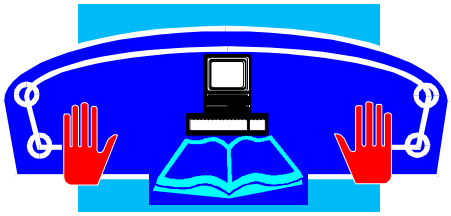

Food Retailing In The Northwest Territories
Type of Study: Statistics/surveys Arctic Foods, Food Processing/outlets
Date of Report: 1986
Author: Canada - Consumer & Corporate Affairs
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PREFACE

This report is the last in a series of reports requested by DIAND and the Ad Hoc Interdepartmental Committee on Northern Food Costs for inclusion in the Northern Food Study project. It was sponsored by Consumer and Corporate Affairs Canada.

Previous reports in this series include:

Alternative Food Technologies. November, 1984.

Government Funding Sources for Alternative Food Technologies. November, 1984.

Income Levels and Distribution. November, 1984.

Statistical References.

Northern Food Costs-Overview. November, 1984.

Nutrition and Health Related Aspects of Northern Food Costs. February, 1985

Northern Consumers, Socio-Economic Change, and Access to Traditional Food Resources. February, 1985.

Transportation Rates and Other Factors Affecting Northern Food costs . October, 1985.

The report was written for discussion purposes only and does not represent the views of the Government of Canada. It was prepared by Donna Green, Mi lford Green, and Signe Research Associate Robert M. Bone who are solely responsible for its contents. It is hoped that it will be of value to northern residents and others interested in the question of food rests in northern Canada.

The figures and statistics that appear in the figures and tables of this report are derived from the data gathered during this research project, unless otherwise indicated. The results reported in this report are also based on the data collected for this study.

EXECUTIVE SUMMARY

This report was commissioned by Consumer and Corporate Affairs Canada to analyse the Northwest Territories food retail markets. The food retail markets were examined by gathering data from two populations in the Northwest Territories: retailers and consumers.

All fcod retailers in the Northwest Territories were contacted by mail and asked to answer a questionnaire designed to gather basic information abut their feed stores. The types of information received from them were: size, supplier names and locations, non-food products and services, and managementexperience. In addition, 15 store managers in six communities selected for on-site interviews, were asked about problems they face, reasons for success, rests of operation, etc..

Consumers were also interviewed in these six communities . They provided information about their shopping habits, their use of alternative sources of fed, and their perception of food in the communities.

The major findings are divided into three sections. The major findings are:

1. Results from Retailer Inventory Survey

   * There are 115 food retailers in the Northwest Territories. They consist of 35 Hudson's Bay Stores, 32 cooperatives, and 48 independents.

   * The average number of focal products carried in a store is 812, in an area of 145 square metres (1558 square feet). There are approximately 850 persons employed in the retail stores in the Northwest Territories, or an average of 8.2 persons per store.

   * Store managers have an average of 8.1 years of retailing experience.

   * Major non-food products and services offered in northern fend stores include fishing supplies, hardware, clothing/footware, hunting equipment, credit, fur buying, handicrafts, and special and bulk orders. The stores therefore tend to be general merchandise in nature, rather than purely food stores.

   * The only feed category that is not readily available in all immunities is fresh meat. This is because of its extreme perishability. Frozen meat on the other hand is generally available.

* Perishables are generally shipped via air or, where available, truck.

* Nonperishables are shipped mainly via trucks or by water transport. However, many retailers supplement these supplies with airlifted supplies later in the year. The available evidence seems to indicate that the cost of food is lower when annual sealifts are utilized, even when the extra costs of financing and warehousing the inventory are considered.

* Store managers do not always order nonperishable foods by the cheapest means of transportation available: i.e. water or road. Air shipment is used more often than is warranted. This practice is most often found in cooperative stores.

* Country fish is sold in 25% of the retail food stores in the Northwest Territories. The sale of other country foods is generally restricted to specialty stores which are located in the larger communities (e.g. Frobisher Bay and Inuvik).

* Large retailers, the cooperative association, and the chain store (Hudson's Bay Company) are able to place orders directly with manufacturers and thereby achieve lower prices than retailers that must order from wholesalers. (A comparison of prices from manufacturers and wholesalers was not undertaken as a part of this study so the amount of savings is uncertain.)

* Suppliers for the Northwest Territories retail stores are concentrated in three major centres: Edmonton, Winnipeg, and Montreal. However suppliers are located all across Canada.

2. Results from the Indepth Examination of Six Communities

Retailer Survey

* Frobisher Bay is the largest of the three eastern communities; Fort Rae is the largest of the three western communities. The largest community in the East and West respectively had a greater number of retailers, a greater number of open hours for food shopping and lower food prices than the smaller immunities visited.

* If a community has more than one store the largest generally has the largest selection and usually the lowest prices. The other (secondary) stores generally have higher prices, smaller and/or different selection of foods and are open more and/or different hours than the primary stores.

* The relative prices between the six communities and the prices in Yellowknife are similar to those found by the G. N.W. T. in 1982, i.e. , fran lowest prices in Fort Rae and highest prices in Cape Dorset. The order is as follows:

a.. Fort Rae
b. Fort Norman
c. Frobisher Bay
d. Broughton Island
e. Norman Wells
f. Cape Dorset

* The most frequently mentioned problem, shared both by the food retailers and the restaurant managers, is unreliable air delivery of perishable goods.

* Shortage of reliable and skilled clerks was also mentioned by retailers as a difficulty northern retailers must face.

Consumers

* Forty-six percent of the consumers indicated that they use credit for at least some of their fend purchases.

* The average number of fcod shopping trips per week is 3.7.

* The average number of dollars spent on a grocery trip was $48.35.

* Inuit, Indians, and non-natives exhibited differences in the typesof food purchased at the local foodstoreontheday of the intercepts.

* Non-natives spent more per capita on food than natives.

* Consumers were generally satisfied with the quality and selection of feed available in the six communities. In all six communities, the majority of consumers considered the price of focal as high.

* Direct or bulk food purchasing is used by a small minority of the consumers in five of the six communities. The exception was Norman Wells, where 71% of the consumers do make some food purchases outside the community. Most residents of Norman Wells felt that the prices charged by the single retailer were excessive and therefore must be bypassed if possible.

* Country food is available to most natives by hunting or sharing. Non-natives generally only have access to country food if it is sold in a retail food store.

* Country focal was consumed by natives in all six communities visited. Country food consumption appears to be the highest (of the six communities) in Broughton Island and Cape Dorset.

* In some Dene communities the sharing of caribou has been institutionalized. The caribou is stored in community freezers and is available free to all natives in the community.

3. Results of Food Price Indices Analysis

* The mode of shipment available to a community accounted for 49% of the variation in the food price index. The presence of land access (roads) was associated with lower food price indexes, while the presence of air access was associated with higher prices.

* Another 14% of the variation in the food price indices for the Northwest Territories communities was accounted for by store types. The presence of an independent was associated with lower food prices, while the presence of a inoperative was associated with higher focal prices.

* The fact that independents are associated with lower prices is attributable to the fact that 62% of the independents used in the regression analysis are located on roads while only 33% of the Bays and only 15% of the cooperatives are located on a . road. Hence the 'average' transportation casts of independent stores are lower than those of the other two types of stores.

* The larger the community the greater the number of stores present in the community. The larger a community the more likely that an independent store is located there. There is also a relationship between the size of the community and the feed prices, i.e. the larger the community the lower the food price indexes.

* Variations in the average per capita income by community have no relation to the food price indexes.

* The proportion of natives in a community had no effect on the food price indices. This indicates that communities with substantial mtive populations do not have higher focal prices than similar communities with small native populations.

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1.0 CHAPTER 1: INTRODUCTION

Canadians living in the Northwest Territories find food costs very high while at the same time, they cannot obtain a wide variety of foodstuffs in northern stores. These two problems -price and variety- place northern shoppers in a disadvantaged position relative to southern Canadians.

Governments have become involved in the food business through various support programs. These programs include transportation subsidies on perishable foods, hunting subsidies to increase the production of country fed, and operating subsidies for cooperative stores. Also governments have encouraged native development corporations to operate retail stores in their communities. Unfortunately, these and other forms of assistance have taken place without an examination of the consumer's needs, a full understanding of the existing retail food structure, and the impact of such programs on food prices.

An underlying assumption of these programs is that as it is in the South, so should it be in the North. Unfortunately because of the distribution of the people, the geography, and the climate, similar levels of service cost substantially more in the North. While food is not the only area where costs in the North are higher, it is an essential commodity. Therefore high food rests affect all northerners.

Supermarkets, and now superstores, supply a wide variety of focal products to southern consumers for relatively low prices. There are two major forces which have allowed supermarkets to flourish in southern Canada: mass volume combined with frequent, cheap delivery via trucks. Except for perhaps Yellowknife, neither of these forces exist in the Northwest Territories.

With 115 feed stores selling food products to sane 50,000 consumers in the Northwest Territories spread across approximately 3.4 million square kilometres, the scope of this investigation is extremely bread and complex. Eighteen percent of these people live in one city, Yellowknife, while the remainder live in 65 communities. (G. N.W.T., 1982). These communities are shown on the map in "Figure 1. Communities in the Northwest Territories". All but 13 have populations of less than 800, too small to support a modern supermarket, even if all communities were frequently accessible by truck.

Only 19 of the communities are connected to the South (or to each other) by roads. Except Colville Lake and Lac la Martre the rest are accessible for a few weeks a year by barge after the summer thaw and before the winter freeze up. The rest of the year these communities are accessible only by air. small communities accessible only by air during the majority of the year prescribe a different and more costly food distribution system than the supermarkets which have evolved in southern Canada and the United States.

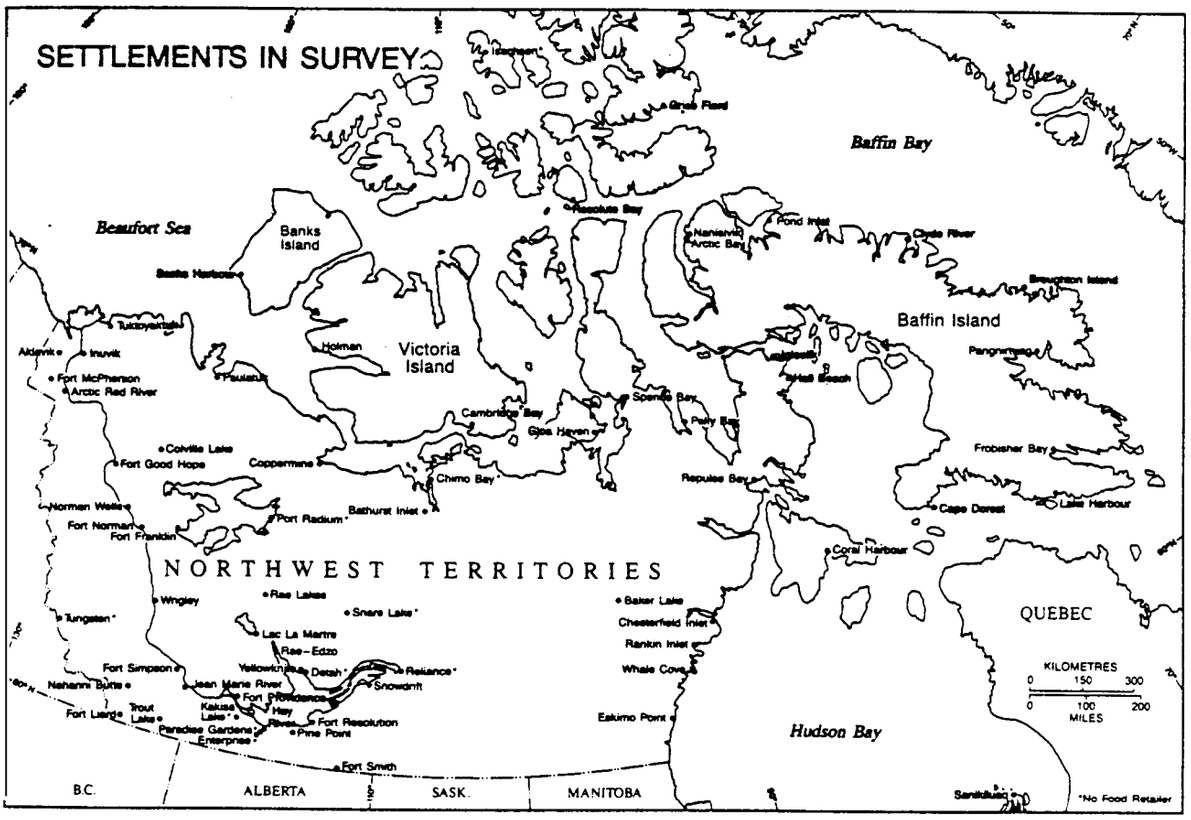

Figure 1. Communities in the Northwest Territories

Consumer and Corporate Affairs Canada contracted with independent researchers to examine the food retailing structure in the Northwest Territories. The overall purpose Of this study, as stated in the terms of reference for the project, is " . .to document and analyse the structure of northern focal retail markets in the Northwest Territories. " The terms of reference cite four main objectives.

1. ~ assess the degree of competition in northern community focal markets as represented by all available means of food purchase.

2. To compare the availability of food purchase alternatives in various types of northern communities, and the reasons for their presence or absence.

3. To evaluate the role of market development in determining differences in food prices between -unities.

4. To identifv_particularly_vulnerable immunities (e.g. native language and/or low income) and recommend means of enhancing their market power.

The food retailing participants in the Northwest Territories fall into three broad categories: 1.) chain stores owned and operated by the Hudsons Bay Company, 2.) independently owned stores, and 3.) cooperatives. Unlike feed retailing in southern Canada where all participants main objectives are to meet consumers focal needs while making a profit, only one of the three types of northern stores has the same major objective: the independents. Only they are free to locate in places where a profitable operation is likely. This is probably the reason a disproportionate number of independents lie on the road networks.

Some cooperatives were formal to be food retailers. They also provide other services such as training and employment in the local communities. Over the years, the federal and territorial governments have supported cooperatives, seeing them as a way to involve native peoples in the market economy and to ensure that communities located in economically marginal regions have retail food service.

Generally chain stores can achieve the lowest prices while still remaining profitable. This is because chain stores can capitalize on economies of scale in purchasing and shipment. The Hudson's Bay Company is able to achieve these economies for both food and general merchandise products. However it is constrained in its operations because the locations of their stores were determined historically, and not economically. Given the size of the immunities and the costs of operations it is likely that sane of the stores do not provide the size of return that most businesses require. It is probable that general merchandise sales subsidizes much of the food operations. Some communities are so small that if a decision was required today as to whether or not to open a store the answer would probably be no. On the other hand, the Hudson's Bay Company has (or is planning) to expand its food operations in major regional centres such as Frobisher Bay and Inuvik.

These three very different types of firms provide the underlying structure of food retailing in the Northwest Territories. This research project was designed to examine the structure in greater detail by determining the location and types of all food retailing stores in the Northwest Territories as well as examining the sizes, suppliers, and managerial experience of each store. A literature review of other feed retailing structures puts the Northwest Territories food retailing system in perspective.

An understanding of fend retailing also requires an examination of the consumers' needs, particularly his reliance on the local retail food stores as opposed to alternative sources of food. Consumer supplied information is therefore another critical element of this research project.

The primary reason that studies are being made of food retailing in the Northwest Territories is because food prices are higher there than they are in the South. Of primary interest is whether or not northern prices reflect actual costs of operation or if excessive profits are being made by sane of the northern retailers. This research project attempts to answer this question by relating the f@ price indexes of 47 communities to factors that have been hypothesized to cause higher prices in the Northwest Territories. If the factors can explain a large proportion of the price variations it is likely that excessive profits are not being made. This analysis is discussed in Chapter 6. .

The essential elements of this research project are:

1. an extensive literature review
2. an inventory of all retail food outlets in the Northwest Territories basal on responses of store managers to a mailed questionnaire
   a. local focal retailers
   b. restaurants
   c. consumers
3. analysis of the food price indexes

The report is organized into sections: The literature review is presented in Chapter 2. The research design is discussed in Chapter 3. The results of the questionnaires are discussed in the next two chapters. The relation between food prices, and various factors are examined in Chapter 6. The conclusions and recommendations are listed in the final Chapter. The information provided in these chapters shed new light on the feed retailing structure in the Northwest Territories.

1.1 REFERENCES

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2.0 CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

Food market development can range from no market (communa1 sharing of food gathered from the land) to the modern retailing structure that exists in the rest of North America. Review of the development of the food retailing structure in North America is important to help understand and place in perspective the food retailing structure in the Northwest Territories. The typical North American food store is the supermarket. It is the result of an evolutionary development in food retailing. It is the most cost efficient method of delivering food to consumers.

Most food studies of the Canadian North compare one or more dimensions of fend retailing in the North (for example, price, gross margins, or profits) with the modern supermarket in a large Canadian city. The apparent assumption underlying most of these studies is that the food stores in the North are comparable to the modern supermarkets. In this literature review the modern North American food retailing system, and what is known about the Northwest Territories' focal retailing system, is discussed. Gaps in present knowledge of the food retailing system in tie Northwest Territories are identified. The rest of this report details the findings of this study which helps to answer many questions which here-to-fore have remained unanswered.

This is an examination of previous studies of food retailing in North America and the Canadian North. From this examination we can determine what is known about fend retailing in the North, what research techniques have been employed, and most importantly, what questions remain unanswered.

2.2 MODERN FOOD RETAILING IN NORTH AMERICA, WITH EMPHASIS ON CANADA

There are several issues that need to be covered in this section: What is the difference between supermarkets, convenience stores, and cooperatives? Is one type of store more profitable/productive than other types of retail feed stores? What is a normal profit level?, What effect does store size have cm productivity?

Appel states that cities are characterized by many types of food retailers. Although each type conjures up an image in one's mind it is important to define the three major types of food stores: the supermarket, convenience stores, and Cooperative=.

The supermarket has been described as the most efficient retailer for food products. What do we mean by the term supermarket? In his article summa–rizing the history of supermarkets David Appel (p. 39) provides the following description:

The term "supermarket" can bring to mind many di f ferent images. Narrowly defined, the supermarket is a specific institution within a channel of distribution. Super Market Institute defines a supermarket as "a large integrated food store offering groceries, meat, dairy, produce, and frozen food, operating primarily on a self-service basis and having an annual sales volume of at least one million dollars. " Other sources disagree as to the volume requirements, but all agree as to the need for intergrated departments, self-service, and large-scale retailing.

