



Government of Nunavut
Department of Health
and Social Services



Nutrition in Nunavut **A Framework for Action**



Message from the Minister of Health and Social Services:

It is my pleasure to release Nunavut's first *Nutritional Framework for Action*.

Improving the nutrition and physical activity of Nunavummiut is not easy. It presents us with major challenges personally and socially. Healthy eating is fundamental to fostering healthy people and communities.

Supported and approved for development in October 2006, the *Nutritional Framework for Action* is a strategic plan that offers a path forward, and sets the parameters for creating tangible changes.

I am proud to say that the Department of Health and Social Services is committed to *Pinasuaqtavut*, and supports Nunavummiut in achieving and maintaining *Niqittiavaknik Nimasuaqniq* (healthy eating).

This strategy calls for an integrated holistic approach to addressing our nutritional needs. Along with my Cabinet and legislative colleagues, I would like to thank all the health personnel for their essential role in developing this framework.

Sincerely,



A handwritten signature in black ink that reads "Leona Aglukkaq".

Leona Aglukkaq
Minister, Department of Health and Social Services

October 2007



Foreword

Good nutrition is basic to health, not only physical health but also social, cultural and emotional health. The nutritional problems we see today in Nunavut are rooted in the social and cultural changes that took place when Inuit started to move to settlements in the 1940s, resulting in a profound effect in their diet. Prior to this, Inuit relied exclusively on the resources of the sea, land and lakes, which provided food of very high nutritional value compared to the food bought in stores today.

Compounding this change, food is now 'big business' and global sophisticated marketing even influences the food choices of remote Arctic communities where foods of low nutritional value, such as pop and chips, are now staples for many. Generations are now experiencing the consequences of a poor diet.

We cannot turn the clock back, but we can optimize the resources now available, using both traditional and nutritious store food so that the basic dietary needs of all Nunavummiut are met. This will take focused, creative and collaborative efforts.

The 'Framework for Action' outlines the steps required for such a strategy. It clearly sets out the agenda for investing in nutrition in Nunavut. The returns on this investment will be seen not only in reducing spiraling health care costs by averting a chronic disease epidemic, but more importantly, in supporting the health and well being of all Nunavummiut now and generations to come.

Dr Geraldine Osborne
Deputy Chief Medical Officer of Health

July 2007



Table of Content

- Executive Summary..... 4**
- Why A Nutrition Framework? 5**
- Nutrition Issues 6**
 - Health Conditions 6
 - Healthy Eating and Food Security 6
 - Policies & Standards to Support Food Security & Healthy Eating..... 7
 - Access to Care & Treatment for Nutrition-Related Health Concerns 7
 - Nutrition-Focused Human Resources 7
 - Inuit Employment Plan 7
 - Financial Resources and Leadership 7
- A Framework For Action 10**
 - Program Vision 10
 - Guiding Principles..... 10
 - Service Delivery Model 11
 - Goals & Objectives 13
 - Overarching Nutrition Program (Goals 1-3) 13
 - Public Health Nutrition (Goals 4-7) 15
 - Clinical Nutrition Services (Goal 8) 18
 - Foodservice Management (Goals 9-10)..... 19
- Acronyms..... 21**
- Summary of Goals..... 22**



Executive Summary

Through its mandate and goals, the Department of Health and Social Services (HSS) has a significant role in identifying the nutritional needs of Nunavummiut and developing initiatives that support healthy eating in Nunavut. This Framework for Action fits within the context of the Department's Public Health Strategy by providing more detail to its nutrition component. The Nutrition Framework proposes a proactive service delivery model framed within the functions of public health nutrition, clinical nutrition and foodservices. It sets out a coordinated and collaborative approach to seeking and implementing solutions to achieve healthy eating.

Health research has shown that Nunavut households experience food insecurity at a rate seven times greater than the Canadian average. Virtually half of Nunavut households reported not having enough to eat due to a lack of money. Food insecure individuals are more likely to have multiple chronic health conditions and suffer more social and psychological distress. Nutrition-related chronic diseases such as diabetes, obesity and high blood pressure are increasing in Nunavummiut and food insecurity has an impact on both treatment and prevention of disease. Inuit traditional foods have outstanding nutritional value and continued reliance on food from the land can help improve food security by providing a higher quality diet at lower cost.

