

Working Together for Ongoing Food Costing & Policy Solutions to Build Food Security

- A Proposed Model of Ongoing Food Costing in Nova Scotia -



Prepared by

Food Costing Working Group of the Nova Scotia Participatory Food Security Projects

On behalf of:

Atlantic Health Promotion Research Centre©
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Nova Scotia Nutrition Council

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On behalf of the NS Participatory Food Security Projects
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Executive Summary

Introduction

Food security has been identified as a priority area as part of *Healthy Eating Nova Scotia, 2005*. Food security is defined as the ability of all people, at all times to have access to nutritious, safe, personally acceptable and culturally appropriate foods that are produced, distributed, and purchased in ways that are environmentally sound and socially just. According to the Canadian Community Health Survey, Nova Scotia has one of the highest rates of income-related food insecurity across the country. In 2000/2001, approximately 17% of Nova Scotian households (over 133,500 people) did not have sufficient money or worried about having enough money to buy the food they needed. Recent research conducted by the Nova Scotia Participatory Food Security Projects shows that Nova Scotians who live on income assistance or earn minimum wages are unable to afford a healthy basic food basket that meets their family's nutritional needs, no matter how carefully they choose and prepare food. With this evidence, the Nova Scotia government has clearly outlined in the *PC Nova Scotia Blueprint* a commitment to address food insecurity issues to improve the health and well being of Nova Scotians.

Since monitoring the cost of a basic nutritious diet in Nova Scotia is directly relevant to the strategy, *Healthy Eating Nova Scotia*, establishing a coordinated and sustainable system for food costing in the Province is essential. In 2004, Nova Scotia Health Promotion provided funding to the Participatory Food Security Projects to review options for food costing and develop an ongoing model for food costing in Nova Scotia. The project *Working Together for Ongoing Food Costing and Policy Solutions to Build Food Security* set out to determine a model drawing on experiences from local, provincial, and national food costing initiatives. Building on the current momentum for food costing and the foundation of the Participatory Food Security Projects, Nova Scotia has an opportunity to be a leader in participatory food costing and use food costing as a tool to address food insecurity and build food security for all Nova Scotians.

Developing a Food Costing Model

A study was designed to review various components for a food costing model from examples across the country. Exploring food costing initiatives across the country was viewed as a critical step in understanding the strengths and challenges of various methods of food costing. Key informants were identified in all 10 provinces as well as the North and informants were people involved in and knowledgeable about food costing in Canada. A total of 20 in-depth interviews, including a pilot interview, were conducted to collect information regarding various methods used by food costing initiatives.

Information from the key informant interviews was analyzed and used to identify options for a food costing model for Nova Scotia. Pros and cons associated with each component of a food costing model were considered in the NS context using experiences and perspectives from provincial food costing work. From this, the most promising options were selected and compiled into a recommended model for ongoing participatory food costing in Nova Scotia.

Thereafter, a consultation process was established to determine Nova Scotia's capacity for implementing a food costing initiative by gathering input on this topic from stakeholder groups. Stakeholders were asked to provide various ways their organization could potentially benefit and support ongoing food costing in the Province.

The results of the key informant interviews, input from the provincial stakeholder groups, and the experience gained in recent participatory food costing in Nova Scotia helped shape the research and

subsequent model. The information was compiled and then used to develop a framework for ongoing food costing in Nova Scotia.

Findings

Options for food costing initiatives were analyzed and selected as key components for food costing in Nova Scotia. The four components are: objectives of food costing, methods for food costing, analysis and use of food costing data, and infrastructure and resources for ongoing food costing.

The most common objectives for food costing included: determining the cost and affordability of basic nutritious foods, supporting advocacy and education, developing policies and programs, and building community capacity and food security. In developing a food costing model, these objectives should be directed at specific target groups for whom food costing information would be most beneficial. Nova Scotia has used a participatory approach for food costing, which has helped to build momentum for addressing food security by engaging and mobilizing individuals, organizations, and communities as well as building capacity at these levels to address the issue through policy and systems change.

The most widely accepted and appropriate tool used for food costing is the National Nutritious Food Basket (NNFB). Key informants agreed that adaptations to the NNFB to help to determine additional factors that impact food security, such as the availability and affordability of locally produced foods and timing of sale items in relation to income assistance cheques are important areas that warrant further research. Health professionals, nutrition students, staff of initiatives, and community members were the people who most commonly conducted food costing. Key informants also emphasized that comprehensive food costing training, such as hands-on training and having support available for food costers, was needed to ensure accurate and consistent data collection.

Conducting food costing on an annual basis was reported as the most feasible approach, allowing sufficient time to analyse the data, apply it to local contexts, translate and disseminate it to inform policy. As well, food costing on a yearly basis is critical to maintain local engagement when using a participatory approach. Key informants agreed that collection of data over a one-week period provides the most reliable data. Most food costing initiatives use non-randomized or convenience sampling methods to select grocery stores for food costing, although it was recognized that these methods do not provide statistical validity or allow generalization of the food costing data. Food costing in Nova Scotia has involved randomized sampling methods and rigorous data collection procedures through collaboration with researchers and statisticians. The importance of continuing to ensure this rigor was recognized as important.

The most common analysis of food costing data was calculating the weekly and monthly cost of a nutritious food basket for a variety of age and gender combinations, family scenarios, and geographical areas. This information was often extended into affordability assessments to compare the cost of basic nutritious foods to various income scenarios. In most initiatives, short reports were produced although some initiatives also produced longer, detailed reports. Generally, reports were targeted towards decision makers within government departments and community groups engaged in food security projects.

Key informants often defined the success of food costing initiatives based on certain outcomes. The most important indicator of building food security was influencing government policies and programs through policy change. Providing context to food costing data by using qualitative findings and portraying the lived experiences of food insecurity were considered significant outcomes. As well, building individual and organizational capacities were important outcomes of food costing initiatives.

Key informants agreed that the best approach for effective and sustainable food costing initiatives would include a combination of committed government funding, in-kind contributions from stakeholders, and

central provincial and local coordinators. It was suggested that in order to maintain food costing engagement and build capacity, a central provincial coordinator should work with local leaders to address food security through participatory approaches. As well, an advisory committee of food security partners and stakeholders would be needed to guide food costing.

Nova Scotia Capacity for Food Costing

Three stakeholder groups in Nova Scotia were invited to participate in a consultation process regarding ongoing food costing in Nova Scotia. These included: core partners of the Nova Scotia Participatory Food Security Projects, provincial government departments, and groups that would be other potential users of the food costing data (i.e. women's resource centres and health charities). Stakeholder groups were provided with the model components, including specific objectives for ongoing food in Nova Scotia, to enhance their understanding of possible benefits of and contributions to food costing and were asked to give input regarding these items. The benefits and contributions identified from these stakeholders indicated that Nova Scotia has a strong capacity to implement ongoing participatory food costing to help build food security for all Nova Scotians. Many partners and stakeholders have been involved with food costing and are strongly interested in continuing to address food insecurity. As a model for ongoing food costing is developed, further consultation and relationship building is necessary to articulate specific roles and contributions of stakeholder partners.

Proposed Nova Scotia Food Costing Model

Based on the analysis of the key informant interviews, feedback from the Nova Scotia stakeholders, and the experiences of the Participatory Food Security Projects, an ongoing participatory model for food costing in Nova Scotia was developed. The following chart highlights the recommended Nova Scotia food costing model.

Proposed Nova Scotia Food Costing Model

Values and Principles

- Food security for all Nova Scotians.
- Capacity building, social inclusion, collaboration, and community mobilization through participatory approaches to food costing.

Purpose

- To gather credible, current, and relevant data on the cost of a basic nutritious diet in Nova Scotia through participatory approaches.

Objectives of Food Costing

1. To engage, mobilize, and build capacity to address the issue of food insecurity and inform healthy public policy at both individual and system levels.
2. To use quantitative data to augment qualitative data to confirm the reality of food insecurity.
3. To foster knowledge development for individuals and organizations on the cost of food and the factors that affect the cost of food.
4. To compare the cost and affordability of nutritious food throughout regions of the province and across the country over time.

Methods for Food Costing

Tool:
National Nutritious Food Basket.

Food Costers:
Those directly and indirectly affected by food insecurity in partnership with those who can influence policy to build food security.

Training:
Train-the-trainer approach. In person detailed training with grocery store modeling. Use "What does it Cost to Eat Healthy in Your Community?: A Training Guide to Participatory Food Costing".

Frequency:
Annually in June over one-week period.

Store Sample:
Stratified random sample based on population & store size.



Data Analysis & Use of Food Costing Results

Timely analysis (using *Excel* workbook template adapted from Ontario food costing spreadsheet) and reporting of food costs and affordability assessments to internal and external stakeholders. Support for local and provincial action planning and dissemination.



Infrastructure & Resources for Food Costing

Leadership:
Designated internal staff support from Nova Scotia Health Promotion (NSHP) as part of *Healthy Eating Nova Scotia*.

Coordination:
Central Provincial Coordinator external to government to liaise between internal NSHP staff support and 9 local coordinators across province. Advisory Committee to guide food costing and food security aspects of *Healthy Eating Nova Scotia*.

Funding:
Core sustainable funding as indicated in attached budget.

Introduction

Why develop an ongoing food costing model for Nova Scotia?

Food costing is used to estimate the cost of a basic nutritious diet generally per month, for families and individuals of various age and gender groups. Food costing data can also be used to measure the affordability of food when compared to other basic living expenses. Affordability assessment can help identify population groups vulnerable to income-related food insecurity and is often used by health professionals, government agencies, and advocacy groups to address factors that cause food insecurity. The overall goal is to use ongoing food costing data to reduce food insecurity in order to build food security for all Nova Scotians.

Food insecurity is complex and means different things to different people. It means that people cannot access enough healthy food that they like and enjoy; it means wondering where your next meal will come from and if your food is safe to eat. It also means wondering where and how your food is grown and produced and whether there will be less food in the future because of modern methods of food production (Atlantic Health Promotion Research Centre, Nova Scotia Nutrition Council & Family Resource Centres/Projects, 2005). In 1998, approximately 10% of Canadians reported living in food insecure households (Rainville and Brink, 2001). In 2000/2001, a national survey found that 14% of Canadian household reported experiencing food insecurity in the previous year with Nova Scotia having one of the highest rates at 17% (Ledrou and Gervais, 2005). Evidence suggests that food insecurity is increasing in Nova Scotia (Canadian Association of Food Banks, 2004).

Beginning in 2001, the Nova Scotia Participatory Food Security Projects received support from Health Canada to conduct food costing using a community-based participatory approach. This research confirmed that many Nova Scotians could not afford a basic nutritious diet. It was also the first time food costing was conducted by people affected by food insecurity, thus beginning to build momentum for addressing the issue locally. This participatory research was recently repeated with funding support from Nova Scotia Health Promotion. With this, the Nova Scotia government has committed to addressing food insecurity to improve the health and well being of Nova Scotians (PC Nova Scotia Blueprint, 2003). Food security was recognized as one of the four key priorities in *Healthy Eating Nova Scotia* released in March 2005. Two main objectives regarding food security were identified: 1) to increase the proportion of Nova Scotians who have access to nutritious foods; and 2) to increase the availability of nutritious, locally produced foods throughout the province.

Since monitoring the cost of a nutritious food basket in Nova Scotia is directly relevant to *Healthy Eating Nova Scotia*, the timing is right to establish a coordinated and sustainable system for food costing in the Province. Recent research by the NS Participatory Food Security Projects confirmed the need for a mechanism that supports ongoing food costing in Nova Scotia to address the root causes of food insecurity and inform policy and programs that build food security. Building upon the foundation of the Participatory Food Security Projects, Nova Scotia has an opportunity to be a leader in participatory food costing and to use food costing as a tool to build community capacity to address food insecurity.

This report proposes a model for ongoing food costing in Nova Scotia using information gathered from interviews with key informants from food costing initiatives across Canada and from evaluation data, experiences and insights from the Participatory Food Security Projects. In addition, it describes consultations with Nova Scotia stakeholders that consider the multisectoral capacity for implementing ongoing food costing.

Nova Scotia Participatory Food Security Projects

Since 2000, research addressing food security in Nova Scotia has involved many different activities and studies guided by a core group of partners collectively known as the Nova Scotia Participatory Food Security Projects. This work has been aimed at answering four important questions about food security:

1) How much does a basic nutritious diet cost in Nova Scotia?

In 1988, the Nova Scotia Nutrition Council (NSNC) conducted a study to find the cost of a basic nutritious diet in Nova Scotia and showed that people living on a low income could not afford to eat nutritiously. In 2000, with the costs of living and food increasing, partners of the food security projects recognized the need to update this information to help inform policy and to build capacity to address the root causes of food insecurity. Together with the staff and participants of Family Resource Centres in the Province (funded by Health Canada's Community Action Program for Children (CAPC) and Canadian Prenatal Nutrition Program (CPNP)), food costing research was conducted in each region of the province in 2002. The outcome was two-fold: an overview of what it costs to eat nutritiously in Nova Scotia and a group of trained food costers with the commitment and interest to work together to build food security. Nova Scotia is currently the only province to use participatory research approaches for food costing.