Typical characteristics of supermarkets described by Appel (pp. 47-49) in 1972:

-929 square metres (10,000) square feet and larger
-9,000 plus items
-$2,000,000 plus average annual sales

Today a 'typical' supermarket has about 2,787 to 4,645 square metres (30,000 to 50,000 square feet) and houses approximately 15,000 to 20,000 items. (Peak and Peak, p. 32)

, The food retailing institution experiencing tremendous growth in Canada is the convenience store. What is a convenience store?

According to one definition stated by the U.S. National Association of Convenience Stores: "a convenience store has building size from 1,000 to 3,200 square feet, and parking area for five to 15 cars. " Hours must be extended beyond those of supermarkets in the area. Self-service must be provided to offer the consumer complete convenience in shopping. Finally the convenience store must have a balanced inventory of daily needed items to include the following: dairy, bakery, beverages, tobacco, frozen feds, and limited produce. ". (Food Prices Review Board. Convenience Food Stores Survey. November, 1975, p. 1.)

If supermarkets are the most efficient means of distributing food, Where do convenience stores fit in the picture? Again the report of the Food Prices Review Board (1975, p. 5) states:

The price differentials between convenience stores and supermarkets varied among convenience chains and cities from a low of 5 per cent in Becker's in Toronto, to a high of 24 per cent in 7-Eleven in Vancouver. The Board's experience indicates that Canadian consumers have been distrubed by the 15 and 16 per cent annual rates of food price increase since 1973. In view of this, it is interesting to note that many Canadians are prepared to pay more (and in one case much more) for the advantages of "convenience" in focal shopping.

Cooperatives axe formed when a group of people join together the purchase focal for its members, and sometimes, for resale to others. Cooperatives generally operate as an independent operator. They are generally smaller than supermarkets, and usually do not carry the full line of food products found in a supermarket. They often concentrate on high margin products or products of special interest to consumers. It is generally acknowledged that cooperatives, ingeneral, are inefficient, lack economies of scale, and often lack adequate managerial skills. These shortcomings result 'in higher rests than are present in supermarkets. The following quotation from Marion and Aklili (p. 59) illustrates this point:

> Since most co-ops have been sanewhat less operationally efficient than other retail establishments, they key question would appear to be that of the extent to which the spirit and philosophy of cooperative enterprise are accepted by consumers in society at large . This will, in turn, determine the number of consumers who are willing to pay higher prices if necessary, directly or indirectly, in exchange for the exchange for the unique attributes offered by a inoperative.

In his study, Cotterill (p. 260) attempts to quantify sane of the inefficiencies built into all cooperatives.

> Winning similar rates of store utilization, an independent, 4,000 square foot food co-op as compared to a 16,000 square foot supermarket of a chain with central warehouse facilities faces extra costs *equal* to 2.4 percent of sales. Another percent could be added to allow for potential but unmeasured economies in sales promotion to obtain a minimum estimate of 3.4 percent of sales. This is a minimum estimate because the costs associated with capital and site location barriers to entry are not included. Moreover, the comparison does not take account of differences in management ability and wage rates between cooperatives and chain supermarkets. But the influence of these two factors on rests may offset each other; to the extent that new co-ops employ less trained staff, they also pay lower wages.

Since most leading chains average before-tax profits are below 2.0 percent of sales, a 3.4 percent of sales minimum cost disadvantage might seem to suggest that co-ops are not being established for economic reasons.

According to Cotterill, the normal profit rate for supemarkets in the United States is under 2. O percent. The same is true for Canadian supermarkets. "In 1977, profit margins, as a percent of sales, averaged 1.70 percent compared to a 1.76 percent average over the 1971 to 1977 period. " (Anti-Inflation Board, 1978, p. 8) A more recent source shows that for the 1982 calendar year the average supermarket chains' profits were 1.766 percent. (Mitchell, et. al., p. 44)

A significant trend in food retailing in Canada has been an increase in " . . average size from 8,000 square feet in 1956 to 22,245 square feet in 1977" (Mitchell, et. al., p. 42). Since then the trend in food retailing has been toward building superstores of over 4,645 square metres (50,000 square feet). The average southern Canadian supermarket today probably has over 2,787 square metres (30,000 square feet). This is important because the size of a store is closely related to its efficiency and productivity, and hence the prices it charges consumers for food products.

In a study of productivity in the food retailing business in Ontario and Newfoundland, Good (p. 89) comes to the following conclusions:

> Size of store as measured by its selling floor space appears to be the most important variable in explaining differences in productivity across all stores, followed by capacity utilization. Other variables seem tobe somewhat less important.
>
> Size differences also contribute most to inter-provincial differences. The effect of the capacity utilization variable, however, is exceeded by that of several other factors.

The food retailing structure and competitive practices in a typical southern Canadian city may be described as follows. In a large southern city the retailing system is comprised of convenience stores 93 to 297 square metres (1,000 to 3200 square feet) offering few items for long hours at higher prices, conventional supermarkets about 2787 square metres (30,000 square feet) with high sales volume, large selection of foods and relatively low prices, and superstores over 4645 square metres (50,000 square feet) offering either very low prices—warehouse style or additional in-store products or services (e.g. delicatessens, bakeries, fresh seafood, pharmacies). With the large number of competitors (different types of stores and different owners) all trying to maximize their share of the food dollars being spent by the thousands or millions of consumers in a city each tries to achieve a competitive advantage, whereby it offers consumers what they want, and advertise to make consumers aware of their offerings. The major dimensions on which the retailers canpete are: location (consumers don't like to have to drive too far to shop for groceries), hours of operation, speed and/or friendliness of service, product offerings, and prices. They use advertising to inform the consumers of these factors and 'specials' (prices and/or products) to encourage more patronage at their stores.

2.3 FOOD RETAILING STRUCTURE IN THE NORTHWEST TERRITORIES

Casual remarks by consumers in the North often indicate the belief that food prices could be lowered if only there was more competition in the North. In many cases, the consumers' want another store in a community. This belief is the generalization of Keynesian economics, more competition means lower prices. It also means fewer incentives for retailers to invest in marginal locations, i.e., very small communities. Is it the formal economic definition of competition that northerners mean when they talk about the need for more repetition? Do the consumers Want pure competition, in an economic sense, or simply lower prices?

It is true that the firm(s) in these situations do supply all the needs of its customers like a general store, and therefore do have the opportunity to abuse this position. It is aLso true that a single firm in a market also has the potential to achieve efficiencies in operations that could not be done if the market was split between several stores. For example, volume orders can often mean both lower prices from the supplier and discount rates fran the transporting firm.

Overhead costs, common to stores regardless of size, can be spread over more sales, allowing the single store retailer to charge lower prices while still maintaining a profit level adequate enough to sustain the business.

At the minimum, each store needs to generate enough in profits to provide sufficient working capital and sufficient funds to keep the facilities maintained and up to date. If the store is independently owned and operated, it must generate sufficient profits to provide the owner with a reasonable standard of living. If the store is a member of a chain, it must be capable of generating a better return than the money invested in another endeavor. While cooperatives are less concerned about the profit motive common to the two previously discussed types of stores, they cannot ignore this economic 'rule'. The mandate for cooperative retail stores often includes non-cconomic goals such as locating in marginal locations and this policy difference is often reflected in the stores' operating results.

2.3.1 Food Acquisition Alternatives for Consumers in the Northwest Territories

Since urbanization began in the Northwest Territories, suggestions have been made regarding ways consumers could reduce their dependence on the one or two stores in a canmunity. Suggestions include: additional retail food outlets, increases in bulk purchasing, government Wholesalers, etc..

One fact overlooked is that most of the Northwest Territories communities are very small. In 1981, the total population of the Northwest Territories was 45,540. Fifty-five of the 66 communities have populations of less than 1,000. Forty-two have a population of less than 500 (Statistics Canada, 1981 Census). The small size raises the question as to whether or not a small community can support more than one store, and if it can what the price implications might be. In his study of focal costs in the Fort Smith Region, Stiles expressed his surprise at finding more than one focal store in several small communities. As he stated it (p. 18):

> The fact that most of the small communities can support two grocery outlets is indeed surprising," and in some instances might account for higher prices. The food industry and business frequently refer to their small profit margins. Compared to other enterprises and dry goods, as an example, profit margins are small. The success Of the food business depends on large volume. Hence in the small communities of the North, increasing the grocery outlets could reduce the volume below the level of economic viability, and grocery prices would have to be increased to meet overhead costs.

When the consumer calls for more competition in the North, it means that he/she does not want to be totally dependent on one supplier, that alternatives should be available. If not the consumer fears that the supplier could take advantage of him/her by charging very high prices. The big question therefore becomes: what are the alternatives available to the consumer, are the consumers aware of the alternatives, and do how much do they use them? Prior studies have touched on some of the consumers' alternatives. The major alternatives used by northern consumers are bulk food purchasing and the use of country food. The evidence seems to indicate that non-natives do the majority of the bulk food purchasing, and natives most of the harvesting of country food . Reliance on country food has reportedly decreased in the last couple of decades (Schaef er and Steckle, 1980) while reliance on store feed has increased. Accordingly, the local retail food store has been assuming greater importance in meeting the dietary needs of native peoples.

Thus there is some indication that the two major market segments in the North (mtives and non-natives) have different focal purchasing behaviors, and different needs to be serviced by the local retail fend stores. This supposition and its effect on the retail structure have not adequately been examined or documented. The study described in this paper examines this in more detail.

Luqmani and Quraeshi (1984) recommend that in lesser developed countries, the cost of focal distribution could be reduced by encouraging coordinated marketing channel linkages such as: chain stores, retailer-sponsored chains, wholesaler-sponsored chains, mergers, and government sponored chains. It appears that in the Canadian North, some of this rationalization has already taken place. In the North there are three basic types of stores, a vertically integrated chain; the Hudson's Bay Company; a voluntary association of stores banded together to enhance buying power and to develop managerial talent: the imperatives; and independent retailers.

2.3.2 The Hudson's Bay Company

The Hudson's Bay Company has operated in the North for several centuries, first as a fur trader and now as a general retail store (plus fur trading). @proximately 31% of all food stores in the Northwest Territories are owned and operated by the Hudson's Bay Company (Table 26) .

The Hudson's Bay Company acts as its own wholesaler. It has a major warehouse in Montreal where it can store goods that it can buy for volume discounts from manufacturers. Hudson's Bay Company stores that do not generate sufficient volume to order directly from manufacturers can order goods through their central warehousing facilities at rests lower than they could get from other wholesalers. From this warehouse the Hudson's Bay Company is able to supply its northern stores. The Warehouse reduces the need of the local retailer to buy and store huge volumes of fed. The Hudson's Bay Company also owns its own supply vessels which are used for the summer supply. Most cooperatives and independents do not buy directly from manufacturers because their purchase orders are tco small. They are generally serviced by wholesalers.

As the Hudsons Bay Company is the major retailer in the North (for both focal and non focal items), most studies at least make a passing reference to its operations. There is a great deal of variance among residents of the North regarding the perceived role the Hudsons Bay Company plays in the northern cuumunities. Sane people see it as a villain, taking advantage of the consumer. In some studies or reports it is cited as sanewhat of a hero by providing food services in remote places (Task Force Report for Northern Ontario). The truth probably lies sanewhere between these two extremes.

2.3.3 The Cooperatives in the Northwest Territories

With the move of native peoples into permanent settlements, there was a need for focal stores in the settlements. The federal government took an active interest in establishing food stores in native settlements by trying to interest the natives to form cooperatives to supply their retail focal needs and at the same time to participate in the market economy. As Stager (p. 15) states it:

> Northern co-operatives were initiated by the Federal Government. Concerned public servants recognized opportunities to introduce formal organization in Inuit society for the purpose of producing wealth by co-operation, and at the same time promoting native control in local enterprise. Both these goals remain strong in the co-operative movement in Canada North.

By 1985, cooperative food stores made up 27% of all food stores in the Northwest Territories (Table 26). In addition to their retailing operations, the northern cooperatives are also involved in several other types of 'business'. The primary examples of these activities are: native crafts, carvings, trading in fur, hotels, and contracts for municipal services such as garbage collection. Retailing, however, remains their biggest business.

In 1984 there were 34 cooperatives in the Northwest Territories with 28 involved in food retailing. The gross volume of retail sales in the cooperatives was $15,897,000 in 1984. This represents 62% of that year total sales. (N.W.T Cooperative Overview) No figures are available showing how much of these retail sales are for food. Stager (1982), in describing his impressions from studying cooperatives in the North, said that he believes cooperatives in general are stronger than the Bay in focal sales, while the Hudson's Bay Company retains its strength in dry goods . He also estimates that in a typical community which has both a Hudson's Bay Company store and a cooperative, the cooperative has about 30 to 40 percent market share, and the Hudson's Bay Company has the remaining 60 to 70 percent share of the retail sales for the communit y (Stager, p. 93). There is unfortunately no evidence currently available to support or refute Stager impressions.

Although each local cooperative is run independently, in 1972 the cooperatives, with a grant of $75,000 from the Government of the Northwest Territories, banded together to form the Canadian Arctic Co-operatives Federation Limited (CACFL). The reason the cooperatives organized was to fulfill the following two goals: 1) to provide coordinated purchasing and transportation for the members and 2) to provide bookkeeping and training/educative support for the members.

During the next four years the CACFL overextended itself and was in severe financial difficulty by 1976. (Stager, p. 61 to 63) The federal government provided a "bail out package" whereby $9.2 million was injected into CACFL via the Cooperative Development Program over the years 1977 through 1982. The $9.2 million was designated for four purposes: 1) $4.1 million for working capital 2) $1.5 million for operating costs 3) $1.1 million for human resource development and 4) $2.5 million from special ARDA for training and education. In addition to this support the government also guaranteed the CACFLs bank loans for the annual sealift. (The guarantees turned into a credit line as CACFL was unable to repay on a regular basis as required by the loans.)

This reorganization and assistance was to result in the following programs for the CACFL: operations advisors which would visit the member comparatives to provide guidance and assistance; centralized accounting; an audit department; a personnel department (to help recruit individuals as managers for member cooperatives and for home office work); and communications (travel for the president and board members and publication of Co-op North).

Another ongoing since of funding (from 1977 to time of report) for the CCACFL is the Government of the Northwest Territories which provides $205,000 *annually* for operating expenses, retail advisors, management assistance (funk to help weaker cooperatives pay their managers), and help in annual statement preparation (Stager, 1982, p. xx, 134). Since the CACFC moved its headquarters from Yellowknife to Winnipeg in 1985, the Manitoba government will also be providing financial support (Christensen, 1985).

2.3.4 Independents

According to Table 26, independent food stores comprise 42% of all food stores in the Northwest Territories. Unfortunately little is known *or has been* published about this third major type of northern focal retailer except that they are locally owned by an individual and often operated by his family. In many communities, these stores appear to serve a sector of the mtive consumer. However, their place in the food structure in the Northwest Territories needs to be examined more thoroughly.

2.4 PREVIOUS RESEARCH REGARDING FOOD AND FOOD RETAILING IN THE CANADIAN NORTH

This section begins with a discussion of information published on the availability and the cost of focal in the North. Over the years, there have been a large number of studies which examined the cost of food products in the North. A typical study begins with a list of food products. These products: are priced in one or more northern communities and then compared with one or more southern communities. They range from sophisticated analysis weighting the food products according to the estimated consumption pattern in a family in the North (Statistics Canada. Family Food Expenditures in Canada. 1982) to a list of a few goods with or without comparison prices or weighting.

Although the methods for determining the cost of food in the North differ, all studies come to the same conclusion: food costs more in the North than in the south. The focal costs more in the North than in the South. The index for the northern communities (percent over southern prices) varied from study to study, and even within studies, depending upon a) what city was used for comparison b) what type of store was us@ for comparison (e.g. large modern supermarket versus a mom and pop store in a poor neighborhood) c) what items were included in the food basket d) how the primal items were weighted and e) how the index was computed when items were unavailable, temporarily or permanently, in the retail store. A summary of these studies is shown in Table 1, at the end of this chapter.

The studies which determined one or more indexes for, comparison are summarized in Table 2. As can be seen from the table, the price of food in northern communities ranged up to 81% above the southern comparison base in Pelly Bay. It is clear that prices are higher in the North, although there may never be agreement on the exact level of difference. This should not be surprising, as even if all the factors mentioned in the last paragraph were identical between studies differences would still arise because of sales during the pricing period, different product quality (especially for produce and dairy products), product availability and selection, and error. Items frequently mentioned as causing these higher prices are transportation costs, management efficiency, volume and services (e.g. credit, delivery, etc.) .

Table 1 lists quite a few studies dealing with the high cost of focal in the North. Although a lot of time and money has been spent examining prices, very few studies have attempted to look at the causes of the higher prices.

The best study in this regard, is ironically one that almost was not publish@. The report being referred to is the Food Price Review Board's report entitled Food Prices in Northern Canada published in December, 1975. The FPRB collected data in the summer of 1974 but because the results " . . did not provide conclusive evidence regarding the marketing of food and the reasons for higher focal prices in these northern territories. " 'The Board, therefore, decided not to issue a report on

that survey, but at a subsequent date to secure additional evidence through a further survey. " However the Board's mandate ended before the additional research could be undertaken. Rather than shelving the information the Board decided to print what it had in this report. In two pages the report lists many of factors suspected of contributing to higher rests, but which they were unable to fully investigate. These items are summarized in the following list:

-transportation and handling costs

-low stock turnover, resulting in high capital requirements for the purchase and storage of stock (including heated warehouses) which results from the weak transportation network, and the fact that many stores are accessible year round only by air:

-small market sizes, resulting in small volume of sales

-small store, with concomitant higher overhead and operating expenses than large stores

-high costs: maintenance, equipment, repairs, utilities, and communications

-high staff turnover.

On the other hand, there are sane advantages to remote store locations:

-little or no competition: no requirement for advertising or promotion expenditures.

A study of food costs in northern Ontario tries to explain the reason for the high prices. Many circumstances are very similar between remote communities in northern Ontario and communities in the Northwest Territories. The Task Force Report on Transportation and Living Costs in Northern Ontario examines in detail what is considered by most to be the largest contributing factor to high food costs: transportation costs.