The strengths, knowledge and resilience of their culture have supported Inuit through many, many generations. The strong tradition of being mindful of others' needs and the sharing of food has been, and is, critical to health and survival. This commitment to culture, together with the government's desire to find unique Nunavut solutions, will guide the changes required to improve nutritional health.

In order to achieve the overall goal of healthy eating in Nunavut, the priorities of the Nutrition Program are defined as:

Nutrition Issues:

- Food security
- Malnutrition

Service Delivery Priorities:

- Access to service
- Promotion and protection of healthy eating in territorial-funded domains

Strategies and Approaches:

- Community development including capacity building and strengthening leadership
- Education and skills



- Development of relevant policies, standards and guidelines;
- Collaboration and partnerships;
- Human Resources: Inuit Employment Plan, recruitment and retention.

The Framework for Action presents ten goals with one to five objectives each that identify areas where work can be done to:

- strengthen collaboration
- research gaps and synthesize information that will aid in the development of approaches to increase healthy eating
- increase access to both traditional and nutritious market food, particularly for pregnant women, single parent families, children and the elderly
- improve staffing procedures to increase health promotion, disease prevention, clinical and food management services closer to communities
- develop healthy nutrition public policies, standards and guidelines
- improve the overall nutritional health of Nunavummiut
- support the Inuit Employment Plan through increased training in such areas as CPNP, ADI and food management, and develop a nutrition career promotion strategy

These goals and objectives support a community-development approach and the building of capacity at all levels both in the public domain and within the Department. Opportunities to work with the Health Committees of Council and to continue to support leadership will be important. While the framework focuses on actions to take place within the next five to eight years, some of the proposed initiatives may occur at a later date.

Why A Nutrition Framework?

The Framework for Action provides the rationale, goals and objectives to assist the Department of Health and Social Services (H&SS) in supporting Nunavummiut to achieve and maintain a level of niqittiavaknik nirinasuaqniq (healthy eating) that will promote optimal health and well-being. The Framework for Action is guided by the four goals of Pinasuaqtavut and the principles of Inuit Qaujimajatuqangit. Further guidance was provided by literature reviews and a consultation.

Good nutrition plays a critical role in supporting lifelong well-being and disease prevention. As individuals, our capacity is challenged when we are hungry or unable to obtain sufficient food. If an essential need such as food is not met, it is not realistic to expect people to think about pursuing higher levels of learning, finding and maintaining employment, or volunteering or taking leadership in the community.



All around us too many Nunavummiut are living with varying levels of hunger, malnutrition and rising rates of certain diseases. These conditions are in sharp contradiction to the goal of Inuuqatigittiarniq or Healthy Communities. Healthy eating is foundational to healthy communities. For example, healthy eating by children and youth can promote brain development, increase immune function and raise self-esteem. In pregnant women, adequate nutrition helps prevent low birth weights and iron-deficiency anemia, and in elders healthy eating improves appetite and decreases depression. Healthy eating and physical activity are the cornerstones of obesity prevention and treatment for all age groups. Indeed, rising rates of obesity and the resulting consequences on health are making nutrition a public health priority, not only in Nunavut, but across Canada.

Nutrition Issues

1) Health Conditions

The occurrence of nutrition-related conditions such as colon cancer, obesity, rickets and iron-deficiency anemia indicates that nutrition and healthy eating are a concern in Nunavut. Rates of diabetes and cardiovascular disease, while still low compared to Canadian averages, are increasing. The growing evidence of malnutrition, unhealthy eating practices and food insecurity tells us that there will be more people suffering poor health and that government and other systems will face an ever increasing demand on the health care system.

2) Healthy Eating and Food Security

Healthy eating is determined by many factors (Figure 1). Food security is fundamental to healthy eating. Food security (Figure 2) exists when an individual (or population) has access to sufficient nutritious, affordable, available, acceptable and safe food to maintain health. In 2001, virtually half (49%) of Nunavummiut households experienced food insecurity, described as 'not having enough food to eat due to lack of money'. This is seven times the overall Canadian rate; in low and lower-middle income households in Nunavut, the rate for food insecurity increased to 68%. Food insecure individuals are more likely to have multiple chronic health conditions and suffer more social and psychological distress.

