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**STORE MANAGERS' PERSPECTIVES ON IMPROVING ACCESS TO
NUTRITIOUS FOODS IN THE STORES OF EEYOU ISTCHEE**

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Foreword and Acknowledgements

As a nutritionist for the Public Health Department of the Cree Board of Health and Social Services of James Bay, access to nutritious foods is a great concern to me. During my master studies, I wanted to take the opportunity to find concrete and realistic solutions to improve access to nutritious foods for the families of Eeyou Istchee. I sincerely hope that our work with the stakeholders of the region will allow the families to find affordable nutritious foods in each of their communities in order for them to be able to make healthy food choices and improve their health and well-being.

Here, I wish to acknowledge the contribution of numerous people who made this project possible. First, I wish to thank the grocery store managers who generously shared their ideas and expertise. Nowadays, they provide essential services to their communities, and they are key players in our efforts to improve access to nutritious foods in Eeyou Istchee. I would also like to thank Mr. Christopher Fletcher and Mr. Paul Linton for their ongoing support throughout this project. Without their guidance and advices this project would not have been possible. Finally, special thanks to my colleague, Ms. Catherine Godin, for her ongoing support and interest in this project. She has kindly listened, shared her experience, read and suggested corrections to improve this essay. Thank you all, it is a pleasure working with you. And above all, it is a great honor working for the Eeyouch people, to whom I wish *miyupimaatisiun*: to be alive and well.

Agoodah.

Chantal *nii*

Summary/ Résumé

Store managers' perspectives on improving access to nutritious foods in the stores of Eeyou Istchee

The Crees of Eeyou Istchee have experienced a nutritional transition and are currently living with high rates of chronic diseases and obesity. Moreover, a great proportion of families lives in food insecurity. Availability of nutritious foods is limited, and their high cost represents a large proportion of the family income. This project explores the issue of access to nutritious foods with store managers in order to identify solutions. Twelve qualitative interviews were conducted and analyzed thematically. The solutions proposed include increasing demand by promoting healthy food choices, improving store settings, adopting management practices that support healthy and affordable food choices, supplying store with affordable nutritious foods, and reducing the impact of transportation costs on the price of nutritious foods. Store managers are key stakeholders who are aware of the changes required to improve access to nutritious foods; it is essential to collaborate with them.

Perspectives des épiciers sur l'amélioration de l'accès aux aliments sains dans les épiceries d'Eeyou Istchee

Les Cris d'Eeyou Istchee ont connu une transition nutritionnelle et sont aux prises avec des taux élevés de maladies chroniques et d'obésité. De plus, une grande proportion des familles vit dans l'insécurité alimentaire. La disponibilité d'aliments sains est limitée et leur coût élevé représenterait une grande proportion du revenu familial. Ce projet explore la problématique d'accès aux aliments sains avec les épiciers afin d'identifier des solutions. Douze entrevues qualitatives ont été réalisées, suivies d'une analyse thématique. Les solutions proposées visent l'augmentation de la demande par la promotion de choix sains, l'amélioration des installations, l'adoption de pratiques de gestion soutenant les choix alimentaires sains à prix abordables, l'approvisionnement en aliments sains et abordables, et la réduction de l'impact des frais de transport sur le prix des aliments sains. Les épiciers sont des acteurs-clés conscients des changements à apporter afin d'améliorer l'accès aux aliments sains, il est donc primordial de collaborer avec eux.

Introduction

In recent decades, aboriginal peoples around the world have experienced significant changes in their eating habits (Kuhnlein *et al.*, 2004). These changes were particularly important in northern aboriginal peoples who, until relatively recently, lived on diets based on food hunted, gathered or caught in their local environment (Council of Canadian Academies, 2014; Damman *et al.*, 2008; Johnson-Down *et al.*, 2013; Kuhnlein *et al.*, 2004; Pachano, 2010; Willows, 2005). This recent transition is characterized by a decrease in the frequency and amount of traditional foods consumed, partly replaced by commercial foods, and accompanied by more sedentary lifestyles (Council of Canadian Academies, 2014; Johnson-Down *et al.*, 2013; Kuhnlein *et al.*, 2004; Petit, 2010; Willows, 2005).

The traditional diet of the Crees of Eeyou Istchee¹ was mainly based on local animals and plants, such as caribou, goose, bear, moose, beaver, partridge, fish, blueberries, cranberries and Labrador tea (Berkes *et al.*, 1978; Laberge Gaudin, 2012a, 2012b; Laberge Gaudin *et al.*, 2014; Pachano, 2010). Basic foods such as flour, oats, sugar and tea were introduced to their diet following the first fur trades (Berkes *et al.*, 1978). Later on, the trading posts were gradually replaced by grocery stores or small businesses, bringing a greater number of commercial foods. Although the families of Eeyou Istchee still eat traditional foods often, commercial foods now also account for an important part of their diet (Atikessé *et al.*, 2013; Bobet, 2013; Bonnier-Viger *et al.*, 2011; Bonnier-Viger *et al.*, 2007; INSPQ *et al.*, 2008; Petit, 2010). The important changes in eating habits and lifestyles experienced by the Crees, as well as other aboriginal peoples worldwide, have significant impacts on their health and well-being (Brimblecombe *et al.*, 2013; Council of Canadian Academies, 2014; Gittelsohn *et al.*, 2011; Ho *et al.*, 2006; Johnson-Down *et al.*, 2013; Kuhnlein *et al.*, 2004; Pachano, 2010; Petit, 2010; Sharma *et al.*, 2010; Willows, 2005). Consequently, the public health department of the Cree Board of Health and Social Services of James Bay (CBHSSJB) recently took an interest in access to nutritious foods in the stores of its communities and, in finding that access to affordable nutritious foods was limited, decided to seek solutions to improve the situation. This essay is presented with the intent to shed light on the issue of access to nutritious foods and potential solutions, which could greatly improve availability and affordability of nutritious foods in the stores of Eeyou Istchee.

¹ *Eeyou Istchee* refers to the James Bay Cree territory located in Northern Quebec.

Issue

The health and living conditions of aboriginal peoples of Canada and other countries around the world are generally significantly lower than the rest of the population (Adelson, 2005; De Shutter, 2012; HealthCanada, 2003; Reading *et al.*, 2013; Reading, 2013; UnitedNations, 2009; Willows, 2005). These disparities are also present among the Crees of Eeyou Istchee, who are currently living with rates of chronic diseases and obesity significantly higher, and living conditions lower than the Quebec or Canadian population in general (CBHSSJB, 2012; INSPQ *et al.*, 2008; ISQ, 2013). In 2012, it was estimated that nearly a quarter of the adult population of Eeyou Istchee, aged 20 or older had been diagnosed with diabetes (CBHSSJB, 2012). In 2003, half of the adult population was obese and a third was overweight (INSPQ *et al.*, 2008). More women than men are affected, and a growing number of children and youth are living with diabetes and weight-related issues (CBHSSJB, 2012; Downs *et al.*, 2009; INSPQ *et al.*, 2008; Ng *et al.*, 2006; Willows *et al.*, 2012; Willows *et al.*, 2007). This high prevalence of chronic diseases and obesity observed among the Crees of Eeyou Istchee is of concern since it may have a significant impact on their long term well-being.

Furthermore, a large proportion of the families of Eeyou Istchee experience food insecurity (INSPQ *et al.*, 2008; Willows *et al.*, 2005). In 2003, it was estimated that over a quarter of the population was in food insecurity (INSPQ *et al.*, 2008). Cost and availability of foods, income and employment conditions, and certain difficulties in accessing traditional foods may partly explain this high proportion of food insecurity in Eeyou Istchee (Dispensaire diététique de Montréal, 2013; ISQ, 2013; Laberge Gaudin, 2012b).

Recently, a report highlighted issues surrounding access to nutritious foods in the stores of Eeyou Istchee. According to this 2011 survey, the availability of nutritious foods is limited in certain communities and the cost of the Nutritious Food Basket is significantly higher in Eeyou Istchee than in any other studied regions of Quebec (Dispensaire diététique de Montréal, 2013). Furthermore, the Nutritious Food Basket represents a large proportion of the income of most Eeyouch families (Dispensaire diététique de Montréal, 2013). It is estimated, that it represents about 80% of the income of low-income families with one or two adults, and 44% of the income of single-parent families with average incomes (Dispensaire diététique de Montréal, 2013). This situation brings great concerns given the high number of single-parent and low-income families in the region (ISQ, 2013). Therefore, access to nutritious foods is a public health issue that must be addressed. It is in this context that public health actors seek to identify solutions to improve physical and economical access to nutritious foods for families of Eeyou Istchee.

Conceptual framework

Multiple individual, social, cultural, physical, economical, historical and political factors influence the health and diet of aboriginal peoples (Downs *et al.*, 2009; Reading *et al.*, 2013; Reading, 2013; Willows, 2005; Willows *et al.*, 2012). In order to represent the complexity and the multitude of factors which influence the eating habits of the Crees of Eeyou Istchee, an ecological framework is being used. Story *et al.* identified the four following levels of influence: individual, social, physical and macro-level (See Figure 1) (Story *et al.*, 2008). Furthermore, this model also recognizes the importance of access, availability, barriers and opportunities in regard to physical environments surrounding food choices (Story *et al.*, 2008). Those last elements are specifically relevant to this project.

Figure 1: Ecological model illustrating the multiple factors influencing what people eat (Story *et al.*, 2008)

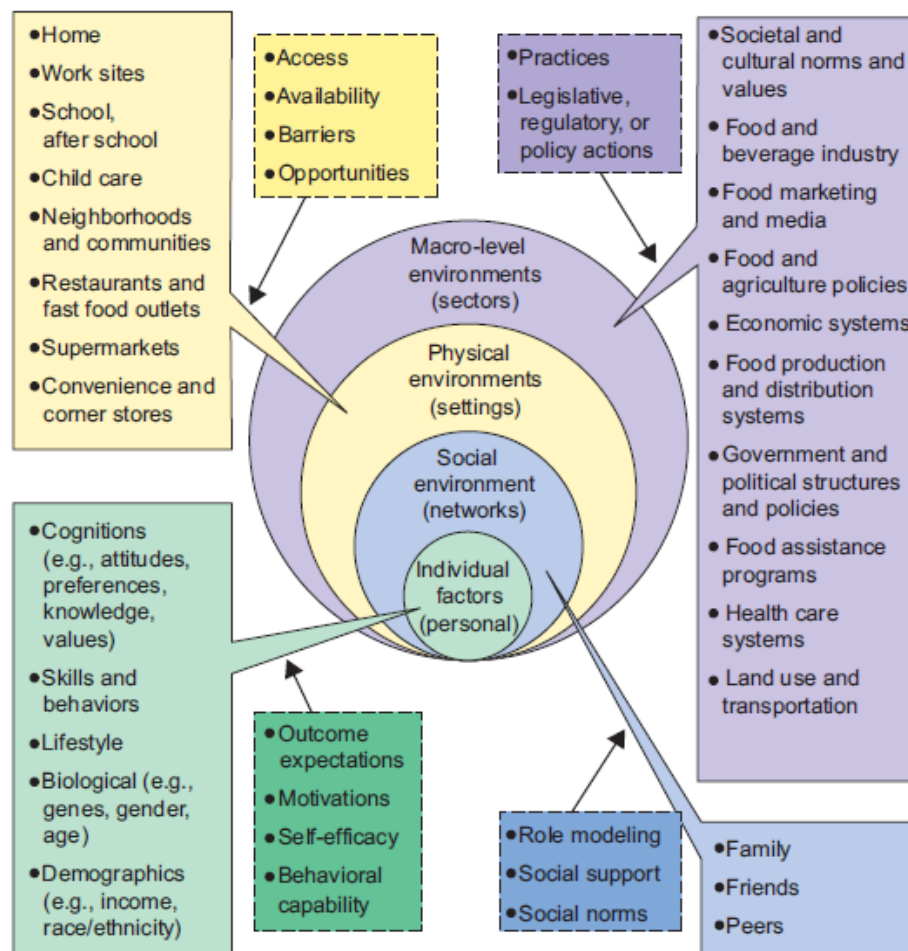


Figure
An ecological framework depicting the multiple influences on what people eat.

Literature review

This literature review aimed at identifying the environmental factors influencing Cree eating habits. It also aimed at identifying and describing different grocery store initiatives taking place in aboriginal communities around the world, in order to determine what characterizes them and build on lessons learned from these initiatives.

CONTEXT SURROUNDING CREE EATING HABITS

Multiple factors of the social, physical and global environments influence Cree eating habits. Different authors have identified factors influencing the eating habits of the Crees of Eeyou Istchee, as well as other aboriginal peoples. The following table presents various factors, which appear to influence Cree eating habits.

Table 1: Factors influencing Cree eating habits
(Laberge Gaudin, 2012a, 2012b; Laberge Gaudin *et al.*, 2014; Petit, 2010; Reading, 2013; Willows, 2005; Willows *et al.*, 2012)

Level of influence	Factors influencing Cree eating habits
Global	<p><i>Global:</i> Globalization: Economic agreements, world food trade, food industry and marketing, westernization, world markets (export raw materials, hydroelectricity, etc.) climate change</p> <p><i>National :</i> Colonialism Assimilation policies: residential schools, creation of reserves, Indian Act => sedentarisation James Bay and Northern Quebec Agreement (1975) Laws and regulations relating to food (e.g. MAPAQ)</p>
Physical	<p><i>Territory:</i> Rivers, fauna and flora Hydroelectric development, logging, mining development, roads Contamination Access to hunting grounds (distance, ease of access) and availability of traditional foods</p> <p><i>Community / Region:</i> Governance: Cree Regional Authority, band councils Geographical location of the communities Local businesses: presence of grocery stores, convenience stores, restaurants, canteens Informal meal sales: "lunch plates" Events, community activities and programs Cree Trappers Association Schools, daycares, health services Local media</p> <p>Availability of healthy foods in businesses Cost of foods / Affordability</p>
Social	<p>Family, friends, social norms, values (sharing) Racism and Exclusion</p>
Individual	<p>Age, gender, education level, employment status, revenue State health and well-being: physical, emotional and spiritual (chronic diseases, obesity, etc.) Food security/insecurity, nutrition transition Cultural Identity, practice of cultural activities, being a hunter Skills, preferences, beliefs, knowledge, perceptions</p>

A few decades ago, the Crees of Eeyou Istchee were nomadic² people living almost exclusively from hunting, fishing and gathering (Pachano, 2010; Petit, 2010). Colonization and first contacts have profoundly transformed their way of living (Adelson, 2005; Pachano, 2010; Petit, 2010; Willows, 2005). During the 19th and 20th centuries, a large number of aboriginal children were taken away from their families and sent to residential schools (Pachano, 2010; Petit, 2010; Reading *et al.*, 2013; Wikipedia, 2014b; Willows *et al.*, 2012). This policy implemented by the federal government, and the Church aimed at evangelizing and assimilating aboriginal peoples (Petit, 2010; Wikipedia, 2014b). Furthermore, the *Indian Act* and the signing of the *James Bay and Northern Quebec Agreement* have gradually led the Crees to become sedentary and settled on reserves (Petit, 2010; Wikipedia, 2014a). This historical and political context linked to colonialism, assimilation policies and social exclusion has had, and still has, major impacts on their health and well-being (Adelson, 2005; Nelson, 2011; Pachano, 2010; Petit, 2010; Reading *et al.*, 2013; Wikipedia, 2014a; Willows, 2005; Willows *et al.*, 2012). The Crees who, until recently, followed animal herds to survive, now live and work in communities. Nowadays, they often have to travel long distances to reach their hunting grounds (Laberge Gaudin, 2012b). These changes in the ways of living linked to the historical and political context have largely influenced the eating habits of the Crees of Eeyou Istchee. Their traditional diet has been replaced by a diet composed of both traditional and commercial foods.

Furthermore, it is important to note that the population of Eeyou Istchee is observing the direct impacts of development projects (Laberge Gaudin, 2012b). Hydroelectric, mining and forestry developments have greatly transformed the territory and have significant impacts on wildlife (Johnson-Down *et al.*, 2013; Petit, 2010). Flooding of large areas, deforestation and the construction of roads is compelling animals to change their migration paths (Laberge Gaudin, 2012b). Moreover, the presence of contaminants linked to the economic development represents an obstacle to consumption of certain traditional foods, including certain fish. (Laberge Gaudin, 2012b). Climate change also affects hunting (Evengard *et al.*, 2011). For example, the early melting of lakes may prevent geese from landing and make hunting difficult.

Although traditional foods are still of great importance to the Crees, commercial foods now also account for a significant part of their diet (Adelson, 1998, 2005; Atikessé *et al.*, 2013; Bobet, 2013; Bonnier-Viger *et al.*, 2011; Bonnier-Viger *et al.*, 2007). Unfortunately, access to nutritious foods is often limited in the local stores and restaurants (Dispensaire diététique de Montréal, 2013; Laberge Gaudin, 2012a), which has important impacts on the health of the population. In Eeyou Istchee, communities typically have a few restaurants, mainly serving fast foods, and one or two very small to medium-size grocery stores, or even sometimes only a corner store (Dispensaire diététique de Montréal, 2013; Laberge Gaudin, 2012a). Obviously, in smaller stores, availability and variety of nutritious foods are limited (Dispensaire diététique de Montréal, 2013; Gittelsohn *et al.*, 2012). This issue of access to nutritious foods is identified by public health actors, but also by community members who wish to have access to nutritious foods in their communities (Willows, 2011a, 2011b).

² The term *nomadic* used here means that the Crees travelled on their territory to survive, according to hunting and fishing seasons.

GROCERY STORE INTERVENTIONS

Given the apparent need for an intervention to improve access to nutritious foods in the stores of Eeyou Istchee and the potential for such an intervention to influence the overall quality of food choices, interventions realized in similar contexts were reviewed.

Types of intervention

First, **four types of grocery store intervention** have been identified in the literature: 1) *point-of-purchase information*, 2) *pricing*, 3) *increasing availability*, and 4) *promotion and advertising* (Escaron *et al.*, 2013; Glanz *et al.*, 2004). Each type of intervention is described in the following table. Two of them are related to the increase of physical and economical access of nutritious foods [*pricing* and *increasing availability* (*)] and specifically target the food environment, whereas, the two other types of intervention aim at influencing the individuals [*point-of-purchase information* and *promotion and advertising*].

Table 2: Types of grocery store intervention
(Escaron *et al.*, 2013; Glanz *et al.*, 2004)

Type	Description
1) Point-of-purchase information	Use of food demonstrations, taste testing, signs, labels, and other printed materials highlighting healthy food choices or describing recipes, to influence purchasing decisions
2) Pricing *	Intervention based on price reductions and coupons to promote health food choices
3) Increasing availability *	Intervention aiming at offering a wider variety of healthy food choices to the customers
4) Promotion and advertising	Promotion and advertising strategies use games, newspaper inserts, multimedia advertising, supermarket tours, and other activities to encourage customers to purchase health foods

Level of evidence of different intervention strategies

The four types of intervention presented in Table 2 are often **used in combination**. Escaron *et al.* identified seven intervention strategies, which represent seven combinations of the different types of intervention. For each of those intervention strategies, the authors determined the level of evidence based on scores attributed to the design, effectiveness and scope of the study (Escaron *et al.*, 2013). The table below presents the seven strategies identified by Escaron *et al.*, as well as their respective levels of evidence.

Table 3: Grocery store intervention strategies and their level of evidence
(Escaron *et al.*, 2013)

Strategy	Combination of intervention types	Level of evidence
a. Point-of-purchase information + Promotion and advertising	1+4	<u>Sufficient</u>
b. Point-of-purchase information + Increasing availability * + Promotion and advertising	1+3*+4	<u>Sufficient</u>
c. Point-of-purchase information + Pricing * + Increasing availability * + Promotion and advertising	1+2*+3*+4	<u>Sufficient</u>
d. Point-of-purchase information + Pricing * + Promotion and advertising	1+2*+4	Insufficient
e. Point-of-purchase information	1	Insufficient
f. Pricing * + Promotion and advertising	2*+4	Insufficient
g. Point-of-purchase information + Pricing *	1+2*	Insufficient

To date, sufficient evidence is available to consider three of these strategies effective: strategies **a**, **b** and **c** (Escaron *et al.*, 2013). Each of these three strategies includes *Point-of-purchase information* and *Promotion and advertising*. The second and third strategies also include *Increasing availability **, and finally, *Pricing ** is also part of the third strategy. Note that two of these three strategies aim at improving access to nutritious foods* (i.e. *Increasing availability** and *Pricing**). Furthermore, strategies to improve access to nutritious foods (b and c) are used in combination with interventions targeting the individuals (i.e. *Promotion and advertising* and *Point-of-purchase information*).

Identification and classification of initiatives in aboriginal contexts

In the present literature review, 16 initiatives in aboriginal contexts around the world have been identified (See Appendix 1 for details on these initiatives). These initiatives were mostly destined to aboriginal peoples of Canada, Australia, United States and Pacific Islands.

Within these 16 initiatives, *Point-of-purchase information* (14/16 interventions), *Promotion and advertising* (12/16 interventions), and *Increasing availability** (9/16 interventions) were the most popular types of intervention used. *Pricing** interventions were less frequent (3/16 interventions).

Most of the initiatives identified **used a combination of two or three types of intervention**. Almost half of the initiatives used strategy b. (7/16 interventions), which includes *Point-of-purchase information*, *Promotion and advertising* as well as *Increasing availability**. Four initiatives were based on strategy a. (4/16

interventions), which includes *Point-of-purchase information*, and *Promotion and advertising*. In total, 11 out of the 16 interventions appeared to be based on strategies supported by sufficient evidence (strategies a. and b.). The five other interventions identified were based on strategies for which evidence is not yet sufficient, or that have not been studied by Escaron so far. Finally, the majority of the interventions identified aimed at improving access to nutritious foods either by *increasing availability** or *reducing prices** (12/16 interventions). However, none of them used both types of intervention simultaneously.

Characteristics of initiatives in aboriginal contexts

Over half of the initiatives identified (9/16 interventions) proposed a development approach based on **formative and/or participative research** (Cortes et al., 2001; Gittelsohn et al., 2006; Gittelsohn, Roache, et al., 2010; Gittelsohn et al., 2011; Godin, 2002, 2004; Ho et al., 2006; Ho et al., 2008; Huet, 2005; Kakekagumick et al., 2013; Novotny et al., 2011; Sharma et al., 2010; Vastine et al., 2005). In-depth interviews with key players of the community, community workshops, group feedback workshops and training sessions on the program implementation allow stakeholders to be involved in the development of the intervention plan and material (Gittelsohn et al., 2006; Gittelsohn, Roache, et al., 2010; Vastine et al., 2005). It also helps to gain a better understanding of grocery store management practices (Gittelsohn et al., 2006; Gittelsohn, Roache, et al., 2010; Vastine et al., 2005). Furthermore, a participative approach enhances **acceptability** and **sustainability** of the intervention (Gittelsohn, Roache, et al., 2010; Ho et al., 2006; Kakekagumick et al., 2013; Vastine et al., 2005). It also helps to ensure the **collaboration** of stakeholders and allows the development of a program **tailored to the context and culture, as well as the needs and preferences** of the population (Gittelsohn, Roache, et al., 2010; Ho et al., 2006; Kakekagumick et al., 2013; Vastine et al., 2005).

According to Gittelsohn *et al.*, interventions which take place in a **variety of settings** are more likely to generate health benefits (Gittelsohn et al., 2011). Some of the grocery store interventions identified were part of broader community intervention strategies (4/16 interventions) or included a health promotion component in the local media (5/16 interventions). Such an approach helps to **maximize the exposure** to the intervention and **reinforces the messages** (Gittelsohn et al., 2011; HealthCanada, 2013).

Stores in aboriginal communities are **often small** (Dispensaire diététique de Montréal, 2013; Gittelsohn *et al.*, 2011; HealthCanada, 2013). They offer a limited number of healthy food choices and are associated with over-consumption of fatty and sugary foods, as well as higher rates of chronic diseases and obesity (Gittelsohn et al., 2011; Gittelsohn et al., 2012). The inclusion of these small stores in interventions aiming at improve access to nutritious foods represents a challenge, especially due to their limited space (Curran et al., 2005). However, in aboriginal contexts, it seems essential to **ensure the inclusion of smaller stores**, as communities are often located in remote areas where the number of stores is limited (Gittelsohn et al., 2011). Improving availability of nutritious foods in small stores is a promising practice that could greatly improve community food environments (HealthCanada, 2013).

As mentioned earlier, most interventions identified **targeted both the individuals** (through *Promotion and advertising* and/or *Point-of-purchase information*) **and the environment** (*Increasing availability** and/or *Pricing**) (11/16 interventions). According to certain authors, interventions targeting demand and supply simultaneously are more effective, especially in smaller communities where access to nutritious food is limited (Escaron et al., 2013; Gittelsohn et al., 2011; Gittelsohn et al., 2012; Johnston et al., 2013). Therefore, while promoting healthy food choices, it is also essential to ensure supply of those foods, and vice versa. Obviously, grocery store managers are more inclined to supply their stores with nutritious foods when they know these items will sell (HealthCanada, 2013; Rosecrans et al., 2008).

Finally, **working with stakeholders** presents multiple challenges (Novotny et al., 2011). However, **grocery store managers** have a significant impact on food supply and have the potential to influence the quality of the diet in their communities (HealthCanada, 2013; Lee *et al.*, 1996). They require the support of **governmental, municipal and health organizations, as well as the support of experts** in order to develop point-of-purchase information strategies, and improve the food supply and store settings (HealthCanada, 2013; Rosecrans *et al.*, 2008). Some even suggest that grocery store managers should be involved early in the development of the intervention, and that a constant exchange of information with them should be privileged (HealthCanada, 2013).

Political interventions related to the improvement of access to nutritious foods in the stores

Political leaders are influent stakeholders who should also be involved in the discussions surrounding the improvement of access to nutritious foods in Eeyou Istchee, as they are generally **involved in the decisions regarding local businesses**. Although this literature review did not specifically target political approaches, a certain number of interventions, which could contribute to the improvement of access to nutritious foods and the reduction of health inequities have been identified (Escaron *et al.*, 2013; Lee *et al.*, 2009).

Examples of political interventions aiming at improving access to nutritious foods:

- Ensure presence of grocery store in the community (i.e. importance of proximity) (Escaron *et al.*, 2013; Johnston *et al.*, 2013)
- Ensure presence of stores of adequate size in order to offer a variety of nutritious food choices (Escaron *et al.*, 2013; Johnston *et al.*, 2013)
- Require compliance to certain norms (For examples: minimum supply in each store, pricing policy, a policy on selling practices aiming at encouraging healthy food choices, or a policy targeting supply of nutritious foods) (Brimblecombe et al., 2013; Lee et al., 2009)
- Subsidize nutritious foods or their transport (Brimblecombe et al., 2013; Johnston et al., 2013; Lee et al., 2009)
- Implement a tax on food items of lower nutritional quality (Johnston et al., 2013; Lee et al., 2009)

- Manage grocery stores locally in order to have a greater say as to what is sold in the stores (In some aboriginal communities, grocery stores are owned by the band councils, managed by a manager who is a member of the community and administered by a Board of Directors composed of community leaders and elders) (Brimblecombe et al., 2013; Johnston et al., 2013; Rowley et al., 2000). Furthermore, coop stores generally have a Board of Directors composed of elected community members (FCNQ, 2006)).
- Ensure the presence of an adequate food transportation system (Johnston et al., 2013)
- Ensure availability of suitable food storage (Johnston et al., 2013; Lee et al., 2009)
- Request support of suppliers to ensure availability of foods (Novotny et al., 2011)
- Consider local production of certain foods (Lee et al., 2009)
- Ensure availability of affordable nutritious foods for the families (Johnston et al., 2013)
- Ensure sufficient income for families to be able to afford nutritious foods (Lee et al., 2009)

Objectives

The public health department of the CBHSSJB has for mandate to promote the health and well-being of its population and prevent chronic diseases. The present intervention project is part of a wider public health initiative aiming at improving access to nutritious foods in Eeyou Istchee. The complexity of the issue calls for multiple intervention strategies targeting different settings and stakeholders. The specific objectives of this intervention project were to (1) work in collaboration with the grocery store managers of Eeyou Istchee, (2) discuss the issue of access to nutritious foods with the store managers of the region, (3) explore their perception of the issue, (4) identify solutions to improve availability and affordability of nutritious foods in the stores of Eeyou Istchee, and (5) explore the possibility of an intervention in the grocery stores of Eeyou Istchee.

Methodology

In order to improve access to nutritious foods in Eeyou Istchee, the contribution of numerous stakeholders is required. A collaborative and participative process has been undertaken with the stakeholders of the region in order to highlight solutions to improve access to nutritious foods and lead to local actions. For the purpose of this intervention project, we specifically targeted the grocery store managers, as they have a significant impact on the food supply and the potential to influence the quality of the diet in their communities (HealthCanada, 2013; Lee *et al.*, 1996).

The project aimed at answering two main questions:

- 1) How do grocery store managers perceive the issue of access to nutritious foods in Eeyou Istchee?
- 2) What solutions do grocery store managers identify and what type of interventions/strategies are they willing to implement or contribute to?

In order to answer these questions, the grocery store managers of Eeyou Istchee were invited to participate in a discussion/interview about access to nutritious foods. First, they received a written invitation, through mail, fax, e-mail or in person (See Appendix 2). Upon positive responses to the invitation, meetings were organized. Their written consent to participate was requested before the interview (See Appendix 2).

Overall, twelve qualitative interviews were realized with the grocery store managers of Eeyou Istchee, which represent a grocery store participation rate of 92.3 %. Most interviews were individual, but 3 were group interviews with 2 or 3 people involved in the management of the store. Approximately half of the participants were male and the other half female. And, a third of the participants were Crees.

Most interviews were conducted in English, but two were done in French, as those managers were more comfortable in this language. The interviews lasted between forty-five minutes to an hour and a half. Most of the interviews took place in the store manager's offices. Only one interview took place in another community

setting selected by the store manager. At the beginning of the interviews, the participants were asked for their permissions to record the discussion in order to prepare detailed transcripts. For technical reasons, two interviews were not recorded, but detailed notes were taken and completed right after the meeting.

The interviews were semi-structured. The first part of the discussion aimed at explaining the results of a previous project on access to nutritious foods in the stores of Eeyou Istchee. The summary report and the list of basic nutritious food items composing the Nutritious Food Basket from the previous project (see Appendix 3 and Appendix 4) were used to explain the results. The detail report (Dispensaire diététique de Montréal, 2013) was also briefly used to explain certain specific data relevant to each store (i.e. number of stores surveyed per community, number of items missing per community, cost of the Nutritious Food Basket in each community, items missing in each community, etc.). The second part of the interview aimed at exploring the store managers' perceptions of the issue of access to nutritious foods and discussing potential solutions to improve the situation. An interview guide which had previously been prepared was used (see Appendix 5). The open-ended questions allowed the participants to explain their point of view and share their experience as store managers in their respective community.

All information gathered during those interviews has been transcribed, and then analysed with the NVivo© qualitative software. Results of the interviews have been classified according to whether they referred to the:

- ❖ issue or solutions,
- ❖ availability or affordability of nutritious foods, and
- ❖ themes emerging from the interviews

Finally, due to the limited number of store managers in the region, and in order to respect their confidentiality, all quotes presented in the following section will be in English and the masculine form will be used in the text.

Results

Results are divided in 11 sections representing the different themes which emerged from the interviews: Health, Customers, Store settings/ management practices/ managers, Supply, Transport, Competition, Collaboration, Government, and Marketing and media. Under each of those themes, the information is presented according to whether it is related to the issue or solutions, as well as the availability or affordability of nutritious foods (see Appendix 6 for the tables presenting all the results). Finally, a table is presented at the end of each section in order to summarize the information related to each theme (See Table 4, Table 5, Table 6, Table 7, Table 8, Table 9, Table 10, Table 11, Table 12, Table 13 and Table 14).

HEALTH

Perception of the issue

Availability

Many store managers seemed to be aware that people of Eeyou Istchee are currently living with **high rates of obesity and diabetes**. One manager said: «The average size of our community members, probably 50% percent overweight [...] I know I was. It's not fun» (5). And another manager added: «This is an important problem in the North; diabetes and everything. It's still a big problem» (7). One manager also noted the presence of **dental issues**: «It would have a huge impact; they would be a lot healthier [if they would eat healthier foods]. So I just find they eat pops and chips every day. The dental [...] it would just be huge benefits» (2).

For some of the managers, the **limited access to nutritious foods has a big impact on health**: «[It has] big, big impact [on health], cause if people can't eat healthy, the obesity rates are up; we have huge diabetic [rates] [...] a lot of people, some of the stuff that the kids are eating. There is no way they are going to be OK, in like 10 years [...] By the time they are 16 they are diabetic, you know» (6).

Affordability

The **cost of food influences the purchasing habits and the health of the population**. One manager explained: «when I buy food, I am the first not to buy any when it is too expensive. [...] if you just think of the fruits and vegetables, sometimes we don't buy any; we buy something else. It's not complicated, people buy less [...] it's not good, they buy more fatty foods [...] it is not as good for their health» (10).

HEALTH

Solutions

Availability

Some managers mentioned that in order to improve their health, customers would **need to change their eating habits**. One manager said: «If they would change the way they eat, they wouldn't have diabetes» (12).

In order to help customers make healthier food choices, one manager suggested **informing customers about healthier food options** in their stores: «there is lots of diabetes [...] I intend to tell people that they should buy more like fruits and vegetables» (8).

Some managers recognize the need to **adapt the availability of food to improve the health of the population**. One manager said: «A lot of these people have diabetes, etc. etc. They have no choice; they have to have these products» (5). Managers seemed to be willing to **increase availability of nutritious foods** to improve the health of the population «I would rather bring these things in [the nutritious food items]. Like, this is what we want to see. There is an obesity problem here [...] and a diabetes problem» (6). One manager even suggested **decreasing availability of unhealthier food items**: «The best way would be not to sell pop, not to sell sweet things in stores, in the stores of all communities. I am sure they would see results [on the health]» (7).

Affordability

While discussing solutions to improve health, one manager mentioned that **unhealthier foods should be made less accessible by avoiding promotions** on those items. He explained: «Like I said, it is a matter of making it less accessible; not to have special on [pop and sweet things] or anything. Not to encourage the sale of those products» (7).

Table 4: Summary of the perception of the issue and solutions related to HEALTH

Perception of the issue of access to nutritious foods	
Availability	Affordability
Many people have diabetes People are diabetic at a young age Many people have weight issues Some people have dental issues	People buy less healthy foods when they are expensive, they buy unhealthier foods
Solutions to improve access to nutritious foods	
Availability	Availability
Improve eating habits, to improve health Inform customers of healthier food options/ encourage purchase of healthier foods Improve availability of nutritious foods Decrease availability of unhealthier foods	Decrease access to unhealthier foods: Avoiding promotions on unhealthier items

CUSTOMERS

Perception of the issue

Availability

Demand of the customers is one of the main factors influencing the availability of foods in the stores. Store managers mostly rely on their **sales** to supply their store; «I only order what I know sells most» (11) said one of them. Managers mentioned having high demand for foods of lower nutritional quality, especially among youth and children: «The teenagers, let's say 10 to 20... still too much fast food and junk food out there» (5). But they also said that even though sales of **unhealthy foods** remain high, demand for items such as pop, chocolate and chips has decreased over the years. «We don't buy pop and ice tea by the pallet as we use to before. Pallets have 72 cases. But now we buy ten cases of one kind, or five cases of another [...]. But Grand Pré milk and water, water that's always by the pallet, always... It changed a lot. And for the fruit and veggies it's the same thing» (7). Managers said that demand for fresh products such as meats, yogurt, milk and produce is increasing. They also mentioned that **certain nutritious food items sell well**, like oatmeal, brown bread, whole-wheat pasta, milk, tomatoes, grapes, bananas, turnip and cabbage. And demand for water has also increased. But, some said that **demand** for items such as multi-grain bread, brown rice, legumes, broccoli, cauliflower, pineapples and fish, **remains limited**.

