



**New Brunswick  
Public Health Nutrition  
Framework for Action  
2012-2016**



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## Message from Chief Medical Officer of Health

It gives me great pleasure to introduce the Public Health Nutrition Framework for Action 2012-2016, the first publication of its kind in New Brunswick. This document has been framed within a population health approach with the aim of providing clear direction as to the work that is needed to address the causes of poor nutrition and unhealthy eating. The need for a renewed focus in this area is clear. New Brunswick continues to see a rise in diseases and conditions directly and indirectly related to diet.

When I consider the health status of our population in New Brunswick, it is apparent that new approaches to maintain health and prevent disease are needed. With a focus on using upstream prevention efforts and shifting how we approach nutrition work, this document describes strategic directions and priority areas of action for the next four years. The process was both collaborative and comprehensive including: consultation with more than 300 stakeholders, an environmental scan, a review of literature, and a thorough examination of available population health data and statistics.

While this framework is designed to allow us to work more strategically within the practice and programs of Public Health, it is true to say that the work needed to be done to make New Brunswickers healthier is a shared responsibility. Achieving the desired outcomes will require a concerted effort by many. Thus it is hoped that the framework will be useful to our partners in other Government departments who have a pivotal role to play, such as the Departments of Culture, Tourism and Healthy Living; Education and Early Childhood Development; and Social Development as well as non-governmental organizations.

On behalf of the Office of the Chief Medical Officer of Health, I want to express a sincere thank you to the working group for the commitment they have put into the creation of this document, one which offers a strong starting point that I believe will move the Public Health system to better support and promote nutrition at the population level.



Dr. Eilish Cleary  
Chief Medical Officer of Health



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## Executive summary

Non-communicable chronic diseases such as diabetes, cardiovascular disease and certain types of cancer are rising across the country. Recent data indicate that New Brunswick has some of the highest rates of these diseases in Canada<sup>1</sup>. New Brunswick also ranks high in the country in prevalence of diet-related risk factors, with more than 24 per cent of our children and youth and 63 per cent of adults being overweight or obese<sup>2,3</sup>. Through improved nutrition, many of these non-communicable chronic diseases and associated risk factors are largely preventable.

Public Health has played a strong role in supporting and promoting good nutrition. The development of the *New Brunswick Public Health Nutrition Framework for Action 2012-2016* identifies strategic directions and priority areas for action related to nutrition work for the Public Health system. It also provides the opportunity to address these areas in a comprehensive and co-ordinated way, using a population health approach.

This framework outlines six strategic directions and five priority areas for action, all of which are strongly based within the population health approach. Within the framework, each priority area lists possible actions framed around these directions.

Strategic directions:

- Capacity-building
- Partnerships and collaboration
- Knowledge management and communication
- Comprehensive approach
- Policy
- Surveillance, monitoring, evaluation

Priority areas for action:

- Food security
- Healthy environments
- Prenatal and early childhood
- Breastfeeding
- School-aged children and youth

The strategic directions and priority areas will guide the focus of nutrition-related initiatives during the next four years. The next steps are the development of an implementation process and an evaluation framework.

## Definitions

Community of practice	Groups of people who share a common interest or profession and collaborate to share ideas and strategies, determine solutions and gain knowledge related to their field.
Comprehensive school health	A framework for supporting improvements in educational outcomes while addressing school health in a planned, integrated and holistic way. It encompasses the entire school environment with actions addressing four distinct but inter-related pillars: social and physical environment; teaching and learning; healthy school policy; and partnerships and services.
Food policy council	People from various sectors of the food system such as farmers, food distributors, processors, waste managers, Public Health dietitians, activists and academics who collaborate on food policy initiatives that benefit the community.
Food security lens	A process that promotes critical thought about the impact of program and policy decisions on food security.
Grey literature	Materials that have not been formally published in a peer-reviewed format (e.g., government and non-government organization reports, conference proceedings, statistical reports, unpublished theses).
Health inequities	Differences in health status that occur among population groups judged to be unfair, unjust and preventable (e.g., social, economic, geographic).
Health disparities	Differences in health status that occur among population groups defined by specific characteristics that may be possible to reduce but not eliminate (e.g., age, gender, genetics). This term is often used interchangeably with <i>health inequalities</i> .
Knowledge management	The systematic process by which knowledge needed for an organization to succeed is created, captured, shared and leveraged.
Nutrition	The science of the dietary requirements of humans for proper growth, development and physiological function. Nutrition is concerned with the optimal balance of nutrients and whole foods, to enable the optimal performance of the body. This is an essential basic and applied science of public health practice.

Policy	A course of action that can be carried out by the people or organizations that create it. Policy provides the foundation upon which an issue is acted or to which an issue is responded. Can include legislation, public policy and guidelines.
Population health approach	Refers to the health of a population as measured by health status indicators and as influenced by the social determinants of health. Population health focuses on the inter-related conditions and factors that influence the health of populations during the life course; identifies systematic variations in their patterns of occurrence; and applies the resulting knowledge to develop and implement policies and actions to improve the health and well-being of those populations. <sup>4</sup>  The overall goal of this approach is to improve the health of the entire population and to reduce health inequities among population groups.
Primary care	Refers to an approach to health and a spectrum of services beyond the traditional health-care system. It includes all services that play a part in health, such as income, housing, education and environment. Primary care is the element within primary health care that focuses on health-care services, including health promotion, illness and injury prevention and the diagnosis and treatment of illness and injury. <sup>5</sup>
Public Health	The science and art of preventing disease, prolonging life and promoting health through the organized efforts and informed choices of society, organizations, public and private, communities and individuals. Public health work is done by many different professions, organizations and individuals, including the Public Health system.
Public Health dietitian	A health professional who has completed a bachelor of science degree in nutrition and an internship program accredited by the Dietitians of Canada (or equivalent) and is registered with a provincial regulatory body (e.g., the New Brunswick Association of Dietitians).  Other titles that may be used in New Brunswick include: Public Health nutritionist, Public Health dietitian, registered dietitian.
Public Health Nutrition	Promotion of improved nutritional health of the population through the application of nutrition science and knowledge of the determinants of healthy eating to communities and populations.
Public Health staff	Employees who work for the Office of the Chief Medical Officer of Health or Public Health Services at the Horizon Health Network or the Vitalité Health Network. Public Health staff include many different professionals such as dietitians, nurses, inspectors, epidemiologists, researchers and medical officers of Health.

