The Conceptual Model for Promoting Food Security in First Nations and Inuit Communities

Why the Need to Promote Food Security?

Available data demonstrate a *very* high prevalence of food insecurity among Aboriginal populations in Canada. Approximately 33% of Aboriginal households (not including First Nations reserves or Crown Lands, the territories, or some remote areas in provinces) are food insecure, compared to almost 9% of non-Aboriginal households [1]. In northern and remote areas, the prevalence of food insecurity has been measured at 70% in a First Nations community, and 40 and 83% in two Inuit communities [2] [3] [4]. Such evidence suggests that food security is an *urgent* issue for First Nations and Inuit.

About the Model

The Conceptual Model is a framework that can be used to guide the development of initiatives that promote food security in First Nations and Inuit communities, and to guide the review of existing interventions or initiatives. Although it is based on the best available evidence, including a review of the literature on food security for First Nations and Inuit, significant information gaps exist. The model was thus developed to help articulate a definition of food security specific to First Nations and Inuit, and aid in the conceptualization of how it can be improved given that food security is a multifaceted and complex issue.

Definition of Food Security

> *Food security exists when all people, at all times, have physical and economic access to sufficient, safe, and nutritious food to meet their dietary needs and food preferences for an active and healthy life[5].*

This definition was developed at the World Food Summit in 1996, and has been endorsed by the Canadian government. The Conceptual Model is based on this definition, however food security has unique considerations and implications for First Nations and Inuit, which are outlined below.

- Food security for First Nations and Inuit includes **access** to sufficient, safe, and nutritious store food and/or traditional/ country food[*] (purchased, hunted, fished, gathered, grown or shared). Access requires that nutritious foods are **available** and **affordable** in a community. Traditional or country foods are an important source of nutrients for many First Nations and Inuit.
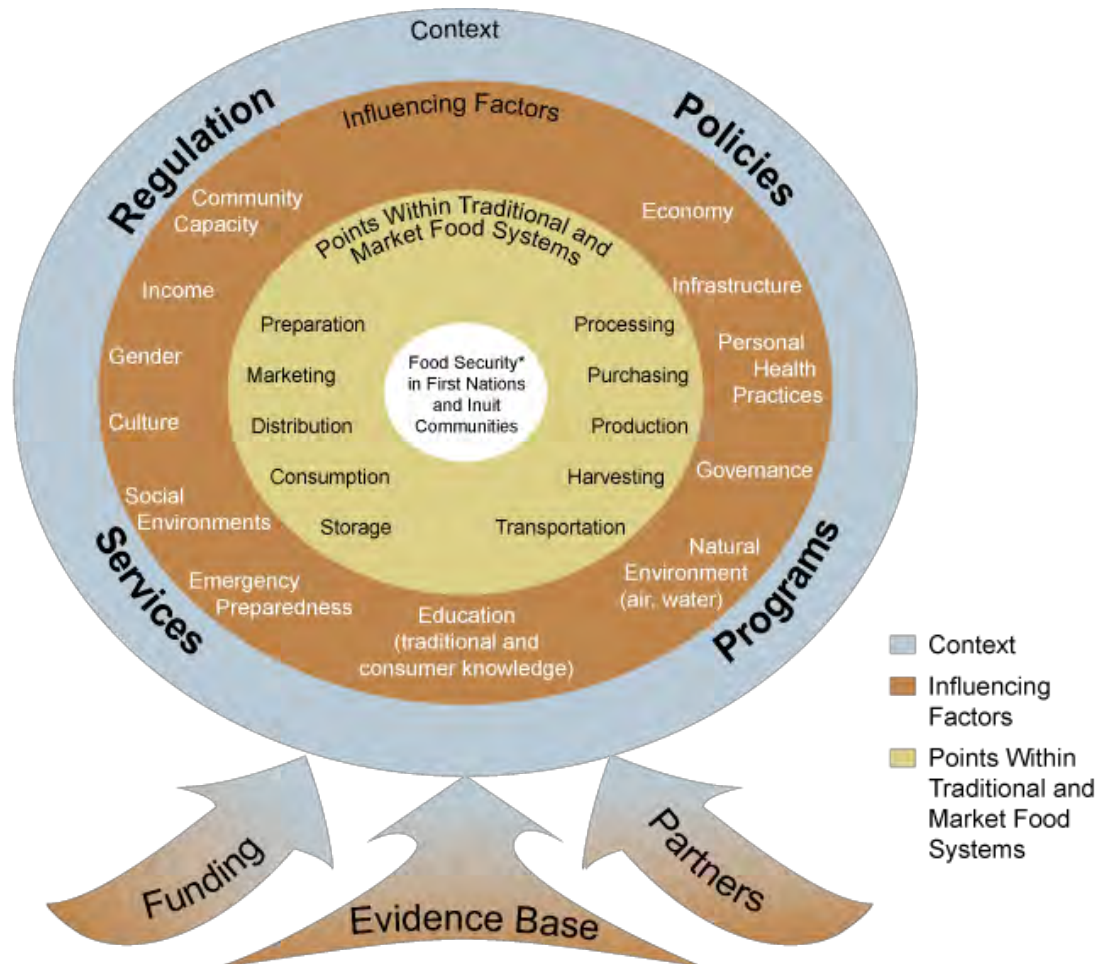
---