As families in Eeyou Istchee tend to be large, they often need to buy **large quantities** of food, especially when their children reach adolescence. This probably explains why customers are often looking for large family-size items or want to buy in bulk. One of the managers explained: «But the thing is if you are a big family [...] I'm telling you, I have a friend that goes to Costco because she has a big family... It doesn't matter how much it cost her to get there, at the end of the day she saves money. [...] 'cause she can get a lot of those things in bulk» (6). And, another manager also mentioned that customers feel that they have more for their money when buying the long breads than the small whole-grain loafs (3).

Families also need specific foods for their **young children**. Managers mentioned receiving demands for certain children's products such as milk, baby formula and baby food. Customers are requesting a **variety** of different products, which often makes it difficult for the stores to offer all products customers are looking for. «I have a hard time to know... order the milk, like Similac, Can you order this? And order that? And somebody else says you only have this... can you order that? Everybody wants something different» (11).

Managers also mentioned receiving more demand from **people who travel** a lot outside of the community and from **new people**, such as health professionals and teachers. Some even mentioned that there is less variety in their store during the summer, while the teachers are away on holidays: «you see a lot of teachers coming in, buying like vegetables and things like that, you know, and we try to have everything for them. Cause we

know that in the summer time, it's kind of less, we order less, you know. But when we see the teachers coming in, and the staff of the clinic, you know, we order lots» (8).

While **some people want to try new things** and make different requests to the store managers, others seem to be **less willing to try new things**. Some managers said that many customers are really loyal to the brands. Managers noted that people have certain **habits**. «It's old habits, it's what we are used to, what their parents were used to» (5). One of the managers mentioned that older people still cook with lard and shortening; they use the shortening to prepare their bannock (3). Furthermore, some **shelf products** such as Grand Pré milk and canned goods also remain in demand, as people go **on the land or in the bush** to hunt (3).

Even though people sometimes eat canned goods while going hunting, **older people tend to eat better** than younger people, since they generally eat **more traditional foods**. Of course, during the interviews, a few managers mentioned that people eat traditional foods such as berries, fish, goose, moose and caribou. One of them even said that some people ask for traditional foods: «Most of the people from here they just want... fresh fish? Do you know of anybody who has fresh goose?» (1).

People also demand specific things for **special occasions**. For Halloween and Christmas, people sometimes request apples and oranges, and for feasts and festivities, they ask for turkeys. One manager said: «Turkey is a very good seller for us 'cause they say that in town they can't find big turkeys. They find them here, [...] or maybe people come and say, eh, can you order turkeys for me? I will come and pick them up next week. [...] Especially when they have feasts, they have turkeys, they buy turkeys. We know that Thanksgiving is coming, then we order extra turkeys» (8). This quote also shows that when items are not usually in store, some customers will **place orders**, and ask the managers to order those specific items for them.

Even though health may not be a concern for all customers, some managers mentioned that they are receiving demands for some **healthier and specialized products**. They are aware that some people have food allergies, intolerances, and certain health issues, which require specific products. One of them said «I have had maybe a dozen people asking for items that got less salt, less sugar, and not processed as much [or] lactose-free» (5). And this same manager also added: «A lot of these people have diabetes, etc. etc. They have no choice; they have to have these products» (5). Managers are even receiving requests from people dieting. For example, Kale recently became available in one of the stores following the request of some customers.

As they observe a growing interest for some health products, some managers also noted the customers' **lack knowledge about foods sold** in the stores. For example, they might not know how to prepare them or they might not know which ones are more or less nutritious. One of the store managers mentioned that «[the customers] are asking... What's that? What's that? Unfortunately, there are many things that they don't know» (10).

Managers also mentioned that there is a growing demand for **ready-to-go** and **value-added** foods. «If they can come and grab it, and it's all done for them, then they will buy it» (12). And another manager also said: «If we don't take the time down there for two hours to cut the fruits, nobody will buy it whole» (6).

Overall, managers say that the **different people and communities have different needs and preferences**. And, they see that **demand is slowly changing**: «It's on the long-term, but it's changing... at least I can say that in 14-15 years it has really changed» (7).

Affordability

Customers' demand influences the price of food items. One of the store managers explained that **unhealthy foods are less expensive** since the demand for those foods is high, and the stores order them in **large quantities**: «They will give you a better deal if you buy in bulk. So pop, I'm buying six or seven pallets of pops, so obviously it is going to be cheaper» (2). Some store managers also noted that families seem to spend a large proportion of their budget on unhealthy foods: «they spend a lot of money on food. Cause they have a lots of kids» (6).

The **demand** for some **nutritious food items is limited**. One manager said that «A lot of those things, when we bring it in, like broccoli, only teachers will buy it» (6). Even though demand for healthier food items remains limited, one of the store managers noted a **certain increase** in the demand: «One thing I have noticed... we are starting to bring in a lot more produce. We throw out a lot of produce» (2). This could eventually positively influence their cost since there will be less waste.

Some store managers mentioned that families need a **large proportion of their budget** to buy foods. Of course, **larger families** will need larger proportion of their budget to buy food. «They spend a lot of money on food, cause they have a lot of kids» (6). Families with **teenagers** need to buy large quantities of food, and families with **young children** often need to buy baby food or baby formula, which are **expensive**. One of them explained: «A family who has children, like baby food... it cost a lot of money for baby food [... and] when the kids are in their teen, [...] they eat more» (11). Finally, one manager also said: «in this community, there is a lot of low-income» (6).

Often families **purchase food outside of their community**. One manager explained: «They still drive down. [...] they are driving all the way [...] So you are looking at 13 hours just to go to Super C. They don't even have Costco there. So again, people need to get out; they have appointments, they have haircuts, they have movies, they need to take their kids to the fair in the summer. While they are there, they buy their stuff» (6). And another manager further explained: «You know, they are going anyway, so they are **saving money**. They are not specifically going to shop, but they put the two things together; They go for entertainment, they go for

practicality and they go to **take advantage of lower prices**» (6). Another one added: «they go to Walmart, they think that's awesome. They come back [...] and expect us to keep up» (12).

People are **noticing that prices are often lower outside** of their community. «We want prices» (10) are some of the customers saying. So, some of them are starting to request lower prices. For example, one of the managers related the story of a lady who often travels outside of the community: «She said: At your store, you really are thieves! Eh? I said, I beg your pardon! I was angry, I told her the prices were 30 to 40% [lower]... But she said, your flour, I saw it at 9.99\$ somewhere, at Maxi... Yes, but it was on special... Yes, but here it is at 37\$» (7).

Customers are really loyal to the brands. Managers noted that they often **don't want to buy no-name brands**: «they started there with no-name products, you know. No, no, you don't take these to the communities; they want Helmer's, Delmonte, Oasis and Puritan. [...] they want the right product, they say: It's Delmonte I want... that is what I want; I don't want just any products» (7). And another manager explained: «I have tried over the years to bring no-name brands or products at lesser price, it just doesn't sell... this is... it's old habits, it is what we are used to, what their parents were used to [...] It is whatever they were brought up on» (5).

On the other hand, the demand for **ready-to-go or value-added food is increasing**, which influences the prices of foods. A manager explained: «if we cut the pineapple, the pineapple is about 7\$ when it is whole, but when I cut it, it goes to about 9\$, because you have the material you are using, you have to put all that into consideration [...] It goes up in time and price» (6).

Finally, one of the managers mentioned that customers seem to have a **limited knowledge of budgeting**, and that they **don't** necessarily **look at prices** when they are purchase foods. «There is competition but really nobody cares, if [the other store] is selling something at 25 cents less, people will [usually] shop for better price, but [for] a lot of people in the North... if it's there, they will buy it» (5).

CUSTOMERS

Solutions

Availability

During the interviews, the store managers brought different ideas to influence customers' demand of nutritious foods in their stores.

Most of the managers agreed that having **food tasting** in the store would be a good way to get their customers to discover new foods. One of them explained «I've [been] giving free samples, if they don't know what mango is I just give it to them» (12). And another said: «if we bring in a new product, we will try to bring it in front of the store, so customers can try if it's something they would like [...]. We've done it with all the new yogurts that came in, the Greek yogurts and some new fruits» (2). One of them believed that food samplings should be done regularly: «I think more samplings [could be done]. If all the stores were bringing in new produce and anything nutritious, whether it would be yogurt and that, just do sampling every week» (2). Stores managers have ideas of different products that could be sampled in the stores, such as produce, yogurts, cheese, breads and, also, healthier prepared foods options. «If we look at President choice's Blue Menu. [...] we could have all those products. I have sauce; I have Blue Menu pasta sauce. We could do a food tasting» (10). Overall, managers seemed to think that food tasting is something that their customers would appreciate: «I think food tasting creates an activity in the store, I think people like that. And they can talk with the person [doing the tasting] at the same time» (7).

Some of them also mentioned that **cooking demonstrations** could be done in the stores. One of the store managers explained how it was organized in another community where he worked: «[they] came in and did monthly demos in the store, where we taught people how to make stuff from squash. [...] You know, we brought in squash for the demonstration and, then, we had it in stock for [...] a while afterwards. They taught them that day [...] how to make pasta with squash, how to make soup, how to make three or four different dishes. [...] it was great. Big big take up on it. [...] They did it and the kids loved it» (6).

The store managers also stressed the importance of **providing information to customers in the stores**. Sometimes, customers ask the store staff about certain foods, and store managers will also inform their customers when new foods are available: «we talk to people in the store. We tell people about it, you know. It is a small enough community and store. People will ask: What is that? And then you tell them... But new stuff, you know, I will tell people: Oh, I brought this in, we brought this in» (6). Managers are constantly in contact with their customers, and some even provide basic health or cooking information related to the foods available in their stores. «Just keep telling away, and that's all we are doing. Just keep telling them, it's good for you, this is what it does, if you are going to have this, have this with it» (12).

Some of the managers suggested having **booths in the stores**. «We could have a booth set up at the front of the store» (2). And a second manager also said: «I remember when I was in [one of the other community], [...] how [the nutritionist] would often have a booth in the store to explain sugars and all that. With time, yes, it gave results» (7). Another manager remembered that clinic staff came in their store to promote nutritious foods: «They had a little booth with what they made and how this was made. And we had the product there. [...] I know one time they made cookies with oatmeal» (8).

Furthermore, store managers also talked about **grocery tours** which can be done to inform customers and promote nutritious food choices. One manager said: «they come in the store once in a while, with 10 of 12 women to explain what is in the store and how it is nutritious and all that, the good foods there» (7).

The store managers also mentioned different **health promotion** strategies that can be used in the stores to influence the demand. «Promotion is good too...Promotion in the entrance of the store or let them know about the good and bad sides, what it causes, and what it is good for. For sure, if they would be more sensitized, that would help a lot. [...] sensitization about nutrition, yes, that would be a really good idea» (10). Some of them suggested that **posters** would be good» (4). «I have a poster [...] of all the apples and when they are in season, why you eat them» (12). Another manager said: «There is [...] [a poster] where it illustrates the sugar in each drink [...] it's attractive and informative» (1). «Let's say if there was a campaign for Drop the Pop...There were a lot of people that dropped pop when that came up. It also had a lot of **pamphlets and brochures**. Maybe with help like that we could post [them] all over the place again» (1).

Others also suggested having **shelf labels** to promote healthy eating habits in the stores: «A couple of the stores I worked in, we had shelf labels about the 5 food groups... and we highlighted the grain or vegetables, meats» (5). One manager mentioned «Some time ago, we could have labels to put on the shelves. [...] it was something about nutrition [...] we put them everywhere and people when they would come in, they would look at them [...] I find it's good. Customers were saying: Eh! That's great! That's fun there! [...] And, at the same time, it creates something in the store; customers say they think about our health here, [...] they take care of us» (7). Another manager also showed great interest in having shelf labels in his store, he seemed to think it would interest the customers: «Customers look and say: Ah! What does this table mean? Is this a good product? Especially in small places like this, people will talk about it, it won't be long [...] As soon as there is something happening, people will talk about it and the word will go around in no time, it doesn't take long in a community» (10).

Having **recipe cards** available in the store is also another way to promote healthy eating mentioned by the store managers: «We sometimes have like recipe cards, where people can do nutritious food and stuff» (6).

Stores sometimes do draws to increase their sells, so some managers suggested **promoting nutritious foods by having draws**. «Maybe if we have a draw of a fruit and vegetable basket, you know. Like maybe on a

weekly thing, if they buy, we'll put their names in there and on Monday, we will have a basket for a draw! [...] Sometimes we do that with things to have our sales up. [...] They come more and if they buy so much, [...] 25\$ or more, they get a ticket [...] Maybe I will try that with fruit and vegetables basket. [...] The draw I guess would be every Monday, 'cause that's when the fruits and vegetables come in» (8). And one of the other managers also suggested «Have some sort of **point system**. If you buy a can of chick peas, you get 1 point from the retailer, and after 500 points, your name [...] goes in some sort of draw, or trip, or some sort of recognition» (5).

Store managers talked about having health promotion in the stores, but also focused on the importance of **promoting healthy eating habits in other community settings and events**. Some stores organize or take part in community events. Those **events** can be occasions to promote nutritious foods: «We actually have a big [event] coming up. [...] we are going to do a big promotion of healthy foods at the event. [...] The stores really need to get involved in the community [...] [we are going to] show the people what we sell for nutrition. [...] it's all going to be fruits and grapes and veggie trays. You are not going to see bottles of pop, chips and chocolate bars and stuff like that there» (2). Some managers even suggested to organize food fairs: «if we could do, maybe get a whole bunch of people together in a gym or something and have a day where we are showing all the healthy food. [...] We could just have samplings going on there. Just all the healthy foods» (2).

Some managers also see the importance of **targeting young children** by promoting nutritious foods in **schools and daycares**. One manager said that it is important to «get to our younger people [...] Try to get them to get the taste, to start liking it at a young age [...] I still think this nutrition or this snack program in the school is a start in the right direction» (5). He further explained: «we have to get the young kids into it. Got a give them samples, or some occasions to eat it, because if we can get that next generation into the healthier food, then the retailers will have to make sure we have the items. Because these people as they grow up, and as they enter into the workforce will demand [...] I want more fruit and vegetables on your shelves, I don't want canned goods anymore, I want fresh stuff. Over the future it will change. I think right now we just have to keep pushing, pushing» (5).

Some of the managers also talked about **nutrition education** as a way to increase demand of nutritious foods: «education is a number one thing you need to do for any of this to work [...] Education, education, education. Like you have programs for pregnant women, make it a part of your teaching. [...] do a demonstration on how to cook [...] If you start like that and they get used to it. I think education is really the base for all of this» (6). That manager suggested: «I mean that **cooking classes**, have somebody come in, people love going to those things. Have somebody come in, cook and show them how to cook some of this healthy stuff. It is a fun thing for them to take their family to do» (6). That manager also talked about the importance of including both the **parents and the kids** in those activities: «Doing something with the kids, and again with enough notice so the moms can be there. So it is not just the kids coming home with the recipe card: we ate this, they made this

[...] the kids do have a lot of say [...] as to what their parents are bringing home [...]. If you can teach the kids, show some interesting new foods. Chance is that they will go ask their parents, can we make this? But the parents have to be there [...] so they can learn how to do it» (6).

While conscious of the importance of teaching children and parents how to prepare nutritious foods sold in the store, a manager also raised the importance of **including traditional food** as part of the nutrition education: «I think training is the best way, [...] but meet them on their own traditional grounds [...] So talk to the women, cause a lot of the women cook, the older women, the elders. They cook traditional ways and it is very good but the younger generation... The elders, I mean people are cooking their geese, making the bread» (6).

Some managers also suggested it would be more efficient to **combine health promotion activities** or to **combine them to other strategies aiming at increasing access to nutritious foods**. For example, a food tasting activity could be combined with the addition of new shelf labels or recipes in the stores and the **offer of new foods** could be combined with a health promotion activity around that food. One manager suggested: «having food tasting at the same time than the labels in the store, if they have questions they will go see the person. [...] That's what I would do, the same week we would start having the shelf labels, there could be a nutritionist with food tasting in the store at the same time» (7). Another one said: «they were talking about putting recipes beside the products [...] but at the same time, I still think there should be a food tasting before giving a recipe [...] we should start by a food tasting and then give a recipe. Because, the first question you ask yourself when you make a recipe is: Am I going to like it or not? I don't want to buy if it isn't good» (10). Managers also suggested combining health promotion activities and **discounts** as a way to encourage customers to try new foods. For example, one of the managers said: «I think maybe if we could do specials on [certain foods]. So if you do sampling on say, like a star food [...], maybe we could have a good special that week for the star food or something. Something like that might help [...] Cause people are not going to buy something if they don't know what it tastes like. They just won't do it. So if we sample it in front of the store and they do like it, we could have a special on it at that time» (2).

Finally, the managers also suggested **using the radio, internet and social media** as a ways to promote nutritious food choices (See **MARKETING AND MEDIA** section for further details).

Affordability

During the interviews, some store managers explained how important it is to **teach how to budget for food**: «It comes down to, for me, having the right nutritional education. Having people actually come up here, [...] to teach them the values, so that they can cook healthy food for their kids [...] teach people what to buy and how to budget [for food]» (6). «You can't do anything unless you teach people how to eat healthy, [and] how

to budget for healthy» (6). «A lot of the parents would be really willing, especially the single moms, they would be willing to sit down and have somebody teach them the value. How much you can save buy buying, [...] the proper things and cooking it yourself» (6). Some store managers even had **tips on how customers could save money**: «you can save money, ‘cause I saved a lot of money when my kids where small but once they get to their teen, I told them you will need a lot of money» (11). «We tell people that if they want to buy lots of groceries they should buy them on Mondays, you get 15% [off]» (11). Another manager added: «the best way is to actually [...] [to] teach them the value of buying whole food» (6). And that manager also explained that the cost of food «can be much lower if you are buying bulk food that you are actually preparing. Instead of buying bagged chicken for 30\$ you can buy the other chicken for 14\$ and cook it» (6).

Store managers suggested having **cooking demonstrations or workshops** focusing on low-cost nutritious food items. For example, one manager talked about a previous experience: «[we] did monthly demos in the store, where we thought people how to make stuff [...] Cheap, cheap, cheap» (6).

Finally, some managers also suggested **encouraging healthy food choices** when doing draws or giving customers gifts cards. A first manager said: «when you buy 100\$ or more, [...] at the end of the month whoever wins the draw [...] get their money back» (11). And another manager also added «Anybody who spends a certain amount on certain things, we give them gift cards. And we are trying to get them to use that gift card to buy nutritious food» (2).

Table 5: Summary of the perception of the issue and solutions related to CUSTOMERS

Perception of the issue of access to nutritious foods	
Availability	Affordability
<p>Demand mostly influence food supply in store: demand of multiple customers</p> <p>Sales statistics, what sells a lot</p> <p>High demand for unhealthy foods, especially kids</p> <p>Decreasing demand for pop, chocolate, chips</p> <p>Demand changed a lot over the years: less pop-chocolate, more yogurt-cheese, etc.</p> <p>Increasing demand for fresh products: more produce, fresh meat, yogurt, fresh milk</p> <p>Demand for certain nutritious foods: tomatoes, brown bread, whole wheat pasta, original oatmeal, cream of wheat, milk, bananas, grapes, turnip, cabbage</p> <p>Increasing demand for water</p> <p>Limited demand for some nutritious foods: multigrain bread, brown rice, seeds, fish, liver, legumes, dry beans, broccoli, cauliflower, apples, pineapples</p> <p>Families with teenagers need to buy large quantities of food</p> <p>People prefer certain format: large bread, large tea box, in bulk</p> <p>Customers want more for their money: long bread loaf VS small bread</p> <p>Families with young children need to buy baby food</p> <p>Demand some products for children: milk, formulas</p> <p>People want a variety of products: baby formulas</p> <p>Demand from people who travel south</p> <p>Demand from people from outside, new people: teachers, health professionals, workers</p> <p>Less variety of food during summer, while teachers are away</p> <p>Less demand from community members</p> <p>Some people want to try new things/ demand to order new things</p> <p>People have certain habits, they don't buy things they don't know, limited willingness to change or try new things</p> <p>People are really loyal to the brands</p> <p>People don't want to buy no name brand products</p> <p>People have certain eating habits, had them for years</p> <p>Cook with lard and shortening, especially older people</p> <p>Need shelf products to go out on the land: Grand Pré milk, canned goods</p> <p>Older people eat better (more traditional foods) than younger people</p> <p>People eat traditional foods: berries, fish, liver from beaver or other animals, moose, goose, caribou</p> <p>Demand for special occasions: orange and apple for Christmas and Halloween, turkeys for feasts</p> <p>People place orders</p> <p>Think nutrition is important only when they are sick, not a priority</p> <p>Some demand for products with less sugar/salt/fat or lactose free</p> <p>A lot of people with diabetes, need special products</p> <p>Some people have food allergies</p> <p>Demand from people dieting: Kale</p> <p>Lack of knowledge on how to prepare certain foods</p> <p>Lack of knowledge of what is healthy/unhealthy</p> <p>Demand for ready-to-go or value added foods</p>	<p>High demand for unhealthy foods: less expensive since ordered in bulk</p> <p>Families spend a large portion of their budget on unhealthy foods</p> <p>Limited demand for some nutritious foods</p> <p>Increasing demand for fresh products: less waste</p> <p>Large proportion of family budget needed to buy food</p> <p>Large families pay a lot more to buy foods</p> <p>Families with teenagers need to buy large quantities of food</p> <p>Families with young children need to buy baby food or formula, which are expensive</p> <p>Lot of low income families in the community</p> <p>Buy unhealthy foods in bulk down south</p> <p>Customers buy from other stores when travelling: lower prices</p> <p>Customers shop in large store down south and expect store in their community to offer items at same price</p> <p>Some customers say prices are too high and demand lower prices</p> <p>People are really loyal to the brands</p> <p>People don't want to buy no name brand products</p> <p>Demand for ready-to-go or value added foods: more expensive</p> <p>Limited knowledge of budgeting</p> <p>People buy because item is there, don't necessarily shop for better price</p>

Solutions to improve access to nutritious foods	
Availability	Availability
<p>Organize food tastings/samplings</p> <p>Organize cooking demonstrations</p> <p>Sensitize/Give information to people in the store</p> <p>Have a booth</p> <p>Organize grocery tours</p> <p>Health promote program or activities to inform/educate :</p> <p>Drop the Pop, posters, pamphlets, banners, recipes, store health promotion program, governmental program</p> <p>Have shelf labels</p> <p>Provide recipes: recipe card, online</p> <p>Organize a draw of a basket of nutritious foods</p> <p>Set up a point system and draw for customers purchasing nutritious foods</p> <p>Promote healthy eating habits during community events or other community settings</p> <p>Organize a food fair</p> <p>Promote nutritious foods in other community settings: school breakfast/snack program, daycare, elders home</p> <p>Target children: get them to start liking it at a young age</p> <p>Target the parents: teach them how to prepare food</p> <p>Organize cooking workshops: parents and children</p> <p>Promote nutritious foods that complement traditional foods</p> <p>Combine health promotion activities: Food tasting + shelf labels</p> <p>Combine health promotion activities + offer nutritious food in store</p> <p>Combine health promotion activities and specials</p> <p>Use media to provide information or promote healthy foods</p>	<p>Organize food budgeting workshops</p> <p>Provide training on how to prepare food at lower cost and budget for food</p> <p>Inform customers about saving to be made when buying in bulk or whole foods</p> <p>Organize cooking demonstrations: low cost items</p> <p>Organize cooking workshops: low cost recipes</p> <p>Organize draws: winner gets their money back to spend on food</p> <p>Gift cards for nutritious foods when purchasing for a certain amount</p>

STORE

From the information gathered during the interviews, the store settings, management practices and managers seem to have great influence on availability and affordability of nutritious foods in the stores of Eeyou Istchee. The following sections present the store managers' perception of the issue and their proposed solutions.

STORE SETTINGS

Perception of the issue

Availability

Some of the actual store settings have been built a long time ago and are now **outdated**. A store manager explained: «when this business was established, at the same time than other businesses, roughly 30 or 40 years ago, a lot of things were canned goods, packaged goods» (5).

Some stores are also **too small** for the growing needs of their community: «the community is growing very fast; they need a bigger grocery store» (2). Smaller stores have «very little flexibility» (6). Of course, the selection of foods available in the stores largely depends on their size. «We have **restrictions** too, as to what we can carry in the store, it is really small» (6) said one of the manager.

The **lack of storage, cooler or refrigeration space** is a major factor limiting availability of nutritious foods in the stores of Eeyou Istchee, numerous store managers are mentioning it. «We don't have a lot of cooler space, so we can't bring in a ton of produce all at once» (2) said one of them. Another said: «since we have [fresh fruits and vegetables], it seems like everybody really enjoy it in town. They want to get there before it runs out. Cause [...] I don't have the space to store the stock for a whole week. I only have enough to keep in stock for today» (1). One of the store managers also explained: «We don't have a lot of cooler space, a lot just sits out in warm temperature, fruit and vegetables. Of course it turns, and of course you are not getting the quality. We are not alone; it is an issue for all retailers» (5). As we can see, the **temperature of their storage space** is also an issue. «We have a warehouse, but it is not heated or it is not weather-controlled, so it is only for water; it is more for [General Merchandise] items» (2). In some of the stores where storage space is very limited, «everything goes [directly] on the shelf» (8), so **shelf space** is an important aspect to consider. Furthermore, some managers also mentioned that their stores **did not have a butchery**, which makes it more difficult for them to sell fresh meat. There, fresh meat is only available on delivery days, until it runs out: «We have fresh meat [...] Twice a week [...] we will get about a 1000\$ worth of fresh meat. We will sell it in an hour» (6).

The **general layout of the store** is also an important aspect when it comes to access to nutritious foods. One of the store managers mentioned that the place where each piece of equipment is located in the store has to be

taken into consideration. For example, **fridges and freezers** have to be placed in **specific locations** in the stores.

Some of the store managers also reported having issues with their **equipment**. The **small size** of some pieces of equipment and **broken** refrigeration equipment can limit availability of certain items. «I have a broken freezer [...] I don't have a lot of space, so I can only squeeze in whatever I can» (6). Furthermore, it is **difficult** to get **refrigeration equipment fixed** as the specialized services required are not available locally. One of the managers said: «here, if we get a big piece of equipment and it breaks down, it takes months to get it fixed» (1). He also added: «I already have a freezer in the back that is broken, I can't fix it, cause there is nobody around to fix this» (1). Of course, while the equipment is unusable, there is less food available in the store.

Many store managers expressed the **need for renovations or the building of new store settings**, but renovations are **expensive**. One of the managers explained: «This is definitely the way of the future, but for a lot of the retailers, it is a huge expense to renovate a store, to bring in the refrigeration, the coolers needed to maintain this product» (5).

Affordability

The store settings also seem to have an impact on prices of foods. In stores where the **storage area is limited**, it is **impossible to buy in bulk** from suppliers. One store manager explained that he cannot take advantage of his supplier's promotions due to the lack of storage space: «I could order items 6 weeks in advance, because they are on special. [But] we stopped because of the space» (10).

Furthermore, one of the managers also explained how the size of the store influences the **size of items** they can carry, for example, they **can hardly sell bulk** size items, as they don't have the space for them in the store: «there are certain things that they need that they will buy in bulk [...]. And we tried that last year, but my store is so small, we don't have the space. I mean, we use to bring [larger size items]; it did well, but we have such a small space» (6).

Another manager also explained how having **outdated** store settings can increase the price of foods sold in the stores. For example, the absence of a receiving area **increases the labor cost**: «we have to take one box at a time off the truck... We don't have a receiving area» (2).

Refrigeration **equipment is expensive** and requires **specialized repair services**. One of the managers said: «we just threw one into the dump... How long was it here, like a year? We could not get it serviced. There was probably only one little thing wrong» (1). «If someone from down south is willing to come up, [...] they charge us at least 4000\$ for the travel to get it fixed, plus the fixing, plus the parts. The thing is, it is the same price every time it breaks, just a little thing here, a little crack in the window or any little thing. It cost more to

get it fixed than to replace it» (1). The managers also mentioned that the unusable refrigeration space, also represent a loss of profit for them. «Whatever money I make from this [...], I am not making any more cause I have to buy new parts» (1).

STORE SETTINGS

Solutions

Availability

Most of the store managers suggested that the **renovation or building of new store settings** would help improve the availability of nutritious foods in their stores. **Having bigger stores** would allow them to sell a wider variety of nutritious foods. «That's why we want to expand to a big grocery store. So people will have more availability of fruits and vegetables and we can get **bigger open long coolers**. [...] That is what we are planning to do [...] to have more of everything» (8). Another one also said: «They are planning it [...]. A bigger store, you [would] have the whole section in just for milk and produce. You know, the whole half wall [...]. So, the nutritious value of the store is going to get much better» (6). And, «when we build a bigger [store], part of the plan is a **butcher[y]**. So the community will actually have access to fresh meat» (6). One of the store managers even explained how increasing the size of his store influenced the availability of foods when they moved to a new location: «we only had [fresh fruit and vegetables] available starting last year, cause it is when we moved in our new building. Before, we were in a small place [...]. We didn't have space for fresh stuff, but since we have it, it seems like everybody really enjoy in town» (1). One manager also suggested that **new store settings** would help them **promote healthy food choices within the store**: «If we had got a new store and have 40 feet of produce then I could [post the health promotion material.] I have a poster that's about this big of all the apples and when they are in season, why you eat them. I have a binder of every possible veggie and fruit» (12).

Furthermore, a store manager also explained how **increasing the storage space** would help improve access to nutritious foods in his store: «We only get shipments twice a week, if we had that big storage space, we could get shipped two pallets of fruits and vegetables. It would be easier accessible for people too» (1). Another manager also mentioned that a renovation would allow them to **add a food preparation area**: «if we can get a renovation for a new store [...] we will be able to do the cut fruits; the value added fruits. So it will [...] be just like buying a bag of chip, you open up, and you start eating. I think that would help a lot with the nutrition» (2). Fortunately, there seem to be many **renovation or building projects** in the region; many managers talked about that. One of the managers even explained the **planning process** they are currently undergoing: «right now, what we are doing is we are doing the business plan. [...] we have a consultant already. [...] he is going to be working on the business plan. [...] Well, you know, when you try to do things in the reserve, you need to go through the Band first. I have to have a letter sent to them. And then they would have to go have a meeting and then decide if it is OK or not. And then they give you a resolution saying: Yeah, it's OK you can go ahead. So we have a resolution, and then the business plan you can usually get funds for the business plan. And they say 25% [...] they help you, and 75% is like a loan. That is approved, then, we are waiting for the payment, once we have the payment we'll ask the consultant. We will give a partial payment and do the business plan. This is new for us too you know» (8). As we can read here, the

building or renovation of a store requires substantial time, resources and expertise. From the information gathered during the interviews, it seems that some store projects may require **political or financial support**, as well as **specialized resources** in order to plan and follow up on each step of the renovation or building projects.

When planning the layout of a store, it is important to consider in which section each food will be placed and on which shelf, how much space will be dedicated to each type of food, which equipment will be needed to keep the foods, etc. Some store managers mentioned that the **improvement of the store layout** is an important element to consider while seeking to improve access to nutritious foods in the stores. For example, one of them said: «we are trying to get some shopping habits changed, so our produces are right **in front of the store** now» (2). Another one also gave an example of how he manages the layout of his store to promote healthier food choices: «Another thing that we do, and that I adjusted yesterday is the cereals. You know, at **eye level** we try to put the cereals that are good for the health, the ones that are sweet and for children at the bottom. [...] And, there were four rows [of Corn Pops], but I cut down to two» (7). Depending on the type of businesses, the store layout may be decided by the head office or by the store managers/owners themselves. When it is possible, some managers prefer to plan their store layout themselves whereas others may prefer to be assisted. One of them said that their major supplier offered **support in planning the layout** of their new store: «[The supplier] recently told us that they are willing to [...] arrange everything in the shelves» (8).

Whereas most managers suggested ways to improve access to nutritious foods in the stores, one of them even suggested that we should also **limit physical access of unhealthier food items**. He said: «For sure, we have to make the unhealthy foods less accessible to the people. [...] I don't know if you have noticed the shelf, for the pops, we just have what we have to, we **don't have any display**. [...] if there are things we can hide, we do it. I'll give you an example, the ice cream cones, the sugary sauce and marshmallows are in a corner. Sometime people will walk around and ask: No marshmallows? Yes, yes... they are in front.[in a corner where they are **less visible**]» (7).

Furthermore, some stores need to **improve their equipment** to accommodate a variety of nutritious food items in their store. For example, one of them said «mostly everything goes on the shelf. [...] So if we have bigger, taller **shelves** we will manage to put everything in there» (8). Others need more **adequate refrigeration equipment or resources to fix** their actual equipment. One of them suggested: «The other thing, you might want to look into is providing fridges or coolers. [...] Or even somebody who knows how to fix it or can get the parts really fast, a technician just for that» (1).

Finally, some managers mentioned that **having nutritious food displays** could help promote those foods within the stores. «I've been in [a] store where they [...] would have a big display on one of the end [aisle], all nutritious food» (2). One of them even joked about it: «design a display for us for nutritious food, like: 'recommended by Cree Health Board!' or '[the nutritionist] says eat this' (laughs). Something inviting, you

know. If someone sees something with a really nice [...] design on it, [saying] it is recommended by the Cree Health Board, [he] might say: Hey! let's look at this, you know» (1).

Affordability

Some store managers say that the **renovation or building of new store settings** would also help improve the price of certain food items by allowing them to buy in bulk, to sell bulk food items and reduce some of their operational costs.

The **increase of storage space** would allow the stores to order larger quantities and get better deals. One of the store manager explained how it could improve the price of foods: «We asked for a warehouse, we should get one within a year [...] I asked for a fridge and freezer too [...] it will allow us to have better prices too. Because every six weeks, I receive a catalog. I can order items that are on special six weeks in advance. We stopped because of the space» (10).

Families of Eeyou Istchee are large and often need to buy in bulk to save on cost of foods. Therefore, **stores require sufficient shelf space to sell bulk food items**. One of the manager explained how having a larger store would allow them to sell the bulk items the families need: «Well, they are planning a [...] store that is about four times this size. Which would make a big difference, because then we can actually bring in the bulk [...] size [items]» (6).

One of the store manager mentioned that **a reception area** could be added if they would renovate the store: «We don't have a receiving area, unless we can get a new store or renovation» (2). This addition would allow them to **reduce the labor cost** in their store, and therefore, its impact on the price of foods.

Finally, managers suggested that **alleviating the cost of equipment and their repair** could help reduce the price of foods. Some of the ideas brought up include: «providing fridges or coolers [...]. Or even [contact information of] somebody in town [who can fix equipment]» (1).