Public Health system	The organizations that provide Public Health services and programs in New Brunswick. This includes the Department of Health (Office of the Chief Medical Officer of Health), the Horizon Health Network and the Vitalité Health Network.
Public policy	Broad framework of ideas and values within which decisions are taken and appropriate action is pursued by government in relation to issues or problems.

## Abbreviations

RHA	Regional Health Authority
OCMOH	Office of the Chief Medical Officer of Health
BFI	Baby-Friendly Initiative
ECI	Early Childhood Initiatives
HLS	Healthy Learners in Schools
HEPAC	Healthy Eating Physical Activity Coalition

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# Public Health Nutrition Framework for Action

## 1.0 INTRODUCTION

### *Why do we need a framework for action?*

Throughout the lifecycle, nutritious foods are essential for optimal growth, development and overall health. Healthy nutrition is important in maintaining health and ensuring a vibrant and productive population. Making healthy food choices is becoming increasingly challenging, however, due to many social, economic and physical factors that influence what foods are available and accessible as well as people's ability to make healthy choices. Promoting and supporting nutrition has become a complex task that requires collaboration across multiple sectors and a willingness to try innovative approaches. Comprehensive and co-ordinated actions that address the root causes of poor nutrition and unhealthy eating are needed.

Public Health in New Brunswick has a long history of supporting and promoting good nutrition by working with pregnant women, families, children, youth, schools, individuals and communities. The increasing rates of diet-related risk factors and non-communicable chronic disease indicate that there is still work to be done. Rates of non-communicable chronic diseases such as diabetes, cardiovascular disease and certain types of cancer are rising across the country including in New Brunswick<sup>1</sup>. New Brunswickers rank high in the country in prevalence of adult obesity, for which diet is an important determinant. According to recent data from the Canadian Community Health Survey (CCHS), in 2009/2010, 63 per cent of New Brunswickers aged 18 and over were overweight or obese, with 28 per cent being obese.<sup>2</sup> The rate of childhood overweight and obesity was also high (24.0 per cent of the population aged 12-17), a disconcerting fact given that obese children tend to remain obese as adults<sup>3</sup>. This is of significant public health concern as declining health status impacts the overall health, productivity and economy of our province. The good news is that many of these non-communicable chronic diseases and associated risk factors are largely preventable.

The Public Health system has begun to shift toward integrating a stronger population health approach (described in Section 4.0) in the way we do business. This has provided an ideal opportunity to identify priority areas for action related to nutrition for the Public Health system and to work on building capacity, as a system, to address these areas in a comprehensive and co-ordinated way using a population health approach. By building capacity within the Public Health system and co-ordinating our knowledge and efforts, Public Health staff will be better equipped to work with partners and stakeholders to promote and support nutrition.

The work that the Public Health system is identifying in this framework supports and complements the work of our partners. The development of this framework is consistent with recommendations from the *Comprehensive Diabetes Strategy for New Brunswickers* that was released in 2011 and supports the work of the Department of Culture, Tourism and Healthy Living wellness strategy.<sup>7,8</sup>

Initiated by the Office of the Chief Medical Officer of Health (OCMOH) at the Department of Health, the framework was developed by a working group of staff from the OCMOH; the two regional health authorities (RHAs), the Horizon Health Network and the Vitalité Health Network; the Department of Culture, Tourism and Healthy Living; and the Healthy Eating Physical Activity Coalition of New Brunswick (see appendix for a list of working group members).

*Strong public health nutrition practice is critical to protecting and enhancing the health of the population.<sup>9</sup>*

- Pan Canadian Task Force on Public Health Nutrition

Working group members used participatory leadership processes to develop this work. Participatory leadership is based on the understanding that involvement, collective intelligence and co-creation are essential to discovering solutions and facilitating change. The working group used many sources of information, including consulting with a diverse group of stakeholders from food producers, food banks and other non-government organizations to Public Health staff and other government departments.

*It is only by directly understanding and tackling the upstream forces that are shifting entire populations' distribution of risk factors in an unfavourable way that we can expect to make a significant impact on these health problems through a strengthened public health infrastructure working in concert with other sectors.<sup>6</sup>*

- Geoffrey Rose

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Stakeholder consultations provided a number of insightful quotations that are highlighted throughout this document. In addition, New Brunswick statistics and epidemiological data on various determinants of health were reviewed and an environmental scan and literature review were conducted to develop the strategic directions and priority areas for action in this report. The result is this framework, which is intended for use across the Public Health system. Public Health dietitians will provide leadership in supporting the implementation of this framework and will collaborate with all Public Health staff to promote and support nutrition messages across program areas at the provincial and regional levels.

## 2.0 BACKGROUND

### *Structure and programs*

The Public Health system in New Brunswick includes the Department of Health and the RHAs. Public Health programs and services are funded by the department through OCMOH, which is responsible for planning, funding and monitoring specific Public Health functions that fall within four main branches: communicable disease control, health protection, environmental health, and Public Health practice and population health. While delivery of programs and services occurs primarily through the RHAs, the OCMOH Health Protection branch delivers Public Health inspection programs. The six core functions for which the Public Health system is responsible are population health assessment, health surveillance, disease and injury prevention, health promotion, health protection, and public health emergency preparedness and response.

Most Public Health nutrition-related work is being carried out through specific programs or services such as the Baby-Friendly Initiative (BFI), Early Childhood Initiatives (ECI) and the Healthy Learners in Schools (HLS) program. Public Health dietitians and other staff work within these program and service areas to promote nutrition and health messages. Public Health partners with other sectors of the health system such as primary health-care providers to promote and deliver services to the public.