2) What is life like for people who don't have enough nutritious food?

Many people who participated in the food costing project know from personal experience that the cost of a nutritious diet is too high for many people to afford. It was felt that capturing stories of people's experiences dealing with food insecurity, along with the food costing data, could be powerful in advocating for policy changes that would build food security. The stories would also allow Nova Scotians to gain a better understanding of the reality of living with food insecurity. Food costers and others came together in "story sharing workshops" to share their stories about what life is like for people facing food insecurity. They worked together to think about what food insecurity means to them, to identify the problems and what causes them, and to decide what needs to be done.

3) What is being done to deal with food insecurity and to build long-term solutions?

The food costing research and the story sharing workshops helped identify both problems and solutions in government policy. As well, they highlighted the need to find ways to immediately address people's food insecurity as well as look for effective long-term solutions. People working on food security across Canada were asked to share their experiences with trying to influence policy. To do this, a national advisory committee was formed and a survey was sent out asking people about the strategies they used to try to change policies related to food security. The results of this scan describe how people have tried to influence policy, what worked, what didn't, what challenges they faced, and what they learned.

4) What more can we do to improve food security?

People working on the food security projects in Nova Scotia, including the National partners, were eager to make a difference locally and nationally through policy change. The evidence collected through this research has been used for informing policy and has resulted in a growing commitment to address food insecurity in Nova Scotia. Using input from individuals and groups from diverse backgrounds through two National Dialogues and the research findings and tools developed through the projects to date, food security partners created a workbook to help guide them through dialogues about food security within their communities. Currently in Nova Scotia, people are working toward finding solutions for the food security issues most important to their communities through community dialogues. The workbook has been used across Canada to develop community-based action plans through a pilot of the workbook. Food security mentors involved with CAPC and CPNP are also currently using the workbook to build food security through local level policy change across the country. The partners in Nova Scotia and across Canada continue to build upon these accomplishments.

Background

Food Costing in Canada – A Brief History

Food costing has been conducted throughout Canada as a basis for policy decisions for over half a century (Nathoo and Shoveller, 2003; Lawn, 1998). The federal government became involved in food costing in 1974 when it established the Food Prices Review Board to address speculated increases in the cost of food (Empire Club Foundation, 1975). The Board was set up to monitor and explain food price increases and provide recommendations for policy makers with a focus on the cost of basic, staple foods. The first national food basket, consisting of familiar and commonly available foods representing a basic nutritious food basket, was created in 1974 with a goal of estimating the cost of a healthful diet for an average Canadian family (Lawn, 1998).

Agriculture Canada assumed responsibility for monitoring the cost of the food basket upon closure of the Food Prices Review Board and developed a representative Nutritious Food Basket in 1980. The Basket contained 64 food items, which were selected from the Statistics Canada Family Food Expenditure Survey to represent basic costs for a nutritious diet from 18 major cities across the country (Lawn, 1998). The Nutritious Food Basket was formulated using the average purchasing patterns in these urban areas. The Basket was updated in 1985 and again in 1989 to reflect changing purchasing patterns and nutrition recommendations. In 1989, the Thrifty Nutritious Food Basket was also developed to reflect the purchasing patterns of lower-income residents of the same urban centers. Data were collected on a regular basis between 1980 and 1995 in 18 major cities by the federal government using these baskets; however, this was discontinued in 1995 when they became outdated following the release of the *Nutrition Recommendations for Canadians, 1990* (Lawn, 1998).

Lacking current food costing information, health and social service professionals and other food basket users expressed the need for current data on the cost of food and pressured the government to update the national nutritious food basket tool. In 1998, Health Canada developed the National Nutritious Food Basket (NNFB), a survey tool comprised of 11 food groupings and 66 food items that represent a basic nutritious diet reflecting average Canadian purchasing patterns as well as the Nutrition Recommendations for Canadians (Lawn, 1998).

Despite the creation of the NNFB, national, provincial, or territorial food costing has not been mandated or sponsored by Health Canada. Most recently the NNFB was used by Statistics Canada to document the cost of food for the Market Basket Measure, a tool used to estimate the cost of a specific basket of goods and services in 19 communities across Canada (HRDC, 2003). While the Market Basket Measure included data collection in Halifax Regional Municipality, these data do not reflect differences in the cost of food throughout regions or communities in Nova Scotia, and the most recent data available are from 2000. Currently, provincial and territorial organizations and community groups invest their own time and resources to conduct food costing studies using the NNFB or adapted versions of it. Some provinces (e.g., Ontario) have mandated regular monitoring of the cost of a nutritious food basket through government departments such as health, community services, and agriculture. In Nova Scotia, a mandate or mechanism does not currently exist for regularly collecting data on the cost of a nutritious diet.

Purpose and Uses of Food Costing

The NNFB is not intended to represent an ideal diet nor the cheapest diet that meets nutritional requirements. Rather it is a list of foods that can be priced to determine the cost of a basic nutritious diet for 23 different age and gender groups, including pregnant and lactating women. The cost of a NNFB is used to assist health and social service agencies in monitoring levels of food insecurity and assessing the

affordability of a basic nutritious diet (Lawn, 1998). Using a standardized tool such as the NNFB, food costing data can provide a proxy measure of the affordability and accessibility of food in relation to the cost of other essentials such as shelter and clothing (Nathoo and Shoveller, 2003). Food costing can be effective in determining which populations may be economically vulnerable to food insecurity.

Food costing data are also used to influence and develop policies and programs that support the purchase of nutritious foods (Nathoo and Shoveller, 2003; Lawn, 1998). As well, the NNFB is used to compare costs and availability of basic nutritious foods in various geographic locations and store sizes, and to assess the cost of special diets like diabetic or heart healthy diets (Travers et al., 1997). Policy and decision makers can use food costing information to develop health, nutrition, social, and food policies that support an affordable nutritious diet for all (Lawn, 1998).

Food Costing in Nova Scotia

During the late 1980's and 1990's, non-governmental groups in Nova Scotia periodically conducted food costing and food security research through various initiatives. In 1988, the Nova Scotia Nutrition Council (NSNC) conducted a provincial food costing study and released their landmark report "*How Do the Poor Afford to Eat?*" examining the affordability of nutritious food for people living on social assistance in the province. This food costing study resulted in advocacy efforts, which led to a modest increase in social assistance rates. In 1997 a food costing case study was conducted in a low-income urban area in Nova Scotia by participants from a Family Resource Centre (Travers, 1997). The action research approach used in this study resulted in lobbying efforts by the women involved and subsequent changes in grocery store policies in this community. Only one other food costing initiative was conducted in Nova Scotia specifically for the purpose of examining the cost of heart healthy dietary recommendations in 1996 (Travers, et al., 1997).

In 1996, evidence indicated that over 17% of Nova Scotians were living in poverty (Lee, 2000), of which almost 18% were children (Raven, 2003). Minimum wages and income assistance rates in Nova Scotia have lagged behind the rising costs of living in the past 30 years, with households affected by these policies living well below the poverty line (Workman and Jacobs, 2002). The 2000 Canadian Community Health Survey reported that 17% of Nova Scotians experienced income-related food insecurity (Ledrou and Gervais) and in March of 2000, almost 21,000 Nova Scotians visited a food bank (Wilson and Steinman, 2000). In addition, research among a sample of low-income lone mothers with two or more children under the age of fourteen in Atlantic Canada, those living in Nova Scotia were 3.3 times more likely to experience food insecurity compared to those living in other Atlantic provinces (McIntyre, et al., 2002).

In addition to the research evidence, there were growing concerns among community organizations and citizens that the impact of poverty was increasingly being felt by Nova Scotians and that the nutrition needs of low-income families were going unmet. In June 2000, at a workshop on food security, NSNC members recommended a food costing study to assess changes since 1988 in the affordability of a nutritious diet for Nova Scotians. The NSNC partnered with collaborating Family Resource Centres in the Province (funded by Health Canada's Community Action Program for Children (CAPC) and Canadian Prenatal Nutrition Program (CPNP)) and the Atlantic Health Promotion Research Centre (AHPRC) to carry out participatory approaches to food costing. Participatory food costing was conducted in the spring and fall of 2002 (Phase I) with funding support from Health Canada. People involved in Family Resource Centers throughout Nova Scotia participated as researchers and were trained as food costers in their communities.

Results from food costing in the 43 stores that were sampled in 2002 showed that a basic nutritious diet costs an average of \$572.90 per month for a two-parent family with two children aged seven and fourteen

years. The results also put the cost of healthy eating into context by comparing a family's monthly income to their basic monthly expenses, and demonstrated that many Nova Scotians, especially those earning minimum wage or on income assistance, were simply not able to afford to eat a basic nutritious diet (AHPRC, NSNC, FRC/Ps, 2004; Williams, et al., 2005 in press). The participatory aspects of this food costing have resulted in the participation of those most affected by food insecurity in research and advocacy, as well as the involvement of government departments and community groups with the ability to change policies. The participatory approach used in 2002 was intended to go beyond determining the cost of a nutritious diet by working towards building capacity at all levels to address food insecurity through policy change.

The participatory food costing study served as a springboard to a series of story sharing workshops (Phase II) to explore the lived experiences of some of the individuals and families in Nova Scotia most affected by food insecurity. Eight workshops were held with 54 women from 10 Family Resource Centres around Nova Scotia in 2003 to share stories about living with food insecurity, to think about what food insecurity means to them, to identify the problems and causes of food insecurity, and to decide what needs to be done to improve food security. This story sharing process allowed women to talk about their experiences of living with food insecurity and add meaning to the food costing data. Through these workshops, communities were engaged in food insecurity issues and gained an understanding of the root causes and the reality of food insecurity in Nova Scotia. Participants in the story sharing workshops felt that these stories, along with food costing data, could be a powerful tool for building food security through advocacy for policy changes. The results of Phases I and II of the participatory food costing were released in March 2004 (AHPRC, NSNC, FRC/Ps, 2004).

Currently, the Participatory Food Security Projects continue to work towards building food security in Nova Scotia and across Canada. Part of this work involves developing a sustainable mechanism to maintain the province-wide food costing initiative and to monitor and address food insecurity in Nova Scotia. In the fall of 2004 and the spring of 2005, participatory food costing was repeated with funding support from Nova Scotia Health Promotion to assess changes from 2002 in the cost of a basic nutritious food basket. The results are being compiled and analyzed and will be available in report format in early 2006. In addition, a plain-language training guide describing how to conduct food costing along with an *Excel* Workbook (Blum and NSNC/AHPRC Food Costing Working Group, 2005) adapted from Ontario (Ontario Ministry of Health, 1998) were developed in 2005 to support this work.

In developing a proposed model for on-going food costing in Nova Scotia, it was important to build on the knowledge and experience gained from the Participatory Food Security Projects as well as explore food costing initiatives and experiences from across the country. In 2004, Nova Scotia Health Promotion (formerly the Office of Health Promotion) provided funding to the Participatory Food Security Projects to review options for food costing and develop an ongoing model for food costing in Nova Scotia. The project *Working Together for Ongoing Food Costing and Policy Solutions to Build Food Security* set out to determine a food costing model drawing on experiences from local, provincial, and national food costing initiatives. A Food Costing Working Group (FCWG) consisting of local project partners and stakeholders was established to help guide this work (Appendix A). Most members of the FCWG have been involved with food security issues in Nova Scotia for several years and have a breadth of knowledge, experiences, and insights to contribute toward developing an on-going food costing model for Nova Scotia.

Developing a Nova Scotia Food Costing Model

Through discussion within the Food Costing Working Group (FCWG), a study was designed to review various components for a food costing model from Nova Scotia and examples across the country to determine the best approach for sustainable food costing in the Province. The study represented the first time that information of this type was collected and synthesized. Exploring initiatives across the country was viewed as a critical step in understanding the strengths and challenges of various methods of food costing.

The research process involved gathering information through interviews with key informants working with food costing initiatives in each province and territory across Canada and through consultations with stakeholders in Nova Scotia. As well, the local experiences from the Participatory Food Security Projects and the methods used in recent provincial food costing helped shape the research and subsequent model. The research findings were compiled and then used to develop a framework for ongoing food costing in Nova Scotia. The results of the research are presented in the *Findings* section of this report and are organized according to four components essential for a food costing model: 1) objectives, 2) methods, 3) analysis, uses and outcomes, and 4) infrastructure and resources. For each component, findings and experiences are discussed and considered in a Nova Scotia context. The report concludes with recommendations for a Nova Scotia model of ongoing food costing.

Key Informant Interviews

In-depth interviews were conducted with people involved in and knowledgeable about food costing in Canada. Key informants were identified through a literature review of food costing initiatives, through the National Advisory Committee for the Nova Scotia Participatory Food Security Projects, and through the Federal, Provincial, and Territorial Group on Nutrition. Snowball sampling was also used whereby key informants identified further people to take part in interviews. Key informants were identified from all 10 provinces as well as the North. The majority of key informants were health professionals, e.g., nutritionists, home economists, but also included administrators, advocates, volunteers, and researchers. The key informants had various responsibilities in the food costing initiatives they were involved with, from coordinating food costing programs in government positions, to collect food prices, to using the data for various purposes such as program planning, counselling, and advocacy.