[*] Traditional/ country or country food refers to wild-harvested food including land animals, birds, fish, sea mammals, berries and other plants. In: Kuhnlein, H.V. & Receveur, O. 1996. Dietary change and traditional/ country food systems of Indigenous Peoples. *Annual Review of Nutrition*, 16: 417-442, traditional/ country food system is defined as "all food from a particular culture available from local resources and culturally accepted. It includes sociocultural meanings, acquisition/processing techniques, use, composition, and nutritional consequences for people using the food".

- Food security is an important determinant of health, and as such is a key element of the population health approach. The population health approach seeks to reduce health inequities among population groups, including First Nations and Inuit. The population health approach is consistent with a commitment to the pursuit of social justice[6] a condition in which all members of a society share equally in opportunities and social benefits.

- The assurance of other determinants of health, such as adequate housing, clean/safe water (for the purposes of drinking, food preparation and basic sanitation) and adequate incomes, is essential to the achievement of food security. This understanding reflects the consensus of the international community, as reflected in Article 25 of the Universal Declaration of Human Rights:

  > *Everyone has the right to a standard of living adequate for the health and well-being of himself [sic] and of his [sic] family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his [sic] control.*

- The harvesting of traditional or country food has economic, spiritual and cultural importance for First Nations and Inuit. To ensure food security and cultural survival, First Nations and Inuit must have access to the land/ water/ ice (sea, lakes, rivers, etc.) for the purposes of harvesting traditional or country food, consistent with inherent rights and land claims agreements.

- Food security depends on the knowledge of traditional and environmentally sound food harvesting practices. Thus, the promotion of food security must respect the knowledge of elders and traditional knowledge keepers, and acknowledge their contributions appropriately.

- Food security for First Nations and Inuit is undermined by high unemployment and low income levels, unreliable supply and high prices of store food, especially in isolated communities, loss of cultural identities and traditional knowledge, global climate change, environmental contamination, and unsustainable harvesting/food production practices.

- Food security must be achieved for all First Nations and Inuit in Canada, regardless of where they live.

When citing this model, please acknowledge its development by the Food Security Reference Group, 2009. For more information, please contact Mary Trifonopoulos at mary.trifonopoulos@hc-sc.gc.ca.

2

The Conceptual Model for Promoting Food Security in First Nations and Inuit Communities

Context

Regulation

Policies

Influencing Factors

Community Capacity

Economy

Points Within Traditional and Market Food Systems

Income

Infrastructure

Preparation

Processing

Gender

Personal Health Practices

Marketing

Food Security* in First Nations and Inuit Communities

Purchasing

Culture

Distribution

Production

Consumption

Harvesting

Governance

Social Environments

Storage

Transportation

Services

Emergency Preparedness

Natural Environment (air, water)

Programs

Education (traditional and consumer knowledge)

Funding

Evidence Base

Partners

Legend:
- Context
- Influencing Factors
- Points Within Traditional and Market Food Systems

* Food security exists when all people, at all times, have physical and economic access to sufficient, safe, and nutritious food to meet their dietary needs and food preferences for an active and healthy life. (World Food Summit, 1996). This definition has unique considerations and implications for First Nations and Inuit.