Public Health dietitians support programs and target populations in a variety of ways, including one-on-one visits with high-risk clients, policy support, resource development and capacity building, all of which are part of a population health approach. Management and staff across the Public Health system have recognized a need for increased collaboration and co-ordination to support population health initiatives across the system. As a result, Public Health dietitians will continue to support the ECI, BFI and HLS programs in addition to integrating more community-level health promotion activities into their work.

In addition to promoting nutrition, Public Health is mandated by the *Public Health Act* to promote food safety through the Public Health inspection program delivered by the OCMOH Health Protection Branch<sup>10</sup>. Public Health inspectors regularly visit facilities such as schools, daycares, hospitals, restaurants and food processors to ensure that appropriate food safety practices and procedures are being implemented. The new Healthy Environments branch at the OCMOH will be looking at ways to improve measures that are already in place in the built environment to support healthy living conditions for New Brunswickers.

The Public Health system contributes on a national level to numerous federal, provincial and territorial initiatives. Public health nutrition issues are receiving a great deal of attention through projects on sodium reduction, obesity prevention, marketing to children, nutrition facts table and breastfeeding promotion, to name a few. There are many opportunities for New Brunswick to participate and help shape these initiatives nationally and provincially.

*The health system ends up owning the problems that result from the chronic disease epidemic and must deal with these. However, it does not own the ways of addressing the causes of the problems as the answers are not medical or clinical but environmental and social.<sup>11</sup>*

- Kickbush, 2010

Promoting and supporting nutrition is a shared responsibility of many groups and organizations, which means there is a role for Public Health to work with federal, provincial and municipal governments, non-government organizations and the private sector to promote and support nutrition in New Brunswick. Aligning and collaborating with federal, provincial and territorial guidelines and recommendations will be essential as the work proceeds. While this framework is specific to the work of the Public Health system, it will be helpful for our partners and stakeholders as it highlights the type of work that Public Health is involved in leading and supporting. At this point, a comprehensive, multi-stakeholder strategy for nutrition and healthy eating in New Brunswick does not exist but may be something to consider creating in collaboration with others.

Overall, this framework is intended to build capacity within the Public Health system to promote nutrition at the population level. Five priority areas for action have been identified for Public Health staff to begin building comprehensive and co-ordinated action during the next four years. As a result of building capacity within the Public Health system, staff will be better positioned to take on leadership and / or supportive roles with partners and stakeholders from other sectors to begin tackling the causes of poor nutrition and unhealthy eating in New Brunswick.

### 3.0 PURPOSE

The purpose of this framework is to establish a co-ordinated approach and to guide nutrition practice across the Public Health system in New Brunswick.

Regional and provincial Public Health staff may not experience a change in the areas in which they work, but, as a result of this framework, they may encounter a shift in how they approach their work. This shift must be learned, adopted, applied and strengthened through practice.

### 4.0 POPULATION HEALTH APPROACH

#### *What is a population health approach?*

The population health approach focuses on the inter-related conditions and factors that influence the health of a population. These conditions and factors are often referred to as the determinants of health and include a broad range of social, economic, biological and physical factors, many of which fall outside the health-care system, yet significantly impact health.

#### **Determinants of health<sup>12</sup>:**

- *Income and social status*
- *Social support networks*
- *Education*
- *Employment / working conditions*
- *Social and physical environments*
- *Personal health practices and coping skills*
- *Healthy child development*
- *Biology and genetic endowment*
- *Health services*
- *Gender*
- *Culture*

The goal of using a population health approach is to maintain and improve the health of a population and to reduce health inequities. By emphasizing a reduction in health inequities, population health initiatives often aim to increase sustainability and integration of programs or services for population groups.

A population health approach uses evidence to inform decision-making. Scientific research, community experience and cultural knowledge contribute to the body of evidence that can be used to understand and identify priorities and strategies to improve health. The field of population health research is relatively new and therefore practice is often ahead of the evidence-base. Public Health practitioners are making significant contributions to the evidence-base by developing new sources of evidence on population health approaches and the determinants of health by monitoring and evaluating their initiatives and disseminating the findings.

#### **Key elements of a Population Health Approach<sup>4</sup>:**

- *Focus on the health of populations*
- *Address the determinants of health and their interactions*
- *Base decisions on evidence*
- *Increase upstream investments*
- *Apply multiple strategies*
- *Collaborate across sectors and levels*
- *Employ mechanisms for public involvement*
- *Demonstrate accountability for health outcomes*

#### *Why is the population health approach important for Public Health?*

Health-care systems are focused on preventing and treating illness of individuals. Public Health is unique in that it has a mandate to improve, promote and protect the people of New Brunswick by promoting health and preventing the incidence of disease at the population level. Doing this requires addressing the underlying factors and systems that

influence and determine health of the entire population. This can be complex, long-term work as many of the determinants that influence health lie outside of the health system (e.g., education, employment, housing), which requires Public Health to partner with other sectors and systems. Creating and fostering collaborative partnerships across sectors will take time, vision and leadership.

## 5.0 STRATEGIC DIRECTIONS

Six strategic directions have been identified and outline how this framework will be implemented. These directions reflect the key elements of the population health approach and provide guidance for the types of action that will be taken within each of the priority areas. They can be thought of as guiding principles for how Public Health staff promote and support nutrition at the population level. They also outline the activities that will be used to achieve success within the priority areas for action.