In the Yukon, one community's focal prices seemed to be out of line with other similar communities in the Yukon. A study was commissioned to determine the reasons for the higher rests and to investigate the possible benefits and costs of a subsidy for focal goods. The consultants found that the largest factor contributing to the high prices was the community's dependence on air transportation for their focal supply. There was only one feed retailer in the community, a cooperative. Management inefficiency and negligence seemed to cause the rest of the overcharge: unpaid line of credit within the community, heating uninsulated buildings, paying 20% too much by buying from an high priced wholesaler. (The reason indicated was that it was inconvenient for the retailer to plan on ordering a week in advance rather than the 1 to 2 days requiredby the higher priced wholesaler.) All this is compounded by the lack of adequate record keeping, which helps to maintain and foster management efficiencies. The subsidy was not recunmended (Reiber, 1982).

'The Government of Saskatchewan decided that it should lower the cost of perishables to residents who chose to live in isolated northern Saskatchewan to the same level as currently existed in La Ronge, Saskatchewan. Based on the following conclusion by the Department of Northern Saskatchewan, they decided to subsidize the cost of the air freight on certain perishable items to five communities (Bergrand and Bone, p. 3):

> 1) Transportation rests are the major causal factor for high fcod prices. More specifically, the air freighting of perishable foods is the primary reason for high food price indices in northern communities of 57 degrees latitude. . . .

2) The high cost of fresh perishable foods (meat, bread, dairy, produce, fruit and vegetables) results in the substitution of non-perishable forms of these foods, e.g. , canned meat, milk, fruits, etc. , with the resultant loss in health or the actual abandonment of eating certain foods.

A study has been developed by R. G. McLaughlin Associates for the Department of Indian and Northern Affairs entitled Transportation Rates and Other Factors Affecting Northern Food Costs. It is an attempt " . . . to determine the degree to which transportation costs alone cause prices to rise. " (Draft report, June 28, 1985.) '

There are three basic modes of transporting foodstuf fs to the North, via water, land, and air. The first, and the cheapest, is by barge, via the waterways. With this form of transportation, the cost to even the remotest communities, is only marginally higher than more southern locations (McLean and Stiles, Table 16, pp. 3941).

The problem with this form of transportation is that it is not available year round, hence for most of the Northwest Territories this form of shipment can only take place in the summer after the break up. Because travel by water transport is slow, generally the only foodstuf f s to be shipped with this method are nonperishables.

As the goods must be ordered several months prior to delivery, demand forecasting-is essential to avoid costly errors in ordered quantities. In addition to the long lead time other considerations include storage and financing. Whether the purchaser is a retail store or an individual household ordering bulk supplies, both must have adequate storage facilities to store a years supply of food and the funds to purchase these goods. Both require a great deal more capital than is necessary to operate in southern markets. As the Hudson's Bay Company estimated in their statement to the Northwest Territorial Legislative Assembly " . . . our stock turns in the North average only one to one-half for this type of merchandise [rim-perishables] as opposed to 11 or 12 stock turns in the South. " (Northwest Territorial Legislative Assembly Hansard, p. 432) (One stock tum is when the inventory for a store sells out in one year. Five stock turns means the merchandise has turned over five times.) This fact alone points out one of the many challenges and costs that northern food retailers face.

The second mode of transportation, and next cheapest is by surface: rail or road. In the Northwest Territories only Hay River and Pine Point are serviced by rail, and only a few communities are accessible by road (See Table 3). Some of these roads are only accessible in the winter, therefore even in these communities consumers and retailers must order for long periods of time. The increased inventory, financing and storage costs once again tend to offset sane of the advantages of cheaper barge and truck transportation.

The final form of transportation, and the one most communities in the Northwest Territories use, is air. Shipments by air are necessary for perishables where there is no road access. In many communities (see Table 3), air is the only transportation mode to the community. In these communities air transportation is necessary, not only for the perishables, but for all food supplies.

2.5 CONCLUSION

This literature review has highlighted what is and isn't known abut food retailing inthe Northwest Territories. The major research issues/research needs pinpointed in this review are:

1. A description of the food retailing structure:

   the participants, their size, their product offerings, their locations

   the alternatives to local retail stores

   the relationship/competition between the participants

2. A description of northern consumers' shopping behaviour:

   use of local retail food store(s)

   use of alternatives to the northern focal store

   effect of demographics on shopping behaviour

3. Food prices in the Northwest Territories:

   Effect of tie, transportation costs, type of store, market size, number of stores, etc.

'l'his research project addresses these issues. As much of the information regarding the structure of food retailing in the Northwest Territories has never been collected it was necessary to contact all retailers in the Northwest Territories. The results are discussed in Chapter 5. Food store alternatives and consumer shopping behaviour is discussed in Chapter 4. Food prices are examined by means of a regression model in Chapter 6.

Table 1. Canadian Studies of Food Price Comparisons

study Title	Southern Comparison: City/ Store Type	No. Items in Food Basket	Index Calculation	Treatment for Missing	Northern Communities Examined
Stats. Can.: Living Cost Differentials, Oct. 5, 1984	Montreal Toronto Winnipeg Edmonton Vancouver (supermarkets)	N/R	None for Food alone: only total cost of living is reported	N/R	52 in NWT
Murphy, 1984	None	92	None	N/A	1: Old Crew
B. of Stats 13203 Price Indexes: N.W.T.	Yellowknife/ supermarket	N/R	N/R	N/R	48 in NWT
B. of Stats Spatial Price Indexes, 1983	Edmonton/ supermarket	103	Edmonton expenditure weighting	N/R	1: Yellow-knife
Facts on Cost of Living in the North, 1982	Ottawa/ supermarket	12	Nine: sum Totals Only	N/A	Frobisher B Baker Lake Cambridge B
Reiber, 1982	None	46	None	N/A	4 in Yukon
Seage, 1982	None	193	None	N/A	4 in NWT
Task Force. Ontario, 1982.	Toronto/ supermarket	20	unweighted totals	N/A	16 in N. Ontario
Yukon Leg Ass: cons Assoc c Whitehorse	Vancouver/ supermarket	62	N/R	N/A	Yellow-knife
Econ Reserach & Planning, Govt Yukon	Edmonton, Vancouver/ supermarket	N/R	Canadian expenditure weights	N/A	White-horse
Kelly Douglas	Vancouver/ supermarket	172	unweighted totals	N/R	White-horse
Dept Cons & Corp.Affair	10 small centres	15	unweighted totals	N/R	White-horse

Table 1: Canadian Studies of Food Price Comparisons
(Continued)

study Title	Southern Comparison: City/ Store Type	No. Items in Food Basket	Index Calculation	Treatment for Missing	Northern Communities Examined
F. P.R. B. Food Prices in N. can. , 1975	Edmonton/ supermarket	86	Unweighed: totals	adjust reference	22 in Yukon & NWT
F. P.R. B. Conv. Food Stores Survey, 1975	Halifax, Montreal , Ottawa, Toronto, Vancouver/ supermarket convenience	56, 16	expenditure weights	used core basket of goods available in all stores (32)	NONE
F.P.R.B. Food Prices in Newfoundland, 1974 ,	Toronto	40	unweighted totals & expenditure weights	core basket (38)	NONE Two in Nfd .
McLean & Stiles, NWT, 1974	Edmonton/ supermarket	74	unweighted totals	missing removed from reference	48 in NWT
Stiles, Fort Smith, 1972	Edmonton/ supermarket	78	unweighted totals	missing removed from reference	9 in NWT

N/R = information not reported in original document
N/A = Not Applicable

Table 2. Food Price Indexes for the Canadian North

Region/ Community	GNWT: 1982	Spatial Price Index 1983	FPRB 1975	McLean & Stiles 1974*	Stiles 1972
Baffin					
Arctic Bay	155			117	
Broughton Island	153			112	
Cape Dorset	168			112	
Clyde River				117	
Frobisher Bay	141		135	117	
Hall Beach	155			107	
Igoolik	169			107	
Lake Harbour	151			117	
Pangnirtung	155		128	112	
Pond Inlet	164			117	
Port Burwell				125	
Resolute	179		134	117	
Sanikiluaq	139				
Keewatin					
Baker Lake	137		117	107	
Chesterfield Inlet	149			112	
Eskimo Point	127			112	
Rankin Inlet	146		118	107	
Repulse Bay	173			107	
Whale Cove	161			125	
Kitikmeot					
Cambridge Bay	152		135	117	
Coppermine	159		128	117	
Gjoa Haven	173			125	
Holman	163			112	
Pelly Bay	181			125	
Spence Bay	168			125	

Table 2: Reported Food Price Indexes (Continued)

Region/ Community	Study				
	GNWT - 1982	- Spatial Price Index 1983	FPRB 1975	McLean & Stiles 1974*	Stiles 1972
Inuvik					
Aklavik	140			112	
Arctic Red River	131			102	
Fort Franklin	150			112	
Fort Good Hope	148			112	
Fort McPherson	122			1 1 2	
Fort Norman	141			112	
Inuvik	124		123	107	
Norman Wells	163		1 4 5		
Paulatuk	161			102	
Sachs Harbour	174			117	
Tukoyaktuk	164		118	112	
Fort Smith					
Fort Liard	120			117	
Fort Providence	102			112	133
Fort Resolution	119			107	139
Fort Simpson	109		120	107	131
Fort Smith	96		123	107	122
Hay River	101		123	102	127
Lac La Martre	149				
Nahanni Butte	147			125	
Pine Point	95			102	125
Rae Lakes	143				
Rae Edzo	112		116	102	139
Snowdrift	153		143		143
Trout Lake	147				
Wrigley			130		
Yellowknife	100	130**	121	100	132
Comparison outside GNWT					
Edmonton		100	100		100

*These values were derived from the report by using Table 1 to convert the scale values (1 to 10) in Table 12 tothemedian point that the scale number was to represent.

**The index for 1982 was 128, for 1981 was 125, and for 1980 was 125.

Table 3. Access To N.W. T. Communities, 1985

OBS	COMMUNITY	AIR	SURFACE	WATER
1	AKLAVIK	YES	YES	YES
2	ARCTIC BAY	YES	NO	YES
3	ARCTIC RED RIVER	No	YES	YES
4	BAKER LAKE	YES	NO	YES
5	BROUGHTON ISLAND .	YES	NO	YES
6	CAMBRIDGE BAY	YES	No	YES
7	CAPE DORSET	YES	NO	YES
8	CHESTERFIELD INLET	YES	NO	YES
9	COPPERMINE	YES	NO	YES
10	ESKIMO POINT	YES	NO	YES
11	FORT FRANKLIN	YES	No	YES
12	FORT GOOD HOPE	YES	No	YES
13	FORT LIARD	YES	YES	NO
14	FORT MCPHERSON	YES	YES	YES
15	FORT NORMAN	YES	YES	YES
16	FORT PROVIDENCE	YES	YES	YES
17	FORT RESOLUTION	YES	YES	YES
18	FORT SIMPSON	YES	YES	YES
19	FORT SMITH	YES	YES	NO
20	FROBISHER BAY	YES	No	YES
21	GJOA HAVEN	YES	NO	YES
22	HALL BEACH	YES	No	YES
23	HAY RIVER	YES	YES	YES
24	HOLMAN ISLAND	YES	No	YES
25	IGLOOLIK	YES	NO	YES
26	INUVIK	YES	YES	YES
27	LAC LA MARTRE	YES	No	NO
28	LAKE HARBOUR	YES	NO	YES
29	NAHANNI BUTTE	YES	YES	NO
30	NORMAN WELLS	YES	YES	YES
31	PANGNIRTUNG	YES	NO	YES
32	PAULATUK	YES	NO	YES
33	PELLY BAY	YES	NO	YES
34	PINE POINT	NO	YES	NO
35	POND INLET	YES	NO	YES
36	RAE EDZO	No	YES	NO
37	RANKIN INLET	YES	NO	YES
38	REPULSE BAY	YES	NO	YES
39	RESOLUTE BAY	YES	NO	YES
40	SACHS HARBOUR	YES	NO	YES
41	SANIKILUAQ	YES	No	YES
42	SNOWDRIFT	YES	No	YES
43	SPENCE BAY	YES	No	YES
44	TROUT LAKE	No	YES	NO
45	TUKTOYAKTUK	YES	YES	YES
46	WHALE COVE	YES	No	YES
47	YELLOWKNIFE	YES	YES	YES

Derived from: R.G. McLaughlin & Associates, 1985.

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3.0 CHAPTER 3 RESEARCH DESIGN

3.1 INTRODUCTION

An evaluation of the degree of competition in northern community food markets requires knowledge of all the food source alternatives used by the consumer and his reliance upon them. As food is generally purchased for an entire household unit by one or more shoppers, the unit of analysis for food shopping behaviour is the household.

In order to assess the effect of competition and market development on food prices, additional information must be collected from and/or about the consumers' food sources. As many of the communities in the North have only one retail food outlet, it has been widely hypothesized that one of the major reasons for the high food costs is the lack of retail competition. This hypothesis as swell as several other potential explanations for the high food costs are investigated: l) high transportation costs 2) high storage and inventory rests due to the lack of ground transportation and availability of water transportation during only one season of the year 3) difficulty of forecasting demand and ordering the correct amount of stock 4) inexperienced and inefficient management and 5) high overhead costs due to the small scale at which stores in many of the communities must operate.

Transportation modes, transportation costs, population statistics and food price indexes are available from secondary data sources such as Statistics @@a, G. N.W. T., and research reports. These sources were used to gather this information. All other information needed for analysis is not available through secondary data sources. The only method of collection of the missing information is through contacts with the retail food sources. Because the majority of the consumer's focal dollars is spent at the local retail focal stores, a concentrated effort was made to gather the necessary information from them.

Some of the northern communities have one or more local restaurants. The restaurant managers are faced with many of the same food supply problems as the local retail food stores. Where feasible, restaurant managers were also contacted.

One of the major goals of this study is an inventory of all food retailers in the Northwest Territories. As there are only about 100 retailers, a decision was made to contact all of them and to gather as much information as feasible about each one of them. Because of the high cost of travel, personal interviews in all of the canmunities were infeasible. A mail survey was chosen. Unfortunately, mail surveys must be kept short and broad open ended questions should not be asked.

Because of the need for additional information from retailers and consumers, several sites were, chosen for on site data collection. While in the communities contact was made with the restaurant managers, bulk or direct food ordering groups, and consumers .

Due to budget constraints (time and money), it was decided that six communities would be studied in depth. While no community is "typical" of all communities in the Northwest Territories, an attempt was made to select communities that were representative in terms of size, types of stores, and transportation access. These communities are Frobisher Bay, Cape Dorset, Broughton Island, Norman Wells, Fort Norman, and Fort Rae.

Table 4 outlines the criteria used to select the communities. As indicated in the chart the communities chosen cover a variety of sizes, transportation access, location, number of stores, and ethnic composition.

Community Characteristics

Community	Native Composition	No. of Stores	NWT Location	Mode Access	Size of Community
1	Less than 75%	5	East	A, W	Large
2	More than 75%	3	East	A, W	Medium
3	More than 75%	2	East	A, W	Small
4	Less than 75%	1	West	A,W,WR	Medium
5	More than 75%	1	West	A,W,WR	Small
6	More than 75%	3	West	A,W, R	Large

Table 4. Community Characteristics: Community 1 = Frobisher Bay, Community 2 = @e Dorset, ~m- munity 3 = Broughton Island, Community 4 =Norman Wells, Community 5 = Fort Norman, and Community 6 = Fort Rae. Mode Access A = Air, Mode Access W = Water, Mode Access WR = Winter Road, and Mode Access R = Year Round Road.

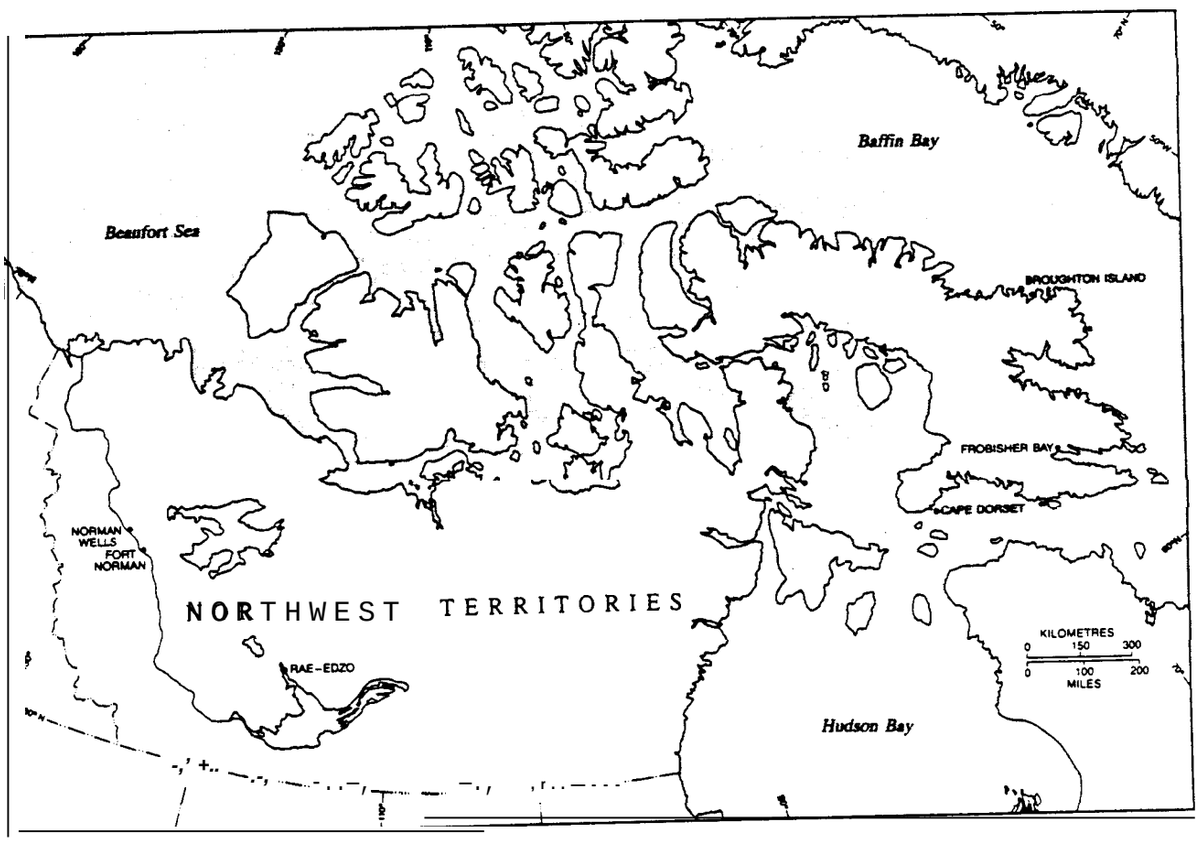

Figure 2. Survey Locations

The division of communities into ethnic composition categories and size of communities is based on Campbell's (1984) ethnic and size divisions. (Size: Small, population of less than 400; Medium, population from 400 t. 800; and Large, population of over 800.) See "Appendix A. Classification of N.W.T. Communities" on page 137 for an updated version of using this classification schema for all Northwest Territories communities. Figure 2. shows the location of each of the six community=.