Once key informants were identified, 19 in-depth interviews were carried out to gain an understanding of the various methods used by different food costing initiatives. Interview questions were developed in consultation with the FCWG and pilot tested with a key informant from the food security projects in Nova Scotia (Appendix B contains the interview guide). Interviews were conducted between January 26th and June 29th, 2005. Of the 19 individual and group interviews conducted, 17 were via telephone, one through electronic mail and one face-to-face. Prior to participating in an interview, key informants were informed of the ethical aspects of participating in the research and were asked to sign a consent form. Interviews were audio-taped and later transcribed verbatim. The pilot interview was also included in the data analysis for a total of 20 interviews.

Data Analysis and Model Development

Data from the key informant interviews were analyzed and used to identify options for a food costing model for Nova Scotia. Qualitative data analysis occurred through identification of common themes and codes across interviews and was managed using the qualitative analysis software NUD*IST (Version QSR N6). This process was facilitated by a sub-committee of the FCWG that helped develop the coding framework to be applied to the transcripts for analysis. The coding framework was tested for inter-rater reliability, whereby transcripts were coded by the project coordinator as well as by a FCWG member with expertise on qualitative data analysis to ensure a reliable and consistent coding framework.

During the analysis process, the FCGW met to review common themes and model components recurring from the interviews. The FCGW considered the pros and cons associated with each component in the NS context using research findings and experiences from provincial food costing work. From this, the most promising options were selected for each model component and compiled into a recommended model for ongoing participatory food costing in Nova Scotia.

Stakeholder Consultations

Once the food costing components were selected, a recommended food costing model was put forward to key provincial stakeholder groups. A consultation process was established to determine Nova Scotia's capacity for implementing ongoing food costing by gathering input on this topic from stakeholder groups. These provincial groups were identified by food security project partners and through the key informant interviews and were divided into three categories: 1) core partners – Family Resource Centres/Projects funded by CAPC/CPNP, the Nova Scotia Nutrition Council, and the Atlantic Health Promotion Research Centre, 2) government departments – Departments of Health (Public Health Services), Agriculture and Fisheries, and Community Services, and 3) community-based groups – health charities (Heart & Stroke Foundation of Nova Scotia, Canadian Cancer Society, and Cancer Care Nova Scotia) and Women's Resource Centres (LEA Place Women's Resource Centre in Sheet Harbour & the Antigonish Women's Resource Centre).

These stakeholder groups were approached to participate in consultations through an information letter briefly outlining the purpose of the consultation, the objectives of food costing, and the primary components of a food costing model. The stakeholders were then asked to complete a "benefits and contributions" checklist answering these questions: 1) How can your organization benefit from ongoing food costing? and 2) What can your organization contribute to ongoing food costing? (Appendix C).

Findings

The following section describes the results from the key informant interviews. Each of the key findings is supported by verbatim quotes from the interviews. These findings are summarized and considered along with findings from the provincial consultations and the experiences from the Participatory Food Security Projects for a recommended Nova Scotia ongoing food costing model. This model is presented at the end of the report.

Overview: The Canadian Food Costing Landscape

The majority of food costing initiatives in Canada began in the 1990's, corresponding to the *Nutrition Recommendations* revisions, the subsequent termination of Agriculture Canada's regular food costing and the later release of Health Canada's National Nutritious Food Basket in 1998. Some food costing efforts have been consistent through formal mechanisms such as mandatory programs within government (e.g., Ontario Health Department) while others have been conducted sporadically by provincial networks or associations as interest or resources allowed. Information was gathered from key informants currently involved with food costing as well as from informants associated with initiatives that have ceased or are not collecting data at this time.

In general, the main reason for initiating food costing was demand from both outside and within government for current and local data on the cost of food for use in program planning, policy development, advocacy, and individual counselling to address food insecurity.

"The [provincial government department] was interested in having a document that would reflect the current cost of healthy eating in the province ... And it was realized that it could be a tool that would have relevant information around possibly policy, planning programs, advocacy work...And it would also helpful when looking at food budgets, family budgets, for counselling and educating the population.." (Interview 9)

Some key informants cited the fact that other areas of the country were collecting food prices as an additional factor in initiating food costing in their own region or province. In one case, food costing was initiated to provide evidence to support the continuation of a food subsidy program for the North.

Overall, five different groups were involved in food costing across the country: 1) the federal government; 2) provincial departments of health, community services, and agriculture; 3) provincial nutritionists' associations; 4) volunteer groups of nutritionists; and 5) non-profit organizations working with low-income populations. These groups often worked in partnership with one another within a province to oversee and conduct food costing initiatives.

The history and objectives of a particular initiative provide the rationale for the chosen approach or model used for food costing. For example, the department of agriculture in Alberta conducts weekly food costing in Edmonton in various grocery stores to collect information on the mark-up between the farm gate and retail food prices. Table 1, Appendix D provides a profile of food costing initiatives across the country.

Food Costing Model: Key Components

The findings from the key informant interviews are organized in this section according to four main components found vital for a food costing model, which are: objectives, methods, analysis and use of data, and infrastructure and resources. Common themes that emerged as options for food costing are highlighted for each component and the strengths and challenges of each are discussed.

Model Component 1 – Objectives of Food Costing

Key informants stressed the importance of having clearly articulated objectives for food costing at the outset so that effective procedures are developed. Essentially the reason *why* food costing is done will determine *how* food costing is done. Being clear about objectives at the outset will help to ensure that food costing initiatives are effective and purposeful.

“So often people focus on lets do an activity rather than the upstream...Like what's the issue? What's the problem? How can we most effectively address it? ...So as long as you've done your homework upstream it will be very helpful.” (Interview 7)

Most food costing initiatives aimed to achieve several objectives, although the main reason for conducting food costing is to **determine the cost of foods** that make up a basic nutritious diet. In addition, one key informant stated that food costing in their province aimed to provide an historical benchmark of food costs in particular areas over time.

“This gives us the statistical backing that in this province we have examined the food and what it costs, and we know now what it costs to feed a family.” (Interview 8)

Beyond determining the cost of food, another objective is to put this cost into context by comparing it to other basic expenses and **determining if the cost of basic, nutritious food is affordable**.

“What we decided was that we could use the data that we got to work on several documents and one of them was a regional cost of eating advocacy document... that could show that people in the communities where we were living did not necessarily have enough money for food.” (Interview 14)

The cost of food and its affordability is then often used for **advocacy and education**. Generally, the purpose of advocacy and education was related to the affordability of nutritious food for vulnerable populations. Food costing information is used to create awareness of the issue and to advocate for higher incomes.

“I think advocacy and education probably are two things that come to my mind right away. One is to educate people and government, as well as other sectors around the fact that it's a problem.”(Interview 8)

As well, the information on the cost and affordability of a nutritious diet was used to inform **policies and programs** in order to build food security.

“...The health care services sector was to provide data for use for programs involving food security issues - prenatal nutrition programs, special nutrition needs such as diabetics, etc., general nutrition education and for policy planning and quite a bit of advocacy work.” (Interview 15)

Three key informants stated objectives of food costing that were specific to certain food costing initiatives. The first objective was related to providing information on the cost of food for **agriculture business analysis**.

“Some of the information initially would have been used to look at spreads between farm gate and retail food prices, for example, in looking at the margins between producer, wholesale and retail levels. As well, if somebody wanted to get into some sort of venture they would be interested in knowing what the end costs of food were for specific products.” (Interview 15)

The second objective was related to **assessing food costs in the North**, where accessing nutritious foods has specific challenges. Third, some key informants reported that their initiative used food costing data to provide **individual budget counselling**. This was typical of organizations or departments involved in providing services for low-income populations.

Building community capacity, building food security, and reducing chronic disease were three broader objectives that related to the collection of food costing data. These objectives show the important role of food costing initiatives in addressing food security broadly. Particularly when using a participatory approach to food costing, such as in Nova Scotia, it has been shown that by engaging individuals and organizations from diverse backgrounds, building capacity for addressing food security can result in policy change. A participatory approach can help to address the issues of food insecurity more broadly by making the link between building capacity in communities and reducing chronic disease.

“But I think beyond [food costing] was to build momentum in communities around the issue... It is one way of bringing people together to build the community momentum and awareness. I think the purpose was twofold. It was to get the data to advocate to government, and also to build networks and support for the issue...” (Interview 19)

“Well ...the reason we are doing [food costing] is to reduce premature mortality and morbidity from preventable chronic diseases. That's the big global goal. And then the objective for us is to ensure access to an adequate supply of nutritious, affordable, safe, and culturally appropriate food in a manner that is dignified without the use of emergency food banks for every resident.” (Interview 6)

The aim of food costing initiatives is often directly related to a specific **target group**. When asked who the food costing initiatives are intended to benefit, key informants stated several target groups: people living on low incomes and who are food insecure; advocacy groups that can use the data to push for policy and program change related to building food security; society itself in terms of raising awareness of the issue; various health units and regions in the provinces that can use the information to build food security; and people living in isolated communities who are vulnerable to food insecurity.

Summary

Based on these findings, the most common objectives for sustainable and effective food costing include: determining the cost and affordability of basic nutritious foods, supporting advocacy and education, developing policies and programs, and building community capacity and food security. In developing a food costing model, these objectives should be directed at specific target groups for whom food costing information would be most beneficial.

The experience of recent food costing in Nova Scotia using a participatory approach has demonstrated success in building momentum for addressing food security by engaging and mobilizing individuals, organizations, and communities to address the issue of food insecurity as well as building capacity at each of these levels. These objectives are fundamental to the principles of participatory food costing and it is recommended that Nova Scotia continue to be leaders in this innovative approach.

Model Component 2 – Methods for Conducting Food Costing

When conducting food costing, there are several standard procedures that must be considered, including: which tool to use to gather the information, who will conduct the food costing, what methods to use for training food costers and for selecting grocery stores, and how often to conduct food costing.

Food Costing Tool

All initiatives used some form of the **National Nutritious Food Basket (NNFB)**, either **adapted or unadapted**. In general, adaptations were made to reflect differences in local or regional consumption patterns. For example, one initiative adapted the NNFB to reflect food consumption in a northern region.

Key informants who used the unadapted NNFB reported conducting food costing more sporadically, and with fewer resources. Initiatives that adapted the NNFB were generally supported by provincial government funding. Respondents noted that adaptations were labour and resource intensive and often required a paid consultant and pilot testing of the tool. In one instance, adaptations resulted in delaying the food costing initiative.

“We looked at the possibility of adapting [NNFB] to make it more specific to [province]... and determined through focus groups that it appeared to be acceptable, for example, they made menus from it...” (Interview 19)

“We did a pilot the first year... and made some adjustments to the list of foods. And I think each year the list has to be modified to a certain extent because things change in the grocery stores, in the marketplace...and of course the recommended nutrients for Canadians and so on...” (Interview 1)

“Certainly I know that it was very beneficial to have it linked with the DRIs...At the same time, it did cause some delays along the way.” (Interview 9)

Some initiatives were able to adapt the NNFB to reflect the cost of special and/or therapeutic diets as well as new nutrition and consumption data such as the Dietary Reference Intakes (DRIs) and Family Food Expenditure data. It was clear that initiatives that did not adapt the NNFB were interested in doing so.

“The Special Diets include: Diabetic, Vegetarian, American Heart Association, High Protein, High Energy, Gluten Free, High Fibre, High Calcium and infant 0-3 months and 4-11 months.” (Interview 11)

To date, Nova Scotia is the only province to document the availability and accessibility of locally produced foods. Other provinces have also considered assessing local foods as well as other factors that influence food security such as the consumption of food items based on cultural preferences, food quality for isolated communities, and the cost of non-food items.

“Well we have been pricing a few non-food items because this [food security] program...does apply to a lot of essential non-food items” (Interview 11)

“...we had a quality assurance initiative that was [added] because the quality was so bad on the coast...and then we've added a very basic quality component...Food being poor, fair, good or excellent quality.” (Interview 13)

Key informants cautioned about the potential misuse of the NNFB, as many people outside of food costing initiatives perceive the tool as a prescriptive diet for what those living on low incomes should be eating. Therefore, many initiatives have chosen not to widely distribute the tool. In Nova Scotia, an information sheet (Appendix E) was developed regarding the proper uses of the tool and its limitations and has been incorporated into the training guide *What does it Cost to Eat Healthy in Your Community?: A Training Guide to Participatory Food Costing*.

Food Costers and Training

Employed staff of food security initiatives, **nutrition students, or health professionals** including dietitians, home economists, community or public health nutritionists, and public health nurses were typically involved in collecting food costing data. In some cases, **community members** were involved in food costing in their area to reduce travel; however, they were generally paid employees of the initiative. Nova Scotia was the only province where a participatory approach was used whereby individuals, almost exclusively women who were participants of collaborating Family Resource Centres with either direct or indirect experience with food insecurity, were trained to conduct food costing, and provided with an honorarium to recognize their time and effort as well as reimbursement for their expenses.