In 2001, virtually half (49%) of Nunavut households experienced food insecurity without sufficient food to eat because of a lack of money.



3) Policies & Standards to Support Food Security & Healthy Eating

Currently there are few foodservice nutrition standards and guidelines in place in Nunavut. Qualified personnel are required to advise and monitor government funded facilities to ensure that the GN is providing quality care and minimizing risk to residents/patients.

4) Access to Care & Treatment for Nutrition-Related Health Concerns

Nunavummiut have historically had very limited access to the clinical nutrition services available elsewhere in Canada. Medical nutrition therapy is widely recognized as a cost-effective treatment modality both in acute care and primary care settings, and as a rule, registered dietitians are key partners in primary care teams for hospitals, long term care facilities, and for out-patient care of chronic disease.

5) Nutrition-Focused Human Resources

A robust Human Resources recruitment and retention strategy for this health discipline is needed.

6) Inuit Employment Plan

There is a need for Inuit to be trained and employed as nutrition professionals. Presently there are no Inuit nutritionists or registered dietitians in Nunavut.

7) Financial Resources and Leadership

Vacant positions within the Department, at all levels, can increase individual workload, decrease service, and result in less effective program management.



Determinants of Healthy Eating

(Figure 1)

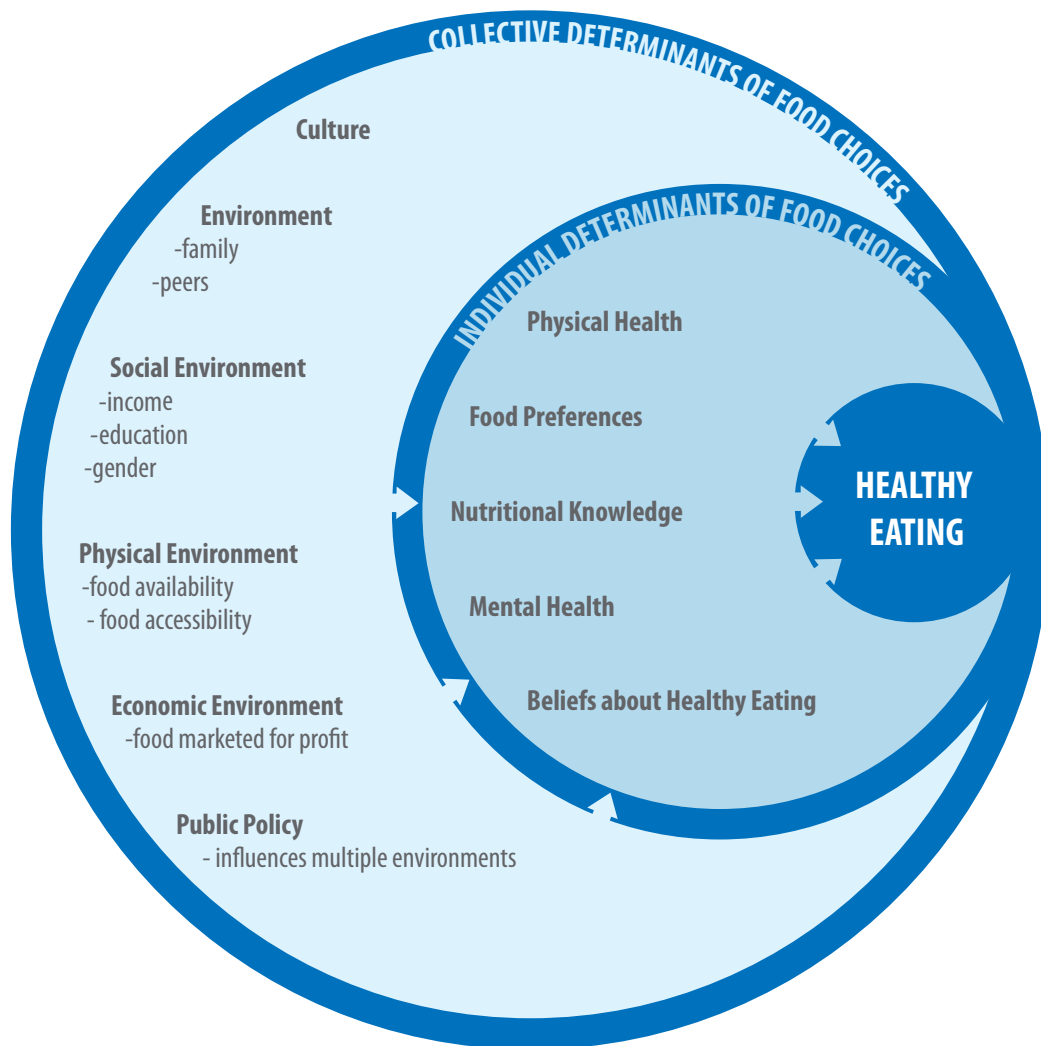


Figure 1: Determinants of Healthy Eating. Both broad and individual factors influence a person's opportunities to achieve healthy eating. (Development based on: Understanding the Forces that Influence Our Eating Habits. CJPH, Vol. 9, Supplement 3, July/August, 2005.)



Determinants of Food Security

(Figure 2)

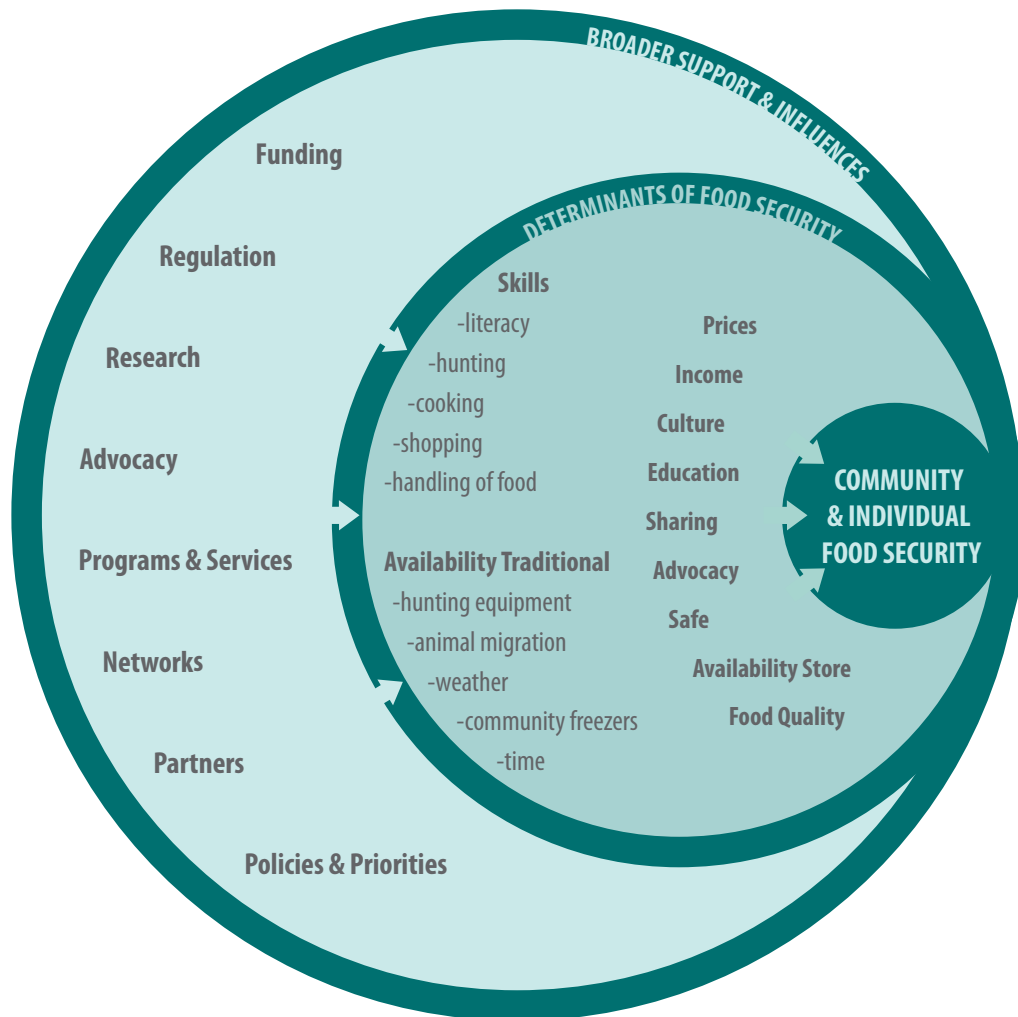


Figure 2: Determinants of food security in Nunavut. Food security exists for individuals when they have access to sufficient, nutritious, acceptable, safe food to maintain health. A range of influences or determinants both broad and more immediate affect an individual's state of food security. Food security is foundational to achieve healthy eating.