*I would think, as much as possible, to have these Public Health nutritionists. . . . working at a macro level trying to change systems is probably going to have the biggest likelihood of success.*

- Stakeholder comment

### 5.1 Capacity-building

***Develop the attitudes, skills, knowledge structures, resources and commitment to create sustainable changes starting within the Public Health system and extending to the populations we serve to support and promote nutrition and healthy eating.***

Working with populations requires a certain set of skills and resources that differ from working with individuals in a clinical or community setting. For many years, nutrition support and programs have been targeted primarily at the individual. As Public Health begins to focus more attention on

promoting nutrition at a population level, staff will need opportunities to develop and reflect on the attitudes, skills and knowledge required for working with populations. Capacity-building opportunities can take many forms, including training sessions, journal clubs, peer mentoring, individual research and reflection and networking.

Capacity-building occurs at the individual, organizational and community levels. Capacity must first be built within Public Health staff and the Public Health system to work collaboratively and facilitate effective capacity building within the communities and populations. Public Health staff must first understand the roles, functions and scope of the Public Health system and see how it compares to the work of the broader health system so that they are aware of how to be most effective. Developing a better understanding of the roles and responsibilities of the various Public Health staff positions (e.g., dietitians, inspectors, nurses, medical officers of health, epidemiologists) can increase opportunities for collaboration and the integration of consistent and complementary messages within the Public Health system that may not be fully realized.

### 5.2 Partnerships and collaboration

***Foster relationships across multiple sectors and work collectively with others on the factors that influence nutrition.***

Improving nutrition is a shared responsibility among many partners. Public Health can play a supportive or leadership role depending on the need and other partners involved. Evidence indicates that successful population



health initiatives are developed, led and shared by multiple stakeholders from different sectors. Nutrition and healthy eating are influenced by a wide range of factors such as the environment, agriculture and fisheries policies, industry, education and skills, income and social assistance policy, culture, charitable organizations and transportation. Strong and effective partnerships take time to establish and nurture. Building strong relationships across many sectors is an essential activity at all levels within the Public Health system and broader health system (e.g., primary health-care providers).

*The impact that you can have on small children is amazing. Children bring messages home to their parents.*

- Stakeholder comment

The public is an important stakeholder when developing strategies to improve nutrition and healthy eating. Public engagement and consultation ensure opportunity for meaningful input and increased confidence in the strategies and decisions that are being developed to promote and support good nutrition.

### 5.3 Knowledge management and communication

**Create, access, interpret, share and use information, research, evidence and best practices to inform policies, programs, and initiatives that will promote and support nutrition.**

Many terms are used to describe the exchange, transfer and use of knowledge such as research, evaluation and evidence. Knowledge management is beginning to emerge as a term that encompasses all uses of knowledge within an organization. The National Collaborating Centre for Methods and Tools uses the following definition of knowledge management: the systematic process by which knowledge needed for an organization to succeed is created, captured, shared and leveraged<sup>13</sup>.

*We all have a role; everybody has a role to improve the availability of healthy food choices.*

- Stakeholder comment

Creating, accessing, disseminating and using knowledge to inform actions is a core function of public health work that can be used to develop policies, programs and initiatives that support and promote nutrition. Interpreting and sharing information on nutrition with multiple audiences, from professionals to community organizations, so that they can use the information in a way that is meaningful to them are key aspects of transferring knowledge.

Knowledge management skills are needed to make decisions, provide recommendations and create programs or services that are truly evidence-informed. There are many sources of knowledge, such as databases, peer-reviewed literature, grey literature, Internet sources, colleagues, corporate / community history, conferences and communities of practice. Once knowledge has been created and captured, it needs to be shared and leveraged.



There is a great deal of work to do within the Public Health system in terms of sharing and leveraging key nutrition messages across program areas, professions and organizations. Public Health dietitians can provide leadership by integrating knowledge management practices into how they communicate with each other and with other Public Health staff across zones, regions, provincially and federally. There is a role for Public Health staff in sharing and leveraging nutrition information with partners, stakeholders,

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*There isn't one solution; there is a whole bunch of little solutions.*

- Stakeholder comment

communities and populations. Developing communication strategies can help to determine what information needs to be created and how it will be captured, shared and leveraged with the target audience. Enhanced knowledge management and communication skills will result in a Public Health system that is better informed and prepared for dealing with issues as they arise.

## 5.4 Comprehensive approach

**Consider the entire range of factors and partners that can influence nutrition across a population.**

Many of the health and nutrition issues that the Public Health system works to address are complex because the causes and solutions involve social, economic, and environmental considerations that traditionally have fallen outside the realm of health. One of the critical factors for success in achieving improved population health outcomes at a population level will be in the ability of the Public Health system to collaborate with a variety of stakeholders from various sectors to identify and implement possible actions that will improve health. Models of behavioural change should also be considered since different population groups can respond to health information in a number of ways depending on how, when and from whom the information is received.

Actions developed using a population health approach take into consideration how each of the determinants of health could be affected. In many cases, this requires multiple strategies that take place in multiple settings in co-ordination with many different partners to address the social, economic, physical, biological and environmental determinants of health. Working with partners, often outside the health field, to connect strategies and initiatives that affect different aspects of a system or issue reflects an integrated and comprehensive approach.

Public Health can advocate for working collaboratively with multiple stakeholders from various sectors such as government, non-government, community and industry to create greater awareness of the importance of co-ordinating comprehensive actions to have a larger, more sustainable impact. Improved population health is a shared goal and responsibility of many sectors. Comprehensive strategies to improve population health must take into consideration the full range of determinants of health and all the possible partners able to influence these determinants<sup>5</sup>.

## 5.5 Policy

**Use policy at various levels to support and promote healthy eating.**

*We can all make changes on the short term, but it is making long term sustainable change that we are really interested in.*

- Stakeholder comment

Many policies affect an individual's ability to make healthy food choices. Policy is a tool that is used to define a course of action that can be carried out by the people or organizations that create it. Policy provides the foundation for the way upon which an issue is acted or to which an issue is responded. The term policy is used to describe a variety of tools, including federal or provincial legislation, regulation, programs, incentives, guidelines, standards, taxes, fines and public ownership. Policies may be developed by Public Health for program delivery or by specific workplaces, communities or organizations, such as healthy eating workplace policies,

municipal government policies or bylaws or recreational facility policies. Communities and individuals can often have a significant influence in developing policies that influence specific settings.