Some key informants felt that professionals should collect food costing data to assure that data were collected properly, but many felt that with adequate training, different groups could be involved in food costing. They also felt that the role of the nutritionists could be better served by working with food costers to address issues of food insecurity on a broader level.

“...at that time they liked to have nutritionists do it because we were more accurate in our recording. But it's a huge amount of time and effort....” (Interview 7)

As reported, food costing requires certain skills, therefore the type and amount of training was examined. Across Canada there were **different levels of training** provided to those responsible for costing food. Some costers received **written instructions** or a protocol to follow while others were given **hands-on training** with practice at a grocery store. In most cases **someone trained to provide support**, such as arranging for transportation, answering questions, etc., was available and this was cited as a critical component to success. Training and support were also provided between colleagues and co-workers when new employees or food costers were hired. Key informants indicated that when focused training was provided, the chances of error in collecting data were reduced.

“I take [food costers] into a store, a regular store... and I have the 66 food items to be costed... there are four of them so they go two by two, and they cost the whole list for one and a half hours. I run through the form with them, explain things... how to weigh the fruits and vegetables and so on and then I have them go for it. We come back after one and a half hours, we sit down, and we compare prices. And if we all have the same price then it's a non-issue. If we have differences, why? And what did you think that meant and what does this mean to you? So it gives us more reliable data and I know there are no mistakes when they go there.” (Interview 6)

“To make the data even more credible I think it would probably be wise to have some form of annual orientation and training to the pricing process... rather than just sending the documents out and making sure they read it and follow the protocols, I think even something, a telephone conference training, question and answer period, new person training - that sort of thing would ensure consistency. Those are costly additions to a program but it would increase the validity I believe of the data gathered.” (Interview 16)

To ensure the accurate and thorough collection of the information, key informants clearly stated that the best approach was **face-to-face training** that allows time for practice at a grocery store and a question/discussion period. In Nova Scotia, a “Train-the-Trainer” method has worked well, maintained a participatory approach, and helped to build community capacity. Opportunity was provided to those interested in food costing (e.g., FRC/Ps staff and participants, public health nutritionists) to be trained. They, in turn, delivered the training to others and served as supports for food costers in their local areas. The guide *What does it Cost to Eat Healthy in Your Community?: A Training Guide to Participatory Food Costing*, developed and used in the 2004/05 province-wide food costing, can serve as tool for training in Nova Scotia and elsewhere.

Frequency and Timing of Food Costing

Key informants across the country reported various frequencies for food costing, although the most common approach was to conduct it **once a year**. Annual food costing was thought to provide a manageable time frame for monitoring differences in food costs and analysing factors attributing to changes in the cost of food. As well, consistency in the timing of data collection was reported as a factor in influencing policy.

*“[Interviewer] why do you think that you have been so successful...?
[Participant] Because we have been constant.” (Interview 12)*

“They find that just having the data steadily done and the reliability of data gives them clout. So that's the strength of it.” (Interview 6)

“Time of year” was also a factor in food costing. The majority of key informants reported conducting **food costing in the spring** or occasionally in the fall, as key informants thought these seasons represented average yearly food prices. Time of year selected was also based, in some cases, on whether the time period was feasible for those conducting the costing.

Some initiatives carried out food costing more than once a year, for example, twice a year in Nova Scotia. Although one key informant talked about conducting food costing four times a year and another reported monthly food costing, these two initiatives focused on small regions within a province. Two other key informants reported conducting food costing only when it was feasible due to time and travel constraints.

Once the time of year is established, a month is chosen for conducting food costing, and then a time period within that month. Generally, food costing was considered optimal when conducted over a **one-week period** but this was not always possible if the sample size of stores was large or few people were available for food costing.

“... we had to do it in a one-week period, some people were costing a lot of stores, some people did four or five stores and that was a challenge for them to get the babysitting and find the time for them to be able to get there in that week.” (Interview 19)

“Costing of a nutritious food basket is priced during a one week period to avoid fluctuations due to changes in market availability of products between store promotional campaigns.” (Interview 11)

Another factor considered in selecting the week during the month was anecdotal evidence that prices were higher when income support cheques arrive, e.g., the last week of the month. In Nova Scotia, food costs were collected during that week in one collection and during another week in the next collection to explore the types of foods on sale during these periods. This analysis is in progress.

“... there was concern expressed ... if the cost of food differed during different times of the month. There's a belief out there that during the last week of the month when income support cheques come out that items on sale aren't necessarily staple items that would belong in the basket or items that these households need to buy right away and they need to spend the money that week because they have nothing left so they can't really wait till next week for the sales. So to try and investigate that belief a little bit...” (Interview 19)

Grocery Store Selection

According to key informants, a number of factors should be considered when selecting stores for food costing. Ideally the selection will include a **variety of grocery store types** (e.g., large, small, chain, independent) and carry a wide range of products, especially the items found in the NNFB.

Second, a strategy must be applied to select a sample of stores. Key informants reported different strategies for selecting stores based on the types of stores they wanted to sample or the feasibility of costing certain stores. In most initiatives the selection was a **convenience or non-random sample** chosen at the discretion of the food coster. A few initiatives **randomly selected stores**. Both methods attempted to sample stores to reflect population size, large and small stores, urban and rural stores, and stores in low, middle, and high income areas that reflect varying incomes.

“Within our larger cities they tried to sample one of each of the chains and an independent...and different areas of the city ... and also looking at where the grocery stores are located and access to our lower income areas in the city.” (Interview 3)

“...to make our sampling a little more rigorous we did it based on population data in each [health region] ... And also urban and rural so we classified all those stores and then did systematic sampling based on that... [we worked with] a statistician from the math department at [local] University... That is one of the things that has given so much strength to the data is that it has been done in a rigorous way based on solid research...” (Interview 19)

Third, the majority of key informants mentioned the importance of **obtaining permission** from the grocery stores to collect food costing data and assuring their anonymity. Some approached the stores prior to food costing through a letter or telephone call. Some asked permission at the time of food costing using an information letter. Others asked the head offices of the major chains directly for permission before approaching the stores individually. Generally stores were very cooperative in food costing initiatives.

“The stores were all asked... their head offices were all contacted to see if they wanted to comply. The first time we made a point of introducing ourselves to the manager or whoever was in charge and providing them with a letter to say why we were there. And there was no big thing about us being there...we didn't feel like we were being watched and we didn't feel that they were changing prices because we were there.” (Interview 10)

“The stores are sent letters as well to inform them that this is going to be happening. If there are any concerns to call us. And then whoever goes into the store... they usually have the letter with them.” (Interview 8)

Overall, many initiatives stressed the importance of thorough, detailed methods to ensure data are accurate and representative if they are to be useful and meaningful.

“... within a short period we realized the importance of having a very rigorous procedure so all the prices that we ended up publishing, our historic price series is all based on this standard price selection procedure.” (Interview 13)

“It has to be rigorous, we found out people will only accept the data if it's done in a rigorous manner. It needs to have components of methodology that are research oriented so there is going to be that piece.” (Interview 19)

Summary

It is clear that a standardized tool is necessary for attaining consistent and accurate food costing data. Based on these findings, the most widely accepted and appropriate tool used for food costing is Health Canada's 1998 National Nutritious Food Basket (NNFB). Key informants agreed that small adaptations to the NNFB can help to determine additional factors that impact food security, such as the timing of sale items. It was also agreed that major adaptations could delay food costing activities and that wide distribution of the tool could create potential misuse.

It was generally recognized that health professionals, nutrition students, staff of initiatives, and community members were the people who commonly conducted food costing. Most key informants felt that different groups could collect food costing data with adequate training. As well, it was agreed that hands-on training and having support available for food costers were effective approaches. It was emphasized that comprehensive food costing training ensured accurate and consistent data collection. The guide, *What does it Cost to Eat Healthy in Your Community?: A Training Guide to Participatory Food Costing*, developed by the Participatory Food Security Projects, is an available resource for food costing training.

For most key informants, conducting food costing on an annual basis was most feasible. Annual food costing allowed sufficient time to analyse the data, apply it to local contexts, and disseminate it to inform policy. Local needs generally determined the amount of time allotted for collecting food costing data; however, key informants agreed that a one-week period provides the most reliable data. It is also evident that most food costing initiatives use non-randomized or convenience sampling methods to select grocery stores for food costing, although it is recognized that these methods do not provide statistical validity or generalization of the food costing data. Food costing initiatives can partner with researchers and statisticians to collect data that are statistically representative and reliable.

The recent food costing initiatives in Nova Scotia have validated and used the NNFB for collecting data. Nova Scotia is the only province where a participatory approach was used. Individuals with direct or indirect experience with food insecurity were trained, using hands-on approaches, as food costers in their communities. Participatory approaches that support individuals vulnerable to food insecurity have resulted in community mobilization and building capacity and actions for impacting policy. Also unique to Nova Scotia food costing initiatives, is the use of stratified random sampling for selecting grocery stores. This has ensured representation of various factors such as geography, store size, and income area, which helps establish validity of data.

It is recommended that Nova Scotia continues to use the NNFB annually to gather credible, relevant, and current data on the cost of a basic nutritious diet through participatory approaches to continue building capacity through existing networks and through new partnerships.

Model Component 3 – Analysis, Use, and Outcomes of Food Costing Data

Analysis of Food Costing Data

Food costing analysis typically includes the weekly and monthly costs of the nutritious food basket for a family of four as well as the cost for **23 age and gender combinations**, including pregnancy and lactation. Having these data for a variety of ages by gender allows for the application of the cost of a nutritious food basket to any family scenario.

The weekly and monthly costs of the nutritious food basket for the family of four are typically presented by **geographical area**. Most commonly this includes analyzing food basket costs in health regions/areas throughout a province. Key informants reported that many user groups value data that reflects costs in local areas.

“Here, what we’ve done in the past couple of years actually is taking the information and done a little two-page flyer basically on the cost of healthy eating in [xxxx] region. And I’ve used that as a handout to different groups because it’s more specific to this region.”
(Interview 4)

In some cases analysis included comparing the cost of a nutritious food basket in rural areas to the cost in urban areas to exemplify any differences or additional challenges for those living in either area. This analysis is also important for understanding the additional costs of food in remote, isolated communities.

“And then the last way we divvied up the data was looking at it based on the geography of [the province] as a whole. And then looked at population groups. So large cities, small cities, small towns... and rural areas of the province.” (Interview 5)

Other ways data were analyzed and reported included assessing additional costs for special diets, examining the costs per food group, comparing the cost of nutritious food baskets in different sized stores, and separating the costs of perishable foods and non-perishable foods in the nutritious food basket.

Beyond analyzing the cost of a basic nutritious diet, key informants clearly identified **affordability analysis** as central for addressing food insecurity issues. Typically, individuals’ basic expenses, including basic nutritious food costs, are compared to their total income to determine if food is affordable. Affordability analysis helps to identify population groups that may not be able to afford nutritious food. Many key informants felt this analysis was important in demonstrating income-related food insecurity, which is often caused by system level problems. This analysis was useful for informing provincial and federal income-related policies and programs such as income assistance and minimum wage.

“And then we pull it all together into this family living cost budget so that it can be calculated in relationship to the family income and other expenses such as housing, transportation, recreation, education...and we take that information and can put them into various budgets, you know single parent family with 3 children, and report the cost of food required to feed basic meals to that family...” (Interview 16)

“I think [affordability scenarios] made it much stronger than just the numbers of how much it cost. They actually could understand what we’re talking about. And [healthful food] is a right for everybody.” (Interview 6)

Use of Food Costing Data

According to key informants, the most basic use of food costing data was to determine the cost of a nutritious food basket in a province or region. These data are generally reported within the department or

organization under which food costing has been conducted, as well as to other user groups who can apply the information in ways specific to their communities.

In most cases a **short report** was compiled that targeted community groups engaged in food security work, such as health promotion networks, anti-poverty groups, food security networks, and food policy councils. Some groups were also consulted by government agencies to develop recommendations using the information.

“...it's our responsibility to provide it to the regional health authorities. In our informal agreement we have agreed to do that. They're responsible for the release of that information, they use it within their programs. Should they choose to release it to somebody else it's at their own discretion.” (Interview 15)

“I think that the two-pager was much more quotable. You had it all right there in front of you instead of having to go through a huge, long report. So it did get used. I have the sense it was used more.” (Interview 8)

Many initiatives also compiled **longer, detailed reports**, depending on available resources. Generally, such reports were directed towards decision makers within various government departments such as health, community services, and labour/employment and including a series of policy recommendations for building food security.

Beyond written reports, food costing data were communicated by user groups in various ways to target groups as well as the general public. Some examples included media press releases, websites, display boards and presentations, government meetings, and academic papers. In Nova Scotia, these data were also shared through the process of community dialogues.

Concern was expressed regarding the **timely sharing** of food costing results with project partners. Key informants from two initiatives experienced a delay in receiving data from the food costing, which was considered a barrier to their momentum. As well, some informants expressed little interest in continuing food costing activities without timely results for use in their day-to-day work.

“I think we'd have a hard time mustering...[if we are] forced to do another food costing when we haven't seen any results from three... You know what I mean? ... I mean they'll be nice for historical purposes but they're not going to be nice for my purposes for budgeting or whatever else...” (Interview 10)

Some key informants recognized the potential for broader use of food costing data but had difficulty promoting the uptake of the information to external groups once the reports were available.