A Framework For Action

Program Vision

All Nunavummiut will enjoy **niqittiavaknik nirasuaqniq** (healthy eating) to help support good health, well-being, and self-reliant and productive lives. To achieve healthy eating, people will have access to food that is safe, nutritious and culturally valued and will not experience hunger or worry about hunger.

Guiding Principles

The over arching guiding principles of the Nutrition Program are those of Pinasuaqtavut, Inuit Qaujimagatuqangit (IQ):

- **Inuuqatigiitsiarniq:** respecting others, relationships and caring for people – health of body, mind, soul and spirit.
- **Tunnganarniq:** fostering good spirit by being open, welcoming and inclusive
- **Pijitsirniq:** serving and providing for family and/or community
- **Aajiiqatigiinni:** decision making through discussion and consensus
- **Pilimmaksarniq/Pijariuqsarniq:** development of skills through practice, effort and action.
- **Piliriqatigiinni/Ikajuqtigiinni:** working together for a common cause
- **Qanuqtuurniq:** being innovative and resourceful
- **Avatittinnik Kamatsiarniq:** respect and care for the land, animals and the environment.

Additional principles specific to the Nutrition Program include:

- **Inuit Knowledge of Traditional Foods:** is valued, respected and recognized as essential knowledge to the Nutrition Program
- **Evidence-based:** we make decisions through discussion and sharing of knowledge, including traditional knowledge, research-based and best-practice based; and being innovative and resourceful
- **Timely & Achievable:** implies respect
- **Equitable:** serving and providing for family and community
- **Responsible:** care is taken to use resources wisely and to evaluate outcomes and effort
- **Meet Professional Standards:** as per Dietitians of Canada's Standards of Practice and Professional Code of Ethics (www.dietitians.ca)



Service Delivery Model

The Nutrition Program represents the human and financial resources of the Department of Health and Social Services that are focused on supporting and maintaining the nutritional health and well-being of Nunavummiut through three key areas of service. These three areas provide leadership in nutrition, and support a coordinated team approach that extends across disciplines and departments to maintain a network of relevant partnerships.

- **Public Health Nutrition**
- **Clinical Nutrition Services**
- **Foodservice Management**

The Nutrition Program provides for the evidence-based development and delivery of a range of health promotion and disease prevention programs, clinical nutrition interventions and nutrition quality assurance in all Government of Nunavut sponsored food services. The focus of services range from the individual through to the broad population level, and has as the ultimate goal, healthy eating for all Nunavummiut. Figure 3 provides a schematic presentation of the three service elements as they relate to collaboration, partnerships, food security and achieving healthy eating in Nunavut.



Nutrition in Nunavut

A Framework for Action

HSS Nutrition Program Service Delivery Model
(Figure 3)