Integrating nutrition considerations into policies that affect food, nutrition and healthy eating requires a thorough understanding of how policy is developed, implemented and evaluated. Gathering data, advocating for legislation and policy development or changes, reviewing evidence and partnering with other sectors to develop or implement policies are all part of Public Health work. Identifying and using policy to support and promote nutrition and healthy eating can be a slow process, but the results are typically far-reaching across the population being targeted.

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## 5.6 Surveillance, monitoring, evaluation

**Strengthen surveillance, monitoring and evaluation efforts to ensure the development of policies, programs and initiatives are based on evidence.**

Surveillance, monitoring and evaluation are core elements for sound public health practice. Many national and provincial data sources can potentially be used by the Public Health system to track the levels, influences and outcomes of healthy eating. These include sources of information about population health such as the Canadian Community Health Survey and the New Brunswick student wellness surveys. They also include administrative data sources such as the New Brunswick Client Services Delivery System and the Hospital Discharge Abstract Database, which provide valuable information needed to plan, monitor and evaluate Public Health programs, policies and services. They can also be used as a basis for evaluating the effectiveness, efficiency and usefulness of the services offered at provincial and regional levels.

Ongoing surveillance, analysis and reporting through the Public Health system is an important way to provide leadership among partners and stakeholders, including the public, to support evidence-informed decision-making and enhanced accountability. In some cases, Public Health will provide leadership in conducting an evaluation and, in other circumstances, it may play a supportive and informative role to a partner organization that is leading an evaluation. Sharing evaluation results with our partners, stakeholders and colleagues also contributes to the evidence base for population health initiatives.

## 6.0 PRIORITY AREAS FOR ACTION

The priority areas for action are targeted primarily at supporting and promoting good nutrition where New Brunswickers live, learn, work and play. Public Health provides certain programs aimed at specific population groups such as children and youth. These continue to be priority areas of focus for Public Health as it is important to help children and youth develop healthy behaviours early in life to help prevent the incidence of non-communicable chronic disease and associated risk factors in adulthood.

Promoting the health of children and youth requires a focus on all the populations and settings that influence children and youth including families, communities and society. There is a need to create environments that support all New Brunswickers to make healthy food and nutrition choices for themselves and their families. A focus on the underlying determinants of health is needed to improve the health of children and all New Brunswickers.

*We are still stuck on recommendations.  
People are so afraid to make policies.*

- Stakeholder comment

The priority areas for action were identified after reviewing research literature, conducting an environmental scan of public health nutrition practice across Canada and, consulting with colleagues, community organizations, government departments, industry, academics and individuals. After analysis and reflection on all of the information gathered, five areas have been identified as priorities for action during the next four years:

- Food security
- Healthy environments
- Prenatal and early childhood nutrition
- Breastfeeding
- School-aged children and youth

Each priority area for action listed includes a list of possible actions that could be taken. Some of the actions may already be occurring in certain parts of the province or may be in the planning process. Certain ones are applicable at any level and others are more specific to a community, regional or provincial level. This list is meant to provide ideas and examples of possible activities that Public Health staff could consider implementing and so is by no means exhaustive.

## 6.1 Food security

Food security is often defined as the ability of all people, at all times, to have access to nutritious, safe, personally acceptable and culturally appropriate foods, produced in ways that are environmentally sound and socially just. This definition has implications for social, economic, political and environmental factors within the farm-to-fork chain, all of which influences the ability of individuals to access food. Food security includes availability within the broader food system, accessibility for households and food choice at the individual level.

The food system determines what is available in the marketplace. There are numerous stakeholders, which include all levels of government, non-government organizations, private industry and consumer groups. Each stakeholder has a certain sphere of influence over the food system and may use various policy levers to influence aspects of the food system such as what is produced, how it is produced, levels of specific nutrients, marketing, advertising, labeling, distribution and food safety to name a few. Consumers have a particularly powerful role because the food industry and producers aim to meet market demand.

Having a safe and healthy food system is only useful if people can access it. The ability to obtain food is influenced by the location of vendors, markets and retailers, cost of transportation, municipal bylaws, food prices, employment and ability to prepare and consume the product. People living in poverty or low-income earners are particularly vulnerable to food insecurity. The recent economic downturn has resulted in



higher food prices and higher unemployment rates in New Brunswick<sup>14,15</sup>. For example, since 2008 food bank usage in New Brunswick has increased by 19 per cent<sup>16</sup>. While the provincial rate of household food insecurity is 10 per cent<sup>17</sup>, vulnerable populations such as single persons, single parent families, immigrants, Aboriginals and visible minorities are experiencing much higher rates of food insecurity<sup>18,19,20</sup>.

Addressing food security requires a multi-sectoral approach. Efforts to reduce food insecurity have often been focused on encouraging individuals to make better choices without considering the broader

factors that determine a person's ability to obtain food. Public Health can partner with provincial and community stakeholders to advocate and work toward reducing barriers to accessing nutritious foods, such as poverty, transportation, education and food skills. Work can also continue with federal, provincial and municipal governments to create and implement policies that support a healthy, vibrant food system.

*Here in New Brunswick, we have apple producers, we have blueberry producers, cranberry producers. . . why not highlight and make available all of those products everywhere?*

- Stakeholder comment

*Good nutrition is a collective endeavour*

- Stakeholder comment

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## **Possible actions:**

### **Capacity-building**

- Increase understanding and awareness among Public Health staff of how Public Health does or could influence food security.
- Increase understanding and awareness of what community and provincial initiatives are already underway to address food security.
- Reflect on personal learning needs and gaps regarding food security.

### **Partnerships and collaboration**

- Support the work of food security initiatives and networks (e.g., New Brunswick Food Security Action Networks, “Buy Local” initiative, regional community inclusion networks, New Brunswick Association of Food Banks).
- Support regional implementation and provincial expansion of the Community Food Mentors program.