“Yeah, the difficulty in getting the word out, there are lots of people that are aware of what we do and the survey results and everything, but everybody who needs to be aware of that isn't necessarily aware of it.” (Interview 13)

Beyond using food costing data for producing reports, key informants expressed that **internal and external advocacy** was an essential use of food costing data. For example, some initiatives used this data to advocate for higher income assistance rates and minimum wages or for income support for people requiring special diets.

“Well... looking at increasing social assistance rates. And I had mentioned previously minimum wage. The review that is currently going on. Two examples of how it might be used.” (Interview 5)

“...our out-patient dietitian gets a lot of different requests to sign letters for more assistance money for food costs, so she'll use that data a lot of times if she has to write a letter to the social worker.” (Interview 17)

Some key informants suggested that extensive internal involvement may make it more likely that the information is used internally and is found on agendas of varying departments.

“I see some value in having this information compiled through the [health and community services departments] and shared out laterally with the other government departments. It gives us some credibility internally too.” (Interview 4)

Key informants also identified limitations regarding nutrition professionals’ scope for advocacy outside their practice. They suggested that broader level advocacy to address income, food systems, and other food security related policies could often be achieved through external partnerships.

“...we had more of a social economy slant to it like we had ... increase social supports and increase minimum wage and increase affordable housing. But those are sort of our main recommendations and a lot of the nutritionists really weren't comfortable. They basically said that should be coming more from social workers, people working with that expertise...” (Interview 17)

“I think one of our challenges in sharing our food costing data is, from the perspective of the [regional health authority], how much advocacy work we are allowed to do, how much are we allowed to say, how much of a voice can we have... working through other people to get the news out and the information out to other people... I think that might be a challenge to us in the future.” (Interview 14)

Overall, key informants suggested that a combination of internal and external advocacy would be ideal.

Nutritious food basket costs are often broken down into specific food and food grouping costs that are useful in **program planning**. For example, food costing data were used by institutions such as day care centres for grant applications or for preparing program budgets.

“People consider this factor when, for example, applying for grants. So you know you are saying that dairy costs me seventy-five cents for a child's snack in a lunch program because we know we're in a rural area and we're paying more for groceries. That seventy-five cents isn't going to go as far so I may need a dollar. And I can back this up because I have the data in this report that says that.” (Interview 5)

Food costing data and affordability analysis have been used to link food security to **broader issues of health**, such as the cost of chronic diseases that are associated with food insecurity.

“Because I think the connection of chronic disease was with unhealthy diets...people who are chronically low income and the lack of resources and things, and just their chronic sickness... I mean the cost that is to healthcare. And that if we can prevent the children from going that route...” (Interview 6)

Key informants indicated that data on the cost and affordability of basic nutritious food were used to **promote knowledge and awareness** about the root causes of food insecurity among people not living with food insecurity.

“...so when they're going out to community groups they're making their case that people are struggling to afford nutritious foods, people are living in poverty in the province. They use that as proof, as evidence.” (Interview 19)

“You know, it wasn't perfect but we were very pleased with the coverage that it got...at least by getting information out to more people and raising awareness and encouraging discussion, I think it was a useful piece.” (Interview 4)

In addition, key informants provided specific examples of how certain groups used food costing data. Several key informants reported that food costing data was used by many **non-governmental organizations** (NGOs), particularly those that work with families. They were often able to use the data to advocate in ways considered inappropriate for government representatives. Some key informants identified **university researchers** as a user group of food costing data and stressed that university collaboration was important for gaining support for food security efforts. Additional user groups were people interested in costs of living for reasons other than affordability. For example, **employers** have used it to determine allowances for employees working in isolated environments, **lawyers** have used this information during custody cases, and **farming consultants** have used it for financial management purposes.

“...also there are a lot of lawyers that use it. Or for when there's a divorce case or things like this...to see what's the cost of feeding their child.” (Interview 12)

“In terms of being able to do cash flows and budgeting for the farm business then they would utilize our budget guide to estimate what amount of money might be needed to maintain the family. Sometimes that information is well known by the family but often times it isn't so they can use these ball park figures to at least come close to cash flow suggestions and then track their own expenses to ensure that it's consistent or accurate.” (Interview 16; 254-260)

Outcomes of Food Costing Data

While few food costing initiatives have been formally evaluated, key informants were able to comment on their perspectives on indicators of success and outcomes achieved. Most key informants considered improving access to nutritious food and building food security through **policy change** as the most important indicator of success and described influencing government policies and programs as a key outcome of food costing initiatives.

“The information is used by [health and social services] and considered in social assistance allowances.... We have received some feedback particularly regarding the cost of foods for people on special diets... special diets and pregnancy food allowance considered in social assistance allowances.” (Interview 11)

“... but they've certainly used the information coming out of the projects and the capacity and tools have been built within the projects...at least to identify the policies that are crucial within their community to address issues of food security.” (Interview 19)

Another important outcome of food security initiatives is applying the findings, especially when both quantitative and qualitative methods are used, in a context of **lived experience** of food insecurity. Key informants suggested that qualitative information had impact in two ways. One was to provide additional context to the data and secondly, to portray the experience of food insecurity.

“...so we talked to some people in our communities about giving us stories about food insecurity to include in our cost of eating document... those stories really brought it home...You can talk to government from a health perspective but when someone actually tells their story how much more impact that has on politicians. [Also] it gives them a chance to share their story which I think is empowering to know that someone is listening to them and that story very possibly made a difference.” (Interview 14)

Another important outcome resulting from food costing initiatives was **building capacity among individuals and organizations**. Most key informants could relate to capacity building as an outcome, however many initiatives did not state it as an objective of food costing. Nova Scotia's food costing initiatives were unique in that building capacity was a stated objective. **Individual capacity** was achieved through **hands-on opportunities** in local communities for engaging people experiencing food insecurity

in the process of food costing. For example, individual capacities built were skills related to food costing procedures such as label reading and price calculations. Beyond increasing practical skills, many participants who collected food costing data also participated in **community dialogues** to share their experiences with food insecurity and to discuss possible causes and solutions. These dialogues **increased awareness** that nutritious food is often not affordable for many people. This helped individuals and families to better understand the root causes of food insecurity and demonstrate that they are not alone in their struggles. This example is another aspect of individual capacity building.

“... it provides a way that people are able to have control, be able to share their own experiences, and have some control over how it's being addressed. And some control over the outcomes of the process. So it's a powerful way of engaging people...and for addressing an issue in a way that makes more sense.” (Interview 19)

“I shared that same information about the cost of eating in the region...and it helps people see what their reality is. You know, that it is not necessarily their fault that they can't manage because it isn't their fault if they haven't got enough money. None of us could stretch the amount if it's not adequate....” (Interview 4)

Addressing food insecurity through **organizational capacity building** was also described as an outcome of food costing initiatives. Key informants identified three critical aspects of organizational capacity building: **developing networks and partnerships**, **securing funding** for food security initiatives, and the **emergence of champions** within governments and organizations who can support the issue and promote change.

“...it's hard because it's sort of internally used, right? Like the people from the [advisory committee] are able to use it within their departments, right? So [advisory committee] members are using it within their organizations and there's sort of an expectation that if you are on the [advisory committee] in some ways you are sharing that information back to the organization that you represent. So I think that there's been that happening.” (Interview P)

“We touched upon community involvement, the promotion of capacity building out of knowing and understanding the numbers and then leading more into involvement with key stakeholders that play a role in policy development. (Interview 14)

Summary

From these findings, there are several aspects of data analysis, reporting, use, and outcomes of food costing that should be considered when developing a food costing model. Key informants agreed that the most common analysis of food costing data was calculating the weekly and monthly cost of a nutritious food basket for a variety of age and gender combination, family scenarios, and geographical areas. Data analysis that reflected local food costs was considered very useful for key informants. This information was often extended into affordability assessments, identified as an essential analysis for addressing food insecurity.

In most initiatives, short reports were produced although some initiatives also produced longer, detailed reports. Generally, reports were targeted towards decision makers within government departments and community groups engaged in food security projects. Food costing data were also disseminated to various target groups in a range of formats, including the media releases, the internet, presentations at professional and governmental meetings and academic papers.

Key informants identified multiple users of food costing data and ways in which these data were used for building food security. Users of data included non-governmental organizations, university researchers, employers, lawyers, and business advisors. Uses of data included: advocacy, program planning, addressing broader issues of health, and promoting knowledge and awareness.

Key informants often defined the success of food costing initiatives based on certain outcomes. The most important indicator of building food security was influencing government policies and programs through policy change. As well, providing context to food costing data by using qualitative findings and revealing the lived experiences of food insecurity were considered significant outcomes. In addition, building individual and organizational capacities are important outcomes of food security initiatives.

Specifically in Nova Scotia, capacity building has been very successful through participatory approaches to food costing initiatives. Individual capacity was built by providing opportunities for engaging people in food security activities to build skills and increase awareness of the root cause of food insecurity. Many champions who can influence food security policies have emerged through networks and partnerships.

Based on these findings, it is recommended that Nova Scotia's food costing initiative should engage in the specific analysis and use of food costing data to encourage policies that build food security, portray the lived experiences of food insecurity, and building individual and organizational capacity to address food insecurity as appropriate to each community. An evaluation process should also be established to monitor effectiveness and success of the initiative, documenting outcomes for addressing food insecurity in Nova Scotia at the individual, community, and systems levels

Model Component 4 – Infrastructure and Resources

Partnerships

The key informant interviews revealed the most common groups involved with food costing across the country (federal and provincial departments, provincial nutritionists' associations, volunteer groups of nutritionists and non-profit organizations). Through partnerships, these groups often worked with each other within a province to share resources and expertise for food costing and each benefited in some way from having access to food costing information.

Partnerships took place between varying government departments such as health and social services or health and agriculture and between government departments and non-government organizations, such as health charity groups, university groups, and industry groups. The most extensive level of partnership in Canada was in Nova Scotia through participatory food costing that involved CAPC/CPNP funded Family Resource Centres, the Nova Scotia Nutrition Council, Atlantic Health Promotion Research Centre, provincial departments of health, community services, and agriculture, public health services, and non-governmental organizations representing organic farmers and food banks.

“I think the other thing is in order for it to be as relevant as it can be, it needs to be done in partnership. I would suggest that what we may end up doing is pulling together all the interested stakeholders and go from there in terms of what might happen [here] and end up with a product that is certainly better understood, more highly utilized and perhaps meets the specific needs of the specific target audiences.” (Interview 16)

Many key informants described their partnerships with community groups as strong and often consulted communities about the best ways the food costing information could be used by them.

“We have a coalition, a group of agencies that get together... there's about 20 agencies so the main core agencies, the middle, and small ones that get together so that we can pull them together for big issues. And so I usually... just send an e-mail out to all the coalition members saying that I am going to do a presentation on the Nutritious Food Basket and ...they always come out because they want to know what is happening with food costs... I will say last year these were our recommendations, now this year, what would you like me to go forward to recommend for you? What are the issues for your communities? And so I try to take their perspective and go through with it.” (Interview 6)

Coordination and Leadership

According to key informants a central coordinator was integral to food costing initiatives. Informants involved with provincially mandated food costing initiatives often had a *central coordinator within the affiliated government department*. Food costing initiatives supported by grants or other funding had a *central coordinator that rested outside of a government department*. Examples of non-governmental based initiatives were non-profit organizations working with low-income populations, voluntary groups concerned with nutrition, or working groups of provincial nutritionists. In both cases, the central coordinator acted as a liaison throughout the province with professionals (e.g., public health nutritionists or home economists) or others who were responsible for collecting and using food costing data within their communities.

“It was beyond what people could do on a volunteer basis. So, although a lot of volunteer time went into supporting the work, having someone who could coordinate it was really important.” (Interview 4)

“It's absolutely essential that you have someone managing the project with a strong knowledge of what it is that needs to be done, why it needs to be done, and can answer the question and then verify the data when it come in.” (Interview 16)

Initiatives external to government often had greater community ownership and more action-oriented uses of the food costing data to address food insecurity. This was most evident in the participatory approach to food costing used in Nova Scotia.

“I’ve heard about the process in Nova Scotia and the ownership that people feel when they are the ones who go out ... and collect the information... it shifts the ownership of that data really, doesn’t it? And in terms of people being able to speak to it. And they’ve been there and they’ve collected it. That seems to me would give a stronger voice to... how you’ll use it and how you’ll speak about it.” (Interview 4)

While groups external to government have more freedom for advocacy, coordination inside government often provided more consistent resources and infrastructure.

Making decisions related to food costing was generally the role of the central coordinator, although decisions were often minimal when a written protocol for food costing was available. However, experience from Nova Scotia participatory food costing regarding decision-making fostered the involvement of many partners through advisory and working groups. As well, the central coordinator had a great deal of responsibility in overseeing the initiative in terms of training local coordinators, entering and analysing data, compiling reports, engaging participants through community dialogues, and disseminating the food costing data and affordability analyses.