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4.0 CHAPTER 4: RESULTS OF CONSUMER SURVEY

4.1 CHARACTERISTICS OF THE CONSUMERS IN THE SAMPLE

The demographic characteristics of the consumers surveyed in the six communities is a critical element in this study. In this section, the demographic characteristics include the size of the household, the native/non-native composition of the household as well as the age and sex of the household inhabitants. These characteristics are important factors related to food purchases and consumer behaviour. Other social variables, such as education and income, are examined within this context. From this description of the consuming households, an analysis of the consumer behaviour, perceptions of the retail focal offerings, and their use of alternative food sources takes place. Facilities in each household are discussed in turn.

4.1.1 Demographics

In this section, the demographic characteristics of the consumers interviewed in the six immunities are discussed. Consumer characteristics were collected for two purposes: (1) to indicate that the sample was representative of the peoples living in the Northwest Territories, and (2) to allow the researchers to determine if any food shopping and/or consumption habits were related to any consumer attributes.

Table5showsthenumberof consumers interviewed in each of the six communities and their ethnic background (native or rim-native). The three communities from the eastern Arctic: Frobisher Bay, Cape Dorset, and Broughton Island, are all in the Baffin region. The three western Arctic communities: Fort Rae, Norman Wells, and Fort Norman are in the McKenzie Valley and Great Slave Lake region. These communities are shown on the map in "Figure 2. Survey Locations". Throughout the rest of the report the three eastern Arctic immunities are referred to as the East, and the three western communities are referred to as the West. Seventy-two percent of the consumers interview were mtives (Inuit in the East, Indian/Metis in the West), 28% were non-natives. Fifty-seven percent (Frobisher Bay 28%, Cape Dorset 16% and Broughton Island 13%) of the consumers interviewed lived in the East. The remainder (43%) live in the West. The number of natives and non-natives interviewed in each community is also summarized in Table 5. For example, in Fort Rae, 9 of the 15 interviewed were native, or 60% of those interviewed there. Throughout this chapter it should be remembered that reference to the entire sample includes all consumers listed in the crosstabulation (Table 5). A different result might occur if different proportions of consumers, with varying attributes, were included.

Sample Consumer Characteristics

Communities	Native	Non-native	Frequency	Percent
Eastern Arctic				
Frobisher Bay	23	16	39	28%
Cape Dorset	21	1	22	16%
Broughton Island	18	0	18	13%
Western Arctic				
Norman Wells	9	15	24	17%
Fort Norman	20	2	22	16%
Fort Rae	9	5	14	10%
Total Interviews	100 (72%)	39 (28%)	139	100%

Table 5. Interviews by Community and by Ethnic Background

AS expected, there was a large difference between the length of time the natives and the non-natives had lived in the communities. Seventy-nine percent of the non-natives had lived in the communities less than 5 years. Eighty-seven percent of the natives had lived in the communities over 5 years, with 80% of them having lived in the immunities for over ten years. This difference has arisen because native residents tend to have been born in the North while most the non-natives moved to the North in response to job opportunities. Common examples are nurses, teachers, government administrators, managers, carpenters, architects, etc. .

This explanation is supported by the self reported educational levels of the interview consumers. As Table 6 shows the non-native consumers generally have a much higher educational level than do the native consumers. This large difference in educational level between the two ethnic backgrounds exists across the Northwest Territories (Census of Canada, 1981) .

Highest Level of Education

Education	Native	Non-native	Total	Percent
No Formal Education	25	0	25	18%
Some Grade School	17	0	17	13%
Grade School	22	1	23	17%
Some High School	4	16	20	15%
High School	4	16	20	15%
Some College	2	3	5	4 %
College	0	7	7	5%
Some Graduate	0	1	1	1%
Graduate Degree	1	7	8	6
Total	98	38	136	100%
	(72%)	(28%)		

Table 6. Highest Level of Education by Ethnic Background

There is generally a strong relationship between higher education and higher income. This is also true in the Northwest Territories (See Table 7). Non-natives tend to have higher incomes as well as higher education levels than natives. This difference arises from the fact that non-natives with skills and higher education have moved north providing skills that are missing in various communities (e.g. nurses, teachers, and managers), while natives have only recently (within last 20 to 30 years) have had wide access to southern education. There is mismatch between mtive skills and employment opportunities. This problem is exacerbated by the weak economic base possessed by mast northern communities. This is particularly true for primarily native (small) communities.

Table 8 reports the percent native in each community and the per capita income for the community. As the table indicates there is a tendency for the per capita income to be higher as the proportion of non-native population increases. This is exactly what would be expected from the skill and job mismatch in the northern communities. Differences in food purchase patterns between natives and non-natives could be due to income and education differences, not cultural differences.

Table of Income by Ethnic Classification

Yearly Income	Native	Non-native	Total	Percent
Less than $ 5000	13	0	13	10%
$ 5000 to $9999	19	1	20	15%
$10000 to $14999	15	1	16	12%
$15000 to $19999	11	1	12	9%
$20000 to $29999	16	7	23	17%
$30000 to $39999	12	4	16	12%
$40000 to $50000	5	6	11	8%
Over $50000	3	18	21	16%
Total	94	38	132	100%
	(71%)	(29%)		

Table 7. Income by Ethnic Background

Per Capita Income By Community, 1981

Community	Percent Native	Per Capita Income	Food Price Index
Norman Wells	21%	$13,279	163
Frobisher Bay	62%	$10,351	141
Fort Norman	8a%	$ 4,481	141
Broughton Island	97%	$4,144	153
Cape Dorset	94%	$3,736	168
Rae/Edzo	90%	$3,368	112

Table 8. Per Capita Income by Community: Data from Statistical References (Blue Book), available from Department of Indian and Northern Affairs.

The amount of disposable income in a household may affect the amount and variety of food purchases. Unfortunately, no data is available on disposable incomes in the Northwest Territory-. Since native peoples rewed into settlements, it appears that they have become more familiar with store feeds and that their disposable incomes have risen allowing increased purchases of southern goods.

Three addit ional demographic variables were collected: the number, age, and sex of each member of the household. The combination of this data tells us the size and composition of each household. Household size provides the rest relevant information because of its relationship to the size and type of food purchases. The basic assumption is that as the size of households vary, shopping and eating behaviours also change. For this reason, it is important to examine the size of the households and its possible effect on shopping behaviour. The mean household size for theentire sampleis4.7 persons.

Because of the importance of other household attributes on food purchases, a series of variables were examined. For instance, native and non-mtive households were identified and assessed in terms of feed purchases.

There is a statistical difference in household size between native, and non-native households. Another question asked, is whether there is any difference in family size between communities. Larger households can be expected to require larger quantities of focal, and hence larger total household food expenditures. It was found that there was no significant difference between the size of the families by community (controlling for native/non-mtive differences).

From the demographic information presented in this section, there are many differences between the native and non-native consumers in the Northwest Territories. In the next sections, northern consumer behaviour is examined. It should be kept in mind that any differences arising between native and non-native consumer behaviour may be the result of differences such as education length of tenure in the communities, household income and household size that have been discussed in this section.

4.1.2 Storage Facilities

The purchasing of food may be affected by the size and type of storage facilities found in households. For this reason, an examination of storage facilities was undertaken. The main findings were: (1) Over 92% of the households have refrigerators (100% of the non-native households have refrigerators). (2) Slightly over 61% of the households have separate freezer units. This varies considerably from community to community: Frobisher Bay 69%, Cape Dorset 45%1 Broughton Island 50%, Norman Wells 54%, Fort Norman 82%, and Fort Rae 64%. (3) Approximately 17% of the consumers interviewed have space in a community freezer for country feed, however, they are located in only two communities: Fort Norman and Fort Rae. In Fort Rae, all the natives and none of the non-natives have space in the community freezer. In Fort Norman, about one half of the population has space in a community freezer. It is interesting to note that the two communities which have community freezers also have two of the three highest rates of in home freezers. (4) Over 57% of the homes have space for storage of canned goods, that is, the majority of the homes have the space whereby, if direct purchase of focal was desired inventory space would be no problem.

In conclusion, the amount of storage space in houses appears adequate and therefore does not appear to be a constraint requiring people to purchase food only in small quantities from the local retail store. It also suggests that country feed can be stored in freezer units.

4.2 CONSUMER BEHAVIOUR

The behaviour of northern consumers is an important aspect of the consumer field survey. Shopping behaviour includes the method of payment, the frequency of shopping, the amount spent when shopping, and the items purchased during a typical shopping trip.

4.2.1 Credit or Cash?

The method of food payments depends much more heavily upon credit than in southern stores where virtually all purchases are paid with cash. In the surveyed immunities, only 54. 3% of the consumers interviewed purchase all their food with cash, 33.9% use both cash and credit, and 11 .8% purchase all their focal on credit. This is in sharp contrast to the South, where until recently no credit purchases for food were allowed. The northern credit policies are a holdover from the trading post days. With the decline of the fur trade, the influx of southerners and the increase in native participation in the wage welfare economy, there has been a tendency to move away from credit.

The use of credit differs between natives and non-nat ives, with more mtives making credit purchases. Thirteen and one-half percent of the natives always use credit for focal purchases, 45.5% pay for focal purchases with both credit and cash, while 41% use only cash for food purchases . Only 8% of the rim-natives use credit exclusively, another 5% combine cash and credit purchases, while 87% use only cash.

4.2.2 How Often do Northern Consumers Shop at a Retail Food Store?

Table 9 lists the responses to the question "How many times have you, or other members of your family shopped for focal in the last week?" The average number of shopping trips for the last week was 3.65 times. There is no significant difference between the mean number of shopping trips for natives and for non-natives.

It is apparent from Table 9 that there are differences between the immunities in the number of times shop@ per week. Statistical tests confirm that the differences are significant. A closer examination of the table shows that there is a difference between the eastern and the western Arctic in the number of times shopped per week. The shoppers in the eastern immunities shop mu& less frequently than do those in the West.

4.2.3 What is a Typical Purchase at the Local Retail Food Store

There were two observations made regarding the consumers' focal purchases: (1) the amount spent and (2) the type of feds purchased. The foods purchased are examined by both native and non-native and by

Inui t and Indian/Metis (Table 10 and Table 11). The percentages listed in Table 10 and Table 11 are the percentages of the total sample represent in each column.

Number of Shopping Trips in Week Prior to Intercept

Number of Shopping Trips	Number of Peeple	Percent of Total
1	22	15.9
2	29	21.0
3	24	17.4
4	14	10.1
5	24	17.4
6	8	5.8
7	12	8.7
8	1	0.7
9	4	2.9
	138	100.0

Mean Number of Shopping Trips in the Last Week By Community

-Unity	Average
Frobisher Bay	3.3
Cape Dorset	2.8
Broughton Island	2.2
Norman Wells	4.2
Fort Norman	5.6
Fort Rae	4.1
Overall	3.65

Table 9. Number of Shopping Trips in the Last Week

Differences between native and rim-native households were expected (based on nutrition studies such as the one done by Indian and Inuit Health Services in Health and Welfare Canada) and confirmed. A larger proportion of the non-natives purchased fresh fruits and vegetables (72% versus 35%) and dairy products (54% versus 35%). The opposite was true for snack feeds with a larger proportion of the natives (81%) than non-native (56%) purchasing them. There were also a few unexpected differences. A larger proportion of natives than non-natives purchased canned goods (67% versus 46%) and staples (54% versus 21%). This difference in shopping behaviour may be due to non-natives buying larger quantities of these goods on a less frequent basis. Finally there was no difference in the proportion of natives (49%) and rim-natives (46%) purchasing meat. This was unexpected since natives have greater access to country foods .

A closer examination of the native purchasing behaviour shows that the Indians/Metis and the Inuit have different purchasing patterns (Table 11). For example, Indians/Metis purchased many more canned goods on the sampled shopping trip than did the Inuit (90% of Indian/Met is shoppers bought canned goods compared to 53% of Inuit shoppers). More Indians/Metis shoppers also purchased more meat, more staples, and more snack foods. One possible explanation is that the Indian/Metis shoppers that were interviewed are more dependent on retail focal purchases than are the Inuit because the Inuit consume more country food. This possible explanation is also examined in light of the differing spending levels for food (later in this section) and in the use of country focal ("Reliance on Country Food" on page 57).

The amount of money spent on focal purchases reveals that (1) non-natives spent slightly more on food on the day of intercept and (2) Norman Wells, a predominantly white community, had the highest figure while Fort Norman had the lowest one. However, there is no statistical difference in food purchase amount for the day of the intercept between communities or between the natives and the non-natives. (East/West differences also do not exist. The mean spent on a single shopping trip was $48.35 (Table 12).

The reader should also note that the amount spent at the grocery varies widely. This is true across the entire Northwest Territories. This may be because stores fill two types of shopping functions: (1) general stockup needs and (2) convenience as well as a socializing function.

The average monthly food bill for all consumers was estimated to be $571 per month. An average of $41 was spent each month at restaurants. Combining these two, the overall average spent per household for food is $612 per month. Analysis of variance indicates that there is a significant difference between communities in the monthly estimate of food expenditure and the eating out expenditure. And, as was discussed earlier, there is a significant difference in family size between natives and non-natives. Because all these differences exist it is important to examine the feed expenditure patterns on a native/non-native per capita by community basis.

The overall per capita focal expenditure per month is $131 for all households in the sample. This information is summarized in Table 13. An examination of the per capita expenditures by communities indicates that people living in the three eastern communities estimate liner per capita expenditures than westerners. This was confirmed statistically: expenditures for westerners are higher than those of the easterners. The East/West difference may be a difference between the Inuit and the Indian/Metis in their use of a mix of retail food and country food.

Types of Food Purchased			
Type of Food	Percent Purchasing Each Food Type		
	Natives	Non-natives	Total
Canned Goods	67%	46%	61%
Fresh Fruits & Vegetables	35%	72%	46%
Meat	49%	46%	49%
Dairy	35%	54%	40%
Staples	54%	21%	45%
Snack Foods	81%	56%	74%
Bakery Products	44%	36%	41%
Miscelleanous (All others)	54%	49%	53%

Table 10. Types of Food Purchased: The percentages listed above reflect the portion of an ethnic group that purchases a particular type of focal.

Types of Food Purchased			
Type of Food	Percent Purchasing Each Food Type		
	Inuit	Indians	Natives
Canned Goods	53%	90%	67%
Fresh Fruits & Vegetables	37%	32%	35%
Meat	39%	66%	49%
Dairy	37%	40%	35%
Staples	47%	66%	54%
Snack Foods	77%	87%	81%
Bakery Products	44%	45%	44%
Miscelleanous (all others)	57%	50%	54%

Table 11. Differences in food purchases between Inuit and Indians/Metis: The percentages listed above reflect the portion of an ethnic group that purchases a particular type of fed.

Amount Spent at Shopping Trip on my of Intercept

Amount Spent	Frequency	Percentage	Cumulative Percentage
$10 or less	24	17.1	17.1
$11 to $20	22	15.7	32.8
$21 to $30	12	8.6	41.4
$31 to $40	22	15.7	57.1
$41 to $50	17	12.1	69.3
$51 to $60	7	5.0	74.3
$61 to $70	2	1.4	75.7
$71 to $80	9	6.4	82.1
$81 to $90	3	2.1	84.3
$91 to $100	8	5.7	90.0
$101 to $125	7	5.0	95.0
$125 to $224	7	5.0	100.0
	140	100.0	100.0

Amount Spent at Grocery on Day of Intercept

By Ethnic Background

	Mean
Native	$47.04
Non-native	$51.10
Overall	$48.35

By Community

	Mean
Frobisher Bay	$49.70
Cape Dorset	$48.97
Broughton Island	$42.34
Norman Wells	$61.55
Fort Norman	$36.41
mrt Rae	$47.39
Overall	$48.35

Table 12. Amount Spent in Most Recent Shopping Trip: Total sample.

Estimated Food Expenditures by Community

	Mean Monthly Food Purchase	Mean Monthly Eating Out Expenditure	Mean Total Food Bill	Mean Household Size	Mean Per capita
Frobisher Bay					
Native (n=23)	$465	$54	$519	6.83	$ 76
Non-native (n=16)	$532	$82	$614	2.62	$234
Total (n=40)	$488	$64	$552	5.20	$106
Cape Dorset					
Native (n=21)	$538	$ 2	$540	5.48	$ 99
Total (n=22)	$539	$ 2	$541	5.27	$103
Broughton Island					
Native (n=18)	$465	$15	$480	4.50	$107
Total (n=18)	$%5	$15	$480	4.50	$107
Norman Wells					
Native (n=9)	$720	$99	$819	4.56	$180
Non-native (n=14)	$704	$100	$804	2.93	$274
Total (n=23)	$710	$100	$810	3.54	$229
Fort Norman					
Native (n=19)	$678	$ 0	$678	5.15	$132
Total (n=21)	$651	$ 0	$651	4.77	$136
Fort Rae					
Native (n=9)	$778	$12	$790	5.89	$134
Non-native(n=5)	$590	$90	$680	1.80	$378
Total (n=14)	$711	$40	$751	4.43	$169
Overall Means	$571	$41	$612	4.66	$131

Table 13. Estimated Monthly Food Expenditure

There is no reason to suspect that the differences in food consumption and purchasing patterns should vary between the eastern and the western rim-natives. Since non-natives generally have less access to country foods, there may be a native/non-native difference. In three of the communities, Frobisher Bay, Norman Wells, and Fort Rae, there is a sufficient sample size of both natives and non-natives to allow comparisons between the two ethnic groups. Since food prices vary and the availability of country food varies among the immunities comparison across communities could blur any differences between native and non-native spending patterns. In each of these three immunities, the non-natives spend considerably more on focal on a per capita basis than do the natives. The most likely explanation for this higher expenditure level by non-natives is a difference in food consumption patterns between natives and non-natives:

1. natives consume more country feeds than non-natives (primarily meats)

2. non-natives consume more dairy products than natives

3. rim-natives consume more fresh fruits and vegetables than natives

These different consumption patterns may reflect past experience with the various food groups. Natives have been reliant on country feds for years, but were only introduced to fresh fruits and vegtables and dairy products since they settled into communities where frequent delivery of the perishable items could be made. Many natives also suffer from lactose intolerance so are therefore unlikely to consume as high a proportion of dairy products as non-natives. Differences in total per capita expenditures are the result of these differing consumption patterns between natives and rim-natives because country feds are relatively inexpensive while dairy and fresh produce are very expensive.