### **Knowledge management and communication**

- Create opportunities for community dialogue on local food security issues.
- Raise awareness among partners and the public about the reality of food insecurity within New Brunswick.

### **Comprehensive approach**

- Identify and apply a food security lens when developing programs, policies and initiatives.
- Work with other government departments to advocate for programs, policies and initiatives that support and promote food security.
- Work with Health Protection to ensure the safety of the food supply.

### **Policy**

- Review municipal bylaws / provincial legislation and policy to determine how they influence access to food.
- Develop policies that encourage the use of locally produced foods in publicly funded institutions.
- Encourage the development of food policy councils.

### **Surveillance, monitoring, evaluation**

- Track and report levels of poverty and food insecurity across New Brunswick.
- Support the ongoing collection analysis and reporting of provincial food costing data to inform program and policy development.
- Work with partners to advocate and build capacity for provincial level food costing to be conducted regularly.

## **6.2 Healthy environments**

For many years, health professionals have helped individuals adopt healthier lifestyles that include eating a healthy diet and exercising more, yet New Brunswick still has some of the highest rates of diet-related chronic disease in the country, including being overweight or obese. A great deal of emphasis has been placed on educating individuals to make healthier choices; health professionals now realize, however, the significance that the environment has on influencing health behaviours<sup>21</sup>.

*In an ideal world the environment would be conducive to healthy behaviours. The healthy choice would be the easy choice.*

- Stakeholder comment

The past few decades have brought significant changes to the social, physical and economic environments where New Brunswickers live, learn, work and play. Examples include the development of residential areas being built further away from schools, grocery stores and markets, increasing costs of fuel and foods, use of technology (e.g., computers, video games), new food production methods and innovative marketing and advertising techniques. New Brunswickers are experiencing other shifts in culture, including busy lifestyles that result in individuals and families cooking less, a decline in family meals at home, and spending more time driving to different organized events and activities. The environments where New Brunswickers spend most of their time strongly influence their behaviours, including eating habits. Making healthy food choices is much easier in an environment that makes healthy, affordable and appealing food options readily available.

It is important for Public Health to understand how healthy environments that support nutrition and healthy eating are developed. Public Health can influence and advocate for the development of healthy environments through partnerships with other sectors and stakeholders. This requires being knowledgeable about the evidence, data and research that support policy options to make healthy choices the easy choice. Policies that address the social determinants of health have been identified as a particularly powerful tool for creating sustainable changes that support healthy behaviours to social, physical and economic environments; however, these changes often require collaboration and action from multiple sectors<sup>22</sup>.



### ***Possible actions:***

#### ***Capacity-building***

- Build capacity within the Public Health system to promote nutrition and healthy eating by increasing awareness and understanding of the work of our colleagues, including dietitians, nurses, inspectors, medical officers and epidemiologists provincially and regionally.
- Identify and assess community, regional and provincial environments that influence nutrition and healthy eating behaviours.
- Build understanding and awareness among Public Health staff about how programs and policies may be used to create healthy environments.

#### ***Partnerships and collaboration***

- Collaborate with partners at provincial and municipal levels to create bylaws that support access to healthy food.
- Support nutrition programs and initiatives at the community, regional and provincial levels (e.g., wellness networks, community inclusion networks, teaching kitchens, community gardens).
- Collaborate with industry partners to help consumers identify healthy food choices. (e.g., media, businesses).

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### **Knowledge management and communication**

- Collect, interpret and share information on evidence-based activities to promote healthy environments with partners and stakeholders (e.g., share information on the benefits of workplace healthy eating policies with staff, management, businesses).
- Advocate for the removal of marketing and advertisement of food or beverages high in fat, sugar and salt that are aimed at children.
- Connect with Public Health colleagues across the province to share evidence, best-practices, evaluation results.

### **Comprehensive approach**

- Build relationships with other government departments and sectors to begin discussing cross-sectoral approaches to creating healthy environments at the community, regional and / or provincial level.
- Collaborate with federal, provincial and territorial colleagues to address national priorities such as sodium reduction, obesity prevention, marketing to children and youth and nutrition facts tables.
- Use multiple strategies aimed at a particular environmental change (e.g., policy development, education component, communication strategies).

### **Policy**

- Support the development of nutrition policies in health care settings (e.g., hospitals, community health centres).
- Support the adoption and implementation of nutrition policies in the workplace (e.g., *Putting Health on the Agenda: A model policy for healthy meetings and events*).
- Identify and promote evidence based policies or guidelines that encourage healthy eating and nutrition (e.g., Department of Education Policy 711: *Healthier Food and Nutrition in Public Schools*).
- Promote the use of local nutritious food and beverages in public institutions.
- Collaborate with municipalities to develop nutrition policies for municipally funded events and facilities (e.g., recreation centres, day camps, public concerts).

### **Surveillance, monitoring, evaluation**

- Incorporate surveillance, monitoring and evaluation component into new initiatives or activities and share results across the Public Health system to enhance mutual learning.
- Develop nutrition indicators that can be measured and evaluated regularly to show changes in nutritional health at the population level.



### **6.3 Prenatal and early childhood nutrition**

Good nutrition begins before birth and is an essential part of healthy growth and development. Even before children are born, a mother's nutritional status can affect her child's health. The eating habits formed during the first few years of a child's life can influence health and eating habits into adulthood.

Many stakeholders are involved in promoting the

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healthy growth and development of infants and children up to five years of age. Public Health has traditionally played an important role in interpreting and disseminating evidence-based information about prenatal and early childhood nutrition to partner organizations involved with providing pre- and post-natal support to families (e.g., hospital prenatal programs, family resource centres, local health clinics). Regional Public Health dietitians provide nutrition support and information to certain vulnerable populations through ECI.

Regular monitoring of growth and development during the early years of life is important for identifying and addressing nutrition risks. Monitoring and screening for nutrition risks during infancy and early childhood can help parents and health-care providers respond to potential health concerns.