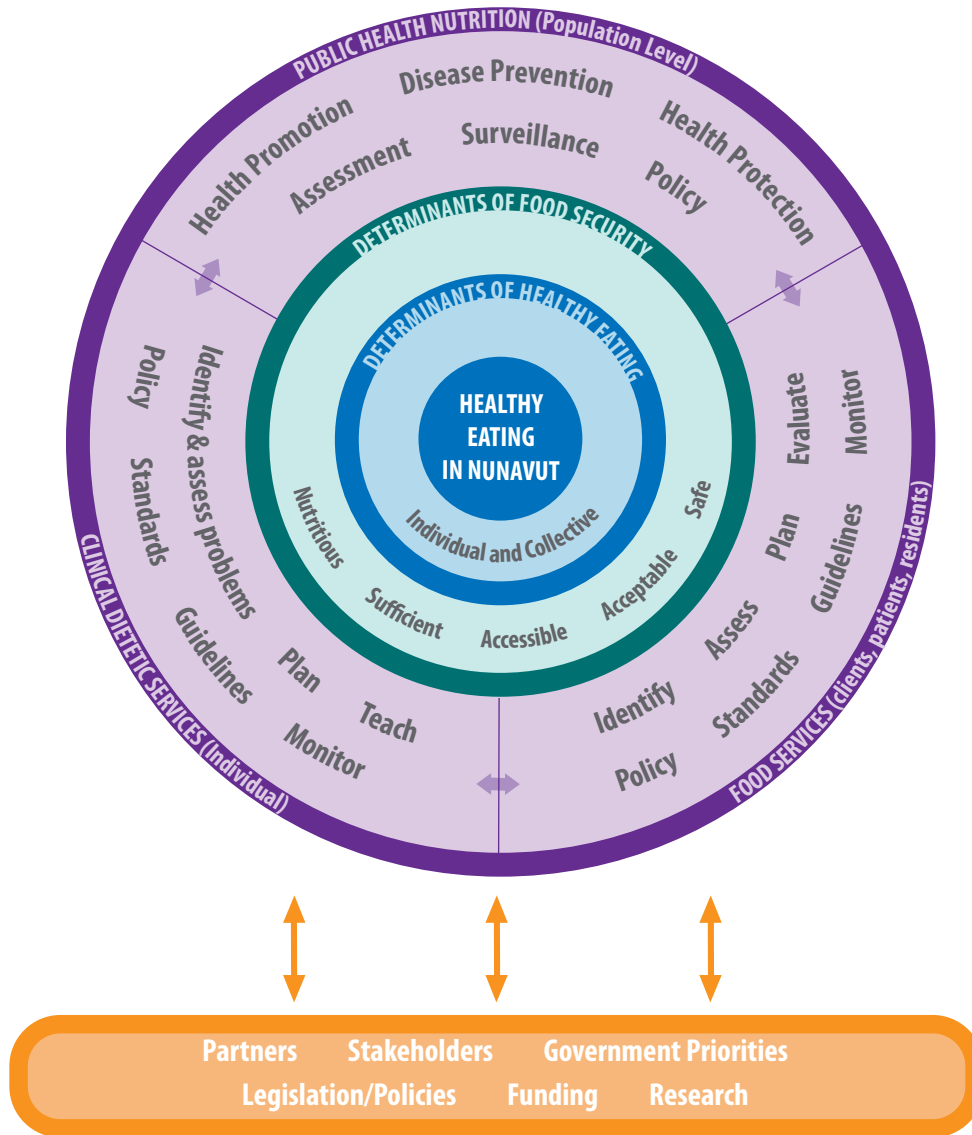


Figure 3: Department of Health and Social Services Nutrition Program Service Delivery Model. The three service elements of the Nutrition Program work together and in a multi-disciplinary environment to support the achievement of food security and healthy eating in Nunavut. 'Service' implies all of the roles and responsibilities typically associated with clinical, public health and food service nutrition.



Goals & Objectives

The Framework for Action includes 10 goals, and their corresponding objectives. These goals are broken down into four main areas: Overarching Nutrition Program, Public Health Nutrition, Clinical Nutrition Services and Foodservice Management. It is important to note that human resources will be required to successfully implement the Nutrition Framework. It is estimated that 80% of Nutritionist/Dietitian positions would need to be filled in order to achieve all the goals and objectives laid out in the Framework.

Overarching Nutrition Program (Goals 1-3)

Issues

- There is no established government multidisciplinary forum to provide focused opinion and expertise to the Nutrition Program regarding healthy eating in Nunavut.
- Currently there are no self-identified Nunavut Inuit nutritionists or registered dietitians; nor are there Nunavut Inuit following nutrition career path.

Goal 1

Broaden the Nutrition Program leadership, vision, coordination and engagement of partners and stakeholders.

Objectives

- + Establish a multidisciplinary, healthy eating advisory group committed to a collaborative approach to better understand and address the determinants of healthy eating and food security for Nunavummiut by October, 2008.
- + Establish the mechanisms by which the Nutrition Program will formally work as a group, including its role in advising on nutrition related policies and how it will work within and exterior to HSS, including a terms of reference, by January 2008.



Goal 2

Provide a range of nutrition services to Nunavummiut that meets their needs and is equitable to that of other Canadians.

Objective

- + Increase the professional nutrition services to Nunavummiut by developing a timely, effective, coordinated recruitment and retention strategy that will result in all nutritionist and dietitian positions being filled by October, 2008.