Table 6: Summary of the perception of the issue and solutions related to STORE SETTINGS

Perception of the issue of access to nutritious foods	
Availability	Affordability
<p>Some stores have been established 30-40 years ago, needs were different</p> <p>Store too small for needs of growing community</p> <p>Some stores are small</p> <p>Small stores have little flexibility as to what they can carry</p> <p>Selection depends on the size of the store</p> <p>Lack of storage, cooler and freezer space</p> <p>When receive delivery, almost everything is put on the shelf</p> <p>Lack of shelf space</p> <p>Insufficient room to put health promotion banners on the shelves</p> <p>No butchery</p> <p>Quantities of refrigeration units and their location in the store</p> <p>Importance of store layout</p> <p>Small size of the refrigeration equipment</p> <p>Broken refrigeration equipment</p> <p>Difficulty in getting refrigeration equipment fixed: specialized equipment, no one in town can fix, far from repair service, takes a long time to get someone to fix it</p> <p>Waste of floor space when equipment is broken</p> <p>Less food available while equipment is unusable</p> <p>Some stores need renovations</p> <p>Store was renovated</p> <p>Different new stores projects in the region</p> <p>Renovations are expensive</p>	<p>Lack of storage space: unable to buy in bulk from supplier</p> <p>Store too small: can't sell bulk or family size items</p> <p>No receiving area: added labor cost to unload truck</p> <p>Expensive to get refrigeration equipment fixed: specialized equipment, no one in town can fix, far from repair service, takes a long time to get someone to fix it</p> <p>Losing money while refrigeration equipment is unusable</p>
Solutions to improve access to nutritious foods	
Availability	Availability
<p>Renovate or build a new store settings</p> <p>Add butchery</p> <p>Provide sufficient cooler/ freezer space and adequate equipment</p> <p>Increase storage space</p> <p>Add a food preparation area</p> <p>Provide support and specialized services to renovate/build</p> <p>Place produce in front of the store</p> <p>Place nutritious food items at eye level</p> <p>Place unhealthy food items lower than eye level</p> <p>Improve layout of the store</p> <p>Supplier can help with store layout: Sobeys</p> <p>Supplier may arrange layout of the store, if needed</p> <p>Limit visibility/Avoid displays of unhealthy food items</p> <p>Ensure access to equipment & repair service</p> <p>Set up nutritious foods displays</p>	<p>Renovate or build new store settings</p> <p>Increase storage space: to be able to buy large quantities</p> <p>Ensure sufficient space to offer bulk items</p> <p>Add a reception area</p> <p>Alleviate cost of equipment and repair services</p>

STORE MANAGEMENT PRACTICES

Perception of the issue

Availability

The type of stores and the way they are managed influence availability of food in the stores. In Eeyou Istchee, there are **different types of stores**; we find stores which are part of a large corporation, privately owned stores, community stores and cooperatives. Some of them are affiliated with major suppliers such as Loblaws or Sobeys, but remain independent. There is no franchise. Depending on the type of store, the management is either shared between the head office and the store manager(s) or it is the responsibility of the owner(s). In larger organizations, the head office provides support and tools to manage the store whereas, in smaller businesses, the management of the store relies mostly on the owner's management knowledge and skills.

In smaller businesses, **budget constraints may sometimes limit availability** of foods. One manager said: «I noticed like if you own a 100% business on your own, it is very hard to manage it with the cash. You have to watch what you buy and things like that. So yeah, we try to manage, [...] we go by every week, you know» (8). And the manager further explained how the budget limits the orders of food: «we do have a limit in ordering things, [...] like whatever we make, it is how much we have to spend. [...] We can't just order everything and anything [...] We have to look at how much we have money» (8). «we have to buy with what we have with the money, you know... You can't buy 100 cases and then can't pay the groceries, you know» (8). And sometimes, customers have **accounts at the stores**. A manager explained how it has an impact on the availability of food in their store: «the people that are on income [security program for hunters], we are supporting them. So we are not getting the money right away, but they are charging. [...] They have an account here and [...] it is only every three months they pay. So whatever they are charging, we are paying for the food. [...] Well, some of them are like local people that work, you know. We give them a limit [...] So that is hard to manage, like if they are going to charge, and we have to buy the groceries and we have to pay them. And then, in three months we get our check and we make a big order then» (8). We see here that availability of food found in the store varies according to the budget available and the payment of the customers' accounts.

Furthermore, during the interviews, some of the managers talked about their **business goals**. Of course, stores' main objective is usually to make **profit**: «[It] is whatever retailers can make money with» (5). «I would say that a lot of retailers in the North go with what sells, what sells lots, what they make money with. So for example, maybe the liver is not available in all communities because [it doesn't sell a lot]» (5). Another manager also agreed: «[The company] wants to serve their communities but we also, at the end of the year, need to be profitable» (6). Only one manager mentioned that their goal is to **provide for their community**: «That is what my main goal is [...]. Our business is about providing nutritious, affordable food for everybody. That's what our goal is, our long-term goal is for the store. [...] Where they can have food

available and affordable [...] That is what the main idea is» (1). One manager summarized how their type of business influences their goal: «Of course, we are a community store, it's owned by the community. It might be more difficult when a store is owned by someone who only wants to make money» (7).

Some managers also suggested that the **store's relationship with the community** influences the management of the stores and the availability of food. «the store need[s] to be more involved in the community... I've only been here for seven months, so before that [the company] and the city didn't get along I guess. We are trying to change all that» (2). And another manager said: «as long as I have been with this company, they've always been willing to find ways to help the communities [...] it is part of our mandate [...] you know, being part of a community and be[ing] involved» (6). Furthermore, one of the managers emphasized the importance of **getting to know the community** in order to be able to **offer the foods corresponding to their needs**: «the way our stores works, which is good, is that we are community specific, we don't do one, we try to be what the community we are in, right? What they like here, they do not [necessarily like in another community] [...] there are differences. [...] Our store only works if you actually know your community. If you don't, it doesn't work» (6).

From the information gathered during the interviews, it appears to be **hard to find experienced managers and reliable employees**. One store owner explained: «it is very hard for us to find a manager. [...] I have another worker. I pay her much more than the other ones 'cause she can do the orders. And when I'm gone she takes care of the store [...] not many people know how to do the orders» (8). That manager also explained: «I try to put [...] [someone] on the schedule to work, then she called me and said she can't come in [...]. It's hard sometimes we have to look for workers that can work for you [...] and then they say they want more [than the minimum wage] and things like that but they don't have a secondary 5 [...] but we manage to have people work, you know» (8). Employees' absenteeism is also an issue, which has an impact on the overall management of the store: «Usually my employees aren't there and I have to work at the office and at the same time work over there» (11).

The **employees' and managers' knowledge** also influences the availability, and the quality of food found in the stores. One manager said: «And the problem we have too with the fruits and vegetables is the cashiers, they don't know to go look at the fruits or throw them out, which ones are good, which ones are bad» (8). «for the fruits and vegetables, we are not that experienced in keeping [them] [...] can you keep them in a basket or can you keep them on a plastic? [...] things like that, we don't really know» (8). The use of a **computerized ordering system also represents a challenge** in some of the stores: «if I order Spartan apples, all of the sudden the code changes [...]. With Sobeys the code can change three or four times for many items during the year [...]. They say you have to look in the computer [...] people are not use to that here» (7).

The **management of the orders** greatly influences availability of foods in the stores. One manager explained how they have to **prepare the orders on time to receive their deliveries**: «So this is all our orders... Sobeys

has to be in on Sunday before 10 o'clock for the dry food but then for the refrigerated, it's Friday before 10 in the morning. So can't [be late]... one time we missed it by half an hour and they told us that they couldn't process the order that I would need to speak to the management and they let go. They said we are going to let go this time» (8). To prepare the order one manager explained how they **look at their inventory before ordering** new foods: «I go check on my coolers, if we have lots of green peppers or red peppers, I don't order them until the order on Thursdays. So I try not to run out of these things. And then I try to keep them all the time» (8). Furthermore, in order to **make room for the new supplies**, stores will generally **have less food available just before the delivery**. One manager explained: «I'm receiving my order today, so there might be some places where it will be a little empty, that's normal» (10).

Some stores have **planograms**, usually prepared by their head office or, in some cases, by the manager. The planograms tell them which items they should have in the store and where to place them. One manager said: «Well one thing is the planogram: we have specific things, and space» (6). The planograms influence availability of food in the stores, since items who are not on the planograms can't be sold in the stores. «They sold, but the thing is when they did the planogram, we had no space for it, so we didn't bring it back» (6). Some managers mentioned that changing the layout of a store is complicated. Every space is planned, and changing the layout would require reviewing the planograms. One manager said: «It would be a lot of work [to put the pop in a less visible area]. It's because of the food categories. I know when you come in the store; the chips are right in front too. [...] but it's complicated, I tried to the best that I could when I planned the layout of the store; by section, by size» (10). Overall, small privately owned stores or community stores seem to have more flexibility as to what they can carry in the store and where they can place each item, than the stores which are part of a larger corporation.

Some managers noted that they have a lot of **waste**: we are «throwing an awful lot» (12) said one of them. One of the manager explained that the waste are often the reason **why they are not ordering** certain products: «I would say that for the selection, it's because of the waste. There are items that we'll keep less in the store because we are not selling enough of them» (7). Another manager explained: «there are some items that we carry from time to time. We just wouldn't necessarily have them in the store all the time. [...] we have them for a week or two, we let them drain down, we might be out of them for a week or two and then back again» (6). For example, a manager said that they have: «broccoli, sometimes, not all the time broccoli [...] Tomatoes we always have but sometimes we run out» (11). As we can read here, stores will usually order what sells most, in order to avoid waste. Therefore, some stores **offer a limited variety** of foods. One manager compared the variety in his store with other stores: «Here in the breads, [my colleague] told me we have a lot more variety compared to the other stores, there's a lot of variety here» (10). In order to avoid waste or to offer certain foods that sell less, some stores will only **offer frozen** options, such as frozen meat or fish: «[The other store] bring in fresh meat on the same truck that some of our stuff come in on and then they freeze it. [...] So they are not selling fresh meat» (6).

In order **to make more profit some stores sell foods of lower quality**. One of the managers compared his store to other stores: «the meat, we don't make much profit on that, but some say it is expensive. [With the other store] they didn't have quality, but now they have variety and quality. Of course, [the other store] they sell a lot of lower-quality products and in small quantities. If we look at the two, we can't compare [the other store] with what we have. There is no comparison» (10). Some stores may even be **selling expired foods**. «We have very good quality [...] We work very hard to make sure that our produce is fresh [...]. But, [the other store], I go there, nothing is fresh» (6). «When I got here, the store was falling apart, it was close to bankruptcy. There were expired products and rotation of products and food safety were an issue, but it changed a lot» (10).

Finally, in an effort to respond to the demand of customers, some stores have started to **offer ready-to-go meals and snacks**. But, one of the managers said that **some of the ready-to-go meals offered may be less healthy**: «maybe in some of their recipes, there might be too much salt, I made them prepare good meals with ham. But the cook added gravy on top. People were saying it was too salty» (10).

Affordability

Some managers noticed that **some stores are more expensive than others**. While discussing the price of the Nutritious Food Basket in Eeyou Istchee, one of the managers said: «I'm not surprised; [the other store] is very expensive» (10). And another manager further added: «we price an item, and then, another company in town charges twice as much than here. You can see the two products are the same. How come right here you can [...] pay two box for this, [...] and it is the same thing over there, and you are paying how much more? It's not like they don't have the same supplier, and it's not like they don't get a better rate than we do. [...] It is the same, and it cost more over there, you know. Why?» (1).

From the information gathered during the interviews, prices of foods seem to vary according to the **different type of stores** (i.e. part of a large corporation, privately owned, community stores or cooperatives). For example, by comparing his small store to another store which is part of a large corporation, one manager said: «they are the ones who have a purchasing power, we don't» (1). Furthermore, prices of food items appear to be managed differently depending on the type of store. In larger businesses, prices are **managed by the head office**: «It's way above me. So we don't have any say, [...] they just send us a batch [of price tags» (12) said one of the manager. And, another manager confirmed: «It's all done through head office, but we also [...] go to different competitors and we will see if our pricing is lower than theirs, we will obviously match it, whether or not we are losing money [...]. Most of it is done right through head office» (2). The stores who are part of a large corporation will usually standardize their prices throughout a certain area. One of the managers recounted what another manager had told him: «we want prices to be the same in all of our stores» (7). On the other hand, in smaller businesses, **prices are managed by the store manager(s) or owner(s)** and the management practices are quite different from one store to the other. Some store managers reported taking the

same percentage of profit on all items, whereas, others take **different percentages according to the category of items**. A first manager explained how prices are managed in his store: «Instead of using different percentages for each thing we just do one. It is easier to calculate. Cause there is so much stock. If I try to remember how much for this, how much for that... It's easier if it's all the same across the board. Then, whatever goes over or under, it all balances out» (1). And a second manager explained: «in the fruits and vegetables I put 15%, in the baby foods it's 3 to 5%» (10). In stores **affiliated** with major suppliers such as Loblaw or Sobeys, a **general markup is pre-established** with the supplier. One manager said: «I had to give a general markup, for example, for the groceries I had given 35%» (10).

As discussed earlier, different type of stores might have different **business goals**, which seem to influence their prices. But overall, stores **need to be profitable**. Some managers said: «As far as for the retail prices, I really can't see any of the retailers lowering their retail substantially. It's not what we are» (5). And a second manager added: «at the end of the year we need to be profitable» (6).

It is **hard for stores to find experienced managers and staff**. Stores need reliable employees to **manage their budget, the price of their foods and detect any error**. One manager said: «not many people know how to do the orders [...] First time she did the order, she did a big order. She did an order of 8 000\$ just for one supplier [...] but we have to use a budget when we do the orders» (8). And another manager added: «Mistakes or errors in the system can happen» (10). «[When we opened the store] I remember, [...] certain foods were really low [...] [and others] where too high. Like the milk, I had to reduce it» (10). He later explained how he has to manage prices with their computer system and make adjustments: «the way it works here, is that I have a database here and I had to give a general markup, [...] but after that I have to make adjustments. [...] after they had adjusted the system, I had to check the different prices. For example, in the groceries, you will have items at 55-60%, you will have items at 20%, 15-20%, so I have to look at each item quickly...That's too low, that's too high» (10).

Managers have to **check prices in the computer system** before ordering. Unfortunately, they don't always have time to look at every price: «We check [prices] from the computer [...]. Well, sometimes we don't have time to check the prices when we order things» (8). Furthermore, some managers mentioned that their stores **deal prices with the suppliers whereas others don't seem to be negotiating prices**. One manager explained that he negotiates prices with his supplier: «of course, you have to check [the prices]. And you can negotiate the prices; you know, we can say: Hey! I saw a special this morning on this and this... [And the supplier might say:] Yes, we will check that, it won't be long, I will call you back. Yes, we can make you a good deal on this» (7). And, «If we have a big contract with them, the prices will be lower, you know, it's a guaranteed clientele, they'll adjust prices accordingly. I'm negotiating with them at the moment» (7). But, another store manager mentioned that they **don't deal the prices because it would require too much of their time**: «It would be a lot of time to go and sit there [to deal the prices]. It is already a day's drive at least. I drive there

for a whole day, and then the next day is when I can meet them. [...] we will get there, we will meet him, its 2 days now out of my work here, just to negotiate every price» (1).

Some stores managers explained that stores encounter **numerous expenses, which influence prices of foods**, such as transportation, labor, employees' traveling, unpaid customer's accounts, lease, electricity and maintenance of the buildings. Some store managers noted that the **extra labor and material cost related to food preparation** influences the prices of ready-to-go items: «if we cut a pineapple, the pineapple is about 7\$ something when it is whole, but when I cut it, it goes to about 9\$ something, because you have the material you are using, [...] It goes up in time and price, [...] We spend more money to process it» (6). And, as mentioned earlier, some store managers reported having a **lot of waste which influences prices of food** sold in the stores. One manager said: «we put up the price a little bit higher, cause we through a lot of things» (8). And another manager added: «It is a matter of if we are going to sell it or not. If we keep bringing in this big selection of different kinds of fruit and we are not going to sell it, there is really no point bringing it up, cause that is just going to raise the cost, because we are shrinking [...] a lot of products» (2).

Finally, some managers also noted that in the North, there are **fewer promotions** in the stores. We are a third more than Montreal, which isn't bad. Price wise, it isn't bad, 'cause let's face it in the big cities you get all the competition, there is sales every week. Whereas in the North, [...] there is a lot less, [...] promotions and sale items» (5). But, one manager mentioned that in their store, they have an **everyday low prices program**, which allows them to keep the prices of certain produce lower: «[we] have a program called EDLP: Everyday low prices. And no matter what, the apples on the counter are supposed to sell for; let's say 9\$. They are always 4.99\$. Oranges, they are always 5.99\$, but we just don't advertise it. But you'll see they haven't changed in three years. The bananas are always 2.95\$ a kilo, it never changes» (12).

STORE MANAGEMENT PRACTICES

Solutions

Availability

Some managers emphasized the importance of **getting to know their community** in order to offer foods corresponding to their needs. Some stores managers suggested: «You can always try to talk to your community, see what they want. We talk to people all the time and try to find out what we can bring in» (6). This manager also added: «the stores and the communities need to actually meet, to say OK, this is some of the stuff we would actually like to see, because this is what we like to eat» (6). **Hiring employees and managers who have a good relationship with the community** is important in order to offer foods which correspond to the needs of the customers. One manager explained how in his store they hire people from the community as managers: «we promote local for supervisor roles, which is really good. [...] it is a support to the community. And [the customers] are more open to those people [...] [they] are not shy, 'cause they might know them for years I guess. So that's helped that our produce manager is local from here, and he talks to everybody and if they want to ask for something, we will bring it in and see if we can get it. It's good to have them in management roles as well. They are a great asset to the team. [...] We just train them, we can train anybody, so I love to promote inside the store» (2).

Some managers underlined the importance of **offering training, information and support to employees** in order to improve the availability and quality of food in the stores: «we trained our staff to do all the ordering» (2) said one of the managers. And another one who has been having difficulties with the quality of his fruits and vegetables said: «The lady that came here [...] [from] *Ministère de l'Agriculture* [...] they were telling us that we can take a course of how to manage your fruits and vegetables. [...] they said that they have it online» (8). Another managers also stressed the importance of providing information to their employees: «They need to be informed, if something is happening in the store, they will ask about it and customers will ask them, [...] it doesn't have to be long or complicated [...] just information» (10). One of the managers also suggested: «I think it is not just educating [the customers]. It is also educating the stores, right? [...] The stores need to [...] do trials and see if they bring some of these [nutritious foods] in what kind of reception they would get. [...] Then, they can tell you, we brought this in, but we didn't get any results. Maybe we will try some of these things out here and see» (6). **Sharing information with employees and managers** of the stores will help them promote healthy food choices and increase availability of nutritious foods within their stores. Finally, one manager also suggested that **providing support** to their cooks could help them improve the quality of the food served: «I would need someone to work with them a little bit. [...] I would be open to that [...] we would have to present it in a positive way [...] they are open when they know it's to help them and for their health» (10).

Ordering new foods upon demand seems to be a good way to increase availability of nutritious foods in the store and offer a selection of food that corresponds to the customers' needs. One manager explained that

customers usually come to see him when they wish to buy something they don't find in the store: «if they need something, they tell us and we order that. [...] That's what some of them [do], they come here and they tell us: Can you order this? I thought it is very good» (11). And sometimes, when certain foods are **less popular**, some managers mentioned that they still **order them once in a while** to respond to some customers' demand: «We had bread that nobody was buying [...] we had to pull it out. [...] We have families that we know want it, [...] so it takes them two weeks to get it, [...] but, here, because we know the people, we talk to them; we can be flexible with some of those things, right? [...] We can bring it in [...] within reason» (6). And some managers also suggested **ordering foods for special demands**: «if I have [someone] that says: Yeah, bring me a case of avocados, we will buy it for them as long as they are willing to buy the case. [...] we do try to be flexible and we do try to bring new stuff, so people can try» (6).

Some managers stressed the importance of **offering a variety of nutritious food items** for people to choose from. For example, one manager said: «in the breads, [...] we have a lot of variety [...] [for them] to discover new things» (10). Trying new breads also allowed another store to widen its variety «in the breads, we added this kind, this kind and this kind: the 6 cereals and the 12 cereals [...] people started to buy them. And now, we have them all the time. For the bread, it's easy, we know we need variety» (7). And, finally, one manager added that having variety helps him to ensure that «the customers will come back, that they won't need to go buy their products elsewhere. And with more variety, there are more chances that he will buy here, our strength is variety» (10). To respond to customers' demand, some managers also suggested **ordering fresh products** in addition to having frozen options. «if the stores are serious, you know, there are certain things that you can change and you can work on. We put in extra hours just to make sure we are getting the meat to our community because we don't have the proper facilities to do meat. [...] So the other store will cut it fresh. [...] Cause, we have a lot of options for frozen meat but people want the fresh [...]. They cut it in the morning, they put it on the plane and it arrives here [...] at noon» (6). Furthermore, while thinking of increasing availability of nutritious foods in the stores, some managers also stressed the importance of **limiting unhealthier items**: «We are trying to get rid of the candy and pop by the units, cause if we [really] want to be a grocery store it has to be, no small chips, no candies. Maybe pop just one fridge» (8).

Furthermore, some of the managers suggested that **availability of foods should be adapted to seasons**, and that it should **complement traditional foods**. The manager said: [We order food according to] the seasons. The season: hunting, goose break, hockey season, camps [...] Just more [of certain foods]» (12). And, another manager also stressed the importance of traditional food and suggested to offer foods that complement traditional foods: «you have to look for food that complement. Like they like corn, you know with their goose. We actually have to look for food that complement [traditional foods]» (6).

Some store managers suggested **offering healthy ready-to-go or value added foods** to increase availability of nutritious foods in their stores. One manager said that a customer suggested: «Why don't you make salads ready-to-go and sandwiches that are healthy? [...] If it was available, they would come here for their lunch.

[...] instead of getting French fries and a cheese burger, they could get a salad and a sandwich» (1). Another manager also said that «They cut the cantaloupe with the melon put strawberries [and] pineapple in a little clamshell. And they love it. They come looking for it for breakfast. And the other thing we do is grapes and cheese [...] they love it» (12) Another managers also explained that when they offer prepared food in their store, they asked their employees to add new fruits on the platters for people to taste, they put a slice of brown bread when preparing sandwiches and they add grapes and cheese cubes on the side of their lunch boxes (9). Of course, managers mentioned that they have to be careful of food allergies and food safety while preparing the foods (9, 10). Managers are also offering more and more value-added foods, which seem to correspond more to customers' demand: «I've tried to bring in the produce that way, like the pre-made salads with all the stuff in the bottom, they will buy that. They don't buy Romaine lettuce; they really don't buy the Iceberg lettuce. We have it, but they like things already prep for them» (12).

In order to increase availability of nutritious foods, managers stressed the importance of **trying new foods**. Sometimes managers try to guess what their customers might like and order: «whatever people might want... We guess some stuff we guess» (1). A manager said: «I don't know if people would buy the soy milk, I'm going to try that» (8). Some managers even take pictures of new foods and their UPC codes in other stores to try them in their own stores: «sometimes when we go to town we take pictures of things that we don't have at the store and then [...] it is very easy to look for the product cause you just use the UPC code and then after that you enter it [in the computer system]» (8). Furthermore, in order to avoid having too much waste, one manager explained how they **slowly introduce new foods** in their store: «[what] we are doing in our store right now, is we are bringing in a different item every time we do an order, so if it doesn't sell it is not a big loss to us. And if it does sell, we will just keep bringing that item in, and we will bring something else in our next orders». Another manager also suggested **ordering small quantities** of a new food to see if customers might like it: «Maybe I can try ordering fish like already in the vacuum thing there. [...] I haven't tried ordering [...] we have to order it by the case. Maybe I can ask them if I can order by the unit» (8).

Stores can contribute to the improvement of access to nutritious foods by promoting nutritious foods to their customers and increasing their demand. One manager shared his tips to **promote new nutritious food items** in his store: «we like to try new things. That is what my background [is]. We would always try to bring new things. **Cross merchandise** it... So [if] we get a new kind of Cheerios, which is healthy, we put it right next to the bananas [...] or we will do **samplings**. So if we bring in a new products, we will try to **bring it in front of the store**, so customers can try if it something they would like» (2). Furthermore, some stores have a **health promotion program** which can be used to promote nutritious food choices within their stores: «if we had our new store we'd have all our signs up and our banners [...] I have a poster that's about this big of all the apple and when they are in season, why you eat them. I have a binder of every possible veggie and fruit» (12). Stores can also contribute to the promotion of healthier food choices in their stores by ordering the necessary foods for the activity and selling them in the store during the promotion. A manager explained how their store participate in health promotion activities: «You know, we brought in squash for the demonstration

and then we had it in stock [...] a while afterwards» (6). Stores are usually willing **to order and provide foods for health promotion activities**: «We could have a booth set up at the front of the store [...]. We would be the one who would donate all the food items» (2). And another manager also offered: «If you come and say OK, I'm going to teach people how to make lentil soup. I need this and that. The store is willing to go as far as **donating** that stuff, so you can teach them, but you have to let us know so can plan ahead, cause we do have donations for events in the community so if it is a legit one, we are willing to help. We are willing to **volunteer** to come there and help you do it. Again, it has to be a community effort» (6).

Finally, some managers suggested that in order to improve access to nutritious foods, stores may need to **adapt their layout**. One manager explained how he manages the layout of his store and the space dedicated to the different items on the shelves in order to favor healthier food choices: «what is unhealthy has to be less accessible [...] if there are things we can hide we do it. [...] the marshmallows are in a corner [...] almost hidden. [...] For the cereals, at eye level, we put the cereals that are healthy» (7). This manager also explained how he increases the space allocated to new items in order to make them more visible to customers: «We put it a little larger on the shelf. So sometimes people ask: What's that? I'm going to try it. And oups, it starts selling» (7). Depending on the type of store, it might be necessary to **adapt their planograms**: «we have a planogram. Everything that you see is planned. [...] every space is planned. So, when we want to make some changes... They are pretty flexible, sometimes we can [make changes]» (6). Adapting the planograms can be an opportunity to make nutritious foods more accessible within the stores, and it can also allow stores to increase the proportion of nutritious food sold.

Affordability

In order to decrease prices of foods, some managers suggested that they could increase their purchasing power by **grouping with other businesses**. «There was an idea that maybe I was thinking about. [...] gang[ing] up together and have purchasing power [...]. I don't know if other stores would go into that, but it could be something that I wouldn't mind» (1). Other stores are also suggested **affiliating with major suppliers** to increase their purchasing power and be able to get lower prices for the food they are purchasing. «We are in the process of switching to Loblaws. [...] We are considered an APEX store, a satellite of their store. We are going to use Loblaws buying power to go direct to these suppliers and obtain better cost» (5).

Many managers mentioned that they compare prices with other businesses in the area, which allows them to match their prices to their competitors. One manager gave an example of how **matching prices to competition helps to decrease the price of certain nutritious food items** in their store: «my case of Grand Pré. I match it to Matagami. It is 35\$ so the families that needs it, they buy here» (6). Furthermore, when managers feel certain prices are too high or too low, they adjust them. «someday, you know, this might appear to be on sale and then some days this might appear slightly overpriced. We will look at it and sometimes, if it

is overpriced, we will bring it back down» (1). Some managers suggested **adjusting prices of overpriced healthy foods**, as well as **underpriced items of lower nutritional quality**. One manager said: «Your fruits and vegetables if you decrease their price you make less profit, but if you sell more, people will be happy and they will buy more at your store» (7). Another manager also said: «We are trying to charge less on the produce and bump the chips up 50 cents» (12). Some managers suggested taking **less profit on healthier items, than on unhealthier ones**. «It's a matter of where we put our priorities [...] maybe put the markup higher in certain places and lower in others» (10). A manager explained how this could be done: «The case of Coke, we make 14% on it, that's not right. We should take 40%, to decrease the price of other foods. [...] That's what we want to do with the fruits and vegetables. We don't have to make 30 or 40% on some of those. We should leave them at 15%, you know to absorb the transport cost. But the junk food, that's what needs to be rebalanced. [...] it has to be changed. It's the only way if we want people to eat better. The items that are really basic that people need, they have to be low. The milk has to be as low as possible. Even if it doesn't cover the transport cost, it doesn't matter; the volume is not big enough to have an impact on our sales. Let's say we make 40 000\$ per week, but we sell for about 600\$ of milk, even if you don't make money there, 600\$ out of 40 000\$ is not much. It won't have much effect on profit; it's not that important. [...] That's what the stores should do. The basic stuff, what people need: flour, dairies, fruits and vegetables, bread, should be as low as possible. But they should take their profit on the junk food: ice cream, pop, chocolate, and the chips» (7). Finally, some store managers also **suggested selling certain nutritious foods at the same price than down south and redistributing extra transportation cost on unhealthier items**. «When I receive the meat it's already priced [...] When it's already priced, you can't put another price it on top of it. If it in special in town, well, I sell it at the price of the special. Transport is never added to it, unless it hasn't been priced» (10). One manager said that transportation represents «10 or 12% [of the sales] but that's a fee that can be redistributed on other items, without adding to your [healthier items]» (7).

One store manager stressed the importance of **negotiating prices with the suppliers and transportation companies**. He explained how he negotiates with his supplier: «you can negotiate prices and say: Hey! I saw a special this morning on this and this. [...] Yes, let me check that, it won't be long I will call you back. Yes, we can make you a good deal or something» (7). And he also negotiates with his transportation company: «The business or the stores have to negotiate with the transportation company. We always negotiate with Kapa Transport. We always get good rates, I'm sure my transport doesn't event represent 8% of my sales» (7). The manager also mentioned the importance of **signing a contract with the supplier to guaranty the prices during a certain period**. «The problem was their prices, but, now, if we sign a big contract with them, the prices will be lower, you know [...] it's a guaranteed clientele, so they will set the price accordingly [...] And they have a volume discount at the end of the year» (7).

In order to offer nutritious foods at lower prices, some managers suggested **ordering foods in bulk**. One manager gave his tip to save on his orders: «Like flour, I know that once a year there is a really big special. So off course, that week I will order 2 pallets» (10). Another manager explained that some items are easier to buy

in bulk than others: «what I have done is I actually bought a pallet of water, a truck full of water actually, and we are going to do really good deals on bottles of water. It is a lot easier to do that cause water doesn't go bad in the next week» (2). Other managers also suggested **selling certain food items in bulk or in larger family-size** packages, in order for the customers to get more for their money. One manager said: «We bring meat packages and it is cheaper [...] because you can get a whole box of meat [...] for like a 150\$, [...] when they bought it fresh it is 300-400\$, so we do those things for the families that ask» (6).

Some store managers suggested that **selling items that require less preparation for the stores** may help reduce prices of foods by lowering labor costs. «People are surprised how cheap it is, it is comparable to down south, it is not that bad, [...] Cause we are not doing anything to it, [...] we just price it and we put it up. It doesn't cost any extra» (6). For example, the manager said that the price of food «can be much lower if you are buying bulk food that you are actually preparing [at home] instead of buying bagged chicken for 30\$ you can buy the other chicken for 14\$ and cook it» (6). And, the manager also said: «Just as soon as sell [the pineapple] whole, it makes our lives easier [...] [and] I would rather bring in boxes of pineapples whole and sell it to families at a much cheaper price» (6).

Some managers suggested **finding ways to decrease waste**, in order to be able to offer nutritious foods at lower prices. One manager said: «if we are not throwing out as much, obviously the cost will go down a little bit» (2). For example, that manager suggested **developing an ordering tool to reduce waste**: «head office is always trying to find new ways [to reduce waste]. [...] So they've developed an ordering tool. So that we know exactly how much we need to order, so we don't run out before the next order, and we don't have extra to throw out [...]. Cause they've got years of history on the store. What that will do is decrease the amount we are throwing out which would help decrease the pricing» (2). And another manager also suggested **reducing prices of certain fruits that may be too ripe**: «Are there any bags of bananas on the counter? [...] What that is, [is] instead of throwing them out, what I do is [sell] baking bananas, it's overripe [...]. So there is a banana bread recipe [on the paper bag], and they are 1.49\$ a kilo. So they can buy those [to cook]. So we are not throwing it out. Less waste and we can keep the price down» (12). And instead of having waste, one of the manager suggested **reducing the price of certain items that the store has too much off**: «Like this week, because there were too many, I put the cantaloupe on special» (7).

Furthermore, managers suggested different way of offering discounts, which could increase access to certain nutritious foods in the stores. First, some managers suggested **offering specials on healthier food items**. For example, one manager said: «We could have specials on fruits and vegetables too. [...] I think each week, we should put a fruit or vegetable on special, people would buy more» (7). Some managers also stressed the importance of **avoiding specials on unhealthier items**. «it has to be as less accessible as possible. We shouldn't have specials on those products; we shouldn't encourage the sale of those products» (7). For example, one said: «The pop, I never have promotions on pop» (10). Some managers also suggested **offering discounts on selected foods during health promotion activities**: «I think maybe if we could do specials on

[...] a star food or something, and we did a sampling for it, maybe we could have a good special that week for the star food» (2). And finally, one store also mentioned **offering discounts to elderly customers** or to all their customers **on specific days** «we have specials on Mondays for everybody. You get 15% off every Monday. [...] And the elders, they get it every day cause they don't have much money» (11).

