfoodsystems.org/sites/default/files/resources/WGIFS\_Final\_Report\_March\_08.pdf

<sup>lix</sup> Morrison, D. (2008). BC. Food Systems Network: Working Group on Indigenous Food Sovereignty. Available online: <u>https://www.indigenousfoodsystems.org/sites/default/files/resources/WGIFS\_Final\_Report\_March\_08.pdf</u>

<sup>lx</sup> Morrison, D. (2008). BC. Food Systems Network: Working Group on Indigenous Food Sovereignty. Available online: <u>https://www.indigenousfoodsystems.org/sites/default/files/resources/WGIFS\_Final\_Report\_March\_08.pdf</u>

<sup>|xi</sup> Government of Canada. (1998). Canada's Action Plan for Food Security: In Response to the World Food Summit Plan of Action. Page 9.

<sup>lxii</sup> Population and Public Health BC Ministry of Health. (2014). Core Public Health Functions for BC. Model Core Program Paper: Food Security. Available online: <u>https://www2.gov.bc.ca/assets/gov/health/about-bc-s-health-care-system/public-health/healthy-living-and-healthy-communities/food security model core program paper.pdf</u>

<sup>kiii</sup> Bellows, A. C., and Hamm, M. W. (2010). International effects on and inspiration for community food security policies and practices in the USA, *Critical Public Health, 13*(2), 107-123. DOI: https://doi-org.proxy.lib.sfu.ca/10.1080/0958159031000097652

<sup>kiv</sup> Willows, ND. (2005). Determinants of Healthy Eating in Aboriginal Peoples in Canada: The Current State of Knowledge and Research Gaps. Canadian Journal of Public Health, 96, Supplement 3, S32 – S36.

<sup>kv</sup> Willows, ND. (2005). Determinants of Health Eating in Aboriginal Peoples in Canada. Canadian Journal of Public Health 96 (S3): S32-S36.

<sup>kvi</sup> Li, N., Dachner, N., Tarasuk, V., Zhang, R., Kurrein, M., Harris, T., Gustin, S., Rasali, D. (2016, August). Priority health equity indicators for British Columbia: Household food insecurity indicator report. Available online: <u>http://proof.utoronto.ca/wp-content/uploads/2016/08/1186-PHS-Priority-health-equity-indicators-WEB.pdf</u>

<sup>kvii</sup> Friel, S, Hattersley, L, Ford, L, O'Rourke, K. (2015). Addressing inequities in healthy eating. Health Promotion International, 30(2): ii77-ii88. Available online: <u>https://www.ncbi.nlm.nih.gov/pubmed/26420812</u>. Accessed 15 February 2018.

<sup>Ixviii</sup> Story, M, KM Kaphingst, R Robinson-O'Brien, and K Glanz. 2008. Creating Healthy Food and Eating Environments. *Annual Review of Public Health* 29: 253-272. Available online: <u>https://www.annualreviews.org/doi/10.1146/annurev.publhealth.29.020907.090926</u>. Accessed 20 December 2011.