It is also widely known that greater income levels lead to more expenditures on luxury goods. This is also true for focal expenditures where more exotic, more expensive foods are typically purchased by consumers with higher income levels in southern Canada. It is likely that this is true for northern consumers as well. The higher income levels of non-natives may therefore also help to explain the higher food expenditures of non-native residents.

4.3 PERCEPTION OF FOOD OFFERINGS IN THE SIX COMMUNITIES

The individual consumer in the six sampled immunities was specifically asked abut his or her perceptions of the feed offerings in the local community. These responses to the perception of feed offering question are examined by each community. Table 14 summarizes the reported perception.s, by types of focal, in each of the communities. The perception of the price, the selection, and the quality of the food is reported. Information was also collected for various types of focal: canned goods, fresh fruits and vegetables, meats, fresh dairy, staples,

snack food, and bakery products. This information is summarized in "Appendix E. Perception of Food Offerings in the Six Communities " on page 189. Because of problems in data collection the rankings of the various types of feed on each of the three dimensions is not reported.

In four of the six communities, a strong majority of the consumers think the food prices are high. In two of the communities, Fort Norman and Fort Rae, the majority of the consumers described the prices as fair. These incidentally are two of the three communities with low food prices. Using Yellowknife as a base (100), the food price indexes for the six communities are: Fort Rae 112, Fort Norman and Frobisher Bay 141, Broughton Island 153, Norman Wells 163, and Cape Dorset 168 (Source: G. N.W.T., Food Price Indexes, October, 1982). Also the higher food prices at the nearby community of Norman Wells may be an important factor causing Fort Norman residents to view local food prices as "fair".

Over 90% of the consumers express@ the opinion that there was an adequate or excellent selection of feed available in their community. Selection was rated excellently the highest proportion of residents (40%) in Frobisher Bay. This is not surprising as Frobisher Bay is the largest community examined, and offers the widest selection of fed.

Almost all consumers in all six communities feel that the quality of feed available in their communities is either adequate or excellent.

In summary, the consumers are saying that there is an adequate or even good selection and quality of food products available in northern stores, but this comes with a rest: high prices.

4.4 USE OF ALTERNATIVE FOOD SOURCES

4.4.1 Shopping at Other Stores

In four of the six communities there are two or more retail focal stores. All three of the eastern communities have more than one food store. Only one of the three communities studied in depth in the West has two or more stores. In the East, travel to other communities must be done by airplane (except for the sealift in the summer). This means that for 'regular' grocery shopping food purchases must be made within the community or flown in. In the West, one of the communities has a year round surface road with a larger population centre. The other two are serviced by winter reads.

Because of the difference in transportation access and in number of stores per community, it was expected that consumer behaviour would vary by community. Therefore each community and its alternatives are discussed in turn. Table 15summarizes the differences between the communities.

Perception of Food Offering in the Six Communities

All Types of Food

Price

Community	Low	Fair	High
Frobisher Bay	1 (2.5%)	4 (10.0%)	35 (87.5%)
Cape Dorset	o (0.0%)	5 (22.7%)	17 (77.3%)
Broughton Island	o (0.0%)	1 (5.9%)	16 (94.1%)
Norman Wells	o (0.0%)	o (0.0%)	23 (100%)
Fort Norman	o (0.0%)	21 (95.5%)	1 (4.5%)
Fort Rae	0 (0.0%)	12 (85.7%)	2 (14.3%)

Selection

Community	Poor	Adequate	Excellent
Frobisher Bay	2 (5.3%)	21 (55.3%)	15 (39.5%)
Cape Dorset	4 (18.2%)	16 (72.7%)	2 (9.1%)
Broughton Island	3 (17.6%)	13 (76.5%)	1 (5.9%)
Norman wells	0 (0.0%)	19 (82.6%)	4 (17.4%)
Fort Norman	o (0.0%)	22 (loo%)	o (0.0%)
Fort Rae	1 (7.7%)	12 (92.3%)	o (0.0%)

Quality

Community	Low	Fair	High
Frobisher Bay	2 (5.4%)	26 (70.3%)	9 (24.3%)
Cape Dorset	1 (4.8%)	16 (76.2%)	4 (19.0%)
Broughton Island	2 (11.8%)	13 (76.5%)	2 (11.8%)
Norman wells	0 (0.0%)	18 (78.3%)	5 (21.7%)
Fort Norman	0 (0.0%)	22 (loo%)	o (0.0%)
Fort Rae	1 (7.7%)	12 (92.3%)	o (0.0%)

Table 14. Perception of Food Offerings in the Six Communities. The numbers listed above are the actual number of consumers giving each of the responses in each of the communities.

Characteristics of Sample Communities

Community	Number of Retail Stores	Population Per Store	Mode Access	Sizeof Community
Frobisher Bay	5	466	A,W	Large
Cape Dorset	3	262	A,W	Medium
Broughton 1s1	2	188	A,W	small
Norman Wells	1	420	A,W,WR	Medium
Fort Norman	1	285	A,W,WR	small
Fort Rae	3	458	A,W,R	Large

Table 15. Community Characteristics Affecting Consumer Shopping Behaviour: A=Air, W=Water, WR=Winter Road, R=Wad.

4.4.1.1 Frobisher Bay

Frobisher Bay has five food retailers. Three are general stores, that is they sell groceries and dry goods. Intercepts were done at two of the three stores. These two stores have the largest market shares with most residents shopping at one or both of these stores for the majority of their grocery shopping. The third general store has a smaller selection of merchandise.

Most consumers indicated that they shopped at more than one store. Some of the reasons listed for multiple store shopping in Frobisher Bay are: fresh fruits and vegetables (n=1), price (n=1), and convenience (n=5). The three general grocery stores in Frobisher Bay keep slightly different hours and are indifferent locations. Hence, any of the stores maybe most 'convenient' on any particular occasion.

Each of the stores in Frobisher Bay fulfills different consumer needs. The largest store, store A, has its own butcher shop and sells the only fresh meat in the community. In appearance it resembles a southern supermarket. The store hours are 10:00 to 6:00 Monday, Tuesday, Thursday, and Saturday; and 10:00 to 8:00 Wednesday and Friday. Consumers gave a variety of reasons for shopping at Store A. They listed: low prices (n=2), variety (n=6), convenience (n=2), and quality (n=2). One of the convenience reasons reported was that the person was shopping in the dry goods part of the store, and decided to pick up groceries in the same shopping trip. Of the 29 respondents intercepted at Store A, 14 indicated that they do all of their shopping there. Five indicated that they also shop at Store B, 12 also shop at Store C, and 1 also shops at Store D.

Store B is located in an office and apartment building. It is a general merchandise store, on a smaller scale than Store A, but specializing in more expensive dry goods, and more 'exotic' foods.. It is open 9:30 to 6:00 Monday through Saturday, and 1:00 to 5:00 on Sunday. It carries no fresh meat, and only a few frozen meats. Community residents indicated the reason for their patronage at Store B was: variety (n=3), convenience (n=3), the freshest fruits and vegetables (n=2), and quality (n=2) . 'The consumer perception is that prices are generally higher here than at the other retail stores in the community (See the retailer chapter for information regarding the actual price differences between stores, as determined in the retail price survey). One Frobisher Bay customer describes the differences as: "When you open a can purchased from Store A you never know what you' 11 find. At Store B store the prices are only 10% higher, but you get fresh focal each week. "

Seven of the ten consumers intercepted at Store B said they also shop at Store A. One said they also shop at Store C. Three indicated that they do all their shopping at Store B.

Consumers generally indicated that they only shopped at Store C when Store A was closed. (Eight consumers specifically gave this reason.) Store C has the longest operating hours in town: 10:00 to 10:00 each day. The perception of prices at Store C is quite mixed. For instance one consumer stated: "I shop at Store C because it offers higher quality, but at higher prices. " Another stated: "Store is close to my tie. I buy fresh fruits and vegetables thereat cheap prices. Store C offers bargains on meat. "

Two of the stores not mentioned by consumers could be described as specialty shops. Store D specializes in country food and local handicrafts. Store E specializes in products to soothe the sweet tooth. Its other major product is cigarettes. As neither of these stores offers anywhere near the full range of groceries needed by consumers, they would not have listed these stores in response to the question asking about major food purchase locations. However, both do a substantial amount of business. From casual observation it appears that the primary shoppers in Store E are young adults and children.

4.4.1.2 Cape Dorset

This community has three stores. Store A is a chain store and supplies the major grocery needs of the community. Store B is a cooperative, it supplements the offerings of the chain store, and maintains slightly different hours (it is open on Monday when the chain store is c1osEx3). Store Cis just begimingtoexpard into food. It is the only store open in the evenings, and it carries a very limited assortment of food. Consumers were intercepted at Store A and Store B. Store B is closed on Saturday, intercepts were done at Store A on Saturday. Store A is closed on Monday, intercepts were done at Store B a-l Monday.

Consumers said they shopped at more than one store for variety. Of the 22 people interviewed only 1 said they shopped exclusively at one store. Nine persons were intercepted outside Store B. All said they also shop at Store A. Six of these persons said they shopped at Store A because it has lower prices. Four indicated that Store A has a larger selection of products. Those shopping at Store B said they shop shopped there for the following reasons: emergency, the Store A is closed, and cigarettes are cheaper.

Thirteen persons were intercepted at StoreA. Only one of them said they do all their grocery shopping at that store. Eleven of the people said they also shop at Store B, While four persons listed Store C as their alternative choice. Once again consumers indicated that the major reasons for shopping at Store A is that it has the best selection and largest variety of food offerings. Five persons indicated that they shop at both Store A and Store B because they sell different products. The offerings in each store do not completely overlap. Other reasons listed for shopping at Store B were given as: credit (n=1), cheaper cigarettes (n=2), cheaper pop (n=1), when Store Ais closed (n=1), and selection and prices (n=1).

Although Store C is the only store open in the evenings the reason people said. they shop at it was because it carries food products not carried in the larger stores (n=3).

From the observations of the stores, and the consumer rational for shopping at each type of store it is clear that the needs met by each of the stores are as follows: Store A provides the major grocery needs. The food operations of Store B and Store C appear to be offered as a convenience to consumers who shop at the store for other nonfood merchandise and during hours when the major food retailer is C1OSEX3. Both are open during Store A's closed day: Monday. Store C is open in the evenings. Of the two convenience type food stores Store B carries a much wider range of merchandise.

4.4.1.3 Broughton Island

This community has two fcod retailers: a general store (chain store, Store A) and a snack bar (Store B) that carries a small assortment of groceries. Meats (frozen only), dairy, fruits, and vegetables are only available at the chain store. All the intercepts were done at Store A. None of the people said they do major grocery shopping at more than one store. As Store B carries only a few groceries this is not surprising. Only two of the consumers even mentioned the other store, and they said they only went to the 'coffee shop' to fill in when Store A was closed.

4.4.1.4 Norman wells

Norman Wells has only one store which is a locally owned independent store. The consumers indicated tit they shopped at the local store for the following reasons: its the only local store (n=14), convenience (n=2), fresh fruits and vegetables (n=5), price (n=1), quality (n=1), and snack foods (n=1) . .

When asked if major food purchases were made elsewhere 67% (n=16) of the consumers said yes. Almost all of the food purchases in other communities are shipped to them by air. Several shoppers mentioned that prices are liner in neighboring communities, despite additional transport charges, e.g. Fort Norman. The consumers explanations for the apparent higher prices in Norman Wells are (1) monopolistic market and (2) higher per capita incomes due to the Norman Wells Oil field Expansion and Pipeline Project (1982-1985). They shop in other communities such as Fort Norman (n=8), Yellowknife (n=8), Edmonton (n =6), Hay River (n=3) , Inuvik (n=1), and Fort Franklin (n=1) . In 1985, the hamlet council approached the Hudsons Bay Company hoping that they would open a store in Norman wells . Hudson's Bay Company has declined the invitation.

4.4.1.5 Fort Norman

mrt Norman, an isolated settlement, has only one store. It is a chain store. When asked if ma jar food purchases were made elsewhere only one of the consumers for that community said Yes. Almost all native consumers reported that all or nearly all of their shopping was done at the local store. One consumer (non-native) indicated that s/he did major grocery shopping in Edmonton on a regular basis because of better prices and better variety. S/he also placed a barge order for non-perishable items.

4.4.1.6 Fort Rae

mrt Rae has three stores. Store A is a chain store where all the intercepts were completed. Store B is an individually run independent, while Store C is an independent run by the band. Consumers shop in and outside this community. Yellowkni fe is only one hour by car, making its food stores very accessible. Fifty-seven percent (n=8) of those interviewed indicated that they shop at more than one store for their regular, major grocery shopping. Six said they also shop in Yellowknife. Four of them said they shop at other stores in Fort Rae. (These don 't add to 8 as two of the consumers said they do additional shopping in both Fort Rae and Yellowknife.), Consumers indicated that they shopped at Store A because it was local and/or convenient (n=4) , variety (n=1), and quality (n=1) . The reason for purchases in other stores, and especially those in Yellowkni fe was for price (n =5), variety (n=5), quality (n=2), and travel (n=1). The hours of the three stores vary. The store owned by the local businessman is open more than the other two stores in an effort to attract more business.

4.4.2 Direct/Bulk Purchasing

One of the major alternatives to purchasing food at the local retail food store is to order the focal 'directly' and have it shipped to the consumer. Orders can be placed with grocers or wholesalers in other communities or from sane southern location. Across the Northwest Territories consumers my order perishables this way and have them air freighted into the community. Consumers who live along a road network have another option; they can obtain their food in other centres and either have their focal shipped by truck/taxi or transport their food in their personal car/truck. Often these kinds of food purchases are associated with multipurpose shopping/business trips. All food ordered/purchased from someplace outside the community is referred to as a direct purchase.

In communi ties where there is no road access consumers may order a large volume (up to a years supply) of nonperishable feds to be barged or sealifted to the communi ty. This is a specific type of direct purchase, a bulk purchase.

The major reasons cited for direct or bulk purchase of food were: better selection, better quality (this generally refers to fresh meat or fresh produce orders), and potentially lower prices. Another powerful, but less frequently espoused reason, at least in the East, is that liquor can not be sold locally. In the case of liquor the special order option with local stores can not be used for purchase. It can, however, be imported directly from a, southern supplier.

Sixteen percent of the entire consumer sample make some direct purchases of food. In the eastern communities, only 7.5% of the consumers interviewed make direct purchases. In the West, 28% of the consumers interviewed make direct purchases. These figures, however, are deceptive'. To see how direct purchases are or are not used, each community needs to be examined individually. Table 16 lists the percent of the consumers interviewed that make direct purchases in each Community. It is clear from this chart that Norman Wells relies heavily on direct purchases, whereas in the other communities only a small minority of the population makes direct purchases.

Bulk Purchases by Community

Community	Percent of Sample Making Direct Purchases
Frobisher Bay	10%
Cape Dorset	5%
Broughton Island	6%
Norman Wells	71%
Fort Norman	0%
Fort Rae	0%

Table 16. Bulk Purchases by Community

The western responses were classified into the categories shown in Table 17. As the chart indicates the two major reasons respondents don' t make direct purchases are lack of money and they don' t like this system of purchasing food. Lack of money generally refers to the fact that direct purchases, especially yearly orders, require a large outlay of money at one time. This large amount is difficult for many consumers to come up with ($2000 to-$3000).

Reasons for Not Bulk Purchasing, Western Communities

Reason for Not Bulk Purchasing	Frequency	Percent
It costs too much money	19	39.6
I'm not a member of the local buying group	2	4.2
I don't have sufficient storage facilities	1	2.1
I don't like direct purchases/ I prefer in-store shopping	19	39.6
Other	7	14.6
	48	100.0

Table 17. Reasons for Not Bulk Purchasing: Western responses.

Almost all the direct purchases were made by residents of Norman Wells. These purchases fall into three main categories: (1) bulk orders through the local store, (2) bulk orders through stores in Yellowknife, Inuvik, or Edmonton, and (3) direct purchases when in other communities on other business. The main reason why Norman Wells residents direct purchase more than residents in other study communities is reported to be the high cost of food in the local store. The manager of that store stated that bulk orders through his store are now less expensive than before because he wanted to capture sane of this food business.

The pricing of direct purchases in this store is the retail price in Edmonton plus freight, plus a handling markup. Residents often purchase food in Yellowknife because of the attraction of lower prices and fresh meat. One resident did complain that direct ordering by telephone is risky because to get a low freight rate on the scheduled PWA flight, you mustorderacertain amount of food. If an item is not in stock the store won't ship it with the rest of the order. This could cause you to pay a much higher freight rate on the smaller order.

The question asking why people don't bulk purchase food was difficult for the eastern respondents to answer. In the East, bulk or direct purchase generally refers to annual sealift purchases. Many who were not bulk purchasing food this year had done so in the past and were able to tell why they had ceased bulk purchasing. Some reasons given by interviewees include: can t plan that far ahead, no bank in which to save the money to make the payment, too much work to get food shipped, risks too high, and don' t need the quantity of food that I must order.

Several people mentioned factors that indicated that they did not know how to go about making bulk/direct purchases: no order lists, no catalogues, need directions as to how to do it, need translator services (comment from a man who said he only speaks Inuktituk, not English or French), and there is no price list. Such problems could be solved through education and moderation by the merchants. (See Table 18 on page 60 for a description of the process that is required for a seal if t purchase). A verbal description of the sealift purchase process and some of the problems one may encounter is outlined in the quotation below:

> The seali ft is not too expensive but the service is extremely poor. They regularly lose or damage goods and making a claim becomes an ordeal. In order to make an order you must find a supplier who gives it to the packer, who in turn gives it to the carrier. The carrier unloads it on the beach and it is up to the consignee to pick it up. If the shipment is lest or damaged, you - must file a claim against the carrier, who will blame the packer or the retailer. . . ● ll your orders are prepaid to the retailer, who pays the packer and the carrier. It is not unusual for an order to be $5000.00 to $7000.00, so if it is lost you must make another order right away if it is not the last ship. This means one could be out $10000.00 to $14000.00 for months before a settlement has been reached if it is reached at all.
>
> . . .There are two ways you can use the seali ft and they differ in all aspects. You can use it as mentioned above in which case the retailer or shipper is responsible because he has the obligation to deliver the goods to his client. He makes enough profit to take these respons ibilities and should be obliged to do so. You can also use the sealift by ordering yourself through Transport Canada. This is when you have to sign a document stating that you accept all the risks. In this case, you can and must purchase insurance to cover your shipment. (Jean-Marc Boulanger, Transport Canada)

How to Make a Sealift Purchase

Step 1. If liquor is to be imported an imported liquor permit must be filed with the G. N. W. T., and the appropriate import fee paid.