Table 7: Summary of the perception of the issue and solutions related to STORE MANAGEMENT PRACTICES

Perception of the issue of access to nutritious foods	
Availability	Affordability
<p>Some stores are owned by a private owner/company</p> <p>Some stores managed by Head office: Northwest Companies, FCNQ</p> <p>Some stores affiliated with Loblaws or Sobey's: AXEP, Intermarché, OMNI</p> <p>Some stores are community stores or coops</p> <p>Head office negotiate with company to carry products</p> <p>Difficult to manage budget for private business</p> <p>Orders are limited by budget constraints</p> <p>Some customers have accounts at the store</p> <p>Difficulty in managing customers' accounts: People employed or on income security pay every 3 months</p> <p>Unpaid customers account have an impact on availability</p> <p>Make bigger orders when receive payments of customers' accounts</p> <p>Business goal: needs of the community VS profit</p> <p>Stores sell what sells most, to make profit</p> <p>Stores' relationship with the community/Way it is perceived</p> <p>Food supplied according to need of the community</p> <p>Hard to find experienced manager and employees</p> <p>Employees' absenteeism</p> <p>Employees' lack of knowledge: fruits/vegetables, ordering, hygiene</p> <p>Difficulty in managing fruits and vegetables</p> <p>Difficulties in using supplier's informatics ordering system</p> <p>Need to send orders to supplier in advance, before the deadline</p> <p>Look at the inventory before ordering</p> <p>Less food items available just before delivery</p> <p>Some stores have planograms (prepared by Head Office): what products to order and where to place them in the store</p> <p>Some items are not sold because not on the planogram: no space</p> <p>Difficult to change the layout of products in the store: would have to change planogram</p> <p>Lot of waste</p> <p>Some items are not ordered to avoid waste: don't sell enough</p> <p>Some foods are ordered once in a while: broccoli</p> <p>Sometimes some food run out: tomatoes</p> <p>Certain stores have little variety: bread, meat</p> <p>Some stores sell a variety of products: bread</p> <p>Some stores sell only frozen meat</p> <p>Certain stores sell products of lower quality: meat, expired foods</p> <p>Some stores sell products of higher quality: meat</p> <p>Stores have to respect food safety measures, get rid of expired products</p> <p>Some stores offer ready-to-go meals and snacks</p> <p>Sometimes ready-to-go recipes are too salty</p>	<p>Some stores are more expensive than others</p> <p>Some stores are owned by a private owner/company</p> <p>Some stores managed by Head office: Northwest Companies, FCNQ</p> <p>Some stores affiliated with Loblaws or Sobey's: AXEP, Intermarché, OMNI</p> <p>Some stores are community stores or coops</p> <p>Some stores have more purchasing power than others</p> <p>For some stores it is their Head office who manages prices</p> <p>Stores of a same company try to standardize their prices in an area</p> <p>Store takes same percentage of profit on all items in their store</p> <p>Some stores take more/less profit, depending on the category of item</p> <p>General markup/Percentage of store profit pre-establish with supplier</p> <p>Business goal: needs of the community VS profit</p> <p>Hard to find experienced manager and employees</p> <p>Have to manage budget when ordering</p> <p>Errors may happen</p> <p>Sometimes problems with computer system that manages prices</p> <p>Some stores adjust prices when overpriced or underpriced</p> <p>Prices have to be checked in computer system before ordering, but don't always have time</p> <p>Some stores deal prices with suppliers</p> <p>Some stores are not dealing prices with suppliers</p> <p>Cost encountered: transport, labor, employees' traveling, unpaid customer's accounts, lease, electricity, maintenance of building</p> <p>Some stores overestimate the cost of transport</p> <p>Customers have accounts at the store</p> <p>Lots of waste</p> <p>Waste add on to the cost of foods</p> <p>Prepared/ready-to-go foods are more expensive due to labor cost</p> <p>Less promotions in the North: less competition</p> <p>Store has an Everyday Low Prices program: fruits keep at lower price</p>

Solutions to improve access to nutritious foods	
Availability	Availability
<p>Getting to know the community</p> <p>Offer foods that correspond to the specific need/taste of the community: community-specific</p> <p>Hire employees that have a good contact/relationship with community</p> <p>Provide training/information/support to stores employees</p> <p>Order new foods upon demand</p> <p>Order less popular foods once in a while or in small quantity</p> <p>Order for customers for special occasions or specific demand</p> <p>Offer a variety of nutritious food items</p> <p>Order fresh products: fresh meat</p> <p>Limit the variety of unhealthy food items</p> <p>Adapt availability of items to seasonal activities: hunting, hockey, etc.</p> <p>Offer foods that complement traditional foods</p> <p>Offer healthy ready-to-go or value added foods</p> <p>Try new foods customers might like</p> <p>Promote nutritious foods: Cross-merchandise, sample, make more visible</p> <p>Use store health promotion program, where available</p> <p>Order and sell promoted healthy foods</p> <p>Donate food items for health promotion activities: booth, testing</p> <p>Adapt layout of the store, planograms</p>	<p>Affiliated with major supplier to have buying power</p> <p>Group with other business to increase purchasing power</p> <p>Compare prices to other stores and match price to competition</p> <p>Adjust prices of nutritious foods when overpriced</p> <p>Adjust prices of unhealthy foods when underpriced</p> <p>Take less profit on healthy/essential items: baby foods, meats, produce, flour</p> <p>Take more profit on unhealthy/unessential items: ice cream, pop, chips</p> <p>Sell essential items at the same price than down south: meat, milk</p> <p>Redistribute extra transport fees on unhealthy food items rather than on the healthy items</p> <p>Negotiate prices of foods with supplier</p> <p>Negotiate transport fees with transport company</p> <p>Sign a contract with the supplier to guaranty prices during a certain period</p> <p>Order food in large quantity: truck full of water</p> <p>Sell food in bulk or family size</p> <p>Order bulk items for specific demand</p> <p>Sell food that require less preparation for stores to reduce labor cost</p> <p>Find ways of decreasing waste</p> <p>Develop ordering tool to decrease waste from sales statistics</p> <p>Reduce price of items for immediate consumption to avoid waste: ripe banana</p> <p>Offer discounts on nutritious foods store has too much of to avoid waste</p> <p>Offer discounts on nutritious foods during health promotion activities</p> <p>Avoid specials on unhealthy items</p> <p>Offer discount to all community members on a certain days</p> <p>Offer discount to elders at all times</p>

STORE MANAGERS

Perception of the issue

Availability

Many managers mentioned that **their own personal eating habits, tastes or needs** influence the availability of food in their stores. One summarizes it well by saying: «It's simple; I keep everything I would buy in a grocery store» (7). For example, he said «Pâté [...] I order that because I like it once in a while» (7). Another manager also explained: «[in] this store we have a lot of fruits cause we love fruits» (6). And, while wincing, a manager explained «we definitely don't carry liver» but his colleague replied: «You see, that is your reaction to it, [...] but they really like it» (6). During the interviews, we could see that **their family members** also influence them: «That time when I did my order, [he] wanted those seeds» (11). That store manager also mentioned «order[ing] a lot of things for [...] diabetic» (11), because someone in the family is diabetic. Finally, another mentioned ordering one's «favorite candy bars» (1).

Furthermore, the **personal beliefs** of some managers also seem to influence the availability of nutritious food in the stores. For example, some have beliefs about certain foods and the way bodies function (i.e. content of certain meats, wheat and gluten, conservation process, intolerance, sugar addiction, nutrients and energy and dieting). Of course, these beliefs influence their choice as to what to sell in their stores. Some bring in wheat-free products and vegetables used for dieting, while others seem to avoid certain meats that they perceive as less healthy.

Of course, **health interest and awareness** may vary from one manager to the other and influence the availability of nutritious foods in the stores. One said that for «healthy food, it depends of your [manager]. You know, you have to be open, and everybody around you has to be open too. Some are completely close; they don't want to hear about it [...] that is the hard part in the North, some are open but others are not yet» (10). But during the interviews, the store managers showed interest, and some even asked for more information. One of them said: «I love this, I should probably have been a dietitian» (12). Some want to know more: «we are trying to have more healthy food, and I want to learn more too. How to have healthy food, like meat, how to cook it in a better way. That would be good» (4). And one manager gave an example of how his interests impact his work and the availability of nutritious foods in his store: «I try to include a lot of brown bread. And the other kind, I don't know what you call that. There is multi-grain in it, but not that much» (11).

Sometimes, the managers' **lack of knowledge about certain products** may impact the availability in the stores. For example, one said: «I don't know much about stuff for children. What I have a hard time to know [is how to] order the milk, like Similac. [...] Everybody wants something different. I don't know which ones to order» (11). Another manager also talked about their lack of knowledge of fruit and vegetables' conservation which impacts the quality of what is found in their store: «for the fruits and vegetables, we are not that experienced in keeping [...] them, you know. Like can you keep them in a basket or can you keep

them on a plastic? [...] Or, you know, like things like that. We don't really know» (8). One manager mentioned that freshness didn't seem to be a priority for some managers: «I go there, nothing is fresh. You know, like bananas are like wrapped up, you know» (6). But, it may partly be due to the lack of knowledge about conservation of those foods.

The managers' **management knowledge and skills** may influence availability of food in the stores. One said: I like working here. [...] [At my other job] I learned a lot and then I know how to do [the] order» (8). Another explained how he learned were to place nutritious foods on the shelves «The cereals, you know, at eye level, we try to put the cereals that are good for the health, the sweet ones at the bottom. [...] And, there were four rows, and I cut down to two. [...] I learned that at the coop [where I use to work] there was a dietitian. Everything that was sweet, for children, we wouldn't put at eye level» (7). As we can see, some are **experienced managers**, some worked elsewhere in the North or outside the region: «I've been in the North for 30 plus years » (5). «I did 12 years [in another store], and [...] I was in Iqaluit before, when I was a lot younger» (2). Of course, their experience influences their management practices and skills. But from what a store owner said, it is **difficult for them to find an experienced/skilled manager** to take care of their store. That owner said: «Sometimes I want to let go of my other job [...] Cause it is very hard for us to find a manager. [...] [we] have another worker [...] she can do the orders. And when I'm gone she takes care of the store [...] not many people know how to do the orders» (8).

Some store managers are from the community where they work, while others are not. Some have also been in the region for many years. During the interviews, we could see that the **contact or relationship** the managers have **with their communities** influences the way they manage the stores and the availability of food in their stores. One said: «I'm very very community bound I guess [...] everybody knows my name, I know all their kids and grandparents [...] and I have a family I look after secretly» (12). And, when asked if the customers were coming to see him when they had demands, a store manager replied: I've been around long enough, [...] everybody in the community knows everybody» (5). And during the interview, many customers even came by to speak to him about certain foods they wanted or the expiry date of a product.

Some managers seem to have **personal motivations** toward the store or a strong desire to help people, which may influence their management practices, as well as the supply and quality of food in their stores. Some of them **own the store** or had the store in their family for years: «We never did anything for the store, you know. It was always my parents that did everything. I was telling [the co-owner] we should work hard on the store and try to upgrade it. I know we have to make lots of sacrifices, you know, especially in the money» (8). Others also mentioned their **desire to help**: «I don't own the store, I'm not here to do any harm, I want to help. Be as fair as possible, because when I got here everything was falling apart: [...] expired products, hygiene... But it changed a lot» (10). And, another also said: «I'm open to anything. Cause I'm also part of [a fundraising organisation]. They don't have a lot up here apart [from] me, but we raise a lot of money for sick kids. And we would like to get them healthy as well. That's what I was doing back [where I am from], on my

time off, so I'm definitely all for helping other people» (2). And one even said: «I can't stand seeing companies taking advantage of people. You know, here we work for them» (7).

Finally, some store managers mentioned that they sometimes **collaborate with healthcare workers** to promote healthy eating habits or lifestyles, and increase availability of certain nutritious foods. For example, one said: «[I'm] trying to work with [the nutritionist], when she does a recipe, she lets me know and I bring the food in and I put it on discount so women will try it» (12).

Affordability

As discussed earlier, some managers seem to have **personal motivations** such as owning the store or desiring to help, which also influences the affordability of food in their stores. One of the store owners said: «That is what my main goal is [...] Our business is about providing nutritious affordable food for everybody. That's what [...] our long-term goal is for the store. [...] Cause in our thinking, this price at the bottom on your chart here [in Montreal], this price here should be available out here [in the community or the region]. [...] It should be possible everywhere» (1). Another manager also talked about his desire to help: «I just want to help [...] but be as fair as possible because when I got here [...], it was close to bankruptcy» (10). And he later added: «I try to be fair, but it is not always easy, you want to please everyone but at the same time you know you please people, but not everybody is happy» (10).

As mentioned earlier, the **contact or relationship** the managers have **with the community members** help them understand the reality and needs of the families: «we have a food income, us here, by the time I'm half way through the month my food income is gone because sometimes people come in here, they have no food and I will give my food income, cause seriously you can't watch somebody that you know and they are struggling» (6). That manager added: «[I know someone] here, again, who uses about 80% of her income [for food] and when the meat comes, you won't believe how much money she spends. So we try to give her a deal on it, because at the end of the day, [...] she's in a home that the income is not that high. [...] so at least she gets to feed her kids fresh meat and something good» (6). As we can see, in some cases, relationships store managers have with community members may influence affordability of foods.

Depending on the type of business, some managers have a large influence on prices of food items. One manager explained that **it depends on their priorities**: «It depends on the manager and all; where the manager puts his priorities. For sure, sometimes it doesn't make others happy to put some prices higher and others lower» (10).

Some of the managers have a lot of **experience**. Their experience as managers allowed them to acquire valuable **knowledge and skills**, which can have an impact on affordability of foods in the stores. One

manager knows from experience that he must wait to find out how much profit was made to offer promotions in his store, he explained: «I offer some little internal promotions [...] [but] I want to know how much profit we made, I don't want to put them in trouble» (10). Another manager also knew from experience that there was something wrong with the price of a food item when a customer complained about it: «I called [the supplier], the guy told me to put it on promo [...] I was making 37 % I think, I decreased it, [...] I know it shouldn't be that price» (7). As we can see, having an experienced manager seems to influence the price of foods in the stores, but one of them noted that it is **hard to find an experienced manager** that can manage the budget and the orders: «not many people know how to do the orders [...] First time [our employee] did the order, she did a big order.... She did an order of 8000\$ just for one supplier [...] I called [the supplier] to tell them if they want to divide that order into two payments [...] and the week after, we just ordered what was really needed. So then we had another invoice of 6000\$ after, that's OK, but we have to use a budget when we do the orders» (8).

STORE MANAGERS

Solutions

Availability

Having **experienced managers** seems to be a great asset for the communities since throughout their past experiences they have acquired knowledge and skills that can help promote or improve access to nutritious foods in their stores. For example, one manager shared tips he has learned from a past experience: «That is [...] my background; we would always tried to bring new things... Cross merchandise it... So we [would] get a new kind of Cheerios which is healthy, we [would] put it right next to the bananas and we [would] do a little [marketing] or we [would] do samplings. So if we [would] bring in a new products, we [would] try to bring it in front of the store, so customers [could] try [and see] if it's something they would like» (2). Another manager also explained how his experience benefited the management of his store: «I manage a coop [elsewhere] for 25 years, sometimes with my boss [...] we would go around the store and he would say: Hey! [...] don't forget this. He had a way of seeing things. Sometimes, I was asking: How do you see all this? He said [...]: One day, you will do just like me, when you will have experience, it will be easy. Sometimes [...] I would go around the store and I would tell [an employee]: Watch this thing there, [...] watch this thing there. And after a few months of doing this, she said the same thing to me: [...] how the hell do you see all that? And, I remembered that man. I told [the employee] when you will have my age; you'll do just the same. [...] It comes with experience [...] I am happy; that's what I like to do, show others, especially to the Crees [...], because they have been taken advantage off in the past, but they can do it themselves» (7).

Furthermore, having managers that have a good **relationship with, or that are from the community** helps to understand the needs of the customers and to offer a variety of products corresponding to their needs. While laughing, one of the managers explained how his family and community ties motivate him to improve the availability of nutritious foods in his store: «Well, you saw my granddaughter [...] I also want her to have the choice of products. I'll bash it in her head to eat her vegetables. (laughs)» (5). Another manager even explained how having community members as part of his management team is an asset: «we promote local for supervisor roles, which is really good. [...] [The customers] are more open to those people, and they are not shy, 'cause they might [have] known them for years, I guess. So that helped that our produce manager is local from here, and he talks to everybody, and if they want to ask for something, we will bring it in and see if we can get it. It's good to have them in management roles as well. They are great asset to the team» (2). **Having a manager available in the store to receive demand** from customers appeared essential to immediately address customers' demands.

Some of the store managers also emphasized the importance of **having managers that have the needs of the community as a priority** in order to improve access to a variety of safe and fresh nutritious foods. One manager focused on freshness and quality: «[If] you look now, everything is fresh. If we don't take the time

down there for two hours to cut the fruits, nobody will buy it whole» (6). «We have very good quality [...] Again, it comes down to the store. Are they serious about having fresh healthy stuff? We work very hard to make sure that our produce is fresh» (6). Another manager concerned about food safety in his store said: «It changed a lot [since I first got here]. Just when they were preparing their chicken, I was going crazy [...] they were letting it thaw on the counter to cook it the next day! They don't ever do that anymore» (10). Finally, another manager concerned about the health of his customers asks his employees, when they prepare the ready-to-go meals and snacks, to add new fruits for the customers to try, to trade a slice of white bread for a brown one or to add grapes and cheese on the side (9).

One of the managers also showed the importance of **involving a manager that knows the needs of the community in the planning of the layout of a new store**, in order to respond to the customers' needs and preferences. «I drew the layout completely [...]. You know, usually in town, you order a layout, you ask for six feet of this, this and this, but it's not like that here, you need to go with the people too; what they like and what they don't like. [...] I adjusted everything myself and ordered new products, what I thought [they would like]. You know, after a while, we get to know the people too» (10).

Finally, some of the managers showed the importance of receiving **information or training** regarding topics such as food, cooking, health, ordering and food safety or conservation. One manager said: «I think it's good, when someone comes to meet you and has more information than you. Because, everything is going fast and sometimes you realize: Ah! I forgot that» (10). After receiving information on the previous project on access to nutritious food, one of the managers said: «I think it is not just [about] educating [the customers]. It is also [about] educating the stores, right? [...] In this store, we discovered we will bring in stuff that we didn't think anybody [would buy] [...]. Maybe give them this list and have them do trials and see if they bring some of these in what kind of reception they would get. [...] Maybe we will try some of these things out here and see» (6). One manager also showed interest in receiving information or training about conservation of fruits and vegetables: «for the fruits and vegetables, we are not that experience in keeping [them] [...] [but the] *Ministère de l'Agriculture* [MAPAQ], They came once. [...] They were telling us that we can take a course of how to manage your fruits and vegetables. [...] they said that they have it online» (8). And, one manager said: «we trained our staff to do all the ordering. I have a grocery manager who does all the grocery; I have a produce manager and one guy who take care of the dairy products» (2). The information and training provided to the store managers can influence access to nutritious foods.

Finally, some managers are **interested in receiving cooking ideas and tips**. For example, one said: «I ordered a lot of things for [...] diabetic, I had to order spinach [...] I'm looking for things I can use with spinach» (11). And another one also added: «we are trying to have more healthy food, and I want to learn more too: How to have healthy food, like meat, how to cook it in a better way. That would be good» (5). We see in the interviews, that it is often knowledge or tips that they will share with the customers, and that can help promote certain nutritious foods within the store. For example, one said: «It's funny, sometimes when

we order products that they don't know, they will ask: What can we make with this? What's that? I ordered spaghetti squash. I don't think we have any more. [Someone] asked: What's that? Well, it can replace pasta [...] I learned about that from my mother [...] have a look on internet, it replaces pasta» (10).

Affordability

During the interviews, we could see that **having experienced managers** could influence the price of foods. One explained how he manages promotions in his store: «I offer small promotions, but when we will have the sales statistics [...] we will be able to decide how much promotions we can offer [...] I want to know how much profits we made» (10). And then, another manager explained how he reduced the price of flour when a customer complained of its high price: «I put it down to 12 %. [...] [I said to the customer:] I'm sorry I hadn't realized we were selling [the flour] at that price. [...] I said, [in the other community where I was working], we were selling it [at a lower price]. She looks at me, Oh! That's where I've seen you! She left and said: I'm sure we are going to have some good deals. [...] I have to check that again [...] there must have been some price changes [while I was away]» (7).

It is also important to **ensure availability of the manager in the store in order to address any price errors or issues** which may arise. One of the manager explained how he is open to discussing price issues with his customers: «Sometimes, I was telling my customers [...] don't be shy to tell me [if there is an issue with the price of an article], but I was also comfortable telling them [...] come, I will show you the price in town and the price I sell it at» (10).

Some managers also underlined the importance of **having a manager that has the needs** of the community as a priority. One of them said: «It depends [...] where the manager puts his priorities. [...] sometimes it doesn't make others happy to put some prices higher and others lower. So you offer promotions, whenever you can» (10). Of course, the store must remain profitable, but that manager tries to offer promotions as often as possible. Seeing health of the population and the quantity of junk food sold in his store, another manager suggested: «what [we are] trying to do is get the store to raise pop, chip, chocolate bars: all the junk food, raise those prices to keep the good stuff lower. We are trying [...] if they look and say here is a chocolate bar for 2.50\$ but I can buy the grapes for a 1.95\$ [...] Instead of raising the cost of the produce [...] that's what we are trying to do» (12).

Finally, some store managers also underline the importance of **having access to information or trainings**, and showed that it could have an impact on the price of foods. One of them suggested: «Maybe giving information too. I will like it when you will come in the store for that [Nutritious Food Basket project] [...] And, it is possible that we make mistakes. [...] But I think... I'm happy with what we've got now. [...] we can all improve [...] we have to adjust, compare» (10). Another manager also mentioned that training can be

provided to learn how to do the orders. The manager said: «We just train them, we can train anybody» (2). And then he further explained: «It's more experience in your staff in ordering. So it doesn't really matter where you are, as long as you order properly. If you order like crazy, and you get all the stock in back shop obviously it's going to go bad. [...] as long as you don't go overboard, you should be fine» (2). We see here, that training on how to order could help reduce waste and, therefore, improve the price of foods.

Table 8: Summary of the perception of the issue and solutions related to STORE MANAGERS

Perception of the issue of access to nutritious foods	
Availability	Affordability
Personal eating habits/taste/need of the manager and his/her family Personal beliefs Health awareness/interest of the manager Lack of knowledge about certain products: baby formulas, fruits and vegetables Management knowledge and skills Freshness doesn't always seem to be a priority Some are experienced manager Hard to find experienced an manager Contact/relation with the community Personal motivation: own the store or not, desire to help Collaborate with health workers or local organisations	Personal motivation: own the store or not, desire to help Contact/relation with the community Management knowledge and skills In some businesses, managers have a large influence on prices: depends of their priorities Hard to find experienced an manager Some are experienced managers
Solutions to improve access to nutritious foods	
Availability	Availability
Hire experienced managers Hire managers that have a good contact/relationship with the community or are members of the community Ensure availability of store manager to receive demands from customers Hire managers that have need of the community as a priority: health, freshness of products, variety Involve managers in planning of store layout to respond to customers' needs Provide information/training to stores managers: food, cooking, health, ordering and food safety/conservation	Hire experienced managers: to manage prices and profits Ensure availability of the store manager for the customers to address price error/issues Hire managers that have need of the community as a priority: health VS profits Provide information/training to managers: price of the nutritious food basket, ordering

SUPPLY

Perception of the issue

Availability

The **choice of supplier** influences availability of foods in the stores. From the information gathered during the interviews, stores of Eeyou Istchee are mostly supplied by Ben Deshaies (Amos), Sobeys (Montreal and Rouyn), Loblaws (Montreal), Northwest companies (Winnipeg) and FCNQ (Montreal). Some stores also have other meat, bread or chip suppliers. Most stores have more than one supplier, but a few of them seemed to have only one. In general, stores have one main supplier, plus another supplier (or more than one) from which they can order items they can't get from their main supplier. «The items we can't get from Sobeys, we get them from Ben Deshaies» (7) said one of the managers.

The choice of supplier is partly influenced by the **quality of food received**. Some store managers are satisfied with the quality of the food they get from their supplier, while others are not always satisfied. For example, one said: «I've had a lot of good word from the customers; our stuff is probably the freshest they see in town» (1). Another manager said: «when we order fresh [products], [...] especially the strawberries and raspberries, sometimes we don't always get those cause when we get them, sometimes they are no good [...] and we have to send them back. Same thing with the vegetables, like lettuce and stuff like that. [...] And we don't have them [in store] when we send them back! (laughs)» (11). Another manager agreed and said: «when they bring stuff too, like Ben Deshaies, [...] we have to watch when it's coming in or sometimes [...] the whole thing is going to be rotten [...] like the strawberries» (8). That last manager compared his suppliers and said: «I think Sobeys has more quality than Ben Deshaies» (8). And, finally, another manager explained: «I would say that sometimes there are some mistakes, sometimes we receive a case that's not good, it happens, but with Loblaws it is really rare. [...] For example, with Ben Deshaies, when they have expensive products and they don't sell them all, they send poor quality, you know. Like cherries, they are expensive, so it influences the quality we receive» (10).

Some managers mentioned that they **can order almost any products** from their suppliers: «We order right from Sobeys warehouse, so selection-wise we can pretty much order anything [...]. Anything Sobeys can get down south we can bring up here [...] pretty much» (2). But in some cases, store managers report that **some items can't be ordered** from their main supplier or are **not available in their preferred format**, which influences availability of certain food items in their stores. One manager said: «We don't always get our food from Sobeys. [...] but we put notes up» (12). Another manager added: «This morning [...] I looked [at the turnips and asked] how come they are so small? She said that's what they are sending us now, in small bags. That's not what we want. They are like potatoes, not turnips. And for cabbage and things like that, it's the same. With Ben Deshaies, if she wants 12 cabbage or 12 turnips, she writes 12 and she will receive 12, and they are nice. They might be a little more expensive, but the customers will have better quality» (7). Furthermore, some managers will **refrain from ordering certain items available in larger quantities than**

needed in order to avoid waste. For example, a manager said: «But when we order it, we have to order it by the case. [...] Pineapples, if I order six, [...] I will sell maybe three or four» (8). Therefore, these items might not be available in the stores on a regular basis.

Store managers said that, sometimes, when they order some food items, their suppliers **don't have them** in stock. One manager explained: «sometimes, [...] if we order something that we never did, they won't have it in stock. Then they will say, only available in two weeks' time or in one week's time, you know» (8). And, another manager explained that some new items requested by customers may not be available in Quebec: «people [...] said: Can you order this? And I ask them, just bring me the paper or can [...] And I will try to order it [...]. But sometimes you cannot get what [they are asking for] [...] 'Cause [...] There are some things Quebec cannot sell, that Ontario has or other places» (11). Finally, supply of certain fresh foods, such as fruits and vegetables, is often based on **what is in season**, which may explain that some items are not available all year around. «Pears and peaches [are] seasonal» (12) said one of the managers. And another manager also said that in the fall, there is no more lettuce from Quebec, so they have to import them from United States (9).

Some of the store managers also mentioned that suppliers influence availability in the stores by promoting specific foods. For instance, in Eeyou Istchee, stores are usually small and some managers said that their **supplier considers them like convenience stores**. «[They see us as a] convenience store. If there are products they can't get, we need to make a special request, it's not supposed to be like that. [...] Especially now, with Sobeys [...] we really are a small number for them» (7). And, then, the manager also further explained that even **the promotions** they receive are targeting convenience stores. «When you call Sobeys, [they say]: No sir, you receive your promotional flyers with your specials, that's it. But they are specials for convenience stores. We receive a flyer, but you know, it's chocolate bars, boxes of chocolate, pop, there is really nothing basic, you know» (7).

Suppliers and large food companies also influence availability of foods in the stores by offering **volume discounts and equipment**, and **paying for shelf space**. One manager explained: «If I buy for a million dollars, I get [...] maybe 2% of volume discount at the end of the year [from the supplier]. If I buy for 2 million, I might get 3%. But, that's the problem with the suppliers and the wholesalers; it's the same thing for them too. If they are with Coke and Coke says, if you buy 300 thousand cases of Coke this year, you will get this much [volume discount] at the end of the year. And, if you buy 500 thousand cases, you will get this much at the end of the year. [...] instead of getting a 500-thousand dollar check from Coke, they will get a 800-thousand dollar check. And it's the same thing everywhere in the store [...] The wholesalers work a lot with volume discounts. And the companies even pay for the shelf space. That's why there is a lot... they call that franchise. It's not the guy in the store who decides how many rows of this and that there are» (7). Another manager also said that «Pepsi and Coke provide free coolers for their clients» (1). Of course, foods for which stores and suppliers have received incentives are probably more available in the stores.

Affordability

The **choice of supplier** also influences the prices of foods in the stores: «Whatever price we get with [our supplier] we pass on to the customers» (1) said one of the store managers. **Prices in the stores vary according to which supplier they come from:** «We found that some of the vegetables are very expensive too [...] but how much we are paying, it is expensive» (8). One manager explained how he has to **manage prices according to the supplier:** «Friday, I receive supply but at the price they are selling it, I have to increase the prices a little bit. [...] it depends of the supplier. [...] the supplier plays a big part. I look at the price I should be selling the items they are providing me. It's crazy. Sometimes, it is 2, 3 or 4\$ extra. [...] there is a big price difference [between the two suppliers» (10). Finally, another manager added: «If companies here in town stick with the suppliers they have, I don't think the price won't change too much» (1).

As mentioned earlier, some managers are **thinking of changing suppliers**. In most cases, the overall cost of food seemed to be one of the main factors influencing their decision. One of the managers said: «Right now we are using Ben Deshaies out of Amos. We are in the process of switching to Loblaw's. The quality is not bad; [but] the prices are too much» (5). But even after changing supplier, stores may still need to **order certain foods from a more expensive supplier** since some items may not be available with their preferred supplier: «Ben Deshaies is more expensive. [...] [but] I still have to order... well, some things Sobeys don't have. I have to order from Ben Deshaies» (8). Furthermore, it seems **difficult for certain stores to change suppliers**. One store manager explained how, as a new customer, their **store had to provide a security deposit** to the supplier: «we spoke to Sobeys and told them that we are interested in buying everything from them. So they said they want [...] a deposit for the food. So we are working on that. And then, maybe right now we have 5000\$ deposit with them to guaranty the food delivery» (8).

Some store managers seemed to have **access to more suppliers than others**. Those who have access to more than one supplier often **compare prices** between them. «Sobeys is less expensive than Ben Deshaies. Cause with Sobeys you can buy things by the unit. [...] But Ben Deshaies, not everything is by the unit. You have to buy it by half case or one case. One time, we tried to buy everything from Ben Deshaies and it was too expensive» (8). As we can read here, stores have to manage their supply according to the **formats provided** by their suppliers. Some items are offered by cases, while others can be purchased by unit. «Sobeys is not selling by the unit, if you order turnip, you have to order 50 pounds, but if you sell only 10 pounds in the month, you will through away 40 pounds» (7). As we can read here, food sold in larger formats than needed cause important waste and, therefore, increase prices of food sold in the stores.

Managers also reported that some food items, such as **meat and vegetables, are expensive:** «Some of the things like the meat [...] sometimes it is very expensive to get from the supplier» (8). Another manager mentioned that the **prices of their suppliers vary from week to week:** «[It is] whatever they decide to charge you that particular week [...] because prices do vary every week, especially in your produce and your meats. Produce for sure, there is a variance every week» (5). Finally, one manager explained how the price of meat

offered by the suppliers and stores is **influenced by the price of meat on the stock market**: «It seems that people living here don't look at the news [...] there is a big increase in the price of meat. But some complain that meat is expensive» (10). Prices of foods are also influenced by seasons. When foods are not in **season** in Quebec, store managers have to order foods from other countries, which can greatly influence their retail prices. For example, one manager explained that lettuces might have been 1.99\$ last week, but now they are 2.99\$ since they are imported from United States (9). One of the managers explained how the **cost of importing foods may influence the prices** in the stores: «I think it's the cost of the store to get it to the community to put it out to make some money, that's what we're all working for. I think it's very costly because the grapes might be grown in Chili and they have to get to Winnipeg and then they get to Rouyn» (12).

Furthermore, some store managers also noted that their supplier sells foods at **different prices, from one store to the other** and even suggested that prices might be **higher for stores located in northern communities**: «You would have to start off from where we get our stuff, 'cause we have our supplier. If I were to go to my supplier, as me right now, his price level is different for other companies [...]. I know it's got different price levels for the clients» (1). «Before it leaves their warehouse, before it leaves their building, it is already costing us more because they ship here. [...] It is an added cost. [...] the Band asked questions about it... why is there a big charge of difference?» (1). The managers suggested that: «Because you are from that area, they charge you more, or because you are Cree [...] I think it is an age old thing» (1).

Managers also reported that suppliers' **prices for certain food items are lower than healthier items of the same category**. For example, one of the store managers said: «So I think it's just easier to buy junk food. It is cheaper. I mean it is a lot cheaper to buy a bottle of pop than a bottle of water. It's just... I don't know how we are going to change that, it's the cost we pay for it. [...] It is more expensive to buy [water]. Like I say, if you are buying one case of something compared to a pallet or something, you will get a better deal on the pallet» (2). We see here that **prices are influenced by the quantities purchased from the supplier**.

Some of the store managers mentioned that they receive **promotional flyers** from their suppliers. But, unfortunately, due to their store size, suppliers' promotions are mostly for **items of lower nutritional quality**: «When you call Sobeys, [they say]: No sir, you receive your promotional flyers with your specials, that's it. But they are promotions for convenience stores. We receive a flyer, but you know, it's chocolate bars, boxes of chocolate, pop, there really is nothing basic, you know» (7).

Finally, managers said that suppliers influence prices in the stores by **suggesting retail prices**. One of them explained: «they suggest a retail price, to make sure you will sell. Of course, they know you will sell much more if your case of pop is sold at 6.99\$ than if you sell it at 10.99\$. If you sell more, you will buy more» (7). One of the managers also noted there are sometimes issues with the suggested retail prices: «You know, like the milk [...] I hadn't noticed there was a mistake. It's someone who told me [...]. I have a database and I had to give a general markup» (10). The suggested retail prices are useful for management of the stores, but

sometimes prices **are too high or too low**, and making **changes in the computer system can be challenging**: «for price, of course, [...] we use suggested retail prices from the supplier, yes, yes, [but] sometimes it's too much. [...] all prices are decided by Sobeys. It's in the computer system, and we can't change it. You can only change it by putting it under promo, and you have to write from this date to this date. [...] for example, I have ten kilos of flour, we are making 37 % on it, but that's not right [...]. Our only problem at the moment is [...] that we can't change it in the computer» (7).

SUPPLY

Solutions

Availability

Some of the store managers suggested that in order to provide the best quality to their customers, stores might need to consider **changing supplier or ordering part of their foods from another supplier**. One manager said: «we did look into [...] another supplier that was in Rouyn a couple of years ago but we didn't approach them since we moved. We are almost interested in [going to] see them. Just to see what kind of product they have» (1). Stores can also choose their suppliers **according to the selection of food they offer**; some suppliers provide foods which are **not provided elsewhere**. For example, one of the store managers said: «I order from Loblaws, we are the only [small affiliated store] receiving fresh meat» (10).

Another manager explained how **doing business with more than one supplier** allows them to offer a wider selection: «There are items we can't get from Sobeys, so we order them from Ben Deshaies. [...] Sobeys is big... so if they don't sell a certain number of cases per year, it's eliminated [from their stock]. There are items that sell in the North, we need to have them, [because] the customers are used to them. But in the South, they don't sell much, so they don't keep a lot of them. For products like that, we order from Ben Deshaies. Like tea boxes of 240 bags, or certain items in large quantities. Sobeys doesn't have them, but Ben Deshaies has them, so we order them there» (7). And that manager further added: «I'm transferring part of the fruits and vegetables to Ben Deshaies, because Sobeys are not selling by the unit» (7).

But, in some cases, instead of having to transfer part of the order to another supplier or refraining from buying certain items sold in larger formats, one manager suggested **asking their supplier** if it would be possible to **order smaller formats**: «we have to order it by the case, [but] maybe I can ask them if I can order by the unit» (8). Being able to order certain foods in smaller formats could help improve availability of certain nutritious foods in the stores.

Some managers suggested **using the UPC codes** to increase availability of nutritious foods in the stores. One of the managers explained: «sometimes when we go to town we take pictures of things that we don't have at the store and then with Sobeys it is very easy to look for the product 'cause you just use the UPC code and then after that you enter it. So we do it with the telex machine. And Ben Deshaies we do it by the computer» (8). Furthermore, some managers also suggested **ordering new food items in advance** to make sure suppliers will have them in stock: «if we order something that we never did, they won't have it in stock. Then they will say, [it will] only [be] available in two weeks' time or in one week's time» (8). Another manager also confirmed that new items should be ordered at least two weeks in advance: «there is always a time lag on getting stuff in [...] at least two weeks » (6).

Furthermore, one of the store managers also mentioned the importance of ensuring a **sufficient number of food deliveries** in order to offer good quality and selection of foods in the stores. He said: «our main supplier is Loblaws [...] we had one order [per week]. I just heard last week that we would be getting two orders from Loblaws. So I won't need Ben Deshaies for the fruits and vegetables anymore, it will help us have quality and better prices. [...] [with one order] there was always something missing, ten items or so» (10).

Finally, some managers underlined the importance of **inspecting the quality of the products they receive** in order to be able to offer foods of good quality to their customers: «We have to check on all the quality of the vegetables» (8). A second manager agreed and said: «I call them [...] I take **pictures** [...] the mold [...] they don't like to receive that, so they apologise [...] I'm happy to do it because I know it's because someone hasn't done its job. Last week, it was the first time [...] the box wasn't good. [...] so they received pictures» (10). One manager further added: «we **return** it right away and they give us a credit right away» (8).

Affordability

Some managers suggested that **changing supplier or making changes to their supply would help improve prices of foods** in their stores. One of them said: «I know there are other suppliers that might have fresher products, at lower price [...], finding [...] a supplier-partner that won't [add extra fees] that would be really awesome. I am almost certain I found one» (1). Another manager also explained: «Right now we are using Ben Deshaies out of Amos. [But] we are in the process of switching to Loblaws [...] [to] obtain better cost» (5). In order to decrease prices of nutritious food items, one manager also suggested **avoiding suppliers who are more expensive** as much as possible. «I don't know about the others, [...] it depends of their suppliers too, but I think that with the right supplier and the right prices, it's **possible to offer fair prices**. [...] It depends of the supplier. I would say that I would buy from Ben Deshaies as less as possible» (7).