Parents and families strongly influence the development of children's eating habits through the behaviours they model and the environments they create for their children. Many factors influence the ability of parents to provide healthy environments for children, such as income, access to healthy foods, education and social support. Other environments where young children spend a great deal of time such as daycares and preschool influence the development of their eating habits and overall nutritional health.

### ***Possible actions:***

#### ***Capacity-building***

- Enhance the capacity of early childhood educators to support parents and daycares in helping children develop healthy eating behaviours.
- Build capacity within the Public Health system to promote nutrition and healthy eating by increasing awareness and understanding of the work of dietitians, nurses, inspectors, medical officers and epidemiologists.

#### ***Partnerships and collaboration***

- Partner with the Department of Education and Early Childhood Development to create policies and / or guidelines that support healthy eating practices in daycares.
- Consult families to determine their information and support needs related to early childhood nutrition.
- Partner with community organizations to support and promote healthy childhood development.

#### ***Knowledge management and communication***

- Review, interpret and disseminate information about prenatal, infant and early childhood nutrition best practices to partners. Integrate consistent key messages regarding nutrition into all programs and resources provided by Public Health.
- Support the implementation of NutriSTEP (Nutrition Screening Tool for Every Preschooler) in communities throughout New Brunswick.
- Improve parental awareness, knowledge and skills related to healthy eating.
- Partner with post-secondary educational institutions to enhance the early childhood nutrition curriculum for early childhood educators and health professionals.

#### ***Comprehensive approach***

- Ensure that programs and policies developed to promote early childhood nutrition are comprehensive.
- Advocate for a ban on advertising and marketing food products that are high in salt, sugar and fat to young children.

#### ***Policy***

- Support the Department of Education and Early Childhood Development in creating a nutrition policy for daycares.

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### *Surveillance, monitoring, evaluation*

- Promote the use of the World Health Organization child growth charts among health-care providers in New Brunswick and track data on children's growth patterns in New Brunswick against this standard.

## **6.4 Breastfeeding**

Breastfeeding is the normal, safest and healthiest way to feed a baby. There are many health benefits for mothers and babies associated with the exclusivity and duration of breastfeeding. The protective health effects of breastfeeding can be considered health promotion and disease prevention at the earliest possible point of intervention.

The Department of Health and Health Canada recommend that infants be exclusively breastfed for the first six months, with continued breastfeeding for two years and beyond along with the introduction of solid foods<sup>23,24</sup>. Yet, a 2007 research study conducted in New Brunswick indicates that only 48 per cent of babies are breastfed exclusively at hospital discharge<sup>25</sup>. While breastfeeding initiation has increased in the province, based on 2009/2010 CCHS data, only 18.7 per cent of New Brunswick's babies were being exclusively breastfed at six months of age, a rate significantly lower than the Canadian average (26.2 per cent)<sup>26</sup>.

The Department of Health is committed to improving breastfeeding rates in New Brunswick. In 2006, the Department mandated that all publicly funded health-care facilities (hospitals, public health and community health centres) work toward achieving the Baby-Friendly designation which requires that facilities meet the Ten Steps to Successful Breastfeeding. The New Brunswick Baby-Friendly Initiative (BFI) Advisory Committee was established in 1997 as a provincial breastfeeding committee and was reconfirmed in 2005 as a BFI advisory committee to the Minister of Health. The committee has been working with BFI committees across the health system to support the implementation of BFI best practices.

Public Health has provided strong leadership and support in the work of the BFI Advisory Committee at the provincial and regional levels. Significant accomplishments have been achieved in the past five years by the BFI Advisory Committee, including support to health-care facilities by providing various training and networking opportunities and developing educational materials and provincial tools.

Until recently, little action has been taken to promote and support breastfeeding within community settings. There is an opportunity for Public Health to take a leadership role in creating environments supportive of breastfeeding and breastfeeding families in the communities we serve. The BFI Advisory Committee has expressed an interest in broadening the scope of its support and partnering with other organizations to promote breastfeeding at the community level as the normal way to feed infants.



*Health Canada recommends that all babies be exclusively breastfed until 6 months of age. In New Brunswick, only 18.7 per cent of babies are being exclusively breastfed at six months of age<sup>23,26</sup>.*

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## ***Possible actions:***

### ***Capacity-building***

- Develop awareness and understanding of breastfeeding resources currently available in the community/province (e.g., lactation consultants, Le Leche League).
- Review best practices for supporting breastfeeding families in the community.

### ***Partnerships and collaboration***

- Collaborate with the BFI Advisory Committee to develop strategies that will create environments for breastfeeding for vulnerable populations (e.g., First Nations, low-income families, immigrants).
- Collaborate with the BFI Advisory Committee to create opportunities using social media for breastfeeding mothers to connect and share their experiences.

### ***Knowledge management and communication***

- Support the integration of breastfeeding as the normal way to feed infants in the K-12 school health curriculum.
- Distribute information about breastfeeding by partnering with community, charitable health organizations and industry.

### ***Comprehensive approach***

- Support community partners in realizing their role in promoting and supporting breastfeeding in community settings (e.g., businesses, parks, recreation facilities, daycares).
- Consider all the factors that influence breastfeeding support when designing and implementing programs, policies or services (e.g., social supports, education, transportation, income).

### ***Policy***

- Support the implementation of the RHA BFI / breastfeeding policy in Public Health offices.
- Support the development and implementation of breastfeeding policies in workplaces and community facilities.

### ***Surveillance, monitoring, evaluation***

- Track, analyze and report levels of breastfeeding in hospital across New Brunswick.
- Develop a data collection and dissemination system to capture data on the duration and exclusivity of breastfeeding after hospital discharge.
- Survey expecting and new mothers to determine what their expectations and needs are for community breastfeeding support.