Step 2. Place order with supplier (s), pay supplier (s).

Step 3. If desired, arrange for insurance to protect shipnent.

Step 4. Book cargo space with Ministry of Transportation

Step 5. Make arrangements for goods to be delivered to the carrier.

Step 6. Make arrangements for goods to be packed and/or crated for shipment on pallets.

Step 7. Make arrangement for goods to be picked up at beach and delivered.

Step 8. File any necessary claims with: supplier, packer, carrier, and/or the insurance company.

Table 18. How to Make a Sealift Purchase

Some of the comments made by consumers when they were asked why they don' t bulk purchase food provide further insights into this issue:

1. "People should not bulk purchase, they Should support the local retailers. Rood is cheaper through the local retailers. "

2. "I have bulk purchased feed in the past. I no longer do so because the freight is too much. "

3. "We used to bulk purchase food. We don t do it anymore because you don' t save any money. There is also tco much to do to bulk purchase. "

4. "If more people could understand the seali ft, they might use it. The food from the sealift is of better quality. It is difficult to get the lump of money together at one time for the sealif t. When I last did it it cost me $2,000. for one year. I didn t order through the sealift this year as I am saving my money to buy a snowmobile and a three wheel bike. "

5. "I have bulk purchased food in the past. I am not currently doing it, but will consider it again sometime in the future. I last bulk ordered food in 1983. I still have sane of it left. There are storage problems when bulk purchases are made, for instance When soap is stored too close to food you get the soap smells in food. When bulk ordering ' food is cheap , but freight costs a lot ! I still believe it is possible to save money over instore purchases. "

6. "I have done bulk feed ordering in the past. I have found that I saved no money. What you get is quality and freshness. "

7, "It doesn't pay. I am the only person in my household. "

As these quotes indicate not everyone thinks bulk or direct purchase is a good alternative to the local food store. Individual household characteristics appear to have a large impact on the usefulness of sealift purchases. To be useful the household must be large enough to consume the quantities that must be ordered, someone in the household must be able to plan ahead (orders are placed. between February and May for August delivery of a years supply of groceries), the money must be available for one large payment, and someone must be able/willing to make all necessary arrangements (ordering, packing, shipping, pickup from dock, etc.). In exchange for possibly lower prices the consumer assumes some of the risks and costs Which the local focal retailer normally assumes: proper order sizes, damage to merchandise, proper storage of merchandise, payment of money upfront , etc. .

4.4.2.1 Implications of Direct/Bulk Purchasing

Direct/bulk purchasing is used mainly Where consumers perceive something inadequate with the local retail situation= .g. Norman Wells high food prices Frobisher Bay, many southerners living in Frobisher Bay are used to larger stores and their offerings. They are willing to feat the the bill to have additional items, generally more expensive i tans, shipped in by air. This is probably because these southerners are used to life in a large urban area, and are having dif f iculty adjusting to a smiler retail market. It is likely they 'd have the same problem moving to a small isolated community in southern Canada.

Consumer advocates in the North often push for greater consumer education in the use of sealifts for bulk purchasing. As indicated in this report the use of the sealift requires the consumer to take on many of the risks the retailer traditionally accepts. This may or may not be desirable from the perspective of an individual householder.

The use of bulk purchase does not come without additional rests, whether done individually by consumers, or by a group of consumers banded together to form a bulk ordering group. Cooperatives or small retailers often act as a bulk ordering group in that most food products carried are non-perishables that are brought into the community via barges/sealift. The major dif ference between them and group ordering is that once the order is received it is not immediately divided up among the members and paid for, but is kept in warehouses and sold one product at a time. This method generally results in no monetary savings for the consumers as these associations have to finance the purchase and maintain a warehouse, as does the major store in the community. The community residents gain an alternative source of supply for nonperishables--but at what cost?

Two researchers (Mar ion and Akilu, pp. 58-59) looking at the inoperative potential in the United States, came to the following conclusion.

> To offer consumers significant price savings, buying clubs must concentrate on volume items that traditionally carry wide margins. Doing this has the tendency of reducing profit margins realized by established food stores. Given the necessity of some minimum profit margin to attract and retain invested funds, the net ef feet could be to force other food retailers to raise prices on items not sold through buying clubs.

Before any action is taken to increase sealift purchases by households, an examination of its ef feet on feed outlets is warranted. This approach is critical in smaller communities in the North mass changeover to sealift purchases could upset the profit margin in food stores and perhaps not only causing increased prices but possibly causing sane stores to go out of business.

An equity question is also raised when bulk purchases increase to the point that they af feet the retail store operations. If retailers are forced to raise their prices on other items to make up for lest profits, then the total food bill for families who chose not to participate in bulk purchases wi 11 be higher than it is presently. The bulk purchasers themselves, in the long run, will not have lower overall food bills, unless they do not buy perishables, because of the increased prices in the local store on perishables.

For the reasons discussed in this section the researchers do not advocate wide scale adoption of direct/bulk purchasing to reduce food rests . Often the rests outweigh the benefits, both to the individual consumer and the local community. However it is important that the residents in the communi ty be aware of this option (both its advantages and disadvantages) and how to direct/bulk purchase if desired. This information can and should be available at the local government offices. It is important that this option remain available to northern residents because it is one way to counteract an irresponsible retailer.

4.4.3 Reliance on Country Food

In an earlier report (P. J. Usher, 1985), the importance of country food in the diet of native peoples has been demonstrated. In our study, there are two important aspects of country food consumption to examine. The first question that arises is how much of the diet is composed of country food and whether it varies by ethnic background? The second question that arises is what types of country feed are eaten and when are they available?

The use of and reliance upon country food varies considerably by community. There are also structural differences between the communities visited in the West and East. For one of the three immunities in the West, there are organized caribou hunts as well as individual hunting parties. The kill f ran the organized hunt is placed in a community freezer, and it is passed out to the residents on a weekly basis throughout the year. In the East the caribou hunts, and other country food hunts, are on a much more informal basis. An individual hunter, or a group of hunters, hunt for the food. The results of the kill belongs to the hunting party. It is then up to the hunting party whether or not the catch would be shared, and if so with whom.

In addition to these differences, there were variations in the ability of the consumers to answer questions regarding the proportion of food used from various categories of food. For this reason the East and the West are discussed separately.

4.4.3.1 The Western Communi ties

Table 19 shows us that in the West only 10% of the consumers interviewed use no country focal. Twenty-seven percent of the consumers eat one half country food and one half southern food. southern foods comprise over 50% of the diet of 45% of the consumers. Only 14% of the consumers get over 50% of their diet from country food.

Country Food Consumption in the Western N.W.T.

Country Food used	Percent	Southern Food Used
6/60 = 10%	0%	0/60 = 0%
16/60 =27%	1 to 10%	1/60 = 2%
5/60 = 8%	11 to 20%	3/60 = 5%
3/60 = 5%	21 to 30%	5/60 = 8%
6/60 = 10%	31 to 40%	7/60 = 12%
16/60 = 27%	41 to 50%	17/60 =28%
4/60 = 7%	51 to 60%	4/60 = 7%
4/60 = 7%	61 to 70%	3/60 = 5%
0/60 = 0%	71 to 80%	5/60 = 8%
0/60 = 0%	81 to 90%	8/60 = 13%
0/60 = 0%	91 to 100%	7/60 =12%

Table 19. Western N.W.T. Country Food Consumption: Volume: Total sample. The columns 'Southern Food Used' and 'Country Food Used' lists the number of persns, out of the 60 western respondents, whose diet is composed of the percent of that food shown in the centre column. For example 17 of 60 persons or 28% indicated that 41% to 50% of their diet is comprised of southern food.

The next question of interest is what types of country food are eaten, and during what times of the year? As this information is likely to vary by community (local tastes and local game), the information is reported by community. (No information is available for Norman Wells.) Where a large enough group of non-natives were interviewed their country food consumption habits were also reported. (In communities where the non-native sample was too small only the information for the natives was reported.) In Fort Norman (Table 20) almost all natives consume caribou all year round. The number of people eating country fish varies by season, with the highest consumption in the summer. Summer is also the primary season for other country meat, berries, and duck-

Country Food Consumption: Fort Norman

Natives (n=20)*

	Fall	Winter	Spring	Summer
Whale/Muktuk	0.0%	0.0%	0.0%	0.0%
Seal	0.0%	0.0%	0.0%	0.0%
Caribou	95.0%	95.0%	95.0%	90.0%
Country Fish	45.0%	20.0%	30.0%	95.0%
Other Country Meat	15.0%	20.2%	15.0%	90.0%
Local Berries	0.0%	0.0%	0.0%	65.0%
Local Duck	15.0%	0.0%	0.0%	55.8%
Other Country Food	0.0%	5.6%	0.0%	0.0%

*Only two non-natives interviewed, results not listed.

Table 20. Country Food Consumption: Fort Norman: The percentages are the proportion of each segment that consume each type of country focal in each season.

The pattern of country food consumption in Fort Rae (Table 21) is very simi lar to that in Fort Norman. While the number of interviews in both immunities is small, it appears that Fort Norman residents consume a wider variety of country foods and that a higher proportion eat caribou than at Fort Rae. For example, only 67% of the natives in Fart Rae eat caribou whereas 90 to 95% of the natives eat caribou all year round in Fort Norman. Although only a few non-natives (n+), were interviewed in Fort Rae, sane idea of their consumption of country focal is available. As Table 21 shows the non-natives do not regularly eat country fed. The country food eaten by non-natives occurs mainly in the major seasons for each type of country feed. The non-natives must either hunt for the fed. themselves, or get the country food from the natives.

Country Food Consumption: Fort Rae

	Natives (n=9), Non-natives (n=5)			
	Fall	Winter	Spring	Summer
Whale/Muktuk	0.0%	0.0%	0.0%	0.0%
	0.0%	0.0%	0.0%	0.0
Seal	0.0%	0.0%	0.0%	0.0%
	0.0%	0.0%	0.0%	0.0%
Caribou	66.7%	66. 7%	66 .7%	66.7%
	40.0%	40.0%	0.0%	0.0%
Country Fish	33.3%	44.4%	33 .3%	66.7%
	0.0%	0.0	0.0%	80.0%
Other Country Meat	11 .1%	22.8%	0.0%	77.8%
	0.0%	.0%	0.0%	20.0%
Local Berries	0.0%	0.0%	0.0%	77 .8%
	0.0%	0.0%	0.0%	20.0%
Local Duck	0.0%	22. 2%	0.0%	66.7%
	20.0%	0.0%	0.0%	0.0%
Other Country Food	0.0%	0.0%	0.0%	22.2%
	0.0%	0.0%	0.0%	0.0%

Table 21. Country Food Consumption: Fort Rae: The percentages are the proportion of each segment that consume each type of country food in each season.

4.4.3.2 The Eastern Communities

Many of the eastern respondents had a great deal of dif ficulty estimating what proportion of total food intake country focal comprised. The interviewer decided that rather than trying to force a proportion from them, when they often didn t understand what percentages or proportions were, that an alternative means of determining the amount of country food intake would be required. Each respondent was asked how many times a week country food was eaten in the household. This was asked after the question regarding what seasons what country food was eaten. In this way it was clear to the respondent what was meant by the term country fed. The responses for all respondents in the three

eastern communities are summarized in Table 22. It is clear from the means listed that natives in Broughton Island (Table 23) and Cape Dorset (Table 24) rely heavily on country food (10 and 9.8 times a week respectively). The natives in Frobisher Bay (Table 25), a large centre, eat country food only slightly more frequently than t he rim-natives. Natives and non-natives may not consume the same quantities of country food (meat especially), each time it is eaten——non-natives tend to include vegetables and other dishes in a meal--hence the number of times country food was eaten per week in a household may not be directly comparable. The native consumption patterns should be comparable from one community to another. Both groups in Frobisher Bay are clearly more dependent on the local food store than are the natives in the smaller eastern communities. Unfortunately because the measures for the amount of country food consumed were different for the West (proportions) , and the East (number of times eaten), it is not possible to state conclusively that more country food is eaten in the eastern communities, although all indications support this conclusion.

Mean Number of Times Country Food was Eaten in a Week

Communities	Mean
Frobisher Bay (Natives, n=23),	2.83
Frobisher Bay (Non-native, n=16),	2.50
Cape Dorset (Natives, n=21),	9.76
Cape Dorset (Non-natives, n =1),	7.00
Broughton Island (Natives n=18),	10.06

Table 22. Eastern N.W. T. Country Food Consumption: Volume

Table 23, Table 24, and Table 25 summarize the seasonal consumption of country food by ethnic background for each of the eastern communities. By examining the native consumption patterns across communities sane observations are clear. Country focal assumption is generally lower in Frobisher Bay than it is in the other surveyed communi ties in the East. Also, the types of finds consumed varies between Frobisher Bay and the other two centres with less seal and fish in the diets of Inuit at Frobisher Bay.

Several suggestions are offered to explain the dif ference in country focal consumption patterns by Inuit in Frobisher Bay and Inuit in the

Country Food Consumption: Broughton Island

Natives (n=18)*

	Fall	Winter	Spring	Summer
Whale/Muktuk	55.6%	38.9%	33.3%	77.8%
seal	100.0%	100 .0%	100 .0%	100 .0%
Caribou	72.0%	94.4%	77.8%	77 .8%
Country Fish/ Arctic Char	77.8%	83.3%	100.0%	88.9%
Other Country Meat	0.0%	0.0%	6.0%	5.6%
Local Berries	0.0%	0 .0%	0.0%	0.0%
Local Duck	0.0%	5.6%	0.0%	27 .8%
Other Country Food	0.0%	5.6%	0.0%	0.0%

*Too few non-natives were interviewed to allow meaningful results.

Table 23. Country Food Consumption: Broughton Island

other two communities of Cape Dorset and Broughton Island. These possibilities are:

1. Hunting is better around the two smaller communities; henoe more country food is available.

2. Inuit in the smaller immunities have, on average, more time for hunting because fewer of them are involved in the wage economy compared to Inuit living in Frobisher Bay.

3. Inuit at Frobisher Bay have become more accustomed to store feds than those at Cape Dorset and Broughton Island.

4. Inuit at Frobisher Bay have higher incomes than those in the smaller communities, and these higher incomes permit more store f ood purchases .

Since a wide variety of country food is available throughout the year at a store in Frobisher Bay at prices less than comparable southern

Country Food Consumption: Cape Dorset

Natives (n=21)*

	Fall	winter	Spring	Summer
Whale/Muktuk	9.5%	9.5%	52.4%	90.5%
seal	81.0%	71.4%	95.2%	90.5%
Caribou	95.2%	95.2%	95.2%	95.2%
Country Fish/ Arctic Char	90.5%	90.5%	90.5%	90.5%
Other Country Meat	9.5%	9.5%	4.8%	9.5%
Local Berries	4.8%	0.0%	4.8%	0.0%
Local Duck	9.5%	0.0%	47.6%	42.9%
Other Country Food	4.8%	19.0%	9.5%	4.8%

*Too few non-natives were interviewed to allow meaningful results.

Table 24. Country Food Consumption: Cape Dorset

foods, the most plausible explanations appear to be associated with a greater preference for store finds and higher in-es. An example of focal prices of comparable feeds at the Frobisher Bay store is a kilogram of ground beef at $6.19 compared to caribou at $4.00, suggesting that availability/price of country food is not a problem.

The highest community consumption of seal is Broughton Island, where each respondent said they eat it all year round. The next highest consumption of seal is in Cape Dorset, where consumption seems to drop off in the fall and winter. Consumption of seal varies somewhat in Frobisher Bay, but is generally high, with 65% to 81% of the native residents eating seal all year.

Caribou is eaten by over 73% of the natives in all three eastern communities. The highest rate is 95% which occurs in Cape Dorset year round. Caribou herds are easily accessible year round from this community. Caribou are not as easily accessible m Broughton Island, which probably explains the higher car ibou consumption in the winter,

Country Food Consumption: Frobisher Bay

Natives (n=23),
Non-natives (n=16)

	Fall	Winter	Spring	Sumner
Whale/Muktuk	6.3%	65.2%	56.5%	82.6%
	6.3%	6.3%	6.3%	6.3%
Seal	65.2%	78.3%	69.6%	81.0%
	0.0%	0.0%	0.0%	6.3%
Caribou	73.9%	82.6%	73.9%	82.6%
	31.2%	31.2%	31.2%	31.2%
Country Fish/ Arctic Char	56.5%	65.2%	65.2%	73.9%
	37.5%	37.5%	43.7%	43.7%
Other Country Meat	26.1%	30.4%	26.1%	34.8%
	0.0%	0.0%	0.0%	0.0%
Local Berries	4.3%	4.3%	4.3%	8.7%
	0.0%	0.0%	0.0%	0.0%
Local Duck	4.3%	4.3%	4.3%	4.3%
	0.0%	0.0%	0.0%	0.0%
Other Country Food	0.0%	0.0%	0.0%	4.3%
	0.0%	0.0%	0.0%	0.0%

Table 25. Country Food Consumption: Frobisher Bay

when it is easier get the caribou. Between 74% and 82% of the natives in Frobisher Bay eat caribou throughout the year.

Similarly the highest consumption for arctic char occurs in Cape Dorset, followed by Broughton Island, followed by Frobisher Bay. The consumption of other types of country food varies by community, and is detailed in Table 23, Table 24, and Table 25.

There was a sufficient number of rim-natives interviewed in Frobisher Bay for a comparison between native and non-native country food consumption. As indicated in Table 22 the rim-native consumption of country food is slightly less than that of the natives in Frobisher Bay. Where differences do arise is in the types of country food eaten: arctic

char is most popular, followed closely by caribou. The other types of country food are eaten by none, or only a small number of non-natives. Arctic char and caribou are available from the country food store and in local restaurants. Char is available whole, or in steaks. Caribou is available in the same cuts in which beef is sold.