Funding

Food costing initiatives varied widely in terms of the infrastructure and funding available to support them. Most key informants stated that if efforts towards reducing food insecurity are to be successful, it is important to ensure that committed resources, including staff, are available for data collection and analysis and use of the information.

“We’re an organization that works mainly on grants and so we don’t even have anybody who is a full time employee...If we had more staff time to devote to it we probably could have found somebody who would have been willing to do the analysis of it, but ... We just didn’t have the ability to do that and time to do that.” (Interview 3)

As well, many key informants felt that core funding was essential for sustainability. Committed infrastructure and resources are needed to ensure the successful collection and use of food costing data.

“I think you need to have continual infrastructure support so people can keep their eye on that ball and not let it go because ...it’s a worked process, it just doesn’t naturally occur. We’ve had lots of in-kind contributions, but it really works well when it’s somebody’s job to make sure that it’s valued and it’s done. And you can’t do it in an in-kind volunteer way. It means having somebody that’s working to make sure that happens...it’s about finding the right group, people.”(Interview 19)

In addition to direct funds, a great deal of in-kind support shared between different government departments and stakeholder groups was utilized to facilitate food costing initiatives across Canada. The most common in-kind contributions included staff time, mileage, dissemination, student time, and expertise for sampling and data analysis.

Summary

Based on these findings, key informants agreed that the best approach for effective and sustainable food costing initiatives would include a combination of committed government funding, in-kind contributions from stakeholders, and central and local coordinators. Employing a central coordinator external to government was considered important for liaising between a designated government food security support person and local food security coordinators/champions. It was suggested that in order to maintain food costing engagement and build capacity, a central coordinator should work with local leaders to address food security through participatory approaches.

As well, key informants recognized that an advisory committee of food security partners and stakeholders would be needed to guide food costing. Roles of the advisory committee could include providing direction to the central coordinator within a province and providing advice and input related to all aspects of the food costing initiative.

It is evident that committed government funding, central coordination, in-kind resources, and the full use of partnerships through an advisory committee will help ensure the success of a participatory food costing model in Nova Scotia. As well, a central provincial coordinator should have sufficient time for training local coordinators, providing support throughout the Province, collecting, entering, and analysing food costing data, preparing reports and communicating the information through established networks, and disseminating the food costing data to communities through dialogues, through the media, and through newsletters or short reports. Beyond collecting and compiling food costing data, the central provincial coordinator can play a key role in engaging individuals and maintaining community involvement by disseminating food costing data to build food security.

Nova Scotia's Capacity for Food Costing

The Food Costing Working Group identified three categories of stakeholder groups in Nova Scotia to participate in a consultation process regarding ongoing food costing in Nova Scotia. Nova Scotia stakeholders included the core partners involved in the participatory food security research, government departments with a strong role in food security issues, and community groups identified as primary users of food costing information. Stakeholder groups were provided the model components, including specific objectives for ongoing food in Nova Scotia, to enhance their understanding of possible benefits of and contributions too food costing and were asked to give input regarding these items (Appendix C). These existing and potential partnerships will need to be further developed and explored as the Nova Scotia food costing model evolves. The following section highlights the consultation results demonstrating the importance of ongoing food costing for these groups and the many contributions they can make.

Core Partners

The three core partners involved in the Participatory Food Security Projects include: Nova Scotia Family Resource Centre/Projects (FRC/Ps), the Atlantic Health Promotion Research Centre at Dalhousie University, and the Nova Scotia Nutrition Council.

Based on past experience and involvement with the initiative, **Nova Scotia Family Resource Centres/Projects (FRC/Ps)** will use the information for increasing awareness of food insecurity in their communities and help demonstrate the root causes of food insecurity. They also identified that knowing the costs of food would be useful for planning budgets when applying for grants. These were outlined as important benefits for the Centres.

Many of the Family Resource Centres also stated they could contribute resources such as staff time for committees and working groups and for organizing food costing activities. FRC/P staff can also identify, communicate with, and support the involvement of food costers. The Centres identified several in-kind supports such as meeting space, travel for food costers, and on-site childcare. However, it should be noted that the FRC/Ps are non-profit and may be limited in the amount of staff time that can be provided.

Family Resource Centres have a great deal of experience in participatory food costing and can contribute valuable insights and knowledge through first hand experience with people facing food insecurity. Further contributions include dissemination, awareness, and translation of food costing information as these Centres have strong connections with local groups including media. As well, many have extensive advocacy experience with food security issues through participation in community dialogues. The FRC/Ps in Nova Scotia have been instrumental in guiding the direction of the participatory aspects of the research and use of the results thus far. They have stated their interest in continuing to play a leadership role in this capacity.

To date, the Food Security Projects have been housed at **the Atlantic Health Promotion Research Centre (AHPRC)**, Dalhousie University through an adjunct research appointment by the Principal Investigator. The AHPRC's missions statement is to "conduct and facilitate health promotion research that informs policies and practices and contributes to the health and well-being of Atlantic Canadians". Participatory food costing research fits well with this mandate.

The AHPRC has made extensive contributions to the success of the Food Security Projects over the past few years and has indicated their continuation through representation on committees or working groups and collaboration with project stakeholders. As well, AHPRC staff could offer extensive research knowledge particularly with research design and data analysis, reporting, and knowledge transfer. AHPRC has strong linkages in the Atlantic Region and across the country with research centres,

governments, universities and NGO's, with whom they could disseminate food costing information through conferences, forums, updates and publications. AHPRC also consults with a communications expert once a week who could be utilized as a resource. In-kind supports identified included office and meeting space, and other office resources and supplies, as well as assistance with managing grants and supervision of students involved with food security research.

The **Nova Scotia Nutrition Council (NSNC)** has a strong history of working on food costing and food security issues and has become a provincial and national leader in food security. The NSNC is committed to fulfilling their goals and objectives for addressing food insecurity through continued involvement in ongoing food costing. Keeping members involved and engaged in issues that affect the nutritional health of Nova Scotians is a benefit to the NSNC.

The NSNC would contribute representation on committees and/or working groups as needed. Disseminating food costing information through newsletters, their website, annual meetings, and workshops with partnering groups was stated as another contribution. The NSNC could also contribute by using food costing information in advocacy and other efforts for building food security in Nova Scotia.

Government Departments

Three government departments were identified as stakeholders in ongoing food costing: the Department of Health, the Department of Community Services, and the Department of Agriculture & Fisheries.

The Department of Health was consulted through members of the Public Health Working Group as well as through Food Costing Working Group members. Response was also sought from the Departments of Agriculture & Fisheries and Community Services. Due to time constraints the Department of Community Services was unable to officially respond via the consultation process. They have indicated general support for the initiative and have helped steer the Food Security Projects to date. Further consultation and determination of contributions will be sought as the model is further developed.

The Department of Health was represented through the **District Health Authorities' Public Health Services**. Public Health Services was consulted through members of the Public Health Working Group as well as through the Public Health Nutritionists in the province. In some districts the consultation was completed by the working group member and nutritionists together while others replied independently. Within Public Health Services, it was identified that the information generated through ongoing food costing can be used by Public Health Services in several ways:

- to raise awareness among staff about the reality faced by many people they serve;
- to augment the importance of utilizing local foods to build food security;
- to plan programs based on needs;
- to advocate for upstream population health models that address the causes of food insecurity to enhance health for all as well as for individuals experiencing food insecurity.

Public Health Services indicated contributions of staff time on committees and/or working groups. In particular, Capital District Health Authority has indicated that the capacity exists for a nutritionist to act as chair for an advisory committee that would guide food security work in the province. They have indicated interest and support for training nutritionists in conducting food costing and serving as trainers and supports for food costers in their respective areas. They could facilitate collaboration with community groups to ensure a participatory approach. Some public health nutritionists have already been trained to work in this capacity. For example, some public health staff involved with the Food Security Projects currently use food costing data through community dialogues being held to build awareness and community action. Public Health Services also provides learning experiences for many students and interns and have expressed that experience with food costing and food security issues are important in this respect.

Public Health Services identified a leadership role for themselves in terms of maintaining the momentum that has been building over the last few years on the issue of food security. Capital District Health Authority is committed to supporting *Healthy Eating Nova Scotia* and have dedicated one FTE public health nutritionist to take the lead on food security issues within their district and with other districts in the Province. Public health nutritionists' involvement with ongoing food costing at the local level would be a key activity in helping to implement the provincial *Healthy Eating Strategy* across the Province. Further contributions from Public Health Services have included knowledge and expertise related to working on policy change strategies and involvement in research and proposal and report writing. In addition, while they have limited expertise in the area of agriculture per se they have been working toward increasing their connections to the farming community.

In-kind supports available through Public Health Services include meeting space, photocopying, and office supplies. In relation to communication and knowledge translation, Public Health Services is well connected to communities throughout the province and have strong partnerships with a variety of key organizations. They would be able to share information through existing networks via e-mail, speaking engagements, radio and newspaper.

Since addressing food insecurity is a long-term goal, Public Health Services have identified that substantial resources are required for coordination and work at the local level. The need for childcare and transportation support for ongoing community participation was identified as a challenge. Timely communication and accessible data was also identified as an area needing attention. They stated that communities need up-to-date progress reports and support for sharing challenges and celebrating their successes. Public Health Services have indicated a strong interest in working collaboratively to have their role articulated and defined in the planning stages for ongoing food costing.

The Department of Agriculture & Fisheries identified several benefits of ongoing food costing. Information on the costs of food could encourage action and ideas for connecting agri-food business opportunities and food accessibility for low-income families. This information can also be used by food producers to examine the spread between wholesale and retail prices in trying to find ways to increase their portion of the food dollar and enhance their levels of food security. This information will in turn promote solutions that are inevitably local in nature by establishing connections between producers and consumers.

The Department of Agriculture & Fisheries indicated their contribution through continued representation on committees and/or working groups. Staff members have experience and knowledge of the food security work through involvement in the Food Policy Working Group and could contribute this experience to ongoing food costing. They could contribute unique perspectives and knowledge on agriculture, the food industry and its stakeholders, as well as program development and evaluation. As well, the Department could disseminate information through their communication channels.

Community Groups

Two sets of community groups were consulted based on their interest in and use of the previous food costing initiatives. These included Women's Resource Centres, specifically LEA Place in Sheet Harbour and the Antigonish Women's Resource Centre, and health charities including the Canadian Cancer Society, Cancer Care Nova Scotia, and the Heart and Stroke Foundation of Nova Scotia.

The **Women's Resource Centres** have indicated that accurate, thorough, and local data on the cost of food was very useful for advocacy related to income assistance rates and the national child tax credit. Food costing information has also been used to increase awareness for those experiencing food insecurity and the broader community, which has helped to reduce misunderstandings associated with people

earning low incomes. Through the process of raising food security awareness, the information has been shared via presentations, newspaper articles, and workshops.

The Women's Resource Centres have indicated that staff time is a potential contribution to food costing in Nova Scotia. LEA Place has indicated their interest in supporting further food costing activities by providing meeting space, training, and transportation and by connecting with people experiencing food insecurity. The Women's Resource Centres could contribute knowledge and experience from past food costing activities, as well as knowledge on social assistance and community services policies. Women's Resource Centres have strong connections with low-income women and groups working with this population and could share food costing information with them and other networks concerned about food security.

The primary challenge for Women's Resource Centres' involvement in ongoing food costing is lack of time and funding resources.

The **Health Charities** identified various uses for food costing data, especially in demonstrating the cost of healthy eating related to chronic disease prevention. It was indicated that food costing data would be helpful to assist their clients who are on fixed incomes. As non-profit organizations, the health charities are committed to advocating for healthy public policy both on provincial and national levels. Many health charities already advocate on food security as organizational priorities.

Health charities feel they are able to contribute personal perspectives as many of their clients have experience with food insecurity. Health charities also have experience in policy through development, advocacy and governmental relations.

Health Charities indicated they could contribute meeting space and volunteers. They are able to contribute dissemination of food costing information to local and national levels through existing communication channels, such as professional networks, newsletters, websites, presentations, volunteer training, staff meetings, and program updates.

The main challenge for participating in food costing initiatives identified by Health Charities was the time associated with reviewing documents, making recommendations, and being supportive of efforts.

Summary

Based on the consultation process, a number of stakeholders were identified as organizations committed to ongoing food costing in Nova Scotia. These include: core partners of the Nova Scotia Participatory Food Security Projects, provincial government departments, women's resource centres, and health charities. The benefits and contributions identified from these stakeholders indicate that Nova Scotia has a strong capacity to implement ongoing participatory food costing to help build food security for all Nova Scotians. Many partners and stakeholders have been involved with food costing and are strongly interested in continuing to address food insecurity. As a model for ongoing food costing is developed, further consultation and relationship building is necessary to articulate specific roles and contributions of stakeholder partners.

Proposed Nova Scotia Food Costing Model

Members of the Food Costing Working Group have concluded that ongoing food costing in Nova Scotia is needed to provide a mechanism for monitoring the cost and affordability of basic nutritious foods to measure and address the level of food insecurity.