Goal 3

Support the Inuit Employment Plan

Objectives

- + Continue to support Inuit employment, through training of HSS staff (i.e. CHRs, HCC), and lay program workers (i.e. CPNP workers)
- + Develop a Nunavut Nutrition Career Promotion Strategy, including role modeling and health career promotion by April, 2012.



Public Health Nutrition (Goals 4-7)

Issues

- Nunavut has a very young population - over half of Nunavummiut are 24 years of age or younger and one quarter of the population are 9 years or younger
- Infant low birth weight in Nunavut is one third greater than the national rate
- Reported cases of rickets in Nunavut are rising
- Iron deficiency anemia is of concern i.e. in one community study, 48% of infants tested for anemia (Hb <110 g/L)
- 95% of Inuit children in Nunavut experience dental decay; 60% of children under the age of 6 have dental treatment in the Hospital under general anaesthesia to treat their decayed primary teeth
- 49% of all Nunavut households are food insecure without enough to eat due to lack of money. This is seven times greater than the Canadian rate.
- 68% of Nunavut households with lower-middle and low income are food insecure without enough to eat due to lack of money

Goal 4

Improve the nutritional status of infants, preschoolers and school aged children.

Objectives

- + Determine the prevalence of iron deficiency anemia in infants and young children, and based on the findings, design appropriate strategies by October, 2008.
- + Steadily increase the percentage of exclusively breastfed infants from birth to 6 months by 10% by 2017
- + Eliminate rickets by 2017
- + Build on partnerships with the schools and the Department of Education to improve school food programs and nutrition education in schools



Goal 5

More Nunavummiut will have sufficient nutritious food (without hunger) including both market and traditional foods.

Objectives

- + Understand the underlying causes and relationships of food insecurity in Nunavut and the implications for Nunavummiut, through an in-depth review and analysis of the issues and the evidence, by October, 2008
- + Identify, design and implement steps that will lead to a 5% decrease in the number of Nunavummiut experiencing food insecurity without hunger, by 2015
- + Identify, design and implement steps that will lead to a decrease in the number of pregnant women experiencing food insecurity with hunger by April, 2009

Goal 6

Increase access to nutritious and acceptable food, including commercial and traditional food.

Objectives

- + Provide support to the Nunavut component of Healthy Foods North as a means to research an evidenced-based, community-based approach to improve access to nutritious and acceptable food in a community and that has the potential to be replicated in other Nunavut communities, by January 2010
- + Determine sustainable approaches to reduce the cost of nutritious commercial foods to Nunavummiut by January, 2009
- + Determine, design and implement community-based, evidence-based approaches and policies in a Nunavut community that will increase access to traditional food, (with a focus on increasing access by pregnant women and families without a hunter) and that has the potential to be replicated in other Nunavut communities by 2017
- + Support Nunavummiut to increase skills and access to a range of healthy food and menu options through opportunistic, collaborative efforts led by partners and stakeholders such as schools, post-secondary programs, media and retailers.
- + Work with community organizations, programs and schools to determine community-based, sustainable approaches to school food programs, by January, 2009



Goal 7

Support the development of evidence-based policies and approaches that will support Healthy Eating in Nunavut.

Objective

- + Build a fuller understanding of all of the key influencers and current status of the nutritional health of Nunavummiut and identify the gaps in knowledge, through an in-depth review of health conditions and relevant research, by April, 2009



Clinical Nutrition Services (Goal 8)

Issue

- Nunavummiut diagnosed with health conditions requiring nutrition therapy may not receive the appropriate nutritional care due to lack of access to qualified nutrition professionals.

Goal 8

All Nunavummiut diagnosed with nutritional health conditions requiring nutrition therapy (e.g. nutrient deficiencies, chronic diseases such as diabetes or dyslipidemia, gastrointestinal disorders such as Crohns disease or colitis) will have timely access to the services of a Registered Dietitian and all relevant Government of Nunavut facilities will be sufficiently staffed / supported by nutrition professionals to provide qualified care within 3 months, or as appropriate, of diagnosis.

Objectives

- + Support all regions to have a referral mechanism in place, and to be consistently referring people diagnosed with type 2 diabetes (or other conditions), to a Registered Dietitian within 3 months of diagnosis, by April, 2010.
- + Evaluate the mechanisms in place to determine the timeliness and level of Registered Dietitian clinical service to Nunavummiut by April, 2012.