4.5 LOWERING THE HOUSEHOLD FOOD EXPENDITURES

Given the high prices of imported southern fed. products in the Northwest Territories it is important that households maximize the use of their food dollars. During the course of this research project it became apparent that nutritionally equivalent food baskets could be made by substituting lower cost products in the food basket.

There are three major ways to accomplish this ob jective. First, where available for sale, country food can generally be substituted for the southern imported meats, at a lower price. Some foods are almost directly substitutable in recipes: caribou for beef, while other provide alternative meals: e.g. arctic char.

Secondly, higher priced foods can be substituted for lower priced foods providing the same, or better nutritional quality. All food is higher priced in the North, but perishables are relatively more so because of the need to ship via air to most communities. Where possible canned fruits and vegetables should be substituted for fresh fruits and vegetables .

Another substitution, which has the ef feet of reducing the price of food, while maintaining nutritional equivalence is to not pay to import unnecessary weight. For example, a large proportion of the cost of milk and bread is water. Water is readily available in the communities and can be added at that point.

The high use of other convenience foods in the North also contributes to higher than necessary food dollars being spent in the North. For natives, the reason may be a lack of rooking ski 11s and a lack of proper utensils in which to prepare foods. Many Inuit and Indian households today therefore lack the necessary 'southern cooking skills (and utensils) to prepare meals more cheaply from 'scratch' .

Non-natives in the Northwest Territories often live alone, or in small households. 'I'hey too appear to be heavy users of convenience foods. 'I'his purchasing behaviour increases substantially the household food bill.

4.6 SUMMARY

The following major conclusions come f rom the analysis of the data collected from the consumers as discussed in this chapter:

*The demographic characteristics exhibited by the sample 'f consumers are:

-Seventy-two percent of the consumers interviewed are natives and 28% are non-natives. The total sample is comprised of consumers from six communities in the following proportions: East: Frobisher Bay 28%, Cape Dorset 16%, Broughton Island 13%; and West: Norman Wells 17%, Fort Norman 16%, and Fort Rae 10%. The native/non-native split in each community is summarized in Table 5.

-Seventy percent of the non-natives lived in the communities for less than 5 yearn. Eighty-seven percent of the natives lived in the communities over 5 years.

-Non-natives generally have a higher educational level than natives. This is summarized in Table 6.

-As would be expected from the dif ferences in education, natives generally have lower incomes than rim-natives (Table 7). This could mean less money available for food purchases.

-Disposable income data are not available. The various special programs available to native and rim-native peoples may have an ef fect on household disposable income and hence on the amount of money available for focal purchases. Also, sane residents within the non-native community may not be eligible for subsidies, i .e. a non-government employee.

-The mean size of a native household is smaller than a non-nat ive household. An average of 5.5 persons live in a native household, while the average number of persons living in a non-native household is 2.5 persons. There was no statistically significant variation in household size by community.

*The majority of the homes in the sample of Northwest Territories households have adequate storage facilities to allow for large purchases of food.

-Over 92% of the households have a refrigerator.

-Sixty-me percent have a separate freezer unit, while 17% have space in a community freezer.

-Over half indicated that they have suf f icient space to store a large amount of canned goods (e.g. yearly sealift purchase), .

*Consumer Behaviour

-Credit purchases of food are very common in the Northwest Territories. Twelve percent of the consumers said they use credit exclusively. Another 34% said they use a combination of cash and credit purchases.

-The average number of shopping trips made during the week prior to the interview was 3.7 times per household. Western consumers shop more frequently than the eastern consumers. (See Table 9.)

-There are differences in the types of feed purchased by rim-natives and mtives. There were also dif ferences between the purchase patterns of the Inuit and the Indian/&t is. See Table 10 and Table 11 for details. The largest dif ferences in food types purchased were: fresh fruits and vegetables, staples, and snack foods for native versus non-native consumers. The largest dif ferences for Inuit versus Indian/Metis purchases were for canned goods, meat, and staples -

-The mean dollars spent on a single grocery trip is $48. 35.

-Eastern native consumers spend less money for food than do ncn-natives.

-Non-natives spend considerably more on a per capita basis for food than do the natives. (See Table 13) This difference is likely due to the native peoples reliance on country fed. A contributing factor could be their lower average per capita income.

*Perception of Food Offerings in the Canmunities.

-Consumers appear to be generally satisfied with the selection and quality of food available in the communities. Most , however , feel the prices for food are too high.

*Use of Alternative Food Sources.

Three alternatives to the local retail store were examined in this report: use of other retail stores, direct purchase and reliance on country food.

-Shopping at other stores. The number of stores per community varies from one to five. Therefore the opportunity to shop at other stores varies considerably f ran one community to another from almost exclusive reliance on the local store in Fort Norman to a highly competitive situation at Frobisher Bay which has five local retail stores.

-Direct/Bulk Purchasing. In most camnunities few consumers do any direct purchasing. Many reasons are listed in the chapter as to why consumers do not or no longer direct purchase focal. The predominantly non-native community of Norman Wells is the exception, where 71% of the consumers engage in sane form of direct purchase. At Norman Wells, residents believe that the local focal store has high prices. This factor may explain why direct purchasing is so popular.

-Reliance on Country Rood. A large portion of most natives diet consists of country focal. The evidence seems to indicate that the traditional eastern communities: Cape Dorset and Broughton Island rely the most on country food. A greater variety of country foods is also consumed in the East, with seal, whale, and caribou being consumed by most of the Inuit. Car ibou is consumed by the majority of the natives in the West. The types of country food consumed, and the season of consumption is summarized by community in Table 20, Table 21, Table 23, Table 24, and Table 25.

Substitution of nutritionally equivalent, lower price foods such as country feed where available, canned fruits and vegetables for fresh, and doing more preparation at home or in the local community (e.g. reinstituted milk and bread baking).

4.7 REFERENCES

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5.0 CHAPTER 5: RESULTS OF RETAILER SURVEYS

The results from the retailer surveys are discussed in this chapter. The chapter has two major divisions: Inventory Results and Indepth Study Results. The results of the food retailer mail survey and the matching questions included on the questionnaire conducted with store managers in six communities are discussed together under inventory results. The location, name, and type of retail food stores are included in this section. The Indepth Study Results section describes the information that was gathered during the on-site study in six immunities: type of credit, hours, perception of success, problems, advertising/sales, price determination, and expenses. The results from the restaurant and bulk order surveys are also discussed.

5.1 INVENTORY RESULTS

In the Northwest Territories there are 115 feed retailers consisting of 36 Hudson's Bay Company stores, 48 independents, and 31 cooperatives (Table 26). All N.W.T. food retailers are listed by community in "Appendix F. Food Retailers in the Northwest Territories" on page 197. This list is current as of November, 1985. The maps in the Appendix (Figures 3, 4, and 5) show the type of store present in each of the Northwest Territories communit ies.

Store Ownership of Northwest Territories Food Stores

Cooperative Association (n=31)	27%
The Hudson's Bay Company (n=36)	"31%
Independents (n=48)	42%

Table 26. Store Ownership of N.W. T. Food Stores

Seventy five food retailers, including the 15 which were visited, responded to the questionnaires. This represents a response rate of 73% of the food retailers that were contacted. The seventy five stores that completed the questionnaires are indicated in "Appendix F. Food Retailers in the Northwest Territories". Table 27 shins the breakdown of the respondents by store ownership.

The majority of the retailers answered all the questions included in the mail survey. The question with the fewest answers was the gross sales question, although many stores willingly provided this information. The Hudson's Bay Company indicated that it is company policy not to report gross sales or market share. This information is therefore not available for the Hudson's Bay Company stores. The Bay also only provided sane of the store floor space dimensions requested, although in all cases they did provide the total retail space for food products.

Store Ownership of Survey Respondents

Cooperative Association (n=19)		25%
The Hudson's Bay Company (n=36)		48%
Independents		
Family Owned (n=6)	8%	
Other Nonchain Independent (n=8)	11%	
Other (n=6)	8%	27%

Table 27. Store Ownership of Survey Respondents

5.1.1 Number of Storesby Size of Community

One of the major objectives of this study is to examine the competition that exists within the communities. One dimension of competition is the number of food stores located within a community. From the data it is clear that the number of people living in a community affects the number of food stores located there (Table 28). This is as would be expected as larger markets can support more sales. Only three communities (6%) have four or more food retailers. All have a population of over 800 persons. One half of the communities have two or three stores. Nineteen communities have only one food store. Fourteen of these communities have populations of less than 400 persons. All eleven communities without a food retailer have a population of less than 400 persons.

Table of Stores by Size

Number of Stores in Community	Size of Community Small	Medium	Large	Total	Percent
0	11	0	0	11	16 .7%
1	14	4	1	19	28. 7%
2	10	10	4	24	36 .4%
3	1	2	6	9	13.6%
4	0	0	1	1	1.5%
5	o	0	1	1	1 .5%
12	o	0	1	1	1 .5%
TOTAL	36	16	14	66	100.0%
	54.6%	24. 2%	21 .2%		100.0%

Table 28. Number of Food Stores by Size of Community: Community sizes are based on population size. Snail communities have a population of less than 400 persons. Medium Size communities have a population between 400 and 800 persons. Large communities have a population of over 800 perons.

5.1.2 'Other Products and Services Of fered

Table 29 lists rim-food products and services carried by food retailers and their availability. The most commonly carried goods are tobacco and sundries, while the main service offered by northern stores is cheque cashing. These are found in nine stores out of ten. Other very common non-food products are fishing supplies, hardware, clothing/footwear and hunting equipment. Credit and special focal orders are services found in eight out of ten stores.

There are many services and non-food products offered in northern stores that are not found in southern retail focal stores. Uniquely northern services include purchasing focal on credit, fur and handicraft buying, special orders, while northern non-food items for sale include f ishing and hunting equipment and snowmobiles.

Services and Products Offered by N.W.T. Food Retailers

Product or Service	Percent Offering Service
Tobacco	97. 3%
Sundries	94. 7%
Cheque Cashing	90. 7%
Fishing Supplies	89.3%
Hardware	89. 3%
clothing/ Footwear	86.7%
Hunting Equipment	86 .7%
Special Orders	82.7%
Credit for Food Purchases	81.3%
Hunting Vehicles	73.3%
Fur Buying	73. 3%
Handicrafts	52.0%
Bulk Orders	49.3%
Public Telephone	44.0%
Hane Delivery	12.0%
Post Office	9.3%
Other	1 .0%

Table 29. Products and Services Of fered by N.W.T. Food Retailers

There are two additional activities that some northern food stores, especially cooperatives, have indicated that they engage in to help keep the costs of food down. These are petroleum and water contracts with the city, for instance, to truck drinking water to each dwelling. As one manager states, the "contracts bring a lot of money that helps keep focal prices down. " Since these types of activities were not included in the questionnaire, we do not know how extensive this practice of 'revenue supplementing from rim-retail operations is.

The data in Table 29 indicates that these stores are not just food stores. In order for a store in a small market area to raise enough revenue to make enough profits to stay in business, the retailer must carry several lines of merchandise. This approach of a 'general store is more cost effective than many specialized stores as they probably could not generate the volume necessary to stay in business without charging exorbitant prices.

The importance of non-food items is supported by the fact that only 15% of the ' food stores derive over 75% of their revenue from food (See Table 30). Food however is the primary product of 86% of the stores surveyed as they report over 50% of their gross sales as being due to food.

Percent of Gross Sales Represented by Food		
Gross Food Sales (% of Total)	Frequency of Response	
5% to 19%	n= 1	1.4%
20% to 49%	n= 9	12.3%
50% to 75%	n=52	71. 2%
over 75%	n =11	15. 1%
No Response	n= 2	

Table 30. Percent of Gross Sales Represented by Food

5.1.3 Size of Retailers

In addition to hewing how significant food sales are to the retailers, it is also important to examine the size of the food operations. This was done by requesting the following information: the variety of foodstuffs carried (the number of food items carried), the retail floor space devoted to food sales (square metres/square feet), the gross sales in food. As it was feared that some retailers might refuse to answer these questions, a surrogate for size was requested: the number of employees. The number of employees are discussed in the next section.

The number of food items carried, the amount of floor space devoted to food and the total gross dollar sales of food are summarized in Table 31. The number of items carried in the northern focal stores ranged from 40 to 5,000 items, with a mean of approximately 800 items. The mean does not ref lect the typical size of a northern store because it was raised by the presence of a few very large stores. The best measure of central tendency is therefore the median of 475 items. The median is the size of the store in the middle of the distribution. In this case since 64 stores answered this question the median means that 32 of the stores have fewer than 475 items, with the other 32 stores having over 475 items. The typical 1972 supermarket housed 9,000 plus items (with the trend being toward larger supermarkets).

Another measure of size for which we have a southern comparison is the dollar roles. In 1985 a typical Canadian supermarket probably had yearly sales of approximately $12.5 million. (Estimated from Snyder, 1986.) As indicated in the table in Table 31, the mean yearly dollar sales of a northern independent or cooperative store (the Hudson's Bay Company did not answer this question) is approximately $900,000. Once again the evidence indicates that the northern stores operate on a much -her basis than its larger southern brothers. Given the extremely low dollar sales by one-quarter of the surveyed stores, future research may wish to focus on determining the minimum dollar sales necessary for a store to stay in business.

Size of Northwest Territories Food Stores

Number of Food Items Carried
(n=64)

First Quartile Range:	40 to 300
Second Quartile Range:	300 to 475
Third Quartile Range:	475 to 795
Fourth Quartile Range:	795 to 5000

Mean = 812
Median = 475
Mode = 400, 700 (5)

Total Amount of Retail space Devoted to Food
Square Metres (Square Feet)
(n=66)

First Quartile Range:	6 to 65 (66 to 700)
Second Quartile Range:	65 to 93 (700 to 1000)
Third Quartile Range:	93 to 186 (1000 to 2000)
Fourth Quartile Range:	186 to 743 (2000 to 7999)

Mean = 145 (1558)
Median = 93 (1000)
Mode = 186 (2000) (7)

Total Gross sales of Food
(n=29)

First Quartile Range:	$12,000 to $204,325
Second Quartile Range:	$204,325 to $350,000
Third Quartile Range:	$350,000 to $650,000
Fourth Quartile Range:	$650,000 to $15,000,000

Mean = $904,980
Median = $350,000
Mode = $750,000 (3)

Table 31. Size of Northwest Territories Food Stores: all types of stores included in all except gross sales of food. The Hudson's Bay Company did not provide this information.

The literature review described the average size of a southern Canadian supermarket to be 2,787 square metres(30,000 square feet) with convenience stores ranging in size from 93 to 297 square metres (1,000 to 3,200 square feet). Prior to this study there was no evidence regarding the size of the food stores in the North. As this study indicates in Table 31, the typical northern store with an average size of 145 square metres (1558 square feet) is much smaller than southern focal stores. The sizes of the northern food stores are more similar in size to southern convenience stores than to southern supermarkets.

Although all the stores in the North are small, the size of the stores also varies by the size of the communi ty. The larger the community, the larger the average store size (floor space). This relationship is statistically significant (Table 32).

Amount of Retail Food Space by Community

Community Population	Number of Responses	Mean Retail Food Space Sq.M.	Sq. Ft.
0-399	25	104	1123
400-799	21	125	1347
800 Plus	20	216	2323
Total	66	145	1558

Table 32. Size of Store by Size of Community

The potential food sales in the smallest communities is not only low because of the small population bases but also because there is a negative relationship between the size of a -unity and the natives reliance on country foods. These two factors place the smallest communities in a vulnerable pos ition as the economic viability of a such small stores is questionable.

A recent statement made in the Progressive Grocer places the size of the northern stores in perspective: 'With the onslaught of new and larger stores, what will happen to the independent supermarket operator--the "little guy" with the 10, OOO-square-foot to 25, OOO-square-foot oper-ation?" (Healey, p. 106). The largest food store in the Northwest Territories, 743 metres or 7999 square feet (Table 31) is smaller than the southern "little guys". The total food retailing space in most communities does not nearly approach the size of a conventional southern supermarket, much less the size of a modern superstore. The Northwest

Territories communities, except Yellowknife, are so small that their 'market development' or market sophistication is clearly far behind that which is present in the South. Given the small size of the northern axmunities the same level of market development can not reasonably be expected.

5.1.4 Number of Employees

The number of both full-time and part-time employees was provided by the managers responding to this survey. The employment statistics are summarized in Table 33. Each of the stores employ somewhere between one and 45 persons . The average number of employees is 8.2. Examination of the range of values appearing in Table 33 shows for example that only 25% of the firms employ 10 or more persons; 50% of the firms employ between 5 and 10 employees, and 25% of the firms employ less than 5 persons.

Once again the data indicates that the northern stores are generally very small operations. Although this is true, they play a large role in the northern economy. Not only do the stores supply focal to the northern consumers, but they are one of the major employers in the Northwest Territories. The survey respondents together (n =73) employ approximately six hundred persons of the Northwest Territories. It is therefore estimated that all the northern fcod stores must employ over 850 persons. Assuming that the total number of employed persons in the Northwest Territories equals the number of persons filing income tax returns, this representi approximately 4.5% of the employment in the Northwest Territories (18, 872 taxable returns were filed in 1981 by residents of the Northwest Territor ies. Bureau of Statistics, page 56.) Future research might to examine the northern and native employment in more depth.

Success or failure of a store depends upon its management. As one of the northern managers stated "A store is only as good the manager of it. " The obvious question is what are the Northwest Territories ' store managers like? How long have they been managers and what type of training do they have? These questions were asked of all the store managers. Their responses are summarized in Table 34. The store managers have an average of 8.1 years of retailing experience. There is no signi f icant dif ference in the store managers' retailing experience by store type (Hudsons Bay Company, the independents and the cooperatives). Only 10% of the store managers have over 15 years of retailing experience. One fourth of the sample has had four years or less experience. The major source of training for managers is on the job training, with over 89% of the sample indicating that this was how they were trained to be a store manager .