Managers also recommended **dealing the prices with their suppliers** in order to be able to offer better prices in the stores. «We'll negotiate enough with Ben Deshaies, that we will get almost the same prices. [...] I took Loblaws' catalog, and at the end we had no difference, because they were also offering a volume discount. [...] [And] the prices were good, but of course you have to check, and you can negotiate. You know, we can say: Yeh, I saw a special on this and this. [...] OK, we can make you a good deal» (7). «So what we are trying to do is start off from where our supplier is, and go and ask him for a better price for whatever we are trying to provide for the people. And if he can cut his price or give us a fair price it's better for [the customers]. I mean better for us and better for the people. We would pass that on to everybody. [...] This is one of the reasons why we are looking for another supplier for some of our items and stuff. [...] Cause we are trying to find the best price we can for here» (1).

Selecting the appropriate format can help decrease prices of foods in the stores. In some cases, it might be worthwhile to order food in **bulk**, whereas for other items it may be better to purchase them **by the unit**. One manager said that «some stuff they have [at the other store] are much cheaper than us, because [...] they can

buy it in bulk. [...] I cannot buy the 24 [...], so I will buy the 12. But if I had bought the 24 it would cost me about 25 % less, and then that would pass down to the customers, so I think [...] it's the size that makes a big difference» (6). Stores can also take advantage of their suppliers' promotions, by ordering certain items in bulk: «I can order products 6 weeks in advance; because they are on special [...] it will help us have better prices, better quantities» (10). Moreover, purchasing large quantities can also help reduce prices by obtaining volume discounts at the end of the year. But, on the other hand, for certain items it may be better to purchase smaller quantities in order to avoid waste.

One of the managers suggested that **signing a contract with a supplier** could help decrease prices of nutritious foods. He said: «I never had any problem with Ben Deshaies, their issue was price, but this time if I have a big contract with them, cost will be less, you know [...] it is a guaranteed clientele, they will adjust their prices accordingly. I'm negotiating with them [...]. And, they will give us a volume discount at the end of the year» (7). Some managers also suggested that **affiliating with major suppliers** could help **increase their purchasing power** and obtain better prices for the items they order. [The price] should be better now that they are with Loblaws [...]. With Loblaws, I'm sure they've decreased. They are a big chain [...] That's the benefit with Loblaws and Sobeys, the price is much better.[...] Canned food has decreased of about 30 %» (7). Another one also said: «We are in the process of switching to Loblaws. [...] We are considered [...] a satellite of their store. We are going to use Loblaws' buying power to go directly to their suppliers and obtain better cost» (5).

While discussing the promotional flyers he receives, one of the managers suggested that the CBHSSJB could collaborate with their supplier to **promote healthier food items and offer promotions on those foods**. He said: «We get stuff like this [promotional flyer] from our supplier. What if we got something like that from Cree Health Board and the supplier? That would be something else too» (1).

Some stores **use their suppliers' suggested retail prices**, which allow them to offer prices similar to the ones found elsewhere in Quebec. «Same thing for meat, I receive meat with their price labels [...] the prices you see there, I should be adding 20%, but they are already labelled [...], so you are getting a rebate» (10). However, one manager stressed the importance of **reviewing and adjusting prices** as well. «I have a database, and I had to give a general markup [...] but after I have to make adjustments. [...] so, I have to quickly look at every item. That's too high, that's too low... Of course, for milk, you don't have a markup of 35%» (10). In some cases, **adjustment of prices may need to be discussed with the supplier**: «we use suggested retail prices from the supplier, yes, yes, [but] sometimes it's too much. We want to talk to Sobeys [...] [We have to] convince Sobeys. [...] they won't have a choice, otherwise we will go elsewhere, we will go with Ben Deshaies» (7).

Table 9: Summary of the perception of the issue and solutions related to SUPPLY

Perception of the issue of access to nutritious foods	
Availability	Affordability
<p>Supplied by Ben Deshaies: Amos Supplied by Loblaws: Montreal Supplied by Sobeys: Montreal and Rouyn Supplied by Northwest Companies: Winnipeg Supplied by FCNQ: Montreal Meat supplied by a butchery Bread and chip supplier Have one supplier Have two suppliers or more Satisfied of the quality with Ben Deshaies Satisfied of the quality with Loblaws Satisfied of the quality with Sobeys Not always satisfied with Ben Deshaies: sometimes lower quality or expired foods: strawberries, raspberries, lettuce, cherries Items not available in store when returned to supplier More quality with Sobeys and Loblaws VS Ben Deshaies Can get almost all products they want from supplier Some items not available with supplier: Sobeys, they only supply products that are sold up to a certain quantity per year Sometimes items are missing from supplier: Sobeys Ben Deshaies offers products in demand in the north, not available at other supplier Some items are not sold by unit, only sold by case Supplier's format are sometimes too large: lot of waste Some items have to be order by the case, often can't order by the unit: influence what they are going to order Some items that sell in the north are not available from supplier: large tea box, bulk Need to order new item in advance Some products can't be sold in Quebec, but are sold in Ontario Supply of food based on what is in season: fruits and vegetables Can't get some items; supplier consider store as a convenient store: small size store Supplier send a promo flyers: corner store specials since small store Suppliers and food companies offer incentives to influence sells: volume discounts, equipment Food companies pay for shelf space (in franchised stores)</p>	<p>Price of supplier influences price in the stores Prices in store are managed according to which supplier they come from Thinking of changing supplier or making changes: due to cost Certain items have to be ordered from a specific supplier, not available with other supplier Need to give deposit to supplier as guaranty for food delivery: Sobeys Some stores have access to different suppliers Some items are more expensive since they come from a more expensive supplier: meat, baby formula Supplier is expensive: Ben Deshaies More expensive with Ben Deshaies than Sobeys or Loblaws Some vegetables are more expensive at Ben Deshaies, but quality better and less waste since can purchase in smaller quantities Some items have to be order by the case, often can't order by the unit: lots of waste Suppliers' prices of meat and vegetables expensive Certain price vary every week: produce and meat Increase in the price of meat on the stock market Supply based on seasons: local product less expensive than imported Food come from other countries, high transport fees Supplier sells food item at different prices from one store to the other Supplier sells food at high price to northern communities Price of pop is cheaper than water: purchase in bulk from supplier Supplier sends promo flyer: convenient store specials since small store Suppliers suggest retail prices Some stores are using suggested retail price from supplier Some suggested retail prices are too high or too low: flour, pop General markup/Percentage of store profit pre-establish with supplier Prices are difficult to change in the computer system</p>

Solutions to improve access to nutritious foods	
Availability	Availability
<p>Change supplier or order certain foods from another supplier</p> <p>Choose supplier that provides best quality</p> <p>Choose supplier that provides good selection of foods: fresh meats</p> <p>Ask supplier if certain items can be ordered in smaller format</p> <p>Use UPC code to order new items from supplier</p> <p>Order new food in advance to make sure supplier has them in stock</p> <p>Ensure sufficient number of deliveries to have good quality and selection</p> <p>Inspect the quality of the products upon reception</p> <p>Send pictures to supplier of items that are not fresh or good quality</p> <p>Return foods that are not fresh or good quality</p>	<p>Change supplier or make changes to supply</p> <p>Choose supplier that provides best price and quality</p> <p>Possible to have fair prices with the right supplier</p> <p>Avoid purchasing from expensive suppliers</p> <p>Deal better prices with supplier</p> <p>Select appropriate format: bulk or unit</p> <p>Order in bulk from supplier</p> <p>Order in bulk items on special from supplier 6 weeks in advance</p> <p>Purchase larger quantities to get volume discounts</p> <p>Purchase smaller quantities to avoid waste</p> <p>Sign an contract with supplier to guaranty price of certain food items</p> <p>Affiliate with major supplier to have buying power</p> <p>Use suggested prices of the supplier</p> <p>Review and adjust prices, after calculation of general markup</p>

TRANSPORT

Perception of the issue

Availability

Eight out of the nine communities of Eeyou Istchee are accessible by road; therefore, most of the food is **delivered by truck**. For the ninth community, Kuujjuarapik/Whapmagoostui, one of the store managers explained that the food is first transported to La Grande airport (Radisson) **by truck, and then, to the community by plane**. Exceptionally, one of the stores accessible by road receives fresh meat by plane twice a week from another community, since there is no butchery in that store. The manager explained that it comes in «twice a week from [the other community]. They cut it in the morning, [and] put it on the plane» (6).

Most of the managers mentioned **receiving two deliveries per week**; only a few of them receive **three** deliveries each week. In some cases, the **frequency of food deliveries** is a factor limiting availability of nutritious food in the stores. Often, **customers have to shop on delivery days** to have access to fresh foods: «people, that's what they do, when the fruits and vegetables come in, they come on Mondays, they know» (8). In some cases, some foods are available only on delivery days: «they want to get there before it runs out, 'cause by the end of the day, what we receive today... I don't have the space to store the stock for a whole week. I only have enough to keep in stock for today. We only get shipments twice a week» (1). Another also said: «We have fresh meat [...] Twice a week [...] It gets here [...], we will sell it in an hour» (6). As we see here, the number of deliveries can be a limiting factor, but on the other hand, one of the managers mentioned that the **consistency** of the deliveries **helps to manage the food orders**: «these stores are easier cause you get the consistency of your trucks» (2) he said.

Selection-wise «there is really no issue to get any kind of product up here, especially where there is the road; [...] we can bring anything up here» (2). Many managers confirm that **transport does not influence the selection** of food found in their stores, but in some cases it seems to **affect their quality**. One of the manager said: «the road is always a problem; a manhole, a bump on the road and the banana is bruised!» (1). Another one also said that the products are not always fresh when they receive them: «sometimes, [...] it comes in raw, with a bit of problem too. Some are not really fresh» (4). Furthermore, some managers mentioned that **fruits and vegetables sometimes freeze** in the transport. One of them explained: «when they bring stuff too, [...], sometimes it froze... Like eh, the vegetables were frozen [...] And we noticed that with the oranges too. Like, they are very nice, but then after that, when you cut them up, they were frozen, like there is not enough juice» (8). Some managers seemed to disagree on that point and said that **transport had little impact on the quality** of food in their stores. One of them said that transport has an impact on the quality «only if they have a problem. Otherwise no, it's pretty good» (12). This difference in opinions could partly be due to the length and type of transportation which may vary. One of the managers who had said that transportation didn't affect the quality of the food later explained that produce could freeze in winter, but not because of transport: «it could happen [it could freeze], because when the guy delivered at [the other places], he left the doors open

[...] [It's not because of the transportation] It's because the doors were open, you know! It was -40°C and he was driving around for an hour before coming here. If the pallet is at the back of the truck, yes, your bananas and tomatoes will freeze» (7). He also added: «And in the summer the same thing it will be full of dust» (7) if the doors are open too long.

Finally, during the interviews, some of the managers gave examples of **emergency situations**, which show the **impact of transport on availability of food in the communities**. A first manager explained: «well, remember that truck that caught on fire? It caught on fire with a whole truck load. It burned on the highway. It wasn't ours though. We were lucky [...] But what happened is everybody came here instead. We got lucky it wasn't our stuff. But whatever they were supposed to sell [...] we were gonna sell. [...] [If] one truck doesn't show up [the] other ones [have] to break it even. Everybody else carries that. So whatever people couldn't buy over there cause it didn't show up, they come [to buy] here. [...] OK, yeah, sells were good, but you know what, somebody didn't get his truck, it affects everybody in the community. If another truck's not going to make it, well, we will order more if we can. [If] so much didn't make it, the others' got a carry it, so everybody's got to eat» (1). A second manager also brought an example: «last year we had a fire, remember the big fire. None of the communities could get food. We were stuck. Our road, access road... Half of our communities we had [...] no food, we had no food, so I called my head office, I said, OK we need help. My community has nothing; we have no fresh water, we have nothing... So they said OK, we will put food on a plane. Air Creebec, OK, they pull out half of our freight, to get maybe two or three pallets. We had about a 150 cases of water that we donated to the community so people could just go and get it. Air Creebec brought me a bill of 20 thousand dollars, just for the food I brought in. The bill was three times, maybe ten times as much as the food I brought in, and most of the food was donated to the community. So what is the sense? Why can you not just help? So what happened is that my head office has taken half of the cost for 10000\$ and I paid the other half, now, it's crazy! 'Cause you can't expect a company to run like that. I didn't mind doing it because my community really needed it. [...] there was fire everywhere, we all needed it, but at the end of the day, Air Creebec could have made some kind of provision» (6). Finally, as we can read in both of those examples, transportation can have a big impact on availability of food in the communities of the region. Stores have become **essential services** in the communities. And, when one of the stores **doesn't receive its delivery**, it has an **impact on availability of food for the whole community**.

Affordability

Overall, managers agreed that **transportation fees are expensive**, and that it has an **important impact on the price of food** in the region. For most of them, freight is one of the major factors responsible for the high cost of food: «cost of transport [...] that is one of the huge factors in the difference, huge» (5). «You need to speak to the transportation companies and find out how much we have to pay [...]. It's uncanny what we have to pay for freight, uncanny» (12). Another manager also said: «Well, the increase is because of the freight [...] it is almost 30 cent a pound to transport stuff up. [...] So if we have 30 to 50 thousand pound on a truck.

That is where the extra cost comes from» (2). As managers explained, their **freight cost is generally calculated by weight**: «it depends of the weight too, but usually it is around 200\$ [per pallet] with the taxes and all... [For a full truck,] it's about 160-170\$ [per pallet] and you have to add the weight if it's over the weight limit. [...] Like this week, I have two pallets of water, it goes fast... And, three pallets of pops, one pallet of milk, and another pallet of Grand Pré milk... The numbers are going up fast. Everything heavy is expensive» (10). However, even if he agreed that transport has an important impact on the price of food, one of the managers said: «I look at the transportation invoices, OK it cost me that much, and my sales are that much. But sometimes I am surprised, [...] it's only 4 or 6% that week. I never went over 6% [of my sales] for transportation» (7).

Some managers also explained that the **different types of transportation** also influence the cost of foods. For example one manager said: «Our cost on freight, it's almost 30 cents per pound [per truck], and further up North... if it is on a sealift it is going to cost more, or if it is flown in it going to cost more. 'Cause the price of freight is already changing as well» (2). Another manager agreed: Maybe it's because they bring [the food] by plane» (4). As mentioned earlier, in Eeyou Istchee, foods are mostly delivered by truck, but also by plane in one of the communities.

Furthermore, in order to protect the foods, **winter wrap** is used for certain products. According to one of the managers this represents an added expense to consider: «we have winter wrap on our produce, which actually cost us more money, cause it cost money to wrap the products. So in the winter time, you may see the produce go a little bit higher in price cause it cost us more to get it here, and the same with meats, for both» (2).

The **location and distance** between the supplier and the community also seem to influence food cost (See Appendix 7 for approximate distances). One of the managers said: Well, I guess the transport it depends on [...] where it is transporting from, eh? But I know up North, it is very expensive for them. Like Kepa goes there and I guess the freight is very long too, you know. And here I think the transport is about 200\$ per delivery, for the whole thing. [...] it's always the same» (8). And a second manager also said: «I think it's the cost of the store to get it to the community to put it out, to make some money, that's what we are all working for. I think it's very costly because the grapes might be grown in Chili and they have to get to Winnipeg and then they get to Rouyn» (12).

Many managers mentioned that their **delivery company** is Kepa Transport, which, in many cases, is the only company delivering in their community: «[The delivery is by] Kepa. We use to have it with Cree Express but they are no longer available [...] Maybe the transportation is too high for us too, it's very expensive [...] Especially with Kepa, cause when we had Cree Express, it was lower [...] Now that you have Kepa it's expensive» (11). Another manager who agreed also said: «Last year, they had Cree Express, it was charging half of what Kepa was charging, [...] I think they were like a 150\$ and Kepa was 400\$. There is a big difference» (6). Overall, only a few managers mentioned that they have other transportation company options.

While **comparing** the price of the Nutritious Food Basket in the region **with other regions of Quebec**, a manager said: «you know the interesting thing is, if you look at that basket in Montreal, we are 50% more [than there]. The majority of that is transportation» (6). «the freight is very high, so the food, for instance, in Matagami will be cheaper than here. Because, from Matagami to here, it cost me an extra 400\$ a pallet to get the food here. So, naturally, the food is going to be more expensive» (6). And, one of the managers explained that for him, the only difference we should see in the cost of food is the extra transportation cost. He calculated: «my transportation cost is calculated in the system; it's between 5 to 20 % more than the price in the city. [...] Let's say we take the most expensive [region]: Abitibi is 217\$ [...] and I multiply by 1.2 [i.e. 20%]... it shouldn't be more than this [260\$]. It should be less than this» (10). But, the average cost of the nutritious food basket in the region is 312\$ per week. The manager insisted: «But it shouldn't be more expensive, normally, it should just be a percentage for transport, it shouldn't be higher than normal» (10). Some managers suggested that **if there would be competition, transportation cost would be much lower** (See COMPETITION section for further details).

Finally, some of the store managers talked about **governmental subsidies programs**. In Eeyou Istchee, only one out of the nine communities is currently entitled to receive the Nutrition North Canada subsidies, as it is only accessible by plane or boat. The stores of that community are also entitled to the Kativik Regional Government subsidies program. The stores located in the other communities are not entitled to any subsidy, as they are accessible by road. One of the store managers provided an interesting example and said that now that they have the Nutrition North subsidies the milk is cheaper in his store than in the community just south of there (3).

TRANSPORT

Solutions

Availability

Managers or their companies have to **deal transportation arrangements** from the suppliers' warehouse to their stores. While discussing a potential change of supplier, one manager said: «The only thing is to figure out a way to transport from Montreal» (1). During the interviews, managers highlighted that while dealing transportation arrangements, one should ensure that foods will be transported at a **safe temperature** and **protected in order to avoid bruising, thawing or freezing**. Some managers mentioned the importance of **using winter wrap**: «we have winter wrap, so we wrap the pallets before they come up. So they do have to keep cool, you can't have a heated truck coming up. So we have winter wrap on our produce» (2). Furthermore, another manager explained how his deliveries are protected to ensure the quality of food he receives: «the trucks are **refrigerated**. [...] They are on **air cushions** or something, [and] they are [...] **wrapped**» (7).

Often, trucks deliver for more than one store or company at the time. One of the managers emphasized the importance of keeping **truck doors closed**, as much as possible, **during and in-between the deliveries** to protect the quality of the food. He explained: «they want to close the doors quickly because they know we'll tell them. There is no truck that will drive here with doors open, he will hear from me, guaranteed. [...] we are really, really, really strict about that» (7). From what the manager explained, keeping the doors closed will help **maintain the truck's temperature and avoid any dust**.

Furthermore, one manager said that upon reception, stores should **inspect the foods they receive** to ensure the quality of the products. That manager explained: «when [they] comes, [...] we have to be there cause we have to check on all the quality of the vegetables. [...] And then, [if the quality isn't good] we return it right away» (8).

Finally, one of the managers also **recommends his customers to buy on delivery days** in order to have fresher products: «I always tell people we get our stuff on Tuesday now, if you want fresh fruit you have to buy them on Tuesday or Wednesday. When the freshest you can get is» (11). Buying on delivery day can allow customers to have **fresher products** as well as a **wider variety**.

Affordability

In order to decrease the transportation fees, one of the managers suggested that stores should ensure to **negotiate with the transportation companies**: «The company or store has to negotiate with the transportation company. We always negotiate with Kepa Transport. I would say that we always get a good rate. I'm pretty sure my transportation fees represent less than 8 % of my sales» (7).

Furthermore, some managers also suggested that the **Band Councils should be involved in the negotiation of an agreement with the main transportation company**, which is a Cree entity. One of the managers said that the **communities should be informed** of the transportation costs: «I think for instance, the communities don't know how much Kepa charges for the freight. Maybe the communities need to know, so they can ask Kepa, can you find a way to help us out, because most of Kepa's profit is coming from up here. Just like our profit is coming here. Everybody has to work together» (6). «They should talk to the trucking companies because they are taking a lot of money for shipping stuff. [...] The council can try to do something because it is half owned by Cree. They can do something about the freight costs» (6). And then, that manager later added: «the communities have to do something about this costing. Because, for instance, Kepa is half owned by Cree entities, so why can there be something that they can do to help their communities. Because, we will pass down the savings from the freight. [...] If my freight is cut in half, you will see a big difference in the prices» (6).

Some managers also suggested **distributing transportation cost on unhealthy food items rather than on the healthy items**. One of the managers said: «Yes, transportation has an impact on price [of nutritious food] if you distribute it on all items. Let's say my transportation increases of 4%, I won't increase my fruit and vegetables of 4 %. But, I will increase the chips and all my other stuff of 4 %, and it will be more profitable for me. Of course, in sales, we sell a lot more pop, chips and chocolate, than fruits. So a business person will say I won't add extra cost on these [healthy foods], it won't have much effect. If you sell for 1000\$ in fruits and vegetables, and the rest you sell for 4000\$, you might as well increase that than the other ones; it will be much better» (7).

Finally, some managers suggested **subsidizing the cost of transportation in order to decrease prices of nutritious foods**. One of the managers said: «Once a year, all the managers meet [...] we try to have different solutions, like Nutrition North was a big one. We always have brain storming ideas, to try to help the communities» (2). As most of the communities of the region are not eligible to the actual Nutrition North governmental program, some managers suggested finding other ways to subsidize transportation. For example, one said: «one of the suggestions we have been trying to make in this community is for the Band to subsidize some of that freight so that we can bring in more nutritious food and sell it at the rate of down south» (6).

Table 10: Summary of the perception of the issue and solutions related to STORE SETTINGS

Perception of the issue of access to nutritious foods	
Availability	Affordability
<p>Food delivered by truck in most communities Food delivered by truck and plane Meat is delivered twice a week by plane 1 food delivery per week 2 food deliveries per week 3 food deliveries per week People shop on delivery days: fresh produce and meat Consistency of the deliveries: help manage food orders Transport has no impact on selection Sometimes truck doors are left open during deliveries, food has time to freeze Some say transport affects the quality: bruised fruits, frozen fruits in winter, thawed foods, not fresh Some say transport has no/little influence on quality Accident on the road: food not delivered Delivery not received affects whole community = essential service</p>	<p>Transport is expensive, it has a big impact on price of food Food delivered by Kupa Only one transport company to deliver the food: Kupa Choice of a few transport companies Transport is a major factor affecting price of food Transportation fees are calculated by weight What is heavy is expensive to transport: water, pop, milk Food delivery by plane is more expensive Food is delivered by truck in most communities Food is delivered by truck and then by plane in one community Meat is delivered twice a week by plane Need to use winter wrap for produce and meat: added expense Transportation fees vary according to the distance from supplier to community Only Kupa delivers in some community There used to be another company delivering: Cree Express Cree Express was cheaper than Kupa Only a few have other transportation options Transport should be the only added fee, food should be the same price as down south plus transport only Nutrition North Canada and Kativik Regional Government subsidies programs are available in one community</p>
Solutions to improve access to nutritious foods	
Availability	Availability
<p>Make transport arrangements from supplier to the store Ensure use of winter wrap during transport to avoid freezing of produce Ensure the use of air cushions to prevent bruising of fruits and vegetables Ensure refrigerated trucks are at adequate temperature Ensure truck doors are kept closed during and in-between deliveries Inspect the quality of the products upon reception Recommend customers to buy on delivery days to have fresher products</p>	<p>Stores should negotiate transport fees with transport company Inform communities about freight cost Community band councils should negotiate arrangement with transportation company for the delivery of nutritious foods Distribute transport cost on unhealthy food items rather than on healthy items Subsidize transportation cost, even in communities delivered by road</p>

COMPETITION
WITH OTHER STORES OR COMPANIES

Perception of the issue

Availability

During the interviews, some managers mentioned the **limited competition** in the region. Some communities have only one store. And, some stores have only one supplier or have access to only one transportation company. One manager said: «that [the company] was free to do whatever it wanted before, and it was taking advantage of the fact that they were the only ones, but now, they are not the only ones anymore» (10). The limited competition seems to affect the quality of the food offered: «before, they didn't have meat of good quality [...] [that other store] sells a lot of meat of lower quality» (10).

Whereas, some stores seem to be aware of **what their competitors are selling, some don't really know**: «I don't know what [the other store] has. 'Cause if I run out of lettuce they would go over there and stuff like that. 'Cause they come here first and if I run out of something I think they go over there» (11).

Some managers mentioned that their customers **buy foods outside of the community**. One of them explained: «They are driving all the way [...] So you are looking at 13 hours just so you can go to Super C. [...] people need to get out, they have appointments, they have haircuts, they have movies, they need to take their kids to the fair in the summer. While they are there, they buy their stuff» (6). «They take advantage of those trips; they come back of those trips with full trucks of stuff» (6). Some managers also mentioned that some **customers order online**: «There's going to be certain individuals that have no choice and they have the option also of ordering online. Or they will pick up a lot of these items when they do go to Val d'Or or Hull» (5). Some of them even use those online services themselves, to order foods, which are not available in their community: «One good thing, here [...] is we are able to buy from IGA in Amos. You can order online, it is trucked up here at a very, very reasonable fee; down south price per say. That is where I get a lot of my fresh stuff, my livers, my kidneys» (5). And a second manager also said: «I don't think we can order it. No, I order it through well.ca. [...] I order mycelium, chia, corn mill, the flax seeds and then I just grind it» (12). The fact that customers have to buy food outside of the community or online, doesn't seem to be an issue for the store managers. One of them said: «the thing is, they still buy a lot of stuff here» (6).

Affordability

As mentioned earlier, store managers noted the **lack of competition in the region**, which appears to have a great impact on prices of foods. One manager said: «at least [here] [...] you have the competition that will lower the prices. If you go to another smaller community, where there is **only one grocery store**, they can put the prices at whatever they want, and people have to buy. It is the **smaller communities** where you are going

to have the higher pricing. [...] There is no competition» (2). A manager added: «In Montreal, I have a Sobeys, I have a Loblaws, I have Super C, I have all those choices. Here you have [only one large corporate store]» (6). Finally, one manager said: «the cost variance in the area... We are a third more than Montreal, which isn't bad. Price-wise, it isn't bad. 'Cause let's face it, in the big cities, you get all the competition, there is sales every week. Whereas in the North [...] there is a lot less» (5). Furthermore, managers also noted the **lack of competition in the transportation business**. One manager said that only one company flies food to their community (3) and other managers mentioned that only one transportation company was delivering food to their community. «[It's] Kepa. We use to have it with Cree Express but they are no longer available. [...] Maybe [...] the transportation is too high for us too. It's very expensive [...] Especially with Kepa, cause when we had Cree Express it was lower what we had to pay for Cree Express than Kepa. It was cheaper. [...] Now that you have Kepa it's expensive» (11).

Some managers mentioned that their **customers compare prices between stores**. One of the managers noted that some of their customers say that prices are expensive compared to other stores. He said: «the problem is that [...] a small group of people say that the store is too expensive. [...] those places have almost no variety compared to here. [...] they look at foods that are not really good, like corn beef, Puritain stew. Of course I sell those at a higher price, it's another supplier and they are selling it to me at a higher price» (10). The store manager thinks that **customers have been used to having higher prices in the communities**: «it's hankered in their mind that it's more expensive here. In their own store [...] we should be selling more, but the sales are blocked because they have it in their head that because it's [in the community], they have to go elsewhere [to get less expensive products]» (10). When they have the choice, customers shop where they feel they get the most for their money. One manager said: «sometimes people come here and buy fruits and vegetables, but then they go to corner store and they buy it over there and they tell us it is very expensive over there. It is 2\$ more expensive than here. Yeah, and they say, it is why they come and buy it here. [...] they will come and say like we want this here 'cause over there they are too expensive. They compare» (8). But, customers don't always get to choose where they purchase their food, since there are few stores in the communities.

Some managers noted that **customers often shop in stores located outside of the community or that some of them shop online** since they find foods are less expensive. «people go down south. They say things are cheaper over there but they don't take into concern their room, their gas and stuff like that out of the 300\$ they are using to go over there, they could have bought a lot of groceries» (11). Another manager explained: «I have a friend that goes to [a large super store outside of the community] because she has a big family. It doesn't matter how much it cost her to get there, at the end of the day, she saves money. [...] She brings two months' worth of food, [...] cause she can get a lot of those things in bulk» (6). One manager also mentioned that it is much cheaper to order online, he even purchases online himself: «This is getting back to this shopping online business. It is fantastic for those that use it. It really works well. [...] I purchase most of my stuff online. [...] I'm paying the down south price [...], a 200-300\$ order, I pay 20\$ [for the delivery]. [...] I can buy stuff [...] cheaper than what this business is paying for it from their suppliers» (5).

Finally, one store manager mentioned that it is **very hard to compete with larger stores** located outside of the community. The manager said: «they go to Walmart, they think that's awesome, they come back [...] and they expect us to keep up» (12). But unfortunately the manager said: «we can't compete with the volume» (12).

COMPETITION

WITH OTHER STORES OR COMPANIES

Solutions

Availability

Managers underlined the importance of **comparing their stores' availability and settings**; it influences them to improve their own stores. One manager said: «For the meat [...] now there is variety and quality. [...] we can't compare what [the other store] has with what we have. There is no comparison» (10). And the availability of food in other stores influences their own availability: «sometimes when we go to town we take pictures of things that we don't have at the store and then with Sobeys it is very easy to look for the product cause you just use the UPC code and then after that you enter it» (8). Finally, one manager compared their store settings to other stores: «I know in Lac Simon they have a grocery store now. [...] Sobeys helped [...] building the Bonichoix in Lac Simon. And I know the one in Nemaska [...] is OMNI. So that's what we are trying to get here, OMNI» (8).

One manager also stressed the importance of **having more than one store or supplier** in the area in order to have some competition and encourage businesses to offer a variety of nutritious foods of high quality. The manager said: «now they are not the only [stores], so it might encourage them to make changes. Same thing with Ben Deshaies, I hope. [...] I know that Loblaws and Sobeys are trying to grab part of the market here, they are starting to break through in the North» (10).

Finally, one manager noted the importance of being competitive and **offering a variety of foods, so the customers would not have to purchase from other stores**. What is important to him is: «that customers come back, that they don't need to go buy their products elsewhere. And with more variety, there are more chances that the customers will buy here rather than elsewhere. Because variety, is our strength» (10).

Affordability

Many managers emphasized the importance of **comparing prices of foods to other stores** in the community or in the area to make sure nutritious foods are not overpriced. A first manager said: «We will try to go to [the other stores in the community] to make sure we are all in the same price range. [...] we try to see if they have a better deal on something, and we want to make sure that we are not overpriced or underpriced. We try to keep the prices the same» (2). And, a second confirmed: «we do price check, we go [outside of the community], we are pretty even with eggs and milk and things like that. We always go checking over [at the other store in the community] [...] if you can get it at [another store] for less, why not compete [...] and sell it for less. Then, they won't go to [the other store], you know» (12).

Some store managers also suggested that when foods are overpriced, they should be **lowered to match to competition**. One manager said: «We go to different competitors and we will see if our pricing is lower than ours, we will obviously match it» (2). «If [the other store] has milk on for 4\$ and ours is 6\$ and our cost is 5\$, we will still bring it down to 4\$» (2). Another manager also suggested matching prices of certain basic food items to those of stores outside of the community: «we have about ten items that we know families, especially low income families need, so we actually took those items, went to [a store outside the community] and match the prices [...] For instance, my case of Grand Pré. I match it to [that other store]. It is 35\$ so the families that need it they buy here» (6).

Finally, managers underlined the importance of **ensuring the presence of competition** between **stores** but also **suppliers** and **transportation companies**. One manager said: «the more competition you have, the cheaper because [that other community] is way above us, yet, some stuff they have are much cheaper than us, because there is competition» (6). Another manager added: «[that store] [...] was taking advantage of the fact that they were the only ones, but now that they are not the only ones, it might force them to change. Same thing with Ben Deshaies I hope. I know Loblaws and Sobeys want to take part of the market; they are starting to break through the North. It will help us get better results» (10). «I think it's possible to offer the right prices. [...] it depends of the supplier [...] now that we are starting to have competition, prices are adjusting» (10). Finally, some managers also noted that if there would be competition in the transportation business, prices of foods would be much lower. One manager said that there used to be another company that was flying food in the North (3). And other managers also said that there used to be another transportation company but that they were no longer available: «They should talk to the trucking companies because they are taking a lot of money for shipping stuff [...] Last year, they had Cree Express, it was charging half of what Kupa was charging, but they went under for some reason. Something went wrong with them. [...] I think they were like a 150\$ and Kupa was 400\$. There is a big difference.» (6). Finally, one manager said that competition between transportation companies is good for customers; it encourages stores to sell food at lower prices (3).

Table 11: Summary of the perception of the issue and solutions related to COMPETITION

Perception of the issue of access to nutritious foods	
Availability	Affordability
<p>Lack of/limited competition: grocery stores, suppliers Lower quality of food of certain stores Lack of knowledge of what competition is selling Customers have to go to other store when run out of some items Customers purchase from down south when travelling Customers have to order missing items online or from down south Store still sell a lot of food even though people shop outside of the community</p>	<p>Lack of/limited competition (grocery stores, suppliers, transport companies) Higher prices in smaller communities: less competition Food more expensive where there is only one store: lack competition Less sales and promotions in the North: less competition Some customers compare, say it's more/less expensive than elsewhere When prices of basic foods are too high, Customers purchase elsewhere Customers are used to having higher prices in the community Customers purchase from down south when travelling Customers travel outside of the community to buy food, which adds on the cost of food they buy Customers buy in bulk down south: practical & get more for their money Hard to compete with large super stores outside the community</p>
Solutions to improve access to nutritious foods	
Availability	Availability
<p>Compare availability with other stores Compare store settings with other stores Ensure presence of more than one supplier Ensure variety of product to avoid having to shop outside or online</p>	<p>Compare prices with other stores (in the community and outside) to make sure nutritious foods are not overpriced Lower prices to match competition Ensure presence of competition: stores, suppliers, transport When there is competition items are less expensive, even if further North Starting to have competition, prices are starting to adjust</p>

COLLABORATION
WITH OTHER ENTITIES

Perception of the issue

Availability & Affordability

Collaboration was mostly perceived as a solution rather than as an issue. Therefore, it will be discussed in the following section.

COLLABORATION
WITH OTHER ENTITIES

Solutions

Availability

During the interviews, the managers showed **great interest in working in collaboration with people of their communities and other entities** to increase availability of nutritious foods and promote nutritious food choices within their stores. They see that many entities could be involved, such as the CBHSSJB, the Band (including their Recreation Department and Head Start Program), the Youth Council, the Cree School Board and the schools, the suppliers, the organizations and companies owning or managing the stores and the stores' employees themselves.

Of course, managers see many opportunities of **doing health promotion with the healthcare workers** of their communities. One of them explained how the store collaborated with different health workers during an event: «the clinic came when I did the walk for diabetes and [the health workers] took everybody's blood [...] glucose before and after» (12). One store manager also said that their store collaborates with health workers every year to prepare food baskets for less fortunate families (9). Some managers also shared their interest in **working with a nutritionist to promote nutritious foods and increase availability** of nutritious foods in their stores. «If, we could have nutritionist come in and maybe have a booth. [...] explain the benefits of all the food that we were selling and she [could] also do the demos» (2). The managers are often willing to contribute to health promotion activities by providing space and foods for the activities: «The store is willing to go as far as donating that stuff, so you can teach them but you have to let us know so we can plan ahead [...] we are willing to help» (6). And, stores managers are also willing to increase availability of certain promoted nutritious food items: «Collaboration with us [...] so that we know the sorts of things that [the nutritionists or healthcare workers] are teaching them about so that we can have some sort of availability of

that stuff afterwards, cause there is no sense of teaching them how to do something and then it is not available in the community. We are definitely on board with that sort of thing» (6).