How the Model Works
The components of the model (outlined below), relate the various elements of food security for First Nations and Inuit. By looking at relationships between context, influencing factors and points within food systems, the Conceptual Model helps in identifying where efforts to promote food security may be placed.

Points Within Traditional and Market Food Systems
This section identifies various points in both traditional and market food systems where there may be opportunities to promote food security. These points range from the harvesting or production of food to its consumption. Traditional and market food systems vary from community to community according to culture, economy and geography. For example, the market food system is different in a fly-in community than in one that is accessible by road. As well, market and traditional food systems are not always independent of one another, as traditional/ country food may sometimes go through a retail environment.

The following are various points within traditional and/ or market food systems, with examples of initiatives that promote food security. Some examples apply to more than one point within a food system. Users of this tool should note that this is not an exhaustive list, and should consider how each point in the food system may have different meanings for traditional/ country food systems, versus market food systems.
- *Harvesting* - Initiatives that aid in the harvest of traditional/ country foods, e.g., hunter support programs, community hunts.
- *Production* – Initiatives that aid in the production of food, e.g., community gardens/ greenhouses.
- *Processing* – Initiatives that aid in the preparation of food for consumption or retail, e.g., fish and meat processing facilities, bakeries.
- *Transportation* – Initiatives that support the transportation of market foods to a community, the transportation of traditional/ country food, or transportation involved in harvesting food, e.g., Food Mail, air transport, road transport, ATVs, boats, barges.
- *Storage* – Initiatives that support food storage facilities in communities and at various points during transportation, e.g., community freezers.
- *Distribution* – Initiatives that assist in the distribution of food, e.g., community freezers, community hunts, food vouchers, food sharing.
- *Purchasing* – Initiatives that support buying food, e.g., food stamps, food vouchers, buying groups.
- *Marketing* – Initiatives related to advertising or the promotion of healthy food to consumers, e.g., exploring opportunities to sell local food, improving existing retail conditions, retail-based promotions of healthy food.
- *Preparation* – Initiatives that support the development of food preparation skills and/ or promote the preparation of healthy foods, e.g., on the land programs, cooking classes, community kitchens.

When citing this model, please acknowledge its development by the Food Security Reference Group, 2009. For more information, please contact Mary Trifonopoulos at mary.trifonopoulos@hc-sc.gc.ca.

4

- *Consumption* – Initiatives that promote healthy eating and/ or provide healthy foods, e.g., school meal programs, breastfeeding promotion.

Influencing Factors

This section identifies factors that can influence food security either by influencing points within traditional and market food systems specifically, or by influencing access to food generally. For example, factors such as the natural environment, traditional knowledge and income might impact on a community member's ability to harvest traditional/ country food.

While not an exhaustive list, the following are examples of influencing factors. Also included are examples of how these factors can be leveraged to promote food security.

- *Community capacity* – Activities that enhance a community's ability to act on its own behalf can help improve access to food, e.g., community gardens/ greenhouses.
- *Education* (also including the transfer and protection of traditional knowledge, consumer knowledge) – Activities that impart knowledge or skill can help improve access to food, through food preparation or production abilities, e.g., on the land/ traditional harvesting programs, cooking classes, community gardens.
- *Governance* – Actions that promote sustainable development practices and management of resources can help improve food security, e.g., self-governance by Indigenous peoples is linked with sustainability as a base for local economy and strengthened capacity to assure food security[7].
- *Culture* –The way of life shared by members of a society can provide a mechanism to promote food security, e.g., advisory groups involving elders or community members, culturally appropriate programs.
- *Gender* – The involvement of men and women equally in the development of initiatives and policies is important in promoting food security, as gendered norms influence both traditional and market food systems, e.g., men are usually the hunters in the family, and women are usually responsible for preparing the food.
- *Natural Environment* – Practices that support natural environments, including water, air, land, and wildlife, can help promote food security and improve food systems, e.g., sustainable practices, on the land education programs.
- *Social Environments* – Relationships with friends, families and the community, as well as on a regional or national level can provide a mechanism to promote food security, e.g., social support networks, support from community members in engaging in food security activities.
- *Infrastructure* – Built environments, services and facilities that support day to day activity, as well as food systems, can help promote food security and help ensure access and availability of food., e.g., roads, urban development, electricity, housing.
- *Income* – Sufficient income is required for an individual, family or household to purchase, harvest or hunt foods, and initiatives in this area can help improve food security, e.g., hunter/ harvester support programs, funding for community gardens, social assistance.