In order to achieve this, options for food costing initiatives were analyzed and selected as key components for food costing in Nova Scotia. The four components are: objectives of food costing, methods for food costing, analysis and use of food costing data, and infrastructure and resources. Within each component, specific actions were determined as most effective given the findings from the key informant interviews and the experiences from the Nova Scotia Participatory Food Security Projects. These actions were also considered to be most feasible given Nova Scotia's capacity for ongoing food costing as indicated by local stakeholders.

Using the four components as a framework for a food costing initiative, the following actions are recommendations for a model of ongoing participatory food costing in Nova Scotia:

- Use the NNFB as the data collection tool with minor modifications to document the availability and affordability of local foods;
- Engage and train local food costers affected by food insecurity from all nine DHAs to collect food costing data using a “train-the-trainer” approach;
- Use a stratified, randomized sample of Nova Scotia grocery stores;
- Collect food costing data from selected stores once a year during the spring (in June) over a one-week period;
- Perform data analysis, using an adapted *Excel* Workbook, to measure consistent variables over time and to assess affordability of the NNFB and availability and affordability of local foods;
- Report and communicate food costing data in a timely manner and based on local needs;
- Establish central provincial and local coordination under guidance of advisory committee; and
- Establish committed government funding and in-kind supports.

The establishment of coordination and leadership is particularly important for the implementation of food costing in Nova Scotia. This should include a designated government support person to implement core funding and to facilitate the dissemination of food costing data at a systems level. The internal support person will work closely with the central provincial coordinator to assist with implementing and managing the food costing initiative.

The external central provincial coordinator will be responsible for training nine local coordinators, most likely public health nutritionists or Family Resource Centre managers, from each DHA on conducting food costing and on engaging local food costers to participate in collecting food costing data. As well, the central provincial coordinator will be responsible for compiling food costing data into reports and disseminating this information through various modes to the internal support person, the nine local coordinators, and to Nova Scotia communities.

Finally, the local coordinators will have the responsibility to liaise with the central provincial food costing coordinator and to engage and train local food costers. They will also establish a relationship with local grocery stores to build support for food costing and provide hands-on support to food costers as needed throughout the data collection period.

The Food Costing Working Group has outlined the following components for food costing in a food costing model.

Proposed Nova Scotia Food Costing Model

The following chart highlights the recommended model for ongoing food costing in Nova Scotia.

Values and Principles

- Food security for all Nova Scotians.
- Capacity building, social inclusion, collaboration, and community mobilization through participatory approaches to food costing.

Purpose

- To gather credible, current, and relevant data on the cost of a basic nutritious diet in Nova Scotia through participatory approaches.

Objectives of Food Costing

5. To engage, mobilize, and build capacity to address the issue of food insecurity and inform healthy public policy at both individual and system levels.
6. To use quantitative data to augment qualitative data to confirm the reality of food insecurity.
7. To foster knowledge development for individuals and organizations on the cost of food and the factors that affect the cost of food.
8. To compare the cost and affordability of nutritious food throughout regions of the province and across the country over time.

Methods for Food Costing

Tool:
National Nutritious Food Basket.

Food Costers:
Those directly and indirectly affected by food insecurity in partnership with those who can influence policy to build food security.

Training:
Train-the-trainer approach. In person detailed training with grocery store modeling. Use *What does it Cost to Eat Healthy in Your Community?: A Training Guide to Participatory Food Costing*

Frequency:
Annually in June over one-week period.

Store Sample:
Stratified random sample based on population & store size.



Data Analysis & Use of Food Costing Results

Timely analysis (using *Excel* workbook template adapted from Ontario food costing spreadsheet) and reporting of food costs and affordability assessments to internal and external stakeholders. Support for local and provincial action planning and dissemination.



Infrastructure & Resources for Food Costing

Leadership:
Designated internal staff support from Nova Scotia Health Promotion (NSHP) as part of *Healthy Eating Nova Scotia*.

Coordination:
Central Provincial Coordinator external to government to liaise between internal NSHP staff support and 9 local coordinators across province. Advisory Committee to guide food costing and food security aspects of *Healthy Eating Nova Scotia*.

Funding:
Core sustainable funding as indicated in attached budget.

Proposed Annual Food Costing Budget

Due to the extensive amount of in-kind supports in most food costing initiatives, it is often difficult to determine the exact costs associated with food costing. The attached estimated annual budget is based on recent Nova Scotia food costing and anticipated in-kind supports.

Next Steps

Implementing a Food Costing Initiative to Build Food Security in Nova Scotia

In developing a feasible and effective ongoing food costing model, the Food Costing Working Group recommends that, under the leadership of Nova Scotia Health Promotion, several key steps be taken for implementing a sustainable and successful food costing initiative:

1. Commit secure funding to support the development and maintenance of food costing in the Province and provide internal leadership and representation for food costing as part of the Healthy Eating Strategy.
2. Identify and establish a formal partnership with an external agency (e.g., university) for coordinating food costing activities and to establish an advisory committee to help guide a food costing initiative. These partnerships will be vital for implementing the food security *Next Steps* as outlined in the *Healthy Eating Strategy*. Through these partnerships, an evaluation process must be established to measure the effectiveness of a food costing initiative in addressing the key objectives for building food security for all Nova Scotians.
3. Consult further with key stakeholders and partner groups to identify and establish committed contributions for ongoing food costing.

The proposed Nova Scotia food costing initiative will work towards increasing the proportion of Nova Scotians who have access to nutritious foods as well as increasing the availability of nutritious, locally produced foods throughout the Province. Achieving these objectives will require addressing the root cause of food insecurity by influencing social, food systems, economic, and political policies to support access to healthy food. Ongoing participatory food costing is clearly an approach that encourages and supports food security actions throughout the individual, community, and system continuum – making Nova Scotia stronger and healthier.

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Appendices

Appendix A – Food Costing Working Group Members

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Principal Investigator

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Project Coordinator (June 2004-July 2005)

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Sonya Sarty
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Appendix B – Key Informant Telephone Interview Script

Introduction:

Hi, my name is [Project Coordinator] and I am calling from the Atlantic Health Promotion Research Centre regarding our key informant survey of food costing initiatives. The purpose of our initiative overall is to identify options for a food costing model for the province of Nova Scotia. To do this we are speaking with other provinces and territories across Canada regarding their food costing initiative so that we may use learnings to propose what may work in our province. As a participant of this study your feedback and experiences with food costing are very important to us.

The interview consists of 14 questions and will take approximately 1 – 1 1/2 hours to complete. I would just like to remind you that the interview will be tape recorded for data analysis purposes and I also want to confirm that you have reviewed and signed the consent form and agree to participate.

1. Please describe the background or history of the food costing initiative.
 - a. When was it initiated?
 - b. Why was it initiated?
 - c. Who was it originally initiated by?
 - d. Is this a formal or informal program?
2. Please describe the role you play in the food costing initiative.
 - a. What is your area of responsibility in relation to this food costing initiative?
 - b. How long have you been associated with this food costing initiative?
 - c. What are your experiences i.e. profession, training, etc. relevant to the food costing initiative?
3. Why do you do food costing?
 - a. What are goals and objectives of the food costing initiative?
 - b. Who or what target groups does the food costing initiative intend to benefit?
4. Describe the procedures used for doing food costing?
 - a. What tool is used and why? (NNFB 1998 or adapted process)
 - b. If adapted process how and why was it adapted?
 - c. How often is it done and why?
 - i. Time if year
 - ii. Time of month
 - iii. Number and timing of weeks.
 - d. Who collects the data and why?
 - e. How are they trained?
 - f. How are stores sampled and why?
 - g. Describe any partnerships that are established and the role each plays.
 - h. How are decisions related to the procedures of food costing made?
5. Do you feel these procedures are working?
 - a. What might you change?
 - b. What else should be done?

6. How is the food costing resourced?
 - a. What infrastructure is used to carry it out?
 - b. Who is responsible for the budget?
 - c. What are the costs?
 - d. What in-kind supports are used?
7. How is the food costing data reported?
 - a. What data analysis is done? I.e. age groups, rural vs urban, store size, perishables vs. non, special diets, income area etc.
 - b. What reports are generated?
 - c. Who is the data shared with and how?
 - d. Who are the primary user groups of the information?
 - e. Is the information made public?
 - f. Have you used data from the Market Basket Measure in any way?
8. How is the information interpreted and used?
 - a. Are recommendations made based on the data and if so who makes them and how are they followed up on?
 - b. Is the information used to assess the affordability of food?
 - c. Are there any advocacy efforts that stem from the interpretation of the data?
 - d. How are the partners you identified above involved in the outcomes of food costing?
9. Please describe any outcomes that have resulted from the food costing initiative.
 - a. Are there any indications that the information has been used to inform policy?
 - b. Have you received any feedback from user groups of the information?
 - c. In your opinion is the food costing initiative useful and/or effective?
 - d. Is there any formal monitoring or evaluation process of the initiative? If so...
 - i. What are the indicators of success used?
 - ii. What are the key results?
10. You described ____ as groups that the food costing initiative is intended to benefit. Are these target group(s) involved in the food costing initiative in any way for example, on committees or working groups, informing the interpretation of the data, as food costers, dissemination etc.? If so please describe how?
 - a. In your opinion how is this working out?
 - b. Do you see value in the described levels of engagement?
11. Are there any other learnings in regards to factors that have acted as challenges or facilitators to the entire food costing initiative that you would like to share?
12. Are there any documents such as tools and resources used in this initiative that you can share with us?
13. Who else do we need to speak to regarding this or other food costing initiatives?
14. Have you heard of any other models/food costing initiatives in other countries that you feel we should talk to?

Thank you for your time!

Appendix C – Consultation Process: Introduction Sheet & Checklist Working Together for Ongoing Food Costing in Nova Scotia

Your organization/department has been identified as a key stakeholder to participate in consultations to inform a model for ongoing food costing in Nova Scotia.

Food security was identified as one of the key priorities in Nova Scotia’s healthy eating strategy titled, Healthy Eating Nova Scotia, which was released March 2005. The strategy was developed by the Healthy Eating Action Group of the NS Alliance for Healthy Eating and Physical Activity, in partnership with NS Health Promotion. The two main objectives around food security are:

1. To increase the proportion of Nova Scotians who have access to nutritious foods, &
2. To increase the availability of nutritious, locally produced foods throughout the province.

To help achieve these objectives Nova Scotia Health Promotion has worked with the Food Security Projects of the Atlantic Health Promotion Research Centre (AHPRC), part of Dalhousie University, and the Nova Scotia Nutrition Council (NSNC) on food security research. Food Costing studies are used across Canada to determine the cost and affordability of a basic nutritious diet, information that is important for informing policy. The current work aims to develop options for a model for ongoing food costing in Nova Scotia. This project, titled “Working Together for Ongoing Food Costing & Policy Solutions to Build Food Security”, seeks to identify key partners who can inform and who are interested in forwarding the goal of establishing a sustainable food costing model in Nova Scotia as a way to help build food security.

In 2000, the need for food costing in Nova Scotia was determined by a growing concern among the Nova Scotia Nutrition Council and individuals in Family Resource Centre/Projects throughout the province. In the face of alarming statistics such as:

18.4% of urban and 17.7% of rural Nova Scotians living in poverty;
17% of Nova Scotians experiencing some form of food insecurity in a year; and
approximately 40 000 individuals accessing a food bank every year in this province.

It was felt that many Nova Scotia residents were unable to meet their nutritional needs given their restrained financial resources.

This concern led to a provincial participatory food costing study in 2002, which involved those most affected by the issue of food insecurity in all stages of the research. Throughout the province, participants of Family Resource Centres/Projects were trained as food costers and used the National Nutritious Food Basket to perform food costing in selected grocery stores in their communities. Results from this work showed that it cost an average of \$572.90/month for a family of four to eat a basic nutritious diet. This work also put the cost of healthy eating into context - comparing a family’s monthly income to all their basic monthly expenses, and demonstrated that some Nova Scotians are simply not able to afford to eat this basic nutritious diet¹. Food costing data can help provide the necessary evidence to influence policies and programs affecting food security.

¹ Atlantic Health Promotion Research Centre, Nova Scotia Family Resource Centres/Projects (funded by the Canada Prenatal Nutrition Program & Community Action Program for Children), Nova Scotia Nutrition Council. Participatory Food Security



The project partners have determined that ongoing food costing in Nova Scotia is important to:

Have credible, current, and relevant numbers on the cost of a basic nutritious diet in Nova Scotia to inform healthy public policy.

Be able to use data on the cost of a basic nutritious diet in combination with qualitative data to confirm the reality of food insecurity in Nova Scotia.

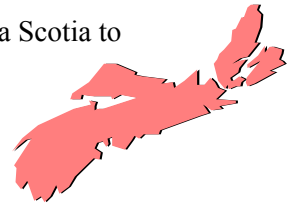
Engage, mobilize, and build capacity through participatory approaches to address the issue of food insecurity and inform policy around food security issues.

Foster knowledge development in general for individuals and organizations on the cost of food and what affects the costs of food.

Compare the cost of nutritious food throughout regions of our province.

Provide a tool for monitoring cost and affordability trends of nutritious foods over time.

Allow for comparisons of the affordability of nutritious food in relation to incomes across the country.