## ***6.5 School-aged children and youth***

Healthy eating habits and good nutrition are very important during the years that children and youth are attending school (aged five to 18 years). A great deal of growth and development occurs during these years. Healthy foods and beverages provide school-aged children and youth with the nutrients and energy they need to learn, be physically active and grow into healthy adults. Research indicates that children and youth who consume the recommended servings of vegetables and fruit every day are least likely to be overweight or obese<sup>6</sup>.

Many countries, including Canada, are experiencing unprecedented rates of overweight and obese children and youth. Simultaneous to the rise in prevalence of overweight and obesity, according to 2009/2010 CCHS data, fewer than half (46 per cent) of New Brunswick's children and youth aged 12 to 17 were eating at least five portions of vegetables and fruits per day<sup>3</sup>. This is a serious public health concern because obesity is a well-known risk factor for many non-communicable chronic diseases, such as diabetes, heart disease and certain

cancers. The reasons for the increase in rates of childhood obesity in New Brunswick are complex and require action and collaboration from many sectors.

Promoting nutritious foods and supporting healthy eating behaviours wherever children and youth live, learn, work and play is one area where many individuals and organizations, including Public Health, are focusing their efforts. The Healthy Learners in School program is a joint initiative between the Department of Health and the Department of Education and Early Childhood Development that is provided by the Public Health system.

This program uses a comprehensive school health approach to create policies and social and physical environments that support healthy choices, including healthy food choices within the school community.

Policies and guidelines that promote healthy food choices in school and recreation settings are developed and implemented in New Brunswick to help make healthy choices easy for children and youth. The Department of Culture, Tourism and Healthy Living in partnership with the Healthy Eating and Physical Activity Coalition of New Brunswick (HEPAC) released a toolkit in 2009 to help recreation facilities promote healthy food options. The Department of Education and Early Childhood Development has provided leadership in creating and implementing Policy 711, which sets nutrient criteria for the foods and beverages that may be sold and served in public schools. Public Health staff support both of these initiatives regionally and provincially by providing information and nutrition expertise in the development and implementation of these tools.

Children and youth spend a significant number of hours each week at school. Much attention is now being given, however, to the hours that children and youth are not in school because this time can also strongly influence their physical, social, emotional and intellectual development. Children may be attending after-school programs, participating in sports or other extra-curricular activities, working at a job or going home. In each of these scenarios, there are opportunities to promote healthy eating behaviours.

### **Possible actions:**

#### **Capacity-building**

- Increase understanding and awareness of comprehensive school health approaches and theory among Public Health staff.
- Support the development of school and / or community-based initiatives to increase skills and knowledge related to vegetable and fruit preparation.

#### **Partnerships and collaboration**

- Partner with food producers to develop food distribution systems that promote use of local produce in school food service systems.
- Promote and support healthy snack options and programs within community after-school programs (e.g., chef's program).



*We (need to) start when they are young with education on healthy foods in schools and teaching people how to cook.*

- Stakeholder comment

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### ***Knowledge management and communication***

- Support the development of curriculum that promotes healthy eating and food preparation skills in many settings (e.g., schools, colleges, after-school programs)
- Use, interpret and disseminate data from student wellness surveys to inform programs and policies.
- Explore and use effective methods of communication for connecting with children and youth (e.g., social marketing, social media, Internet).

### ***Comprehensive approach***

- Support district school health committees and high school health committees in the development, implementation and evaluation of their action plans.
- Apply a comprehensive school health approach when working with school populations.

### ***Policy***

- Develop, support and advocate for comprehensive policies that promote healthy eating among young people.
- Support schools and school districts in the implementation of Policy 711.

### ***Surveillance, monitoring, evaluation***

- Support schools and communities in monitoring and evaluating healthy eating policies that are developed and implemented.
- Support partners in interpreting and using data from surveillance and monitoring activities such as the New Brunswick student wellness surveys.

## **7.0 NEXT STEPS**

This framework gives the Public Health system a co-ordinated approach to improving the nutritional health of New Brunswickers. The strategic directions and priority areas for action identified in this document will guide the focus of nutrition-related initiatives during the next four years. It should be noted, that much of the work will require a long-term vision. This framework provides a starting point that will move the Public Health system toward supporting and promoting nutrition at the population level by using multiple strategies and maintaining efforts during the long term. Of course, this work needs to be balanced with current program commitments and requirements.

This framework offers flexibility and creativity in determining what actions are needed to meet specific community, regional and provincial circumstances. Implementation will be gradual as the concepts in the framework are shared across the Public Health system; each organization within the Public Health system will need to review this document and then determine its immediate, short-term and long-term priorities. Not all possible actions are relevant to all organizations, communities or offices, and there are likely many other possible actions that are not provided as examples; management and staff will need to determine what is appropriate for their organization and community.

Maintaining the momentum of this work is essential. Consideration needs to be given to what type of structure is required to facilitate ongoing collaboration, communication, knowledge management, capacity-building and relationship development between all organizations of the Public Health system. Examples could include regional / zone committees, provincial committees, e-mail lists and working groups. This structure would give Public Health staff the opportunity to learn and build their professional capacity within the different strategic directions and priority areas. This will ensure continued co-ordination of efforts, sharing of information and resources and improved efficiency as we learn from and support each other.

One of the next steps will be the development of an evaluation framework. This evaluation framework will include a process evaluation using data collection methods, timelines and processes. Evaluations will take place at different phases during the next four years. In this way, the effectiveness of this framework can be measured and generate feedback for future Public Health planning.

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## **APPENDIX**

### **WORKING GROUP MEMBERS**

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Westner, Hannah

#### ***Organization***

Horizon, Zone 7

OCMOH

Vitalité, Zone 4

OCMOH

Vitalité, Zone 6

Horizon, Zone 2

Vitalité, Zone 4

Vitalité, Zone 5

Horizon, Zone 2

OCMOH

Horizon, Zone 3

OCMOH

Horizon, Zone 7

HEPAC

Vitalité, Zone 1

OCMOH

Department of Culture, Tourism and Healthy Living