When citing this model, please acknowledge its development by the Food Security Reference Group, 2009. For more information, please contact Mary Trifonopoulos at mary.trifonopoulos@hc-sc.gc.ca.

5

- *Personal Health Practices* –Promoting self-care and healthy eating can help improve food security by promoting consumption of healthy foods, which can help increase demand, improve supply, and therefore help improve access to food, e.g., healthy eating promotion, retail-based promotions.
- *Economy* – A sustainable system of production, distribution and consumption that includes local economic development opportunities can help promote food security, e.g., traditional/ country food markets, bakeries, agriculture.
- *Emergency Preparedness* – All activities (plans, procedures, contact lists and exercises) undertaken in anticipation of a likely emergency, with the goal to be able to respond quickly and effectively in the event of an emergency[8], can help ensure food security, particularly for vulnerable communities, e.g., planning undertaken by fly-in communities to ensure the availability of food in the event of an emergency such as a failed shipment of foods.

Context
This section identifies the broader context at a community, regional, national or international level that can influence community food security. It includes the policies, programs, services and regulations that may be directed at the various points/ stages of traditional and market food systems, and/or the factors affecting these food systems, which can provide a basis for promoting food security in First Nations and Inuit communities.
- *Programs* – Planned responses to issues or needs to achieve food security.
- *Services* – The development, availability or accessibility of services that improve food security.
- *Regulation* – Standards or rules of governance that regulate factors which impact food security.
- *Policies* – Guiding principles or plans of action that enhance food security.
Funding, evidence (including research and evaluation), and partnerships (including leadership), are shown as inputs that facilitate the planning and development of food security initiatives. These inputs are needed to support or drive the development of cohesive and sustainable policies, programs, services and regulations to promote food security.

About the Development of the Model
The Conceptual Model was developed by the Food Security Reference Group (FSRG) based on available evidence and academic expertise, as well as extensive input from various First Nations and Inuit partners and stakeholders. The FSRG was a senior-level group convened by the Community Programs Directorate of the First Nations and Inuit Health Branch (FNIHB), Health Canada between 2005 and 2011, which brought together key organizations to share information, discuss strategies and opportunities, and set priorities for action, to inform the work of FNIHB and partners. The FSRG included the Assembly of First Nations, Inuit Tapiriit Kanatami and federal government, including Health Canada (FNIHB, Health Products and Food Branch), the Public Health Agency of Canada, and Indian and Northern Affairs Canada, as well as academic experts and other organizations working in the area of food security.

[1] Office of Nutrition Policy and Promotion. (2007). Income-related household food security in Canada. Ottawa, ON: Health Canada.

[2] Indian and Northern Affairs Canada. (2004). Nutrition and food security in Kangiqsujuaq, Nunavik. Ottawa, ON: Minister of Public Works and Government Services Canada.

[3] Indian and Northern Affairs Canada. (2004). Nutrition and food security in Fort Severn, Ontario. Ottawa, ON: Minister of Public Works and Government Services Canada.

[4] Indian and Northern Affairs Canada. (2003). Nutrition and food security in Kugaaruk, Nunavut. Ottawa, ON: Minister of Public Works and Government Services Canada.

[5] Agriculture and Agri-Food Canada. (1998). Canada's action plan for food security: A response to the World Food Summit. Ottawa, ON: Author.

[6] Beauchamp, D. (1999). Public health as social justice. In D. E. Beauchamp & B. Steinbock (Eds.), New ethics for the public's health (pp. 101-109). New York, NY: Oxford University Press.

[7] Native Women's Association of Canada. (2007). Aboriginal women and self-determination: An issue paper. Cornerbrook, NL: Author.

[8] Health Canada. (2006). Emergency Preparedness. Http://www.hc-sc.gc.ca/ed-ud/prepar/index_e.html.

When citing this model, please acknowledge its development by the Food Security Reference Group, 2009. For more information, please contact Mary Trifonopoulos at mary.trifonopoulos@hc-sc.gc.ca.

7