To achieve these goals, several components for an ongoing Food Costing Model must be considered. The project partners will be outlining suggested options related to:

Coordination – provincial and local coordination under guidance of steering group and/or coalition

Resources – core funding and in-kind supports

Data Collection Tool – having it reflect many aspects of food security including the cost of food and availability of local foods

Frequency of Costing Activity

Store Selection

Engaging food costers and providing on-going training and support

Data Analysis

Data reporting, interpretation, and communication

Attached is a menu of possible benefits and contributions, a brainstorm if you will, of the various ways your organization/department can potentially benefit from and support a sustainable model for provincial food costing. We are hoping to highlight that multiple key organizations/departments across the province see the value in conducting ongoing food costing and are willing to support the effort. Your input will be included in the report to be submitted to Nova Scotia Health Promotion.

Considering the goals for ongoing food costing and the model components outlined, please review the checklist and comment on any of the benefits and contributions that you feel might apply to your organization/department.

Responses can be emailed to [Project Coordinator] or faxed to 494-3594.



Benefits and Contribution Checklist for

(name of organization)

Via this checklist, we are looking for answers to the following two questions:

- 1. How can your organization benefit from ongoing food costing?** *(addressed in Table 1)*
- 1. What can your organization contribute to a model of ongoing food costing?** *(addressed in Table 2)*

TABLE 1. Benefits – How can your organization benefit from ongoing food costing?

✓	USES OF FOOD COSTING DATA	COMMENTS
	Monitoring Food Costs	
	Monitoring the availability of local foods	
	Assessing the affordability of nutritious foods(i.e. comparing costs of a nutritious food basket in relation to basic living expenses and incomes)	
	Program planning (i.e. creating budgets for meal programs)	
	Policy Development	
	Advocacy	
	Education / Awareness Raising	

	Other (Please describe)	
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TABLE 2. Contributions – What can your organization contribute to a model of ongoing food costing?

✓	CONTRIBUTION	COMMENTS
<i>Staff Time</i>		
	Steering Committee / Working Group Members	
	Staff Time for Food Costing Activities (i.e. training, driving, answering questions)	
	Food Costers	
	Students/Interns	
	Other Staff Time (Please describe)	
<i>Expertise/Knowledge</i>		
	Food costing experience	
	Experience with Food Insecurity	
	Policy	

	Research	
	Agriculture	
	Statistics/Quantitative Analysis	
	Proposal/ Report Writing (e.g. editing)	
	Other Expertise/Knowledge (Please describe)	
<i>Supports</i>		
	Direct Funding	
	Meeting space	
	Office Space	
	Supports for Food Costers (childcare, transportation)	
	Other In-kind Supports (Please describe)	
<i>Communication/Uptake</i>		
	Connections with Key Community Members & Organizations	
	Sharing with Networks and	

	Organizations	
	Dissemination	
	Communication Mediums	
	Knowledge Translation	
	Advocacy	
	Other Communications	
<i>Leadership</i>		
	Please describe any areas that your organization/department could play a leadership role in.	
<i>Other</i>		
	Please describe any other areas where your organization/department could provide potential contributions	

Do you anticipate any challenges related to your involvement in a model for ongoing food costing?

Would you like to make any other comments or do you have any questions?

Thank you very much for your valuable contribution. A report of results is planned to be presented to Nova Scotia Health Promotion in October and a summary report will be made

available to all those who have contributed to the process. The Food Security Projects looks forward to working together with you for ongoing food costing.

Appendix D

Profile of Food Costing Initiatives across Canada: Highlights from the Key Informant Interviews

Region	Impetus	Objective(s)	Methods	Support/Infrastructure	Outcome(s)	
British Columbia	Initiated by Community Nutritionists Council in response to concerns about the affordability of nutritious food for low income groups.	To determine the cost of healthy eating and use results for education and advocacy.	Food costing conducted annually in spring using National Nutritious Food Basket (NFB). Food costing done by nutritionists/dietitians, public health nurses and clerks, and students.	This is an informal program without specific funding. Community nutritionists seek support from local health regions.	Annual report of food basket cost for a family of four, both genders, and 23 age groups. Scenarios used to determine affordability. Partner with Dietitians of Canada to produce report. Data used by community groups: kitchens, resource centres, dietitians, and nurses. Used to advocate for increase in Northern Living Allowance.	
Alberta	Initiated in 1995 following ending of Ag-Canada's NNFB to monitor food prices. Nutritionists and Dept. of Health later became involved.	Alberta Agriculture: to benchmark series of retail food prices and information on spread between farm gate and retail food prices. AB Health: to advocate and plan programs.	Weekly food costing (FC) in Edmonton through Dept. of Agriculture using AB Agriculture Nutritious Food Basket. AB Health: Collected 1-3 times per year in various health regions as resources allow.	Formal through AB Agriculture department. In-kind support from health regions. Human Resource and Employment supports one contract position.	AB Agriculture determines NFB cost for family of four, both genders, and 23 age groups. Sends results to health regions where they examine cost and affordability and share as appropriate.	Media coverage. Used to advocate for funding food security work and for greater social supports. FC Work has attracted members to provincial food security network.
Saskatchewan	Initiated in 1998 in Regina by Home Economics for Living Project (HELP) in response to cuts to Income Assistance rates. Public Health Nutritionists partnered in 2001 for province wide food costing.	To determine the cost of food and compare cost to incomes. To use the information in programs and advocacy work.	Once per year in June in Regina by summer students using National NFB. Conducted once provincially by nutritionists.	Funding from Human Resources Development Canada and Canadian Home Economics Association for Students. Public Health Nutritionists had time supported. Mining Industry provided flights to North.	Reports cost of NFB for family of four, both genders, and 23 age groups. Presents percentage of cost for each food group in Canada's Food Guide to Healthy Eating. Assesses affordability by comparing costs to incomes.	Nutritionists are drafting a report of results and planning advocacy work. Also examining the feasibility of on-going provincial food costing. HELP uses results for individual counselling programs.

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Profile of Food Costing Initiatives across Canada: Highlights from the Key Informant Interviews

Region	Impetus	Objectives	Methods	Support/Infrastructure	Outcome(s)	
Manitoba	<p>Done for over 20 years in Winnipeg by Manitoba Agriculture to inform <i>Budget Guides</i> to examine the cost of living.</p> <p>MN Bureau of Statistics (MBS) examines costs in North.</p>	<p>To collect food prices as part of assessment of costs of living.</p> <p>To compare food costs in Northern Manitoba to those in Winnipeg.</p>	<p>Conducted annually in October/November in Winnipeg and December in north using an adapted National NFB.</p> <p>Food costers are students, home economists and dietitians/nutritionists.</p> <p>MBS food costers are in northern communities and become contract employees of MBS.</p>	<p>Funded by Agriculture department.</p> <p>In-kind support from health regions for time of dietitians / nutritionists. Students receive school credit.</p> <p>MBS funded.</p>	<p>Reports cost of NFB for family of four, both genders, and 23 age groups.</p> <p>Examines affordability for families.</p> <p>Comparison of northern MN food prices to Winnipeg prices.</p>	<p>Used to inform Department of Agriculture Budget Guidelines and costs of living for family farms; Advocate for additional allowances for northern living.</p> <p>Media exposure.</p> <p>Currently, food costing being reviewed; may be moved to another department due to reduced need for this information within Ag.</p>
Ontario	<p>Initiated in 1998 in response to mandate to address food insecurity. Literature showed food costing as an effective tool for influencing policy and building food security.</p>	<p>To monitor the cost of a nutritious food basket to promote and support access to healthy food.</p> <p>To raise awareness and advocacy.</p>	<p>Conducted annually in spring using provincially adapted National NFB.</p> <p>Food costers are dietitians/nutritionists.</p>	<p>Mandatory program as part of health department's budget</p>	<p>Health regions determine basket cost in their area; Overall provincial average is generated.</p> <p>Comparisons of rural and urban areas.</p>	<p>Regional funding for food security initiatives.</p> <p>Reports generate evidence and awareness for advocacy work.</p>
Quebec	<p>Montreal Dietary Dispensary (MDD) collecting food costs for over 50 years.</p>	<p>To determine the cost of food and basic household items needed to maintain health.</p>	<p>Collects food prices every four months in low-income area of Montreal with adapted National NFB.</p> <p>One food costing in 20 regions of Montreal in partnership with health department.</p>	<p>On-going food costing coordinated by staff MDD.</p> <p>Costing done by dietitians/nutritionists and interns.</p>	<p>Affordability by age groups and both genders to income.</p> <p>Compare food prices throughout seasons.</p>	<p>Influential in setting social assistance rates, old age pension rates, and assistance for pregnant women.</p>

Appendix D

Profile of Food Costing Initiatives across Canada: Highlights from the Key Informant Interviews

Region	Impetus	Objectives	Methods	Support/Infrastructure	Outcome(s)	
New Brunswick	Initiated in 1999 by Dept. of Health and Wellness.	To determine cost of a healthy diet. To develop tool for policy, budgets, advocacy, programs, & counselling.	Collected 2001-2003 using an adapted National NFB, with incorporated Dietary Reference Intakes. Costers are nutritionists & home economists.	Department of Health and Wellness budget for public health nutritionists' work. Home Economists from Department of Family & Community Services.	Complete document and briefing note to Minister of Health, including recommendations for action.	Most recent results not yet released for use.
Nova Scotia	Initiated in 2002 by the Nova Scotia Nutrition Council (NSNC) due to concern for low-income families unable to afford a healthy diet.	To build capacity within individuals, communities, organizations, and systems to build food security.	Conducted twice per year using the National NFB over a one-week period in randomly selected grocery stores. Costers are Family Resource Centre participants.	Funded by NS Health Promotion and Health Canada; In-kind support from Atlantic Health Promotion Research Centre (AHPRC) – Dalhousie University.	Reports avg. monthly cost for family of four, both genders, and 23 age groups; Comparisons of urban vs. rural and larger vs. smaller stores	Influential in having food security part of gov't agenda. Several workshops, reports, and Food Security projects have resulted; as well as capacity building.
Prince Edward Island	Initiated in 1977 by Dept. of Health and Social Services and University of Prince Edward Island.	To monitor cost of healthy eating based on nutrition recommendations. To generate data for clients on income assistance & for special diets.	Collected annually by home economists using adapted National NFB with addition of items for therapeutic diets.	Funded by Dept of Health and Social Services. Coordinated by nutrition/health education professional.	Coordinator compiles report for each health region for use by nutritionists. Information is not made public.	Dept of Health and Social Services uses data to inform social assistance and special diet allowances.
Newfoundland	Initiated by Dept. of Health and Community Services in response to lobby from nutritionists and community groups.	To gather information on cost of nutritious food for program budgets and advocacy work.	Collected annually using provincially adapted NFB by dietitians/nutritionists.	No identified funding but it is a component of department's mandatory programs.	Reports cost of NFB for family of four, both genders, and 23 age groups for each health region. Comparisons of urban and rural areas.	Used differently in each region; Provincial cost of healthy eating document with press release, public forum & letters to ministers; Brief presented during minimum wage review.
North (6 Provinces and 3 Territories)	Initiated to determine effectiveness of Food Mail Program and argue for continuation.	To reduce price of nutritious foods in isolated northern communities.	30-35 communities costed throughout the year using adapted Northern NFB. All stores participating in food mail program.	Formal program funded through Dept. of Indian and Northern Affairs.	Reports cost of NFB for family of four, both genders, and 23 age groups in each community.	Maintained food mail program; reduced rates charged to ship food. Additional food allowances provided for fly-in communities. Data available on website.

Limitations of the NNFB

There are many limitations to using NNFB. **It is very important that those who use the NNFB clearly understand these limitations, listed below, and ONLY use it for the purposes intended.**

For example, the NNFB **SHOULD NEVER** be used as an individual budgeting tool or to prescribe a diet.



The NNFB **DOES NOT**:

1. Aim to represent an **ideal** nutritious diet for Canadians.
2. Take into account food dollars spent away from home.
 - For example, food dollars spent in cafeterias, restaurants.
3. Include processed, convenience and snack foods.
4. Include any non-food items that are typically bought at the grocery store and considered part of the grocery bill—for example, toilet paper, toothpaste, laundry detergent, etc.

For a thorough explanation of these limitations please refer to the Health Canada document, *National Nutritious Food Basket*¹.

More Limitations...

The NNFB:

1. *Includes* foods bought at grocery stores and *excludes* food items bought at other food retail outlets. For example, the NNFB excludes food purchased in convenience stores, warehouse-type bulk stores, farmers markets etc.
2. Uses specific sizes or quantities of food that may:
 - a. not always be available in every grocery store.
 - b. not always be the cheapest to buy.



Used correctly, the National Nutritious Food Basket can be an excellent tool to assist individuals and organizations to monitor the cost of food in a specific region and to work for policy change within the **government** and the **food system**.

1. Lawn, J. (1998). National Nutritious Food Basket. Health Canada: Ottawa, Canada.

Source: *What does it Cost to Eat Healthy in Your Community?: A Training Guide to Participatory Food Costing*, Atlantic Health Promotion Research Centre, Collaborating Nova Scotia Family Resource Centres/Projects and the Nova Scotia Nutrition Council, 2006.