One of the managers mentioned that the **CBHSSJB should also collaborate with the suppliers** to promote nutritious foods to the stores: «We get stuff like this [promotional flyer on his desk] from our supplier. What if we got something like that from Cree Health Board and the supplier? That would be something else too» (1).

One manager suggested **working with teachers to increase availability** of nutritious foods in the stores. One manager explained that some teachers had made suggestions and were willing to help: «There are teachers here that came up to us, the new teachers [...] Maybe they can help out with ideas. Like, there was even another teacher that came up to me and said: Why don't you make salads ready-to-go and sandwiches that are healthy? He was about to show me how to make them» (1).

Some managers also mentioned that the **schools and stores should collaborate to offer nutritious foods to the children** during their snack or breakfast program, and that we should target the younger generation, so they will learn to eat healthier foods at a young age (3). One of them added: «we would [...] definitely support any idea like this, we would definitely try and bring in, make the items more available» (5). One manager also mentioned their collaboration with the school board to provide milk to the elementary school children: «the Cree School Board we have the... we've always had the contract for the milk program and we order the milk for the school that elementary school. [...] We ordered like about 16 cases a week for them, for the kids to drink milk every morning and afternoon I think for each class» (8).

One manager also mentioned that he **works with the recreation department to organize a health promotion event** in his community: «I work with some of the recreation people. We actually have a big [run] coming up. [...] and we are going to do a big promotion of healthy foods at the event. [...] The stores really need to get involved in the community» (2).

Finally, some managers also mentioned that their **Band Offices should contribute to the improvement of access to nutritious foods** in the stores, since they are the one who take the decisions. And, one manager also suggested that the Development Corporation should be involved, since they are the ones supporting the development of local businesses: «I know [in another community] all the businesses are very... Their businesses are growing, eh? They get funds from the Band them. But us it's not the Band, it's the Development Corporation» (8).

Affordability

Managers also saw that **collaboration with other entities of the region could help stores decrease the prices** of nutritious foods. They believe the Band, the transportation companies, the stores and their corporations and the CBHSSJB employees, should be involved.

First, some managers suggested **working with the CBHSSJB employees**. Some of them see **health promotion activities as an opportunity to offer discounts** on certain nutritious food items, which also allows their customers to try new foods. One of them said: «I use to work a lot with the clinic, with the nutritionist. I was offering specials, but we were never having specials on pop and things like that. We were having specials on other things» (7). And finally another manager also added: «[I am] trying to work with [the nutritionist], when I get back, when she does a recipe, she lets me know and I bring that food in and I put it on discount so women will try it» (12).

From the information provided during these interviews, transportation has an important impact on the price of food in the region, so some of the managers suggested **involving the transportation company and their local governmental entities to decrease the transportation fees**: «I think [...] the communities don't know how much Kupa charges for the freight. Maybe the communities need to know so they can ask Kupa, can you find a way to help us out [...]. Everybody has to work together» (6). «They should talk to the trucking companies because they are taking a lot of money for shipping stuff» (6). «the communities have to do something about this costing. Because, for instance, Kupa is half owned by Cree entities, so why can there be something that they can do to help their communities, because we will pass down the savings from the freight, right? If my freight is cut in half, you will see a big difference in the prices» (6). «So for me, one of the suggestions we have been trying to make in this community is for the Band to subsidize some of that freight, so that we can bring in more nutritious food and sell it at the rate of down south» (6).

Some of the managers also suggested that the **organizations and different companies doing business in the region should meet and group their efforts**. They suggested: «There has to be community effort [...], everybody has to work together. It is not just the store or the community. Everybody has to work together. The best way would be to actually try to find a time to have a conference with all the entities [...] All the stakeholders to see [...] how everybody can help. [the company] would be willing to participate [...] it is a part of the mandate. [...] being part of a community and be involved, so, you know... Getting all the stakeholders together to find common solutions. That would be the best way to do it. [...] Like a conference or a meeting [...] I've had a Kupa representative come here all the time to see how the business is. They can come. You can have the Band Council sitting here; have the Cree Health Board sitting there. [...] Have them sit there, do your presentation, find a way to solve the problem» (6).

Table 12: Summary of the perception of the issue and solutions related to COLLABORATION

Perception of the issue of access to nutritious foods	
Availability	Affordability
x	x
Solutions to improve access to nutritious foods	
Availability	Availability
Collaborate with: <ul style="list-style-type: none"> ○ Teachers/School/ Cree School Board ○ Parents ○ Health workers: Nutritionist, CHRs, Dental Hygienist, Doctor, nurses, Clinic staff/ CBH ○ Suppliers ○ Store managers/owners, Store employees ○ Band council, leaders, Recreation department, Youth Council, Head Start Program ○ Organization owning or managing the store: Northwest, Tawish, FCNQ, Development corporation ○ Cook involved in community activities 	Collaborate with: <ul style="list-style-type: none"> ○ Band office ○ Stores ○ Northwest company ○ Transport companies ○ Clinic staff ○ Nutritionists

GOVERNMENT
Perception of the issue

Availability

Little information was provided about this theme. But an important element mentioned by the store managers is that unfortunately, **training provided by the Quebec government is in French**. That manager expressed the desire for their managers and staff to participate in training to improve the quality of food sold in their store, but it is unfortunately not accessible due to the **language barriers**: «[The MAPAQ,] they were telling us that we can take a course of how to manage your fruits and vegetables. [...] they said that they have it online but most of the time they have it in French too» (8).

Affordability

Some store managers mentioned the existence of the **Nutrition North Canada program**, which subsidizes the cost of transport in communities where there is no permanent road, rail or marine access. This program is currently available in one of the nine communities: Whapmagoostui/Kuujuarapik. A manager noted that since they have the Nutrition North Canada program, the milk is cheaper in their store than in the other community just south of there, which is accessible by road (3). All other communities have year-round road access, so they are not entitled to receive this subsidy. One manager said: «But for this here, Canada has the Nutrition North [but] this store doesn't qualify. A lot of the stores in Quebec don't actually qualify, as ironic as [it is] [...] Just because we have the road doesn't change the fact that it cost so much. [...] 'Cause most people are going in their big trucks and going down south to shop, eh, it is costing a lot more gas, it is creating a lot more environmental issues cause there is so much gas being burnt» (6). One manager added that in addition to the Nutrition North Canada Program, the **Kativik Regional government also subsidizes certain foods**, which are not necessarily healthy food choices (3). Furthermore, that manager mentioned that the two governmental subsidies programs are posted in his store, and that it is possible to see their impact on the price of each item (3). He noted a certain **lack of transparency** in the program; the other store of his community doesn't post the subsidies like they do (3). One manager mentioned that he didn't know about the subsidies programs and if they were applied in his store; it is their head office who manages prices of foods (4). Finally, one manager noted that items subsidized change every so often and that **some healthy items**, such as water, **are not subsidized** (3).

One manager mentioned that their store receives a **tax exemption** which can influence the price of foods. The manager said: «we do pay the taxes for delivery, I don't know about the other stores but we do pay and we get a reimbursement on the GST [...] like every 3 months. We get a refund of GST and tobacco tax, [...] we pay the tax and we get a refund from the government» (8).

Finally, one manager briefly mentioned the Quebec **law on price of milk**. While talking about suppliers suggested retail prices, the manager said: «the suppliers and wholesalers [...] they suggest prices for you to sell. Of course, they know you will sell more pop if you sell it at 6.99\$ than if you sell it at 10.99\$. If you sell more, you will buy more. At the end of the year, instead of having 500-thousand dollar check from Coke, they will get one of 800-thousand dollar. It's the same everywhere in the store. Except, for milk. No, milk is regulated by the government» (7).

GOVERNMENT

Solutions

Availability

Some of the managers discussed the **implementation of Nutrition North program**, a governmental program which helps to promote nutritious foods and increase their availability in the stores. One manager said: «we try to have different solutions, like Nutrition North was a big one. We always have brainstorming ideas, to try to help the communities» (2). And, another manager also added: «I came from [another community]. The Nutrition North Program came in and did monthly demos in the store, where we taught people how to make stuff from squash [...] A bunch of different squash [...] we brought in squash for the demonstration and then we had it in stock for the squash a while afterwards» (6).

Furthermore, one manager also mentioned that the *Ministère d'agriculture, de pêcheries et d'alimentation du Québec (MAPAQ) provides trainings*, which can help stores ensure the quality and safety of the foods they provide. The manager explained: «for the fruits and vegetables, we are not that experienced in keeping [...] them, you know [...] *Ministère de l'Agriculture*, they came once. [...] They were telling us that we can take a course of how to manage your fruits and vegetables» (8).

One manager mentioned that the **Band Offices are involved in the development of new stores or renovations**, and that they can provide financial support to the businesses. Of course, such support can **help improve access to nutritious** foods in the stores. The manager said: «you know when you try to do things in the reserve you need to go through the Band first. I have to have a letter sent to them. And, then they would have to go have a meeting and then decide if it is OK or not. And then they give you a resolution saying: Yeah, it's OK you can go ahead. So we have a resolution... And then the business plan you can usually get funds for the business plan. [...] And they say 25% they help you and 75% is like a loan. [...] That is approved, then we are waiting for the payment, once we have the payment we'll ask the consultant, we will give a partial payment and do the business plan» (8).

Finally, one store manager suggested that **Band Offices could be involved in improving the layout of the stores**, which would improve access to nutritious foods within the stores. That store manager explained: «I was in two communities where the community's council decided that they wanted all the chips in the back of the store, all the water and juice at the front. The company didn't have a choice. I have told my community, maybe, that is something they should think about. But nobody has really gotten back to me, so I just do whatever I am told. But the communities actually have a lot of say as to how we would design the stores. It is up to the communities. [...] The community will just approach me and just say OK, we don't want this. That will be a **council decision**. We want you to bring more nutritious stuff at the front, right? And pull the other stuff back. I go to [the head office] and say this is what they want. [They] will not argue with it, as long as it

is a council decision. [The company] is usually OK with it. And I have been to two communities where they did that, I've been in communities where we stopped carrying plastic bags 'cause the council said no we don't want it is too much garbage all over the place. I have approached my council to actually put a bylaw like that in this community because I see that since spring is over; there [are] bags everywhere. But the council has to be the one to make some of these demands. [...] They have to drive it. The company is pretty good at listening what the council wants, but it has to be the council. [...] that is part of the solution» (6).

Affordability

One manager suggested **modifying the Nutrition North Canada program** to include remote community accessible by road, where foods are still expensive. The manager explained: «we are still a remote community, weather we have a road or not. So there should be some changes to the Nutrition North program, considering that we are paying this much for food. [...] even though we have a road, we are still pay this much for food» (6). That manager also suggested that the **Bands should be involved in subsidizing nutritious foods**: «one of the suggestions we have been trying to make in this community is for the Band to subsidize some of that freight so that we can bring in more nutritious food and sell it at the rate of down south» (6). And the manager added: «maybe subsidization as far as what we are talking about as far as the freight [...] so that stuff is more affordable. We are happy to pass on the savings» (6). Finally, one manager underlined the importance of **subsidizing all healthy food items, including water** (3). And, he also stressed the importance of **ensuring the transparency of the subsidies programs** in the stores (3).

Table 13: Summary of the perception of the issue and solutions related to GOVERNMENT

Perception of the issue of access to nutritious foods	
Availability	Affordability
<p>Training provided by the Quebec government is only available in French</p>	<p>Nutrition North Canada is applicable in Whapmagoostui/ Kuujjuarapik Most stores of the region don't qualify in the Nutrition North program: delivered by road Communities don't qualify for NNC but large proportion of extra fees is due to transport Kativik Regional government has a subsidy program (only in Nunavik): Whapmagoostui/ Kuujjuarapik Lack of transparency in applying NNC subsidy program Manager doesn't know about the subsidies programs and if they are applied in her store: prices managed by Head office Items subsidized change Some healthy items are not subsidized by NNC: water Some stores receive a tax exemption: GST refund every 3 months Quebec law on price of milk</p>
Solutions to improve access to nutritious foods	
Availability	Availability
<p>Nutrition North Canada: promote nutritious foods, increase availability MAPAQ provides training on quality/safety foods: online Band office are involved in new store/renovation projects: give permission and support project by providing funding Band offices can be involved in improving layout of the store: can request it to the stores</p>	<p>Adjust the Nutrition North Canada to include northern communities delivered by road Subsidize freight for communities where food is delivered by road Involve the Bands in subsidizing nutritious foods Ensure all healthy items are subsidized: including water Ensure transparency of the program: post subsidy/discount</p>

MARKETING AND MEDIA

Perception of the issue

Availability

There was very little discussion about marketing and media during the interviews. But the managers still mentioned that the **customers demand foods that they see in the media**. For example, one manager said: «People want the popular food they see on TV, and they ask for that [...] Sometimes people will come and ask like... You don't have like this or this?» (8). And, one **manager admitted that media also influences their choice of what to order** in their store. The manager said that they try «whatever is new that we might see on TV too like advertised» (1). Finally, some managers mentioned receiving **promotional flyers from their suppliers**: «We get stuff like this [promotional flyer on his desk] from our supplier» (1). But the second manager added that since they have small stores they receive convenience store promotions, which influence availability of food in the stores: «When you call Sobeys, they say: No sir, you receive your promotional flyer, that's it. But, it's convenience store specials. We receive a flyer, but you know, it's chocolate bars, chocolate boxes, pop... there is nothing basic, you know» (7).

Affordability

As mentioned earlier, store managers receive promotional flyers. Of course, those **flyers influence the price of unhealthier items** in the stores.

Furthermore, one manager believes that there is **not enough sensitization about the issue** of price of foods in Eeyou Istchee. He said: «I think it's because [...] we don't talk about it enough and people are not sensitized enough. But, it's not supposed to be more expensive. Normally, there should just be a percentage for transport. It should be higher than normal» (7).

MARKETING AND MEDIA

Solutions

Availability

One store manager suggested that the **supplier and CBHSSJB send joint promotional flyers to promote nutritious food choices**. He said: «What if we got something like that [promotional flyer] from CHB and the supplier? That would be something else too» (1).

Some managers suggested **using Facebook to advertise availability of nutritious foods**. One of the store managers said: «When [the meat] gets here, we put it on Facebook, actually, we can't even advertise anymore, because we will get about a 1000\$ worth of fresh meat. [And] we will sell it in an hour» (6).

One store manager also suggested **using internet to promote health, and provide information and recipes** to store employees and customers. «It's funny, when we receive foods that [the employees] don't know, they ask questions: What can we make with this? What's that? We had received spaghetti squash. [...] I said listen, [...] I never prepared it but have a look on internet, it replaces pasta» (10). He also tells his customers to look on internet for recipes: «Look on internet, that's what I tell them [...] you have to take advantage of internet when you are looking for a recipe. And, they use internet a lot» (10). Other managers also suggested **using the radio to share health and food-related information**. One manager said: «Maybe talk it out through the radio or spread it [...] If people talk about it, I'm sure people would listen» (4). And a second manager added: «Just keep telling away [...] that's all we are doing, just keep telling them, it's good for you, this is what it does [...]. Just keep talking. [...] I go on the radio» (12).

Affordability

As previously mentioned, one manager had **suggested sending joint promotional flyers** from the supplier and CBHSSJB. Such collaboration could help decrease prices of certain nutritious food items.

Some of the managers seem to suggest **using media, such as Facebook, to sensitize people about the price of food issue**. One manager said: «There is even [...] a Facebook page. I don't know if you have seen it? It is called Feeding my family. [...] That is for northern Inuit villages, [...] they show prices [...] all over [the North]» (1). Another manager added that the Facebook page also shows the difference in price on items that have been subsidized (3). Using media and social media could help sensitize community members and stakeholders about the price of food.

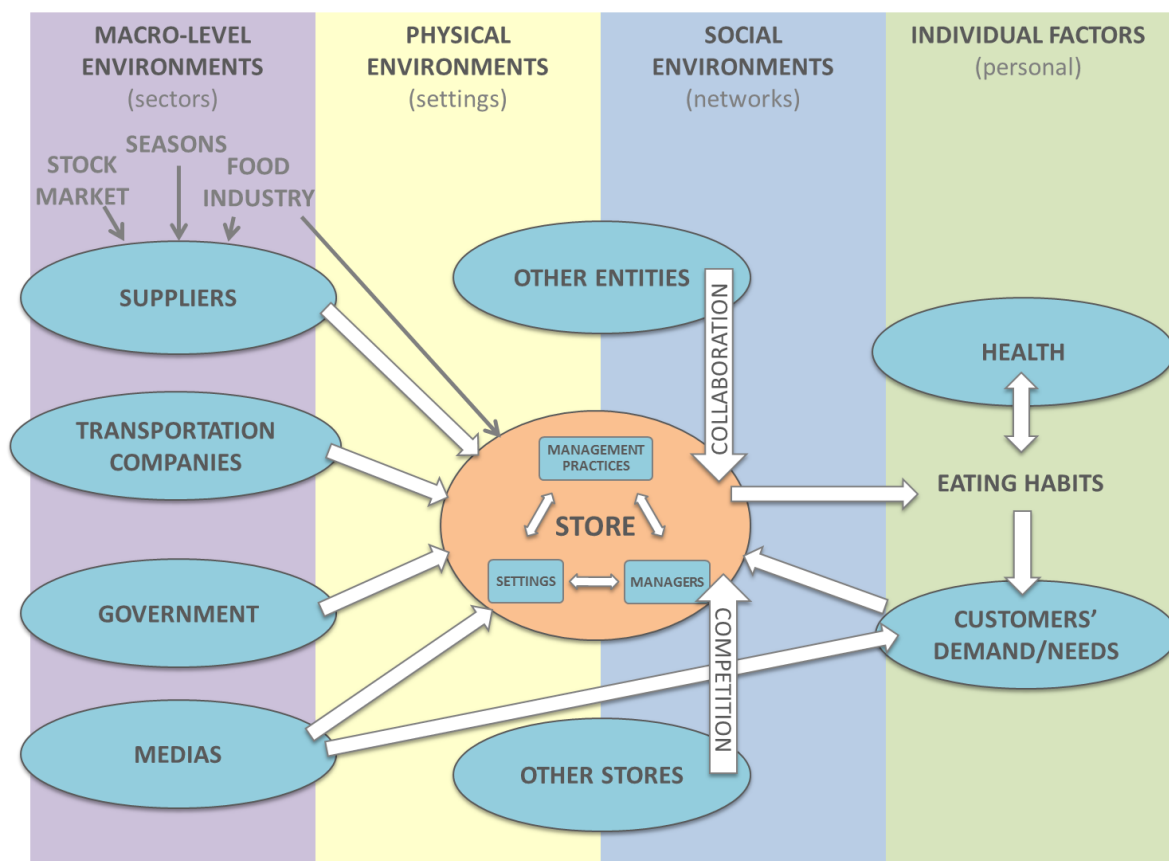
Table 14: Summary of the perception of the issue and solutions related to MARKETING AND MEDIA

Perception of the issue of access to nutritious foods	
Availability	Affordability
Customers demand what they see on TV, the popular food Managers order what they see on TV Supplier sends promotional flyer for small store: chocolate, pop	Supplier sends promotional flyer for small store: specials on unhealthy foods Lack of sensitization about the issue of limited access to nutritious food
Solutions to improve access to nutritious foods	
Availability	Affordability
Advertise food deliveries on Facebook: fresh meat Send joint promotional flyers from supplier <u>and</u> CHB to promote nutritious food items Use internet to provide information and recipes to store employees and customers Use social medias to do health promotion Promote healthy eating on the radio	Use social medias to sensitize people about high price of food Send joint promotional flyers from supplier <u>and</u> CHB to decrease price of nutritious food items

Discussion

This project has clearly shown that the store managers of Eeyou Istchee have considerable insight into the issue surrounding access to nutritious foods. The managers raised concrete and realistic solutions to improve availability and affordability of nutritious foods in the region. Figure 2 illustrates the main factors influencing access to nutritious foods in the stores of Eeyou Istchee, and the relationships between these factors as outlined by the stores managers.

Figure 2: Factors influencing access to nutritious foods in the stores of Eeyou Istchee and their relationships



The purple, yellow, blue and green sections of this figure represent the four levels of influence proposed in Story's conceptual framework (as discussed in *Conceptual framework* section) (Story *et al.*, 2008). They represent the macro-level, physical and social environments, as well as the individual factors. The SUPPLIERS, TRANSPORTATION COMPANIES, GOVERNMENT and MEDIA are part of the macro-level environments. The STORE, the OTHER STORES and OTHER ENTITIES have been placed in both the physical and social environments, as they are physical settings, and also engage in collaboration or competition relationships. The STORE SETTINGS, MANAGEMENT PRACTICES and MANAGERS are represented within the STORE itself. And, finally, the HEALTH and CUSTOMER'S DEMAND/NEEDS are represented in the individual factors' section of the figure.

Of course, the STORE influences the eating habits, and, therefore, the HEALTH of the individuals depending on its food availability and affordability. But, as the figure shows, the CUSTOMERS' DEMAND/NEEDS also influence the STORE. Furthermore, the OTHER STORES, OTHER ENTITIES, SUPPLIERS, TRANSPORTATION COMPANIES, GOVERNMENT and MEDIA influence the STORE. And, the MEDIA also influence the CUSTOMERS' DEMAND. The STORE SETTINGS, MANAGEMENT PRACTICES and MANAGERS are all interconnected and influence each other. Finally, as we can see in this figure, a multitude of factors at different levels of influence have an impact on access to nutritious foods in the stores.

Consequently, solutions to improve access to nutritious foods in Eeyou Istchee must address the different factors presented above. The store managers proposed various solutions aiming at addressing these factors. The following figure presents a summary of the main solutions they proposed.

Figure 3: Solutions to improve access to nutritious foods in the stores of Eeyou Istchee



In order to improve **availability** of nutritious foods, it appears essential to increase demand by promoting nutritious food choices to the customers, improve store settings and adopt management practices that support healthy food choices. Table 15 provides examples of the solutions proposed to improve availability of nutritious foods.

Table 15: Examples of solutions to improve availability of nutritious foods

Solutions	Examples
1) Increase demand by promoting nutritious food choices to the customers (within the stores, as well as in other community settings)	Food tasting Cooking demonstrations Grocery tours Information booths Recipes Labels and posters Community workshops Radio, internet and social media
2) Improve store settings	Renovate or build new store settings to have appropriate store size, sufficient storage and refrigeration equipment Improve layout, display and visibility of nutritious foods
3) Adopt management practices that support healthy food choices	Offer a variety of nutritious food choices which complement traditional foods Offer new foods Offer some prepared or added-value items Hire experienced managers Train employees

To improve **affordability** of nutritious foods, it is important to reduce the impact of transportation cost on the price of nutritious food items, select suppliers that allow stores to offer affordable nutritious foods, ensure the presence of competition and adopt management practices that support affordable nutritious food choices. Table 16 presents examples of the solutions proposed to improve affordability of nutritious foods.

Table 16: Examples of solutions to improve affordability of nutritious foods

Solutions	Examples
1) Reduce the impact of transportation cost on the price of nutritious food items	Negotiate transportation costs Encourage competition Redistribute transportation costs on foods of lower nutritional quality rather than on essential nutritious foods Subsidize transportation of healthy foods
2) Select suppliers which allow stores to offer affordable nutritious foods	Select suppliers which allow the offer of a variety of affordable nutritious foods Order foods in bulk Negotiate food prices
3) Ensure the presence of competition	Ensure the presence of more than one stores, suppliers and transportation businesses
4) Adopt management practices that support affordable nutritious food choices	Offer larger size items Reduce waste and managing costs Offer discounts on nutritious foods Make a higher profit margin on items of lower nutritional quality than on the nutritious foods Hire experienced managers Train employees

Overall, the results of this project show that the collaboration of multiple stakeholders, including the store managers, is needed to improve availability and affordability of nutritious foods in the stores of Eeyou Istchee.

Initiatives in other aboriginal contexts around the world described in the literature review were characterized by four main elements: the use of participatory research in the development of their intervention strategies, the adoption of a community approach targeting multiple settings, the inclusion of smaller stores and the collaboration with multiple stakeholders. So far in this project, the use of a participatory research method has proven to be most useful to gain a better understanding of the issue and in identifying solutions adapted to the context. Such a methodology also seems essential to develop a collaborative relationship with the main stakeholders such as the store managers. Furthermore, the inclusion of different types of stores allowed for a better understanding of their different realities and the identification of solutions suitable for different types of stores. Finally, the results of this project also confirm the importance of adopting a community approach targeting multiple community settings, including the stores, the schools, and the local radio. Such an approach targets individuals and their environments simultaneously, optimizing the success of the intervention.

The store managers' perceptions of the issue and their proposed solutions are specific to the reality of the stores of Eeyou Istchee. Nevertheless, the variety of explanations and solutions proposed suggests that these results may also serve to shed light on the issue of access to nutritious foods in other aboriginal communities or remote regions, and provide avenues to improve access to nutritious foods in other similar contexts.

There are limitations to this project. First, store managers were the only type of stakeholders interviewed. The inclusion of other stakeholders could have provided insight on different aspects of the issue, as well as other solutions relevant to this context. Furthermore, it is also important to mention that access to traditional foods was not addressed in this essay, as it was not discussed during the interviews with the store managers. Therefore, this essay specifically addresses access to commercial foods found in the stores. Future projects should involve other stakeholders and also aim to address the issue of access to traditional foods.

Recommendations

The research and analysis described in this report lead to the following recommendations. These are divided in 3 sections which address the health sector, the political and economic sectors, and the grocery store businesses.

Recommendations for the health sector (health organizations, including the CBHSSJB, and the local and regional health workers such as the nutritionists, community health representatives, school nurses, etc.)

1. Seek collaboration of other stakeholders, and engage in an ongoing collaboration with the store managers and other stakeholders such as the regional, provincial and national governments, band offices, transportation companies and suppliers
2. Encourage collaboration between store managers and workers of different local entities such as health workers, recreation and wellness departments
3. Inform customers and promote affordable nutritious food choices in the stores, media and other community settings such as daycares, schools, recreation centers and workplaces
4. Share all proposed solutions with the store managers and other stakeholders (e.g. by organizing meetings with stakeholders, participating in conferences [See Appendix 8 for poster presentation of the results at JASP public health conference])
5. Provide health and food-related information, tools and training to the stakeholders, such as the store managers
6. Provide support to the implementation of the proposed solutions (e.g. by offering health promotion activities and material, offering health and health food-related training, sensitizing other stakeholders and asking them to contribute, planning a store health program)
7. Document the implementation of the solutions, as well as their effectiveness
8. Continue to monitor availability and affordability of nutritious foods, and inform stakeholders and the population

Recommendations for the political and economic sectors (political and economic organizations, including regional and national governments, band offices and development corporations)

1. Seek support from different levels of government and collaborate with local, regional, provincial and national stakeholders to implement proposed solutions and improve access to nutritious foods
2. Encourage and support the renovation or construction of new stores settings, (e.g. by offering expertise or financial aid, and approving construction or renovation projects)
3. Negotiate fair transportation rates for all stores to reduce impact of transportation on nutritious foods
4. Subsidize nutritious foods or their transportation to decrease cost of nutritious foods
5. Encourage the presence of more than one store, supplier and transportation company in order to encourage healthy competition, reduce food cost and ensure highest food quality standards
6. Request the presence of certain basic nutritious foods in all stores

7. Establish norms/request improvement of the store layouts and settings to ensure presence of safe affordable nutritious foods and their promotion
8. Establish acceptable norms of profits for basic nutritious foods
9. Set limits for food industry and suppliers' incentives (e.g. limit incentives for the sale of pop, such as volume discounts from food industry and suppliers, donation of refrigeration equipment for pop)
10. Enforce existing food-related laws and by-laws (e.g. food retail permit, food safety and hygiene training, maximal price of milk)

Recommendations for the grocery stores businesses

1. Review and implement proposed solutions to improve the availability of affordable nutritious foods
2. Collaborate with local and regional entities to improve access to nutritious foods and promote nutritious food choices to the customers (e.g. maximize health impacts of new management practices)
3. Set up stores adequately to offer a variety of affordable nutritious foods (e.g. renovate, ensure adequate store size, storage and refrigeration space, repair equipment)
4. Adapt layout to encourage nutritious food choices within the stores (e.g. place nutritious foods in a more visible or accessible section of the store: in front of the store/at eye level/at the end of the aisle, set up nutritious food displays, increase number of rows of nutritious food items, increase proportion of floor space allocated to nutritious foods)
5. Hire experienced store managers who have the need of the community as a priority
6. Provide training to staff and managers (e.g. food safety and hygiene, health and food, management of the store)
7. Adopt management and supply practices which will help ensure the availability of a variety of affordable nutritious food choices (e.g. select adequate supplier, negotiate food prices and transportation costs, take higher profit margin on unhealthier food items than healthier ones)
8. Promote nutritious and affordable foods choices to customers to increase demand

Conclusion

In conclusion, this project provided an opportunity to explore store managers' perception and gain a deeper understanding of the issue of access to nutritious foods in Eeyou Istchee. Access to nutritious foods depends on the stores themselves: their settings, management practices and managers; but also of customers' demand, suppliers, transportation companies, government, media, and relationships with other stores and entities (i.e. competition and collaboration). The interviews with store managers allowed the identification of multiple concrete and realistic solutions, which will both help improve availability and affordability of nutritious foods in Eeyou Istchee.

Overall, the store managers are aware of the changes required to improve access to nutritious foods. Even though, the main objective of the stores is to be profitable, the managers showed that there are solutions that can both accommodate the goals of their businesses and encourage healthy eating habits. Indeed, this project showed that the store managers are valuable partners who can help achieve goals of health promotion and chronic disease prevention, and improve health of the population of Eeyou Istchee. Therefore, it seems essential to collaborate with them to promote healthy food choices to their customers, improve their store settings, reduce the impact of transportation costs on nutritious foods, and adopt management and supply practices that support healthy and affordable food choices.

On the other hand, such an intervention strategy also requires participation, collaboration and long-term commitment of multiple stakeholders, such as the political leaders, health workers/organizations, suppliers, transportation companies and media. The collaboration of these stakeholders is also essential to tackle all aspects of this complex issue and implement the proposed solutions in order to ensure access to nutritious foods for the families of Eeyou Istchee.