Foodservice Management (Goals 9-10)

Issue

- There is a need to develop policies and protocols to facilitate the service of traditional food in Nunavut that are consistent with food safety protocols and enjoyment of traditional food

Goal 9

All Government of Nunavut sponsored care and residential facilities will provide a suitable quantity and quality of foods, including traditional foods, to prevent illness and assist in the management of existing conditions.

Objectives

- + Develop separate sets of policies, standards and guidelines for Nunavut's health care, residential and other facilities and their food service operations that require a suitable quantity and quality of foods to prevent illness and assist in the management of existing conditions, and which stipulate appropriate staffing for this food service by April, 2010.
- + Explore options to develop food procurement and handling policies, standards and guidelines for Government of Nunavut sponsored facilities and programs, describing safe and simple ways that traditional food can be obtained and served to the public and to residents of facilities, by April, 2009

Goal 10

Develop, implement and monitor consistent policies, standards and guidelines regarding the foods that may be served in territorial government funded/licensed programs and activities in order to provide nutritious choices to clients/participants.

Objectives

- + Develop policies, standards and a training protocol for breakfast and school food programs that include nutritious menu choices and the safe food preparation and handling of the foods used in these programs, by October 2008



A Framework for Action

- + Implement the above standards, train all relevant volunteers/staff delivering school breakfast and other school feeding programs and evaluate performance and outcomes, by October 2009
- + Further evaluate adherence to the Child Day Care Act standards for the provision of meals and snacks and create approaches to address the shortfalls, by October, 2008
- + Contribute to the revision of the feeding standards set out in the Child Day Care Act at the relevant time
- + Determine the feasibility of the development, implementation and evaluation of policies, standards and guidelines for territorial government funded/licensed programs and activities to include nutritious food choices and the safe food preparation and handling of the foods used in these programs and activities, by October 2010.



Acronyms

ADI	Aboriginal Diabetes Initiative
BRH	Baffin Regional Hospital (2007 to be renamed Qikiqtani General Hospital)
CCHS	Canadian Community Health Survey
CHR	Community Health Representative
CLEY	Department of Culture, Language, Elders and Youth, GN
CPNP	Canada Prenatal Nutrition Program
DOE	Department of Environment, GN
FNIHB	First Nations and Inuit Health Branch, Health Canada
GN	Government of Nunavut
HC	Health Canada
HCC	Home and Community Care
HII	Health Integration Initiative
HSS	Health and Social Services, GN
INAC	Indian and Northern Affairs Canada
KI	Key informant
NAC	Nunavut Arctic College
NTI	Nunavut Tunngavik Incorporated
ONPP	Office of Nutrition Policy and Promotion, Health Canada
PHAC	Public Health Agency of Canada
RD	Registered Dietitian
RPHN	Regional Public Health Nutritionist
TPHN	Territorial Public Health Nutritionist



Summary of Goals

1. Broaden the Nutrition Program leadership, vision, coordination and engagement of partners and stakeholders.
2. Provide a range of nutrition services to Nunavummiut that meets their needs and is equitable to that of other Canadians.
3. Support the Inuit Employment Plan
4. Improve the nutritional status of infants, preschoolers and school aged children.
5. Increase access to safe, nutritious and acceptable food, including commercial and traditional food, for all Nunavummiut.
6. Support the development of evidence-based policies and approaches that will support Healthy Eating in Nunavut
7. Provide timely access (within 3 months, or as appropriate of diagnosis) to the services of a Registered Dietitian for all Nunavummiut diagnosed with health conditions requiring nutrition therapy (e.g. nutrient deficiencies, chronic diseases such as diabetes or dyslipidemia, gastro-intestinal disorders such as Crohn's disease or colitis). Government of Nunavut facilities should be sufficiently staffed / supported by nutrition professionals to provide qualified care
8. Provide food, including traditional food, of suitable quantity and quality to prevent illness and assist in the management of existing conditions in all Government of Nunavut sponsored care and residential facilities.
9. Develop, implement and monitor consistent policies, standards and guidelines regarding the foods that may be served in territorial government funded/licensed programs and activities in order to provide nutritious choices to clients/participants.