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Appendix 1: Description of initiatives in aboriginal contexts identified

In-store initiative	Intervention setting	Description (setting, population, goal, intervention, results)	Types of intervention (Escaron <i>et al.</i> , 2013)	Strategy and level of evidence (Escaron <i>et al.</i> , 2013)	Specific characteristics/ approach
Apache Healthy Stores (Curran <i>et al.</i> , 2005; Gittelsohn <i>et al.</i> , 2011; Vastine <i>et al.</i> , 2005)	Apache communities Arizona (US)	<ul style="list-style-type: none"> ❖ 11 stores of Apache communities, Arizona (American Indian Reservations) ❖ This initiative included: Stocking of promoted foods, in-store communication materials (shelf-labels, posters, and recipe cards), cooking demonstrations and taste tests, and mass-media messages (newspaper and radio). ❖ Formative and participatory research was used to develop the intervention program ❖ The authors concluded that, overall the program was successfully implemented. They observed significant changes in the knowledge, intention and frequency of acquisition of healthy foods. 	<ul style="list-style-type: none"> ❖ Increased availability ❖ Promotion and advertising ❖ Point-of-purchase information <p>(1+3*+4)</p>	b. (Sufficient evidence)	<ul style="list-style-type: none"> ❖ Store intervention, with media messages ❖ Use formative and participatory research approach to develop the program ❖ Inclusion of small stores ❖ *Environmental and individual approach ❖
Healthy Foods Hawaii (Gittelsohn, Vijayadeva, <i>et al.</i> , 2010; Novotny <i>et al.</i> , 2011)	Communities with preponderance of Native Hawaiians and Pacific Islanders Hawaii (US)	<ul style="list-style-type: none"> ❖ 5 food stores in low-income multi-ethnic communities in Hawaii ❖ 2 communities with a preponderance of Native Hawaiians and Pacific Islanders ❖ This research aimed at «decreasing the risk for obesity in children by modifying the food environment and conducting point-of-purchase promotions». It evaluated the impact of the intervention on children-caregivers dyads psychosocial factors and behaviors. ❖ The intervention consisted in increasing «the store stocking of nutritious foods, point-of-purchase promotions, interactive sessions, and involved local producers and distributors». It aimed at «shifting food availability and consumption to healthier local foods» and creating links between local food producers, food distributors and store owners. ❖ The store intervention was effective in «improving healthy food knowledge and perception that healthy foods are convenient among caregivers», and it also «increased the consumption of several targeted healthy foods in children». 	<ul style="list-style-type: none"> ❖ Increased availability ❖ Point-of-purchase information ❖ Promotion and advertising <p>(1+3*+4)</p>	b. (Sufficient evidence)	<ul style="list-style-type: none"> ❖ Store and distribution system intervention ❖ Use formative and summative research approach to develop the program ❖ *Environmental and individual approach

In-store initiative	Intervention setting	Description (setting, population, goal, intervention, results)	Types of intervention (Escaron <i>et al.</i> , 2013)	Strategy and level of evidence (Escaron <i>et al.</i> , 2013)	Specific characteristics/ approach
Healthy Foods North (Gittelsohn, Roache, <i>et al.</i> , 2010; Sharma <i>et al.</i> , 2010)	Inuit communities Nunavut and Northwest Territories (Canada)	<ul style="list-style-type: none"> ❖ 4 Inuit communities of Nunavut and Northwest Territories ❖ Store intervention included working with the shops to increase stocking of healthy foods, point of purchase signage, promotion in shops and communities, and use of community media to reinforce key messages ❖ Formative and participatory research was used to develop the intervention program ❖ <i>Results of the intervention are not available yet</i> 	<ul style="list-style-type: none"> ❖ Increased availability ❖ Point-of-purchase information ❖ Promotion and advertising (1+3*+4) 	b. (Sufficient evidence)	<ul style="list-style-type: none"> ❖ Store intervention, with media messages ❖ Use formative and participatory research approach to develop the program ❖ *Environmental and individual approach
Looma Healthy Lifestyle Program (Rowley <i>et al.</i> , 2000; Rowley <i>et al.</i> , 2001)	Aboriginal community Northwest Australia	<ul style="list-style-type: none"> ❖ Aboriginal community of Looma, Northwest Australia ❖ Community-based intervention aiming at improving lifestyle of community members by diet, physical activity and tobacco cessation ❖ The intervention included (amongst others elements): Improving availability of fresh produces (quality and quantity), whole wheat bread and flour, and margarine instead of butter. Store tours were offered to identify healthy choices. And a community member was appointed as store manager, with the mandate to improve food quality. ❖ The intervention contributed in improving the plasma concentrations of multiple nutrients. Food store data showed an «increase in density of fruits and vegetables and carotenoids in store supply». ❖ The authors concluded that the intervention «reduced the prevalence of coronary heart disease risk factors related to diet» (reduced insulinemia and glycemia, and increased insulin sensitivity) 	<ul style="list-style-type: none"> ❖ Increased availability ❖ Promotion and advertising (3*+4) 	<i>Strategy not identified by Escaron</i>	<ul style="list-style-type: none"> ❖ Community-based intervention, including store component ❖ Implication of the band council in the implementation of store health policies and management of the store ❖ *Environmental and individual approach

In-store initiative	Intervention setting	Description (setting, population, goal, intervention, results)	Types of intervention (Escaron <i>et al.</i> , 2013)	Strategy and level of evidence (Escaron <i>et al.</i> , 2013)	Specific characteristics/ approach
Marshall Islands healthy stores program (Cortes <i>et al.</i> , 2001; Gittelsohn <i>et al.</i> , 2007; Gittelsohn <i>et al.</i> , 2006)	Pacific Islanders communities Republic of Marshall Islands	<ul style="list-style-type: none"> ❖ 23 small and large stores of Marshall Islands (12 received the intervention and 11 were control) ❖ Marshall Islands is a developing country, mainly composed of Pacific Islanders ❖ This research project aimed at improving the customer's knowledge, self-efficacy, purchasing and cooking patterns, and assessing acceptability/feasibility for store managers. ❖ Formative research was used to develop an effective and culturally appropriate intervention program (including qualitative and quantitative data) ❖ Intervention combined mass media (newspaper articles, video, radio announcements) and in-store components (shelf labels, cooking demonstrations, posters, recipe cards) (<i>Increase demand</i>) ❖ The managers were asked to stocks healthy food items (<i>Increase availability</i>) ❖ The author concluded that the program «was successful in impacting many cognitive and behavioural outcomes. Program will be expanded to other stores of MI. 	<ul style="list-style-type: none"> ❖ Promotion and advertising ❖ Point-of-purchase information ❖ Increased availability (1+3*+4) 	b. (Sufficient evidence)	<ul style="list-style-type: none"> ❖ Store intervention, with media messages ❖ Use formative research approach to develop the program ❖ Intervention in small and large stores ❖ *Environmental and individual approach
Minjilang (Lee <i>et al.</i> , 1996; Lee <i>et al.</i> , 1994; Lee <i>et al.</i> , 1995)	Aboriginal community Northern Territory (Australia)	<ul style="list-style-type: none"> ❖ In the store of Manjilang, aboriginal community North of Darwin, Australia ❖ Intervention strategies were planned in consultation with the community ❖ Several intervention strategies were used simultaneously to motivate changes in dietary habits and variety of food choices ❖ The intervention consisted in «provision and promotion of a wide variety of nutritious foods in the store, and the use of Shelf-talkers to aid recognition of target foods» ❖ The intervention has brought substantial changes in the dietary quality and biological indicators during the project ❖ The authors concluded that the intervention demonstrated that «a community can bring about improvements in their nutritional status, and that store turnover method can be an inexpensive and non-invasive method to evaluate changes in an aboriginal» community 	<ul style="list-style-type: none"> ❖ Increased availability ❖ Point-of-purchase information (1+3*) 	<i>Strategy not identified by Escaron</i>	<ul style="list-style-type: none"> ❖ Store intervention ❖ Consultation of the community to plan the intervention ❖ Implication of the store managers in improving the availability of healthy foods ❖ Environmental and individual approach

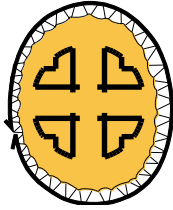
In-store initiative	Intervention setting	Description (setting, population, goal, intervention, results)	Types of intervention (Escaron <i>et al.</i> , 2013)	Strategy and level of evidence (Escaron <i>et al.</i> , 2013)	Specific characteristics/ approach
Navajo Healthy Stores (Gittelsohn <i>et al.</i> , 2013)	Navajo communities New Mexico, Arizona, and Utah (US)	<ul style="list-style-type: none"> ❖ Stores of the Navajo Nation, in New Mexico, Arizona, and Utah ❖ This research project implemented a «14-month intervention trial in the Navajo Nation that sought to increase availability of healthier foods in local food stores, and promote these foods at the point of purchase and through community media» ❖ Half of the region stores were assigned to the in intervention and half to comparison (by the end of the trial, all region received intervention) ❖ Results: Greater exposition to the intervention was associated with reduced BMI, improved healthy food intentions, healthy cooking methods and healthy food getting. Odds of improving weight status were 5 times the odds of maintaining or worsening it. ❖ Conclusion: «The combined environmental and educational intervention, coupled with increased knowledge and skills was associated with positive impacts on food related psychosocial factors, behaviors, and weight status» in the Navajo Nation. 	<ul style="list-style-type: none"> ❖ Increased availability ❖ Point-of-purchase information ❖ Promotion and advertising <p>(1+3+4)</p>	<p>b.</p> <p>(Sufficient evidence)</p>	<ul style="list-style-type: none"> ❖ Store intervention, with media messages ❖ *Environmental and individual approach
Store Healthy Options Project in remote Indigenous Communities (SHOP@RIC) (Brimblecombe <i>et al.</i> , 2013)	Aboriginal communities Northern Territory (Australia)	<ul style="list-style-type: none"> ❖ Stores of 20 aboriginal communities of Northern Territory, Australia ❖ «This research project aimed at assessing the effectiveness and cost-effectiveness of evidence-based strategies that have the potential to influence food and drink purchasing in disadvantaged population» ❖ It offers a price discount (20%) on healthier food items (such as fruits, vegetables, water and diet soft-drinks) ❖ The price discount is accompanied (or not) by an in-store nutrition education strategy ❖ 10 communities had the combined interventions, 10 communities benefited from only the price discount ❖ This project is currently underway (Ending Dec. 2014). Results are not available yet. 	<ul style="list-style-type: none"> ❖ Price ❖ Point-of-purchase information <p>(1 +2*)</p>	<p>g.</p> <p>(Insufficient evidence)</p>	<ul style="list-style-type: none"> ❖ Store intervention ❖ *Environmental and individual approach

In-store initiative	Intervention setting	Description (setting, population, goal, intervention, results)	Types of intervention (Escaron <i>et al.</i> , 2013)	Strategy and level of evidence (Escaron <i>et al.</i> , 2013)	Specific characteristics/ approach
Supermarket Healthy Options Project (SHOP) (Ball <i>et al.</i> , 2011; Mhurchu <i>et al.</i> , 2009; Ni Mhurchu <i>et al.</i> , 2010)	Maori, Pacific and non-Maori/non-Pacific (Not specific to Aboriginal population) Lower North Island (New Zealand)	<ul style="list-style-type: none"> ❖ 8 supermarkets of Lower North Island, New Zealand ❖ Project targeted the Maori, Pacific and non-Maori/non-Pacific shoppers in equal numbers ❖ Project aimed at assessing the effect of tailored nutrition education (package of dietary information based on sales) and price discounts on selected healthy food purchases ❖ Price discount had a significant effect on healthy food purchases (11% increase); effect persisted after cessation of the discount ❖ Price discount and nutrition education had «no significant effect on saturated fat purchases or other nutrient considered» 	<ul style="list-style-type: none"> ❖ Price ❖ Point-of-purchase information (1 +2*) 	g. (Insufficient evidence)	<ul style="list-style-type: none"> ❖ Store intervention ❖ *Environmental and individual approach
Zhiwaapenewin Akino'maagewin trial (Gittelsohn <i>et al.</i> , 2011; HealthCanada, 2013; Ho <i>et al.</i> , 2008; Rosecrans <i>et al.</i> , 2008)	First Nation communities North Ontario (Canada)	<ul style="list-style-type: none"> ❖ 7 First Nations of Northern Ontario ❖ Community-based intervention project in schools, stores and health offices ❖ Intervention development was based on formative research ❖ Intervention program was adapted from Sandy Lake School Diabetes Prevention Program and Apache Healthy Stores program ❖ Store intervention included stocking of healthier foods by store owners, shelf labels, posters, cooking demonstrations and taste test, local radio and TV, newsletters and bulletin board. ❖ Research did not detect improvement in weight. ❖ Intervention was successful in increasing selection of promoted healthy food items (higher healthy food scores after the intervention). Knowledge, food intention and self-efficacy scores were also improved. 	<ul style="list-style-type: none"> ❖ Increased availability ❖ Point-of-purchase information ❖ Promotion and advertising (1+3*+4) 	b. (Sufficient evidence)	<ul style="list-style-type: none"> ❖ Community-based intervention in multiple settings ❖ Use formative research approach to develop the program ❖ *Environmental and individual approach

In-store initiative	Intervention setting	Description (setting, population, goal, intervention, results)	Types of intervention (Escaron <i>et al.</i> , 2013)	Strategy and level of evidence (Escaron <i>et al.</i> , 2013)	Specific characteristics/ approach
Sandy Lake Health and Diabetes Project (Ho <i>et al.</i> , 2006; Ho <i>et al.</i> , 2008; Kakekagumick <i>et al.</i> , 2013)	First Nation community North Ontario (Canada)	<ul style="list-style-type: none"> ❖ 3 stores of Sandy Lake First Nation (1 supermarket and 2 convenient stores) ❖ Community multi-institutional intervention program with a store component: store initiative, radio show, school program, home visits, walking trails, summer camp, community health promotion ❖ Goal of the intervention is to «educate community members regarding diabetes prevention and management, and improve the environments for making healthy lifestyle choices» ❖ Project development based on participative research and iterative process ❖ The store intervention component included: increased availability of items lower in fat and sugar, development of labels, displays, taste tests, and grocery store tours ❖ Overall results of the project show a significant change in knowledge and a significant increase in frequency of healthy food purchasing among participants of the intervention community. No significant changes in physical activity or BMI 	<ul style="list-style-type: none"> ❖ Increased availability ❖ Point-of-purchase information ❖ Promotion and advertising (1+3*+4)	b. (Sufficient evidence)	<ul style="list-style-type: none"> ❖ Community-based intervention in multiple settings ❖ Use participatory research approach and iterative process to develop the program ❖ *Environmental and individual approach
Ojibwe Northwest Ontario First Nation (Ho <i>et al.</i> , 2006)	First Nation communities North Ontario (Canada)	<ul style="list-style-type: none"> ❖ Stores of 3 Ojibwe communities, Northwest Ontario First Nations communities ❖ Community multi-institutional intervention: school, store, radio shows and home visits ❖ Program inspired by Sandy Lake Health and Diabetes Project ❖ Store intervention included shelf labeling, flyer and radio promotion, demonstrations of cooking methods and tips for healthier shopping ❖ Intervention resulted in increased interest and steady sales of specially ordered product ❖ Overall, grocery store intervention ranked in 4th place out 6, as potential strategy in these communities (School health program, Renal education and pamphlets being more popular intervention strategies) ❖ Authors concluded by underlining the importance of formative research to involve population and organizations in improving availability of healthy foods, to balance community learning preferences with proven strategies and to emphasize community participation. 	<ul style="list-style-type: none"> ❖ Point-of-purchase information ❖ Promotion and advertising (1+4)	a. (Sufficient evidence)	<ul style="list-style-type: none"> ❖ Community-based intervention in multiple settings ❖ Use formative and participatory research approach to develop the program ❖ Individual approach

In-store initiative	Intervention setting	Description (setting, population, goal, intervention, results)	Types of intervention (Escaron <i>et al.</i> , 2013)	Strategy and level of evidence (Escaron <i>et al.</i> , 2013)	Specific characteristics/ approach
Northwest Company Healthy Food Initiative (HealthCanada, 2013)	Company initiative for stores of Aboriginal and Inuit communities Northern Canada	<ul style="list-style-type: none"> ❖ Private store initiative ❖ In-store labels and promotion of healthy/affordable choices (recipe cards, cooking workshops, monthly newsletters and space to realize educational activities) ❖ An advisory committee composed of health workers aimed at ensuring acceptability of the program 	<ul style="list-style-type: none"> ❖ Point-of-purchase information ❖ Promotion and advertising (1+4)	a. (Sufficient evidence)	<ul style="list-style-type: none"> ❖ Store intervention ❖ Individual approach
Nutrition North Canada Program (HealthCanada, 2013)	Governmental initiative for Aboriginal and Inuit communities Northern Canada	<ul style="list-style-type: none"> ❖ Initiative of the federal government, launched in April 2011 (In replacement of the Food Mail Program, which ended in March 2011) ❖ The subsidy program aims at improving access to perishable healthy food in isolated Northern communities ❖ Eligible food items vary by community and category of items ❖ Payment of subsidies are based on weight ❖ Recipient stores are responsible to pass subsidy to consumers, provide proof of the nature of the shipments, visibility of the program and data on products shipped and pricing. 	<ul style="list-style-type: none"> ❖ Price (2*)	<i>Strategy not identified by Escaron</i>	<ul style="list-style-type: none"> ❖ Store intervention ❖ *Environmental approach
Witchihewin Miro Pimatisiwinik Itekara program (WIMPI) (Huet, 2005)	Atikamekw community Qc, Canada	<ul style="list-style-type: none"> ❖ Program in stores of 3 Attikamek community, Evaluation in store of one community ❖ Program included: 31 labels with food tips/advices, places on the grocery store shelves, and a guide to conduct grocery store tour was develop for nutritionist and CHR ❖ Shelf label messages were elaborated following consultations of members of the 3 Attikamek communities ❖ Evaluation of changes in sales by using pre-post comparison of sales of targeted food items, sales data 11 months before the program and 11 months after the beginning of the program ❖ Patterns of changes were different for the different foods items; some immediate results were observed, while other changes were adopted more slowly. ❖ Results: Increased consumption of lean meats, high quality fats, fruits and vegetables (mostly potatoes), diet soft drinks, 100% pure juices AND Decreased consumption fatty dairies and low quality fats 	<ul style="list-style-type: none"> ❖ Point-of-purchase information ❖ Promotion and advertising (1 +4)	a. (Sufficient evidence)	<ul style="list-style-type: none"> ❖ Store intervention ❖ Use formative and participatory research approach to develop the program ❖ Individual approach

In-store initiative	Intervention setting	Description (setting, population, goal, intervention, results)	Types of intervention (Escaron <i>et al.</i>, 2013)	Strategy and level of evidence (Escaron <i>et al.</i>, 2013)	Specific characteristics/ approach
Food Labelling Project in Eeyou Istchee (Godin, 2002, 2003, 2004)	Eeyou Istchee/James Bay, Qc, Canada	<ul style="list-style-type: none"> ❖ Development phases in 6 communities and pilot project in 1 community. Implementation of the program in the stores of the 9 communities of Eeyou Istchee and Chibougamau (2003) ❖ The goal of this project was to improve the quality of the diet by educating people at the point of purchase. The program has 2 components: the shelf labels and the grocery tours ❖ The labels were developed in consultation with the population of 6 communities, and a pilot test was done in one of the community ❖ Results of evaluation of awareness and use of labels: 82% of the people surveyed were aware of the project and 44% had used the messages 	<ul style="list-style-type: none"> ❖ Point-of-purchase information ❖ Promotion and advertising ❖ (1 +4) 	a. (Sufficient evidence)	<ul style="list-style-type: none"> ❖ Store intervention ❖ Use formative and participatory research approach to develop the program ❖ Individual approach



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Cree Board of Health and Social Services of James Bay

Appendix 2: Written communication to store managers and consent form

Mistissini, June 2th, 2014

Attention: Store Managers of Eeyou Istchee

Re: Access to a Nutritious Food Basket Project

Dear Store Manager:

Following up on our project *Access to Nutritious Food in Eeyou Istchee*, we wish to invite you to participate in a one-hour individual discussion with one of our team members, in order to help us identify solutions to improve access to nutritious food in Eeyou Istchee.

We recently sent you a summary of the results of this project, which is also available at: <http://www.creehealth.org/library/online/access-nutritious-food-basket-eeyou-istchee>. We are thankful for your collaboration during the data collection, which allowed us to gather valuable information regarding the availability of nutritious foods and their cost in our region.

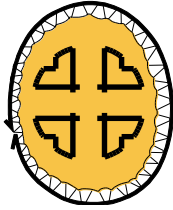
We hope to continue working in collaboration with you, and that as a key stakeholder, you will help us highlight solutions to ensure that all families of Eeyou Istchee have access to nutritious foods.

If you agree to participate, please fill out the enclosed consent form and return it by email or fax, before June 30th 2014, in order for us to make arrangements to visit you in your community this month.

Best regards,

Paul Linton,
Public Health Assistant Executive Director-
Chishaayiyuu Miyupimaatisuin

Chantal Vinet-Lanouette
Public Health Nutritionist, Chishaayiyuu
Miyupimaatisuin



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ACCESS TO A NUTRITIOUS FOOD IN EEYOU ISTCHEE

CONSENT FORM

I agree to meet with a member of the CBHSSJB Public Health department to discuss access to nutritious foods in Eeyou Istchee.

Yes No

I understand that no specific information about my store will be published, and that the information gathered will be used to prepare a report on access to nutritious foods in Eeyou Istchee. My participation will remain confidential, unless I specifically agree otherwise.

I understand that in order to prepare this detailed report, our discussion will be recorded and that this recording will be destroyed as soon as detailed notes have been taken. The CBHSSJB will not use this recording for any other purpose.

Please sign and fill out the following:

Signature: _____

Name and position: _____

Name of the store: _____

Address: _____

Phone: _____

Fax: _____

E-mail: _____

Availability in July 2014: 1st week 2nd week 3rd week 4th week

Please return to:

Chantal Vinet-Lanouette, Nutritionist
Phone: (418) 923-2204 ext. 42370
Fax: (418) 923-2564
Email: chantal.vinet@ssss.gouv.qc.ca



Access to Nutritious Food in Eeyou Istchee

- Cost of basic nutritious foods is higher in Eeyou Istchee than in any other Quebec region
- Nutritious food choices are limited in certain communities
- Access to a variety of low-cost nutritious foods is difficult, especially in smaller stores
- Eating well seems to be out of reach for low-income and single-parent families

Accessibility to nutritious foods is essential to promote health and prevent chronic diseases (diabetes, hypertension, etc.)

We need to ensure that nutritious foods are available and affordable to all Eeyouch families

In September 2011, 16 stores of Eeyou Istchee, 5 of Jamesie¹ and 3 of Abitibi were visited to find out:

- What is the cost of the Nutritious Food Basket (NFB) in Eeyou Istchee?
- Is the NFB affordable for Eeyouch families?
- Are the NFB items available?

The Nutritious Food Basket includes 71 food items, that are basic, nutritious and at low cost.

The cost of the NFB is usually based on a reference family of 4 (2 adults and 2 children), and is calculated for a one-week period.

To take into account larger Eeyouch families, NFB cost is also calculated for a family of 6 (2 adults and 4 children).

¹ Jamesie includes Chibougamau, Chapais, Radisson, Lebel-sur-Quévillon, Matagami

What is the cost of the NFB?

In Eeyou Istchee, the average weekly cost of the NFB, for a family of 4 is **\$312.47**.



It costs **at least \$10.00** per person per day to eat well in Eeyou Istchee

Cost for larger families

For a family of 6, the weekly cost of the NFB is \$418.41.

Breastfeeding: a saving

In addition to its health benefits, breastfeeding represents a saving of more than \$30.00 per week compared to the cost of infant formula.



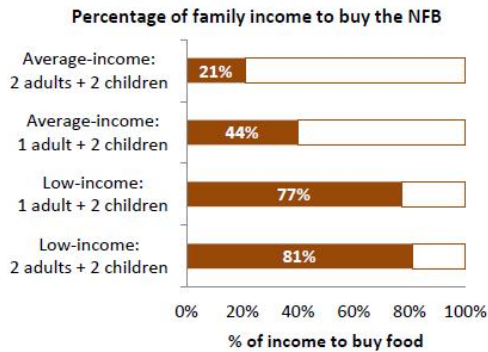
Is the NFB affordable for Eeyouch families?

Family income

An average-income family with 2 adults and 2 children would spend 21% of their income to buy the NFB.

The percentage for an average-income family of 1 adult and 2 children is **twice as high** (44%) and **4 times as high** for a low-income family (about **80%** of their income).

In Eeyou Istchee, 1 family out of 4 lives on a low income. This is 5 times higher than in Jamesie.

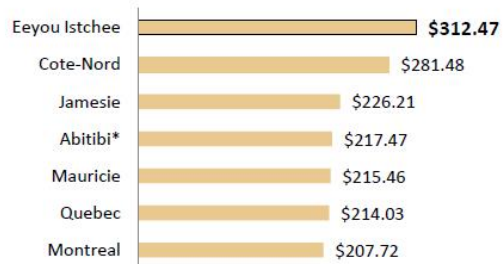


In Eeyou Istchee, each time a low-income family earns \$100.00, about \$80.00 is needed to buy the NFB

Comparing Eeyou Istchee to other Quebec regions

The **weekly cost** of the NFB is **higher in Eeyou Istchee** than in any other studied regions of Quebec.

Cost of NFB in Eeyou Istchee and other regions (2011)



* This value represents only 3 stores of Abitibi

Are the NFB items available?

Overall, in the communities of Eeyou Istchee 2 to 41 food items were missing (out of the 71 selected in the NFB).

Less food items were available in smaller stores compared to larger ones.



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Copies of this broadsheet may be found at:
<http://www.creehealth.org>

Source: Montreal Diet Dispensary. Access to a nutritious food basket in Eeyou Istchee. Project report. 2013.

Appendix 4: List of basic nutritious foods
(Dispensaire diététique de Montréal, 2013)

KINDS AND SIZE OF FOODS USED IN PRICING LIST – September 2011

FOODS	PRICE	SIZE	CATEGORY PRICE	FOODS	PRICE	SIZE	CATEGORY PRICE
Milk				Potato	\$8.24	4.54 kg	\$1.75 / kg
Milk, whole	\$9.61	4 litres	\$2.40 / litre	Other vegetables			\$4.70 / kg
Milk, 2%	\$9.86	4 litres	\$2.47 / litre	Carrots	\$5.07	2.27 kg	
Milk, 1%	\$10.65	4 litres	\$2.66 / litre	Onions	\$2.49	908 g	
Viande			\$11.66 / kg	Celery	\$2.10	1 unit	
Medium ground beef	\$12.68	1 kg		Spinach	\$3.51	170 g	
Round steak	\$16.41	1 kg		Broccoli	\$2.66	608 g	
Stewing beef	\$14.74	1 kg		Lettuce, iceberg	\$2.50	1 unit	
Pork loin chop	\$13.41	1 kg		Tumip	\$3.62	1 kg	
Ham, smoked boneless	\$13.57	1 kg		Cabbage	\$2.80	1 kg	
Chicken thighs with back	\$8.76	1 kg		Tomatoes	\$7.96	1 kg	
Liver	\$9.21	1 kg	\$9.21 / kg	Tomatoes, canned	\$2.84	796 ml	
Fish			\$17.45 / kg	Tomato juice	\$2.02	540 ml	
Sole fillets, frozen	\$17.46	1 kg		Tomato paste	\$1.26	156 ml	
Tuna, light, flaked	\$2.18	170 g		Green peas	\$2.53	540 ml	
Pink salmon, canned	\$3.13	213 g		Corn, whole kernel	\$2.46	540 ml	
Egg, grade A, large	\$3.37	1 dozen	\$0.28 / unit	Frozen mixed vegetables	\$5.81	1 kg	
Cheese			\$21.41 / kg	Bread			\$5.21 / kg
Cheese process	\$7.96	500 g		Whole wheat bread	\$3.20	675 g	
Cheddar mild	\$7.36	300 g		Hamburger or hot dog	\$4.09	12 units	
Mozzarella	\$7.65	300 g		Breakfast cereals			\$8.94 / kg
Peanut butter	\$4.68	500 g	\$9.36 / kg	Shredded wheat	\$7.20	425 g	
Flax seed	UNAVAILABLE			Bran flakes	\$6.83	520 g	
Legumes			\$8.14 / kg	Oats, quick	\$5.19	1 kg	
Beans in tomato sauce	\$2.74	540 ml		Other cereal products			\$4.34 / kg
Red beans	\$2.62	540 ml		Rice, long grain	\$5.23	900 h	
Chick peas	\$2.10	540 ml		Macaroni / spaghetti	\$3.76	900 g	
Lentils	\$3.35	907 g		Flour, all purpose	\$8.19	2,5 kg	
Dried white beans	\$3.90-	907 g		Flour, whole wheat	\$3.94	1 kg	
Dried red beans	UNAVAILABLE			Butter/Margarine			\$12.03 / kg
Yellow split peas	\$2.80	907 g		Butter	\$6.82	454 g	
Citrus			\$3.29 / kg	Margarine	\$4.14	454 g	
Oranges	\$5.04	1 kg		Other fats			\$7.85 / kg
Frozen orange juice	\$2.81	341 ml		Mayonnaise (65% oil)	\$4.82	475 ml	
Other fruits			\$4.44 / kg	Vegetable oil (canola)	\$5.74	946 ml	
Apples	\$4.42	1 kg		Sugar			\$3.00 / kg
Bananas	\$3.16	1 kg		White sugar	\$5.29	2 kg	
Grapes	\$6.64	1 kg		Brown sugar	\$4.08	1 kg	
Pears	\$5.71	1 kg		Sweets			\$9.15 / kg
Cantaloupe	\$4.00	1 kg		Strawberry jam	\$5.20	500 ml	
Fruit cocktail	\$5.58	796 ml		Honey	\$8.05	500 g	
Raisins	\$3.85	375 g		Molasses	\$2.10	300 g	
Miscellaneous weekly allowance – Adult: \$2.91 - Child: \$1.43				Infant formula	\$36.08	730 g	\$49.43 / kg
				Infant cereals	\$6.10	227 g	\$26.86 / kg

Appendix 5: Grocery store managers interview guide

<i>Introduction and consent to participate</i>
<ul style="list-style-type: none">❖ Presentation of the interviewer and participant.❖ Ensure informed consent of the participant.<ul style="list-style-type: none">➤ Explain that results of the discussions with the different store managers of Eeyou Istchee will be used to prepare a report highlighting solutions to improve access to nutritious food in Eeyou Istchee.➤ Explain that their participation will remain confidential and that no specific information on their store will be published.➤ Explain that the discussion will be recorded to transcribe the valuable information from the interview into detailed notes. The recording will not be used for any other purpose and will be destroyed as soon as notes have been taken.➤ Make sure consent form has been signed before starting the interview.
<i>Theme 1: Access to nutritious food in Eeyou Istchee and health</i>
<ul style="list-style-type: none">❖ Presentation and discussion of the results of the project on access to nutritious food in Eeyou Istchee.<ul style="list-style-type: none">➤ Use the summary report and list of food items➤ Make sure to explain access, availability and affordability (cost)❖ What do you think of those results?<ul style="list-style-type: none">➤ Were you aware that access to nutritious foods is an issue in Eeyou Istchee? Why do you think it is an issue?➤ Were you aware that low-income and single-parent families cannot afford to purchase nutritious food?❖ According to you, what explains this situation?❖ What kind of impact do you think access to nutritious food has on the overall health and well-being of the Crees?<ul style="list-style-type: none">➤ What kind of impact do you think access to nutritious food has on the health and well-being of the low-income and single-parent families?➤ What would be the impact on health if nutritious food is not available?➤ What would be the impact on health if cost of nutritious food is high?
<i>Theme 2: Solutions</i>
<ul style="list-style-type: none">❖ Explain that :<ul style="list-style-type: none">➤ As a health organization we are seeking solutions to improve the health and well-being of the families of Eeyou Istchee and that access to nutritious food is a main concern to us.➤ We see them as experts, main stakeholders.❖ We read that transportation in remote regions influences access to nutritious food.<ul style="list-style-type: none">➤ What kind of impact do you think it has on the price of the food in your store?➤ What kind of impact do you think it has on the selection of food available in your store?➤ What kind of impact do you think it has on the quality of the food in your store?❖ We know that the supply of food is often based on demand.<ul style="list-style-type: none">➤ What influence your decision on what to sell?➤ How are prices of food items determined?➤ How can we increase demand of nutritious food items?

- ❖ Do you see solutions to improve access to nutritious foods in Eeyou Istchee?
 - How can we make nutritious food more available?
 - How can we decrease the cost of nutritious foods?
 - How can we improve the quality of the food?

- ❖ Certain in-store initiatives promote nutritious food choices or inform/educate clientele, while others improve cost or selection of food available.
 - Have you ever heard or participated in such an initiative?
 - What worked? What did not work?
 - What kind of initiatives could be successful in your store?

- ❖ Many key players can collaborate in improving access to nutritious food.
 - Who else could contribute to improve access to nutritious foods in your community/in our region?
 - How can we help you with the initiative(s) you just mentioned?

Thanking participants for their time and collaboration

- ❖ Ask participants if they have questions or other things they would like to discuss
- ❖ Ensure they have our contact information in case they wish to discuss further

Appendix 6: Summary of the results (Tables: *Perception of the issue* and *Solutions*)

	Perception of the issue of access to nutritious foods	
	Availability	Affordability
Health	<p>Many people have diabetes (5, 6, 7, 8, 9, 12) People are diabetic at a young age (6) Many people have weight issues (4, 5, 6, 9, 12) Some people have dental issues (2)</p>	<p>People buy less healthy foods when they are expensive, they buy unhealthier foods (10)</p>
Customers	<p>Demand mostly influence food supply in store: demand of multiple Customers (1, 2, 6, 7, 9) Sales statistics, what sells a lot (1, 2, 5, 11) High demand for unhealthy foods, especially kids (1, 2, 4, 5, 6, 11, 12) Decreasing demand for pop, chocolate, chips (7) Demand changed a lot over the years: less pop-chocolate, more yogurt-cheese, etc. (7) Increasing demand for fresh products: more produce, fresh meat, yogurt, fresh milk (1, 2, 3, 5, 6, 7, 8, 11) Demand for certain nutritious foods: tomatoes, brown bread, whole wheat pasta, original oatmeal, cream of wheat, milk, bananas, grapes, turnip, cabbage (7, 8, 11) Increasing demand for water (7) Limited demand for some nutritious foods: multigrain bread, brown rice, seeds, fish, liver, legumes, dry beans, broccoli, cauliflower, apples, pineapples (3, 5, 6, 8, 11, 12) Families with teenagers need to buy large quantities of food (11) People prefer certain format: large bread, large tea box, in bulk (3, 6, 7, 11) Customers want more for their money: long bread loaf VS small bread (3) Families with young children need to buy baby food (11) Demand some products for children: milk, formulas (8, 11) People want a variety of products: baby formulas (11) Demand from people who travel south (1, 7, 11) Demand from people from outside, new people: teachers, health professionals, workers (1, 2, 6, 7, 8, 9, 10) Less variety of food during summer, while teachers are away (2, 8) Less demand from community members (2) Some people want to try new things/ demand to order new things (1, 4, 7, 11) People have certain habits, they don't buy things they don't know, limited willingness to change or try new things (4, 5, 12) People are really loyal to the brands (3, 5, 7) People don't want to buy no name brand products (5, 7) People have certain eating habits, had them for years (5, 6)</p>	<p>High demand for unhealthy foods: less expensive since ordered in bulk (2) Families spend a large portion of their budget on unhealthy foods (6, 12) Limited demand for some nutritious foods (6) Increasing demand for fresh products: less waste (2) Large proportion of family budget needed to buy food (7) Large families pay a lot more to buy foods (4, 6) Families with teenagers need to buy large quantities of food (6, 11) Families with young children need to buy baby food or formula, which are expensive (5, 8, 10, 11) Lot of low income families in the community (6) Buy unhealthy foods in bulk down south (6) Customers buy from other stores when travelling: lower prices (6, 12) Customers shop in large store down south and expect store in their community to offer items at same price (12) Some customers say prices are too high and demand lower prices (7, 8, 10) People are really loyal to the brands (3, 5, 7) People don't want to buy no name brand products (5, 7) Demand for ready-to-go or value added foods: more expensive (6, 9, 12) Limited knowledge of budgeting (5) People buy because item it there, don't necessarily shop for better price (5)</p>

Perception of the issue of access to nutritious foods		
	Availability	Affordability
	<p>Cook with lard and shortening, especially older people (3)</p> <p>Need shelf products to go out on the land: Grand Pré milk, canned goods (3)</p> <p>Older people eat better (more traditional foods) than younger people (5)</p> <p>People eat traditional foods: berries, fish, liver from beaver or other animals, moose, goose, caribou (1, 5, 6, 11,12)</p> <p>Demand for special occasions: orange and apple for Christmas and Halloween, turkeys for feasts (7, 8)</p> <p>People place orders (8)</p> <p>Think nutrition is important only when they are sick, not a priority (5)</p> <p>Some demand for products with less sugar/salt/fat or lactose free (5, 8)</p> <p>A lot of people with diabetes, need special products (5)</p> <p>Some people have food allergies (9)</p> <p>Demand from people dieting: Kale (9)</p> <p>Lack of knowledge on how to prepare certain foods (6, 9, 10)</p> <p>Lack of knowledge of what is healthy/unhealthy (12)</p> <p>Demand for ready-to-go or value added foods (6, 9, 12)</p>	
Store Settings	<p>Some stores have been establish 30-40 years ago, needs were different (5)</p> <p>Store too small for needs of growing community (2)</p> <p>Some stores are small (6, 12)</p> <p>Small stores have little flexibility as to what they can carry (6)</p> <p>Selection depends on the size of the store (5, 6)</p> <p>Lack of storage, cooler and freezer space (1, 3, 5, 6, 8, 10)</p> <p>When receive delivery, almost everything is put on the shelf (8)</p> <p>Lack of shelf space (8)</p> <p>Insufficient room to put health promotion banners on the shelves (12)</p> <p>No butchery (6, 7, 8)</p> <p>Quantities of refrigeration units and their location in the store (10)</p> <p>Importance of store layout (10)</p> <p>Small size of the refrigeration equipment (1)</p> <p>Broken refrigeration equipment (1, 6)</p> <p>Difficulty in getting refrigeration equipment fixed: specialized equipment, no one in town can fix, far from repair service, takes a long time to get someone to fix it (1)</p> <p>Waste of floor space when equipment is broken (1)</p> <p>Less food available while equipment is unusable (1)</p> <p>Some stores need renovations (4, 8, 10, 12)</p> <p>Store was renovated (10)</p> <p>Different new stores projects in the region (3, 6, 7, 12)</p> <p>Renovations are expensive (5, 8)</p>	<p>Lack of storage space: unable to buy in bulk from supplier (1, 5, 6, 10)</p> <p>Store too small: can't sell bulk or family size items (6)</p> <p>No receiving area: added labor cost to unload truck (2)</p> <p>Expensive to get refrigeration equipment fixed: specialized equipment, no one in town can fix, far from repair service, takes a long time to get someone to fix it (1)</p> <p>Losing money while refrigeration equipment is unusable (1)</p>

Perception of the issue of access to nutritious foods		
	Availability	Affordability
Store Management practices	<p>Some stores are owned by a private owner/company (8, 10)</p> <p>Some stores managed by Head office: Northwest Companies, FCNQ (4,12)</p> <p>Some stores affiliated with Loblaw's or Sobeys: AXEP, Intermarché, OMNI (7, 9, 10)</p> <p>Some stores are community stores or coops (4, 5, 7, 10)</p> <p>Head office negotiate with company to carry products (12)</p> <p>Difficult to manage budget for private business (8)</p> <p>Orders are limited by budget constraints (8)</p> <p>Some customers have accounts at the store (8)</p> <p>Difficulty in managing customers' accounts: People employed or on income security pay every 3 months (8)</p> <p>Unpaid customers account have an impact on availability (8)</p> <p>Make bigger orders when receive payments of customers' accounts (8)</p> <p>Business goal: needs of the community VS profit (1, 5, 6, 7)</p> <p>Stores sell what sells most, to make profit (5)</p> <p>Stores' relationship with the community/Way it is perceived (2, 6, 7, 12)</p> <p>Food supplied according to need of the community (6)</p> <p>Hard to find experienced manager and employees (8)</p> <p>Employees' absenteeism (11)</p> <p>Employees' lack of knowledge: fruits/vegetables, ordering, hygiene (7, 8, 10)</p> <p>Difficulty in managing fruits and vegetables (8)</p> <p>Difficulties in using supplier's informatics ordering system (7)</p> <p>Need to send orders to supplier in advance, before the deadline (8)</p> <p>Look at the inventory before ordering (8)</p> <p>Less food items available just before delivery (10)</p> <p>Some stores have planograms (prepared by Head Office): what products to order and where to place them in the store (6)</p> <p>Some items are not sold because not on the planogram: no space (6)</p> <p>Difficult to change the layout of products in the store: would have to change planogram (6, 10)</p> <p>Lot of waste (2, 4, 12)</p> <p>Some items are not ordered to avoid waste: don't sell enough (7)</p> <p>Some foods are ordered once in a while: broccoli (6, 11)</p> <p>Sometimes some food run out: tomatoes (11)</p> <p>Certain stores have little variety: bread, meat (10)</p> <p>Some stores sell a variety of products: bread (10)</p> <p>Some stores sell only frozen meat (6)</p> <p>Certain stores sell products of lower quality: meat, expired foods (6, 10)</p> <p>Some stores sell products of higher quality: meat (10)</p>	<p>Some stores are more expensive than others (1, 7, 10)</p> <p>Some stores are owned by a private owner/company (8, 10)</p> <p>Some stores managed by Head office: Northwest Companies, FCNQ (4, 12)</p> <p>Some stores affiliated with Loblaw's or Sobeys: AXEP, Intermarché, OMNI (7, 9, 10)</p> <p>Some stores are community stores or coops (4, 5, 7, 10)</p> <p>Some stores have more purchasing power than others (1)</p> <p>For some stores it is their Head office who manages prices (2, 7, 4, 12)</p> <p>Stores of a same company try to standardize their prices in an area (7)</p> <p>Store takes same percentage of profit on all items in their store (1)</p> <p>Some stores take more/less profit, depending on the category of item (7, 10)</p> <p>General markup/Percentage of store profit pre-establish with supplier (8, 10)</p> <p>Business goal: needs of the community VS profit (1, 5, 6, 7)</p> <p>Hard to find experienced manager and employees (8)</p> <p>Have to manage budget when ordering (8)</p> <p>Errors may happen (10)</p> <p>Sometimes problems with computer system that manages prices (10)</p> <p>Some stores adjust prices when overpriced or underpriced (1, 10)</p> <p>Prices have to be checked in computer system before ordering, but don't always have time (8)</p> <p>Some stores deal prices with suppliers (7)</p> <p>Some stores are not dealing prices with suppliers (1)</p> <p>Cost encountered: transport, labor, employees' traveling, unpaid customer's accounts, lease, electricity, maintenance of building (2, 6, 8, 7, 12)</p> <p>Some stores overestimate the cost of transport (7)</p> <p>Customers have accounts at the store (8)</p> <p>Lots of waste (2, 4, 8, 12)</p> <p>Waste add on to the cost of foods (2, 8)</p> <p>Prepared/ready-to-go foods are more expensive due to labor cost (6)</p> <p>Less promotions in the North: less competition (5)</p> <p>Store has an Everyday Low Prices program: fruits keep at lower price (12)</p>

Perception of the issue of access to nutritious foods		
	Availability	Affordability
	Stores have to respect food safety measures, get rid of expired products (10) Some stores offer ready-to-go meals and snacks (9, 10, 12) Sometimes ready-to-go recipes are too salty (10)	
Store Managers	Personal eating habits/taste/need of the manager and his/her family (1, 4, 6, 7, 9, 11, 12) Personal beliefs (1, 12) Health awareness/interest of the manager (4, 6, 7, 10, 11, 12) Lack of knowledge about certain products: baby formulas, fruits and vegetables (8, 11, 12) Management knowledge and skills (7, 8) Freshness doesn't always seem to be a priority (6) Some are experienced manager (2, 5, 7, 8) Hard to find experienced an manager (8) Contact/relation with the community (2, 5, 6, 12) Personal motivation: own the store or not, desire to help (1, 6, 7, 8, 10) Collaborate with health workers or local organisations (7, 12)	Personal motivation: own the store or not, desire to help (1, 6, 7, 8, 10) Contact/relation with the community (6, 12) Management knowledge and skills (7, 8) In some businesses, managers have a large influence on prices: depends of their priorities (7, 10) Hard to find experienced an manager (8) Some are experienced managers (2, 5, 7, 8, 10)
Supply	Supplied by Ben Deshaies: Amos (1, 5, 7, 8, 10, 11) Supplied by Loblaws: Montreal (9, 10) Supplied by Sobeys: Montreal and Rouyn (2, 6, 7, 8, 12) Supplied by Northwest Companies: Winnipeg (6, 12) Supplied by FCNQ: Montreal (4) Meat supplied by a butchery (11) Bread and chip supplier (8) Have one supplier (1, 5) Have two suppliers or more (7, 8, 9, 10, 11, 12) Satisfied of the quality with Ben Deshaies (1, 5, 7) Satisfied of the quality with Loblaws (10) Satisfied of the quality with Sobeys (8) Not always satisfied with Ben Deshaies: sometimes lower quality or expired foods: strawberries, raspberries, lettuce, cherries (8, 10, 11) Items not available in store when returned to supplier (11) More quality with Sobeys and Loblaws VS Ben Deshaies (8, 10) Can get almost all products they want from supplier (2, 10) Some items not available with supplier: Sobeys, they only supply products that are sold up to a certain quantity per year (5, 7, 8, 12) Sometimes items are missing from supplier: Sobeys (12) Ben Deshaies offers products in demand in the north, not available at other supplier (7, 8) Some items are not sold by unit, only sold by case (7, 8)	Price of supplier influences price in the stores (1, 10) Prices in store are managed according to which supplier they come from (10) Thinking of changing supplier or making changes: due to cost (1, 5, 7, 8, 10) Certain items have to be ordered from a specific supplier, not available with other supplier (8) Need to give deposit to supplier as guaranty for food delivery: Sobeys (8) Some stores have access to different suppliers (8, 9) Some items are more expensive since they come from a more expensive supplier: meat, baby formula (8, 10) Supplier is expensive: Ben Deshaies (1, 5, 7, 8, 10) More expensive with Ben Deshaies than Sobeys or Loblaws (7, 8, 10) Some vegetables are more expensive at Ben Deshaies, but quality better and less waste since can purchase in smaller quantities (7) Some items have to be order by the case, often can't order by the unit: lots of waste (5, 7, 8) Suppliers' prices of meat and vegetables expensive (8) Certain price vary every week: produce and meat (5) Increase in the price of meat on the stock market (10) Supply based on seasons: local product less expensive than imported (9) Food come from other countries, high transport fees (12) Supplier sells food item at different prices from one store to the other (1) Supplier sells food at high price to northern communities (1) Price of pop is cheaper than water: purchase in bulk from supplier (2, 10)

Perception of the issue of access to nutritious foods		
	Availability	Affordability
	<p>Supplier's format are sometimes too large: lot of waste (7, 8)</p> <p>Some items have to be order by the case, often can't order by the unit: influence what they are going to order (5, 7, 8)</p> <p>Some items that sell in the north are not available from supplier: large tea box, bulk (7, 8)</p> <p>Need to order new item in advance (8)</p> <p>Some products can't be sold in Quebec, but are sold in Ontario (11)</p> <p>Supply of food based on what is in season: fruits and vegetables (9, 12)</p> <p>Can't get some items; supplier consider store as a convenient store: small size store (7)</p> <p>Supplier send a promo flyers: corner store specials since small store (1, 7)</p> <p>Suppliers and food companies offer incentives to influence sells: volume discounts, equipment (1, 7)</p> <p>Food companies pay for shelf space (in franchised stores) (7)</p>	<p>Supplier sends promo flyer: convenient store specials since small store (1, 7)</p> <p>Suppliers suggest retail prices (7, 8, 9, 10)</p> <p>Some stores are using suggested retail price from supplier (7, 8, 9, 10)</p> <p>Some suggested retail prices are too high or too low: flour, pop (7)</p> <p>General markup/Percentage of store profit pre-establish with supplier (8, 10)</p> <p>Prices are difficult to change in the computer system (7)</p>
Transport	<p>Food delivered by truck in most communities (1, 2, 5, 6, 7, 8, 9, 10, 11, 12)</p> <p>Food delivered by truck and plane (3, 4)</p> <p>Meat is delivered twice a week by plane (6)</p> <p>1 food delivery per week (11)</p> <p>2 food deliveries per week (1, 2, 6, 10)</p> <p>3 food deliveries per week (8, 12)</p> <p>People shop on delivery days: fresh produce and meat (1, 6, 8, 11)</p> <p>Consistency of the deliveries: help manage food orders (2)</p> <p>Transport has no impact on selection (2, 7, 9, 10, 12)</p> <p>Sometimes truck doors are left open during deliveries, food has time to freeze (7)</p> <p>Some say transport affects the quality: bruised fruits, frozen fruits in winter, thawed foods, not fresh (1, 2, 4, 8)</p> <p>Some say transport has no/little influence on quality (7, 9, 10, 12)</p> <p>Accident on the road: food not delivered (1)</p> <p>Delivery not received affects whole community = essential service (1, 6)</p>	<p>Transport is expensive, it has a big impact on price of food (1, 2, 3, 4, 5, 6, 9, 10, 11, 12)</p> <p>Food delivered by Kepa (2, 3, 6, 8, 10, 11, 12)</p> <p>Only one transport company to deliver the food: Kepa (2, 3, 6, 10, 11)</p> <p>Choice of a few transport companies (9)</p> <p>Transport is a major factor affecting price of food (1, 2, 3, 4, 5, 6, 8, 9, 10, 12)</p> <p>Transportation fees are calculated by weight (2, 10)</p> <p>What is heavy is expensive to transport: water, pop, milk (10)</p> <p>Food delivery by plane is more expensive (2, 3, 4, 5, 6)</p> <p>Food is delivered by truck in most communities (1, 2, 5, 6, 7, 8, 9, 10, 11, 12)</p> <p>Food is delivered by truck and then by plane in one community (3, 4)</p> <p>Meat is delivered twice a week by plane (6)</p> <p>Need to use winter wrap for produce and meat: added expense (2)</p> <p>Transportation fees vary according to the distance from supplier to community (8)</p> <p>Only Kepa delivers in some community (1, 2, 5, 6, 10)</p> <p>There used to be another company delivering: Cree Express (6, 11)</p> <p>Cree Express was cheaper than Kepa (6, 11)</p> <p>Only a few have other transportation options (8, 9, 12)</p> <p>Transport should be the only added fee, food should be the same price as down south plus transport only (10)</p> <p>Nutrition North Canada and Kativik Regional Government subsidies programs are available in one community (3)</p>

	Perception of the issue of access to nutritious foods	
	Availability	Affordability
Competition (other stores or companies)	<p>Lack of/limited competition: grocery stores, suppliers (5, 10)</p> <p>Lower quality of food of certain stores (10)</p> <p>Lack of knowledge of what competition is selling (11)</p> <p>Customers have to go to other store when run out of some items (11)</p> <p>Customers purchase from down south when travelling (6)</p> <p>Customers have to order missing items online or from down south (5, 12)</p> <p>Store still sell a lot of food even though people shop outside of the community (6)</p>	<p>Lack of/limited competition (grocery stores, suppliers, transport companies) (2, 3, 5, 6, 7, 10)</p> <p>Higher prices in smaller communities: less competition (2)</p> <p>Food more expensive where there is only one store: lack competition (7)</p> <p>Less sales and promotions in the North: less competition (5)</p> <p>Some customers compare, say it's more/less expensive than elsewhere (8, 10)</p> <p>When prices of basic foods are too high, Customers purchase elsewhere (7)</p> <p>Customers are used to having higher prices in the community (10)</p> <p>Customers purchase from down south when travelling (6)</p> <p>Customers travel outside of the community to buy food, which adds on the cost of food they buy (8, 11)</p> <p>Customers buy in bulk down south: practical & get more for their money (6)</p> <p>Hard to compete with large super stores outside the community (12)</p>
Collaboration (other entities)	x	x
Government (subsidies, program, laws)	<p>Training provided by the Quebec government is only available in French (8)</p>	<p>Nutrition North Canada is applicable in Whapmagoostui/ Kuujjuarapik (3)</p> <p>Most stores of the region don't qualify in the Nutrition North program: delivered by road (6)</p> <p>Communities don't qualify for NNC but large proportion of extra fees is due to transport (6)</p> <p>Kativik Regional government has a subsidy program (only in Nunavik): Whapmagoostui/ Kuujjuarapik (3)</p> <p>Lack of transparency in applying NNC subsidy program (3)</p> <p>Manager doesn't know about the subsidies programs and if they are applied in her store: prices managed by Head office (4)</p> <p>Items subsidized change (3)</p> <p>Some healthy items are not subsidized by NNC: water (3)</p> <p>Some stores receive a tax exemption: GST refund every 3 months (8)</p> <p>Quebec law on price of milk (7)</p>
Marketing and media	<p>Customers demand what they see on TV, the popular food (8)</p> <p>Managers order what they see on TV (1)</p> <p>Supplier sends promotional flyer for small store: chocolate, pop (1, 7)</p>	<p>Supplier sends promotional flyer for small store: specials on unhealthy foods (1, 7)</p> <p>Lack of sensitization about the issue of limited access to nutritious food (10)</p>

	Solutions to improve access to nutritious foods	
	Availability	Affordability
Health	<p>Improve eating habits, to improve health (9, 12)</p> <p>Inform customers of healthier food options/ encourage purchase of healthier foods (8)</p> <p>Improve availability of nutritious foods (6)</p> <p>Decrease availability of unhealthier foods (7)</p>	<p>Decrease access to unhealthier foods: Avoiding promotions on unhealthier items (7)</p>
Customers	<p>Organize food tastings/samplings (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12)</p> <p>Organize cooking demonstrations (1, 2, 6)</p> <p>Sensitize/Give information to people in the store (2, 6, 10, 12)</p> <p>Have a booth (2, 4, 5, 7, 8, 9)</p> <p>Organize grocery tours (6, 7, 9)</p> <p>Health promote program or activities to inform/educate : Drop the Pop, posters, pamphlets, banners, recipes, store health promotion program, governmental program (1, 4, 6, 10, 12)</p> <p>Have shelf labels (5, 7, 10)</p> <p>Provide recipes: recipe card, online (4, 6, 9)</p> <p>Organize a draw of a basket of nutritious foods (8)</p> <p>Set up a point system and draw for customers purchasing nutritious foods (5)</p> <p>Promote healthy eating habits during community events or other community settings (2, 3, 6, 12)</p> <p>Organize a food fair (2,12)</p> <p>Promote nutritious foods in other community settings: school breakfast/snack program, daycare, elders home (3, 5)</p> <p>Target children: get them to start liking it at a young age (3, 5, 6)</p> <p>Target the parents: teach them how to prepare food (6)</p> <p>Organize cooking workshops: parents and children (6, 12)</p> <p>Promote nutritious foods that complement traditional foods (6)</p> <p>Combine health promotion activities: Food tasting + shelf labels (7)</p> <p>Combine health promotion activities + offer nutritious food in store (6, 7)</p> <p>Combine health promotion activities and specials (2, 7)</p> <p>Use media to provide information or promote healthy foods (4, 6, 10, 12)</p>	<p>Organize food budgeting workshops (6, 11)</p> <p>Provide training on how to prepare food at lower cost and budget for food (6)</p> <p>Inform customers about saving to be made when buying in bulk or whole foods (6)</p> <p>Organize cooking demonstrations: low cost items (6)</p> <p>Organize cooking workshops: low cost recipes (6)</p> <p>Organize draws: winner gets their money back to spend on food (6)</p> <p>Gift cards for nutritious foods when purchasing for a certain amount (2)</p>

	Solutions to improve access to nutritious foods	
	Availability	Affordability
Store Settings	<p>Renovate or build a new store settings (1, 2, 3, 4, 6, 7, 8, 9, 10, 12)</p> <p>Add butchery (6, 7, 8)</p> <p>Provide sufficient cooler/ freezer space and adequate equipment (1, 8, 10)</p> <p>Increase storage space (1, 10)</p> <p>Add a food preparation area (2)</p> <p>Provide support and specialized services to renovate/build (8)</p> <p>Place produce in front of the store (2)</p> <p>Place nutritious food items at eye level (7)</p> <p>Place unhealthy food items lower than eye level (7)</p> <p>Improve layout of the store (7, 10)</p> <p>Supplier can help with store layout: Sobeys (8)</p> <p>Supplier may arrange layout of the store, if needed (8)</p> <p>Limit visibility/Avoid displays of unhealthy food items (7)</p> <p>Ensure access to equipment & repair service (1)</p> <p>Set up nutritious foods displays (1, 2, 7)</p>	<p>Renovate or build new store settings (1, 2, 6, 7, 10, 12)</p> <p>Increase storage space: to be able to buy large quantities (1, 10)</p> <p>Ensure sufficient space to offer bulk items (6)</p> <p>Add a reception area (2)</p> <p>Alleviate cost of equipment and repair services (1)</p>
Store Management practices	<p>Getting to know the community (6, 12)</p> <p>Offer foods that correspond to the specific need/taste of the community: community-specific (12)</p> <p>Hire employees that have a good contact/relationship with community (2,12)</p> <p>Provide training/information/support to stores employees (2, 6, 7, 8, 9, 10)</p> <p>Order new foods upon demand (2, 4, 6, 7, 8, 11)</p> <p>Order less popular foods once in a while or in small quantity (8)</p> <p>Order for customers for special occasions or specific demand (6, 8)</p> <p>Offer a variety of nutritious food items (7, 10, 12)</p> <p>Order fresh products: fresh meat (6)</p> <p>Limit the variety of unhealthy food items (6, 7, 8)</p> <p>Adapt availability of items to seasonal activities: hunting, hockey, etc. (12)</p> <p>Offer foods that complement traditional foods (6)</p> <p>Offer healthy ready-to-go or value added foods (1, 2, 6, 9, 11, 12)</p> <p>Try new foods customers might like (1, 2, 6, 7, 8, 10)</p>	<p>Affiliated with major supplier to have buying power (5, 7, 9)</p> <p>Group with other business to increase purchasing power (1, 7)</p> <p>Compare prices to other stores and match price to competition (2, 6, 10)</p> <p>Adjust prices of nutritious foods when overpriced (1, 7, 8, 10, 12)</p> <p>Adjust prices of unhealthy foods when underpriced (1, 7, 10, 12)</p> <p>Take less profit on healthy/essential items: baby foods, meats, produce, flour (7, 8, 10, 12)</p> <p>Take more profit on unhealthy/unessential items: ice cream, pop, chips (7, 10)</p> <p>Sell essential items at the same price than down south: meat, milk (6, 10)</p> <p>Redistribute extra transport fees on unhealthy food items rather than on the healthy items (7, 10)</p> <p>Negotiate prices of foods with supplier (7)</p> <p>Negotiate transport fees with transport company (7)</p> <p>Sign a contract with the supplier to guaranty prices during a certain period (7)</p>

Solutions to improve access to nutritious foods		
	Availability	Affordability
	<p>Promote nutritious foods: Cross-merchandise, sample, make more visible (2)</p> <p>Use store health promotion program, where available (12)</p> <p>Order and sell promoted healthy foods (6, 12)</p> <p>Donate food items for health promotion activities: booth, testing (2, 3, 5)</p> <p>Adapt layout of the store, planograms (6, 7)</p>	<p>Order food in large quantity: truck full of water (2, 10)</p> <p>Sell food in bulk or family size (2, 6)</p> <p>Order bulk items for specific demand (6)</p> <p>Sell food that require less preparation for stores to reduce labor cost (6, 12)</p> <p>Find ways of decreasing waste (2, 7, 12)</p> <p>Develop ordering tool to decrease waste from sales statistics (2)</p> <p>Reduce price of items for immediate consumption to avoid waste: ripe banana (12)</p> <p>Offer discounts on nutritious foods store has too much of to avoid waste (7)</p> <p>Offer discounts on nutritious foods during health promotion activities (2, 7, 10, 12)</p> <p>Avoid specials on unhealthy items (7, 10)</p> <p>Offer discount to all community members on a certain days (11)</p> <p>Offer discount to elders at all times (11)</p>
Store Managers	<p>Hire experienced managers (2, 5, 7, 8)</p> <p>Hire managers that have a good contact/relationship with the community or are members of the community (2, 5, 12)</p> <p>Ensure availability of store manager to receive demands from customers (2)</p> <p>Hire managers that have need of the community as a priority: health, freshness of products, variety (2, 6, 7, 9, 10)</p> <p>Involve managers in planning of store layout to respond to customers' needs (10)</p> <p>Provide information/training to stores managers: food, cooking, health, ordering and food safety/conservation (6, 8, 9, 10, 11)</p>	<p>Hire experienced managers: to manage prices and profits (7, 8, 10)</p> <p>Ensure availability of the store manager for the customers to address price error/issues (7, 10)</p> <p>Hire managers that have need of the community as a priority: health VS profits (1, 7, 10, 12)</p> <p>Provide information/training to managers: price of the nutritious food basket, ordering (2, 10)</p>

Solutions to improve access to nutritious foods		
	Availability	Affordability
Supply	<p>Change supplier or order certain foods from another supplier (1, 5, 7)</p> <p>Choose supplier that provides best quality (1, 10)</p> <p>Choose supplier that provides good selection of foods: fresh meats (10)</p> <p>Ask supplier if certain items can be ordered in smaller format (8)</p> <p>Use UPC code to order new items from supplier (8)</p> <p>Order new food in advance to make sure supplier has them in stock (6, 8)</p> <p>Ensure sufficient number of deliveries to have good quality and selection (10)</p> <p>Inspect the quality of the products upon reception (8)</p> <p>Send pictures to supplier of items that are not fresh or good quality (10)</p> <p>Return foods that are not fresh or good quality (8, 10)</p>	<p>Change supplier or make changes to supply (1, 5)</p> <p>Choose supplier that provides best price and quality (1, 10)</p> <p>Possible to have fair prices with the right supplier (10)</p> <p>Avoid purchasing from expensive suppliers (10)</p> <p>Deal better prices with supplier (1, 7)</p> <p>Select appropriate format: bulk or unit (6, 7, 10)</p> <p>Order in bulk from supplier (6, 10)</p> <p>Order in bulk items on special from supplier 6 weeks in advance (10)</p> <p>Purchase larger quantities to get volume discounts (7, 10)</p> <p>Purchase smaller quantities to avoid waste (7)</p> <p>Sign an contract with supplier to guaranty price of certain food items (7)</p> <p>Affiliate with major supplier to have buying power (5, 7)</p> <p>Use suggested prices of the supplier (8, 9, 10)</p> <p>Review and adjust prices, after calculation of general markup (10)</p>
Transport	<p>Make transport arrangements from supplier to the store (1)</p> <p>Ensure use of winter wrap during transport to avoid freezing of produce (2, 7)</p> <p>Ensure the use of air cushions to prevent bruising of fruits and vegetables (7)</p> <p>Ensure refrigerated trucks are at adequate temperature (7)</p> <p>Ensure truck doors are kept closed during and in-between deliveries (7)</p> <p>Inspect the quality of the products upon reception (8)</p> <p>Recommend customers to buy on delivery days to have fresher products (11)</p>	<p>Stores should negotiate transport fees with transport company (7)</p> <p>Inform communities about freight cost (6)</p> <p>Community band councils should negotiate arrangement with transportation company for the delivery of nutritious foods (6)</p> <p>Distribute transport cost on unhealthy food items rather than on healthy items (7, 10)</p> <p>Subsidize transportation cost, even in communities delivered by road (2, 3, 6)</p>
Competition (other stores or companies)	<p>Compare availability with other stores (8, 10)</p> <p>Compare store settings with other stores (8)</p> <p>Ensure presence of more than one supplier (10)</p> <p>Ensure variety of product to avoid having to shop outside or online (5, 10)</p>	<p>Compare prices with other stores (in the community and outside) to make sure nutritious foods are not overpriced (2, 4, 8, 9, 10, 12)</p> <p>Lower prices to match competition (2, 6, 12)</p> <p>Ensure presence of competition: stores, suppliers, transport (3, 6, 10, 11)</p> <p>When there is competition items are less expensive, even if further North (6)</p> <p>Starting to have competition, prices are starting to adjust (10)</p>

Solutions to improve access to nutritious foods		
	Availability	Affordability
Collaboration (other entities)	Collaborate with: <ul style="list-style-type: none"> ○ Teachers/School/ Cree School Board (1, 3, 5, 8) ○ Parents (1) ○ Health workers: Nutritionist (1, 2, 5, 6, 7, 9, 12), CHRs (8, 9), Dental Hygienist (12), Doctor, nurses (1, 5), Clinic staff/ CBH (6, 9, 12) ○ Suppliers (1) ○ Store managers/owners (5, 6, 7), Store employees (5, 10) ○ Band council, leaders (6, 8, 10), Recreation department (2), Youth Council (9), Head Start Program (9) ○ Organization owning or managing the store: Northwest, Tawish, FCNQ, Development corporation (2, 4, 8, 10) ○ Cook involved in community activities (3, 4) 	Collaborate with: <ul style="list-style-type: none"> ○ Band office (6) ○ Stores (6) ○ Northwest company (6) ○ Transport companies (6) ○ Clinic staff (7) ○ Nutritionists (7, 12)
Government (subsidies, program, laws)	Nutrition North Canada: promote nutritious foods, increase availability (2, 6) MAPAQ provides training on quality/safety foods: online (8) Band office are involved in new store/renovation projects: give permission and support project by providing funding (8) Band offices can be involved in improving layout of the store: can request it to the stores (6)	Adjust the Nutrition North Canada to include northern communities delivered by road (6) Subsidize freight for communities where food is delivered by road (6) Involve the Bands in subsidizing nutritious foods (6) Ensure all healthy items are subsidized: including water (3) Ensure transparency of the program: post subsidy/discount (3)
Marketing and media	Advertise food deliveries on Facebook: fresh meat (6) Send joint promotional flyers from supplier <u>and</u> CHB to promote nutritious food items (1) Use internet to provide information and recipes to store employees and customers (10) Use social medias to do health promotion (6) Promote healthy eating on the radio (4, 12)	Use social medias to sensitize people about high price of food (1, 3) Send joint promotional flyers from supplier <u>and</u> CHB to decrease price of nutritious food items (1)

Appendix 7: Approximate distances between suppliers and communities

	Ben Deshaies /Sobeys	Sobeys/ Loblaws/FCNQ	Northwest company
	Abitibi: Amos or Rouyn (km)	Montreal (km)	Winnipeg (km)
Waswanipi	250 to 355	740	NA
Ouje-Bougoumou	375 to 480	730	NA
Mistissini	475 to 580	785	NA
Nemaska	565 to 665	1085	NA
Waskaganish	520 to 625	1040	2090
Eastmain	635 to 740	1175	2200
Wemindji	795 to 900	1335	NA
Chisasibi	870 to 970	1405	2435
Wapmagoostui (*to Radisson by truck + plane)	800 to 905* + plane	1340* + plane	2370* + plane

Note: Distances were calculated with Google Maps: www.google.ca/maps



Conseil CRI de la santé et des services sociaux de la Baie James
 Cree Board of Health and Social Services of James Bay



SOLUTIONS POUR AMÉLIORER L'ACCÈS AUX ALIMENTS SAINS DANS LES ÉPICERIES D'EYYOU ISTCHEE

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CONTEXTE ET OBJECTIFS

Ces dernières décennies, les Cris d'Eeyou Istchee (Terres-Cries-de-la-Baie James) ont connu une transition nutritionnelle caractérisée par une diminution de la quantité et de la fréquence de consommation d'aliments traditionnels, au profit d'aliments commerciaux. La population crie de la Baie James est maintenant aux prises avec des taux de maladies chroniques et d'obésité supérieurs au reste de la population québécoise. Aussi, une très grande proportion des familles vit dans l'insécurité alimentaire. La disponibilité d'aliments sains est limitée dans la région et leurs coûts élevés représentent une grande proportion du revenu familial. Dans ce contexte, il apparaît essentiel d'identifier des solutions afin d'améliorer l'accès aux aliments sains.

Puisque les épiciers en régions éloignées ont un impact important sur l'approvisionnement alimentaire, et le potentiel d'influencer la qualité de l'alimentation de leur communauté, un projet collaboratif et participatif a été entrepris avec les épiciers d'Eeyou Istchee afin d'explorer leurs perceptions de l'accès aux aliments sains, et d'identifier des solutions qui leur semblent appropriées.

RÉSULTATS: SOLUTIONS PROPOSÉES

Les solutions proposées par les épiciers visent notamment:

- **l'augmentation de la demande par la promotion de choix sains auprès de leur clientèle**
 - dégustations, démonstrations culinaires, visites d'épicerie, kiosques d'information, recettes, affichage en épicerie, activités communautaires, radio, internet et médias sociaux
- **l'amélioration de leurs installations**
 - rénovation ou aménagement de nouvelles installations (espace d'entreposage et de réfrigération, boucherie, aire de réception des marchandises), amélioration des étalages et de la visibilité des aliments sains
- **l'adoption de pratiques de gestion soutenant les choix alimentaires sains à prix abordables**
 - offre d'une variété d'aliments sains permettant de compléter la nourriture traditionnelle, essai de nouveaux aliments en fonction de la demande, offre d'aliments préparés/à valeur ajoutée/en grands formats, formation des employés, embauche de gérants expérimentés, réduction des pertes et des coûts de gestion, offre de spéciaux sur les aliments sains, marge de profit plus importante sur les aliments de faible qualité nutritionnelle que sur les aliments sains essentiels
- **l'approvisionnement en aliments sains et abordables**
 - sélection de fournisseurs permettant d'avoir une variété d'aliments sains à prix abordables, approvisionnement en grandes quantités, négociation des prix des aliments sains
- **la réduction de l'impact des frais de transport sur le prix des aliments sains**
 - négociation des frais de transport, encouragement de la présence de compétition, subvention du transport d'aliments sains, redistribution des frais de transport sur les aliments de plus faible qualité nutritionnelle plutôt que sur les aliments sains essentiels



MÉTHODE

Douze entretiens qualitatifs semi-dirigés ont été réalisés auprès des épiciers d'Eeyou Istchee, transcrites, puis analysées de façon thématique à l'aide du logiciel NVivo.

CONCLUSION

Dans l'ensemble, les épiciers d'Eeyou Istchee sont conscients des changements à apporter pour améliorer l'accès aux aliments sains. Ils représentent des partenaires de choix qui peuvent contribuer à la réalisation d'objectifs en matière de promotion de la santé et de prévention des maladies chroniques. Il semble donc primordial de **collaborer** avec eux à la promotion de la saine alimentation auprès de leur clientèle, à l'amélioration de leurs installations, à la réduction de l'impact des frais de transport et à l'adoption de pratiques de gestion et d'approvisionnement soutenant des choix alimentaires sains à prix abordables.

Ces entretiens ont permis de mieux comprendre la problématique d'accès aux aliments sains et de mettre en lumière des solutions adaptées à la région. La présence d'épiciers ayant à cœur les besoins de leurs communautés peut représenter un atout important pour les communautés qu'ils desservent. Espérons que cette nouvelle collaboration permettra d'assurer la disponibilité d'aliments sains à prix abordables pour toutes les familles de la région.

RÉSULTATS: PERCEPTIONS DE LA PROBLÉMATIQUE

Les épiciers rencontrés sont conscients de la problématique d'accès aux aliments sains et de ses effets sur la santé, tels que l'obésité, le diabète et certains problèmes dentaires. Ils sont ouverts à contribuer à l'amélioration de l'accès aux aliments sains dans la mesure où ils pourront continuer à réaliser des profits.

Selon eux, la **disponibilité limitée** d'aliments sains serait principalement liée:

- à la **demande** des consommateurs
- à la **taille** et aux **installations** actuelles des commerces d'alimentation
- à certaines pratiques de **gestion**

Le **coût élevé** des aliments serait lié:

- aux **coûts de transport**
- à la **faible compétition** (épicerie, fournisseurs, compagnies de transport)
- à certaines pratiques de **gestion**
- à l'**approvisionnement** alimentaire

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Note: Le rapport complet de ce projet sera disponible en début d'année 2015, contactez les auteurs de cette présentation affichée si vous désirez en obtenir une copie.

NOVEMBRE 2014



Conseil de la santé et des services sociaux de la Baie James
Cree Board of Health and Social Services of James Bay



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SOLUTIONS TO IMPROVE ACCESS TO NUTRITIOUS FOODS IN THE STORES OF EYYOU ISTCHEE

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CONTEXT AND OBJECTIVES

In recent decades the Crees of Eeyou Istchee (James Bay Cree Territory) have experienced a nutritional transition characterized by a decrease in the frequency and amount of traditional food consumed in favor of commercial foods. The Cree population of James Bay is currently experiencing rates of chronic diseases and obesity significantly higher than the general Quebec population. Moreover, a great proportion of families live with food insecurity. Availability of nutritious foods is limited in the region and their high costs represent a large proportion of the family income. Therefore, it is essential to identify solutions to improve access to nutritious foods.

Since grocery store managers of remote communities have a significant impact on the food supply and the potential to influence the quality of the diet in their community, a collaborative and participative project was undertaken with the grocery store managers of Eeyou Istchee to explore their perceptions of nutritious food access and identify appropriate solutions.

METHOD

Twelve qualitative semi-directed interviews were conducted with the store managers of Eeyou Istchee, transcribed, and then analyzed by themes using the NVivo software.

RESULTS: PERCEPTIONS OF THE ISSUE

The grocery store managers are aware that access to nutritious foods is an issue and that it affects the health of the population (obesity, diabetes and dental problems). They are open to help improve access to nutritious foods, as long as they can continue to make profits.

According to them, the **limited availability** of nutritious foods is mainly linked to:

- consumers' **demand**
- **store size** and actual **settings**
- certain **management practices**

The **higher cost** of foods would be related to:

- **transportation costs**
- **limited competition** (grocery stores, suppliers, transportation companies)
- certain **management practices**
- **food supply**



RESULTS: PROPOSED SOLUTIONS

The solutions proposed by the store managers include:

- **Increase demand by promoting healthy food choices to their customers**
 - tastings, cooking demonstrations, grocery tours, information booths, recipes, labels and posters, community workshops, radio, internet and social media
- **Improvement of their settings**
 - renovating or building new store settings (storage, refrigeration space, butchery, reception area), improving display and visibility of nutritious foods
- **adoption of management practices that support healthy and affordable food choices**
 - offering a variety of nutritious food choices which complement traditional foods, offering new foods, offering prepared/added value/larger size items, training employees, hiring experienced managers, reducing waste and managing costs, offering discounts on nutritious foods, making a higher profit margin on items of lower nutritional quality than on the nutritious foods
- **supply of affordable nutritious foods**
 - selecting suppliers which allow the offer of a variety of affordable nutritious foods, ordering foods in bulk, negotiating food prices
- **reduction of the impact of transportation costs on the price of nutritious foods**
 - negotiating transportation costs, encouraging competition, subsidizing transportation of healthy foods, redistributing transportation costs on foods of lower nutritional quality rather than on essential nutritious foods



CONCLUSION

Overall, the store managers of Eeyou Istchee are aware of the changes required to improve access to nutritious foods. They are valuable partners who can help achieve the goals of health promotion and chronic disease prevention. Therefore, it seems essential to **collaborate** with them to promote healthy food choices to their customers, improve their store settings, reduce impact of transportation costs and adopt management and supply practices that support healthy and affordable food choices.

These interviews allowed for a better understanding of the issue of access to nutritious foods and highlighted solutions adapted to the region. The presence of grocery store managers that have the well-being of the community at heart can be an important asset for the communities they serve. Hopefully this new collaboration will help ensure availability of affordable nutritious foods for all families of the region.

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Note: The complete report of this project will be available in early 2014, contact the authors of this poster if you wish to receive a copy.

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