Number of Employees in N.W. T. Stores

Number of Full-time Employees
(n=75)

First Quartile Range:	1 to 3
Second Quartile Range:	3 t 0 5
Third Quartile Range:	5 to 7
Fourth Quartile Range:	7 to 36

Mean = 6
Median = 5
Mode =3 (16)

Number of Part-time Employees
(n=55)

First Quartile Range:	1 to 2
Second Quartile Range:	2 to 2
Third Quartile Range:	2 to 4
Fourth Quartile Range:	4 t 0 9

Mean =2.8
Median = 2
Mode = 2 (20)

Total Number of Employees:
Full-time plus Part-time
(n=73)

First Quartile Range:	1 to 5
Second Quartile Range:	5 t 0 7
Third Quartile Range:	7 to 10
Fourth Quartile Range:	10 to 45

Mean =8.2
Median = 7
Mode =5 (13)

Table 33. Number of Employees in N.W.T. Food Stores

Store Managers: Training and Experience

Years of Retailing Experience for Store Manager
(n=75)

First Quartile Range:	Less than One year to Four year
Second Quartile Range:	Four to Six years
Third Quartile Range:	Six to Twelve years
Fourth Quartile Range:	Twelve to Thirty-eight years

Mean = 8.1
Median = 6 years
Mode = 2 years and 6 years (8 each)

Type of Retail Training

On the Job Training (n=66)	89.2%
Technical School (n=1)	1 .4%
Other (n=2)	2.7%
None (n=5)	6.8%

Table 34. Years of Experience & Training Type of N.W.T. Store Managers

5.1.5 Types of Food Carried in Northwest Territories Food Stores

Table 35 lists the proportion of Northwest Territories food retailers carrying various types of focal. As the figure shows most stores carry most of the products listed (canned goods, fresh fruits and vegetables, f rozen meat, fresh dairy, staples, snack foods, and bakery products). The only product category listed which is carried by less than half of the stores is fresh meat. The majority of the northern stores carry only frozen meats. During the indepth interviews some of the retailers indicated that this was the case for several reasons: 1) there are a lack of butchers in the North 2) air shipment does not have proper cooler space to sane communities and 3) the demand is not large enough .

The retailers were also asked what country feds were sold in their stores. Approximately 75% of the managers indicated that no country food was sold in their stores (Table 36). Those stores selling country food tended to concentrate on fish with stores in the eastern Arctic selling arctic char.

Types of Food Carried by the Food Retailers

Snack Food	98.6%	(n=72)
Fresh Fruits and Vegetables	97 .2%	(n=71)
staples	95.9%	(n=73)
Bakery Products .	95.8%	(n=71)
Frozen Meat	94.4%	(n=71)
Fresh Dairy	94.4%	(n=72)
canned Goods	93.2%	(n=73)
Fresh Meat	40.3%	(n=67)

Table 35. Types of Food Carried by the Food Retailers: The percentages above represent the proportion of stores in the sample carrying each of the types of goods 1 isted.

Types of Country Food Carried by Food Retailers

Type of Country Food	Percent of Stores Carrying Each Type
Country fish	25.4%
Whale	9.9%
Other Country Meat	5 .8%
Other Country Food	5.8%
Caribou	5.7%
seal	2.9%
Local Berries	2.9%
Local Duck	2.9%

Table 36. Types of Country Food Carried by N.W.T. Food Retailers: the percentages above represent the number of stores carrying each type of country food .

During the course of the interviews with store managers in six communities, several managers mentioned that federal regulations governing the inspection of food products hinder retail stores from carrying such food because they can not buy it directly from the hunters. In contrast, none of the game killed in organized caribou hunts for the purpose of supplying local residents with meat throughout the year is subject to federal meat inspection. In the MacKenzie Valley, mtive communities with organized caribou hunts tend to f i 11 the demand for game at no cost to the consumer. For this reason alone, store managers in these communities would be discouraged from trying to sell caribou.

The institutionalization of caribou hunting by many Dene bands is an innovation not feud in the eastern Arctic. On the other hand, the sales of country food seems stronger in regional centres such as Inuvik where there is a large white population and in larger Inuit communities.

5.1.6 Suppliers and Frequency of Reorder

Another way in which northern stores differ from their southern counterparts is in the transportation network servicing the communities. Virtually all southern stores are accessible by read. Only a few of the northern communities are served by road year round. A few more are accessible by winter road. All but two of the remaining communities are accessible by water and air. Generally barge or seal if t travel via water passages is the cheapest form of shipment. If this form of transportation was available year round the impact of transportation rests on food prices would be minimal. Unfortunately, during the majority of the year the water passageways to the North are frozen. This means water traffic can only service these communities during the summer. Most communities in the eastern Arctic receive a shipment by inter once a year while those in the western Arctic and along the MacKenzie River system may receive several barge shipments each summer. Because of the difference in transportation charges between water and air, many f irms try to ship as much as possible via water. For example by air from Montreal to Frobisher Bay the general tariff rate for the smallest weight class is $2.49 per kilogram, while the price is 16.6 cents per kilogram via seali ft (Mclaughlin & Associates, 1985). Insurance costs, however, can be higher for the sealift. Many nonperishable food products are therefore shipped to the communities via water transportation for a full years supply.

Store managers do not always ship non-perishable goods by the cheapest means of transportation. Some stores, notably at Rankin Inlet, Chesterfield Inlet and Whale Cove, import most of their foodstuf fs by air even though they can use water transportation (McLaughlin, table 6.3). While there is insufficient evidence to indicate how widespread the practice of ordering non-perishable food stuffs by air when a community is served by either road or water transportation, it appears there are two main occasions causing a store manager to engage a more expensive transportation system. The most commonly cited occasion is when the water-delivered food stuffs are sold out. On those occasions, there is no choice but to use air transportation to restock the store. The Hudson's Bay Company officials claim that under those circumstances their policy is to absorb the extra transportation costs and keep the prices at the previous levels. This policy applies to basic food items such as flour, sugar, lard, canned milk and tea only. There is no evidence to indicate if other stores have the same policy.

The second occasion for ordering by air may occur when the store manager finds it more convenient to order in smaller lots but on a more regular basis. While there is no evidence to verify this supposition, it stands to reason that very small stores may have more dif f iculty in buying and storing a large amount of non-perishable foods. Also, it may be that in monopolistic settings, the extra rests can be passed on to the consumer .

Certainly the issue of choice of transportation mode and therefore which transportation rate is used by the store manager requires further investigation. In this study an examination of the issue from the point of view of storage space for food stuffs has been examined. The reasoning is as follows: if stores in the cunmunities which have water transportation available to order a full year supply on the barge or sealift, then they should have larger inventory space and rests than stores in communities which do not have access to water transportation.

To examine this relationship between inventory space and type of transportation, a ratio of food inventory floor space to food retailing floor space was calculated. If the communities on the waterways are making bulk purchases of products and storing them for up to a year, their ratios should be higher than those of stores in communities who can resupply on a more frequent method via the trucking industry. As shown in Table 37, a simple observation of the means seems to indicate that there is a dif ference in the inventory to retail space proportion for food products by community access, that is, the mean proportion for a community with all year road access is .64 while the mean proportion for a community with no road access is 2.73. The range of proportions was from .25 to 13.17. The statistical tests however indicate that there was no significant difference among the communities.

Relationship Between Inventory and Retail Space

Food Inventory Space to Food Retailing SpaCe

Community Access	N	Mean Proportion	Std. &V.
All year Road	6	.64	.26
Winter Road	3	2.20	2.09
No Road Access	33	2.73	3.36

NonFood Inventory Space to NonFood Retailing Space

Community Access	N	Mean Proportion	Std. Dev.
All year Road	6	.70	.54
Winter Road	3	1.2a	1.06
No Road Access	31	1.48	3.16

Table 37. Relation of Inventory Space to Retail Space: in the N.W. T.

Comparison of these ratios with those normally found in southern supermarkets illustrates their different inventory requirements. In discussing a typical southern supermarket Cotterill (p. 259) states: "Between 70 and 75 percent of a store's space is selling space. This percentage may decrease in large stores that operate delicatessens, bakeries, and large non-grocery departments." This means the typical ratio of inventory space to retail space in southern supermarkets is .33. Northern stores with road access have an average ratio of .64 while stores without road access have a mean ratioof 2.73. These are both considerably higher than their southern counterparts. This finding implies additional expenses of warehousing, inventory financing, and increased risk of damage and spoilage.

In examining the type of transportation available to immunities, only two communities, Colville Lake and Lac la Martre, must ship food supplies by air. All other immunities can obtain their food supplies by other modes of transportation, namely water and/or truck. This fir-ding means that non-perishable foods must be sent by air to Colville Lake and Lac la Martre and since the responses from these communities compr ise 3% of the total responses, it follows that around 3% of all non-perishable feds must be shipped by air. In fact, the actual air shipments of non-perishable foods is much higher than 3% (see Table 38). For example, the percentage of staples and canned goods reportedly shipped by air was 17.4% and 27.9% respectively (Table 38).

Type of Food	Delivery Mode of Food			
	Land Delivery	Water Delivery	Air Post Office	Air Private
canned Goods (n=68)	26.5%	45 .6%	4.4%	23.5%
Fresh Fruits and Vegetables (n=70)	25.7%	—	18.6%	55.7%
Fresh Meat (n=26)	30.8%	—	7.7%	61 .5%
Frozen Meat (n=68)	25.0%	—	22.1%	52.9%
Fresh Dairy (n=69)	26. 1%	1 .4%	23.2%	49 .3%
staples (n=69)	27.5%	55 .1%	2.9%	14.5%
snack Food (n=70)	27.1%	32.9%	2.9%	37 .1%
Bakery Goods (n=70)	26. 1%	1 .4%	20.3%	52.2%

Table 38. Transportation Mode for Food Delivery

Possible explanations for the apparently heavy use of air transportation rather than a lower coet form of transportation are:

1. Some store managers may not have sufficient capital to order all their non-perishables at once; hence they may be forced to order smaller lots, sane of which would have to be shipped by air.

2. Supplies of a few goods may run out before the next barge or sealif t; under this circumstance, the store manager may order just enough new stock by air to last until the navigation season begins.

3. Managers of small stores may find that the size of their orders is too small to benefit from water transportation; hence they may use air transportation.

4. Nonperishables which are low in weight and high in volume may be cheaper to ship by air than water because air rates are based on weight while water rates are determined by volume.

5. The lack of inventory space may force some store managers to spread their food orders throughout the year and sane of these orders would have to be sent by air.

6. Air transportation may offer other advantages, such as speed of delivery, low chance of damage to nonperishable foods, and ease of ordering over water transportation.

Although all three types of stores use air transportation more than is necessary, the cooperative stores Ship significantly more nonperishables via air than do the other two types of stores (see Table 39) .

Food Type	Mode Access	Type of Store			Over-all
		Independents	Cooperatives	Hudson's Bay	
Canned Goods	Air	19%	76%	9%	28%
Staples	Air	12%	38%	11%	17%
Snack Foods	Air	42%	87%	17%	40%

Table 39. Air Usage by Store Type

The frequency of reordering different food types indicates that the purchases of canned goods and staples are being ordered frequently throughout the year (Table 40). Therefore, store managers are using high cost modes of transportation to deliver some non-perishable goods.

The major point is that the cheapest mode of shipment is not always being used by retailers. As the cost of shipment by air is substantially higher than shipment by truck or barge, this results in higher food prices for the consumers and/or lower profits for the retailers.

In the next chapter an indepth examination of the relationship between the males of shipment available to a community, the type and number of stores located in the community, and the focal prices in the community is undertaken. This analysis is performed via multiple regression.

Frequency of Reorder of Each Type of Food

Type of Food	Frequency of Reorder	
Canned Goods (n=73)	39.7%	Once a Year
	17.8%	Once a Week or More
Fresh Fruits and Vegetables (n=71)	87.3%	Once a Week or More
	8.5%	Twice a Month
Fresh Meat (n=67)	59.7%	Never
	28.4%	Once a Week or More
Frozen Meat (n=71)	69.0%	Once a Week or More
	15.5%	Twice a Month
Fresh Dairy (n=72)	80.6%	Once a Week or More
	5.6%	Never
	5.6%	Twice a Month
Staples (n=73)	50.7%	Once a Year
	13.7%	7 to 12 Times a Year
snack Food (n=72)	30.6%	Once a Year
	25 .6%	Once a Week or More
Bakery Products (n=71)	85 .9%	Once a Week or More
	7.0%	Twice a Month

Table 40. Frequency of Reorder of Each Type of Food: The percentages listed above are the percentage of retailers indicating their frequency of repurchase of the various goods. The most often listed frequency of purchase and the second highest frequency of purchase listed are included in this table.

5.1.7 Location of Suppliers

The most frequently mentioned suppliers are listed in Table 41. As can be seen from the table some of the retailers are able to buy directly from manufacturers. The most frequently mentioned locations of the suppliers are listed in Table 42. The majority of the suppliers are located in four major centres: Edmonton, Winnipeg, Montreal, and Val d'Or. Val d' Or is a mail trans-shipment centre for foods originating from Montreal and other southern points. From Val d' Or perishable food mail must be sent in order to qualify for parcel post. The other supply locations mentioned by retailers are also included in Table 42.

The Major Suppliers Listed by the N.W. T. Retailers

Supplier	Number of Retail Stores Listing this Supplier
Scott National	27
Western Grocers	24
Edmonton Meats	21
Del Monte	9
Jessels	9
McGavin's Foods	9
Proctor and Gamble	9
Fed Coop	8
Palm Dairy	6
Alberta Grocers	5
Arctic Coop	4
Home and Pittfield	4
Modern Dairies	4

Table 41. Major Suppliers Listed by the Surveyed Firms

As can be seen from the wide variety of supplier locations, the Northwest Territories' retailers have found suppliers throughout the country willing to service their needs. The supplier locations have an impact on the cost of shipment into the Northwest Territories. Most previous studies have assumed that food was shipped from the major centres only. These results indicate that this is not a correct assumption. No data was collected to find out why stores buy from the locations that they do, and what the relative price and transportation charge advantages/disadvantages are between the various locations. Further research is needed inthe area of suppliers. This research may wish to consider whether or not major suppliers only service their primary customer, forcing their competitors (or potential competitors) to find other suppliers.

Location of Suppliers

Location	Number of Mentions
Edmonton, Alberta	79
Winnipeg, Manitoba	28
Montreal, Quebec	27
Val D'Or, Quebec	11
Thompson, Manitoba	3
Carp, Ontario	2
Churchill, Manitoba	2
Fort Liard, N.W. T.	2
Inuvik, N.W.T.	2
Ottawa, Ontario	2
Peace River , Alberta	2
Whitehorse, Yukon	2
Calgary, Alberta	1
Coquitlam, B.C.	1
Fort Nelson, B.C.	1
Grande Prairie	1
Richmond, B.C.	1
Timmins, Ontario	1

Table 42. Location N.W. T. Food Retailers Suppliers

5.2 INDEPTH STUDY RESULTS

The six communities: Frobisher Bay, Cape Dorset, Broughton Island, Norman Wells, Fort Norman, and Fort Rae received a more indepth treatment than the other communities within the study. Personal interviews were conducted with the managers of all retail feed stores in those communities, with all restaurants in the communities, and with any organization that facilitated bulk/direct purchases for the residents of these communities. (The consumer survey, see Chapter 4, was also conducted in these six communities.) The communities were chosen to represent a reasonable spectrum of communi ties in the Northwest Territories. See Table 4 and the accompanying text for the rationale for choosing these six communities.

5.2.1 General Observations

The overall rendition of the food stores and the quality of the food sold in them was examined. Considering all factors, e.g. building, cleanliness, quality of food, layout, service, etc. all stores were given an overall rating of excellent, okay, or poor. Although many of the stores were old and small, all but one received a rating of excellent or okay (Nine okay and five excellent). The one poor rating was given because the store was in bad shape: a decrepit and dingy building, poor lighting with no windows, poor display of food, etc " All of the 'ix communities had one or more stores in okay or excellent condition. (The poor store was located in a community where there was at least one other competitor to offer the consumer some choice.)

Both researchers noted that fresh fruits and vegetables were not handled in the Northwest Territories stores as they are in the South. In southern stores many types of produce are displayed on ice, and are kept cool and wet. In the Northern stores after the produce was received it was priced and placed either in coolers or on shelves. In the communities where perishables resupply was done by air, consumers generally knew when the produce was due to arrive and to be placed on the shelves. Many consumers made a point of shopping on that day. Some managers mentioned how difficult it was to sell produce a few days after the resupply. In these small stores with small and regular supply consumers know how old the merchandise is and even if it is sti 11 good, but just not as fresh, it won' t be purchased unless marked down, and sanetimes not even then. This means managers must be very careful in the amount of produce ordered. This combination of consumer behaviour and retailer behaviour results in a situation whereby there is generally a dearth of produce on the shelves when the next order arrives.

Each store manager and/or chain headquarters must decide what products to carry in the retail store. Most decisions depended upon the past sales record. Any new-to-the-store or new-to-the-community products are first tested in the store on a trial basis before a major order is placed. If, after the novelty of a new product wears off, the product still sells well, it is ordered in larger quantities. The ideas for testing new products come from several sources a) special orders by consumers b) advertisements of new products (e.g. on television) and c) seeing new products while visiting outside the community. The nurses and hane education officers also indicated that they sometimes make suggestions to the retailer regarding certain feed products. They indicated that generally the managers are receptive to their suggestions.

All retailers were asked what if any products were purchased locally. Few stores carried locally produced feds, though country food was frequently shared or exchanged among mtive residents. In two communities locally produced food was sold in food stores, tomatoes from a food retailers home greenhouse, and reconstituted milk in Frobisher Bay* Seal was reported to be difficult to purchase for resale.

Concrete data regarding the profits, sales level and market share could not be collected as most f irms declined to provide the information. In the four immunities that have more than one food retailer (see Table 43) there is a retailer with over 50% market share (sells over 50% of the food in the community) and one or more secondary retailers. In each case the primary retailer was a Hudson's Bay Company store. The researchers estimate the primary retailers market share in these four communities to vary between 60% and 95%.

5.2.2 Store Hours.

If a community has more than one retail food store there is a tendency for them to operate the stores at slightly different hours. For instance, if the major retailer is closed in the evenings, or on certain designated days, the other retailer(s) generally adopts slightly different hours. The effect of this practice is that the consumer generally has someplace to go to buy food. As the number of stores generally increases with the size of a community, so does the number of shopping hours available for shopping. This relationship is summarized in Table 43.

Number of Hours Per Week of Food Store Operations

Community	Population	Number of Stores	Most Hours In One Store	Total @en; Hours
Frobisher Bay	2330	5	84	9 0
Fort Rae	1375	3	98	98
@e Dorset	785	3	46	73.5
Norman Wells	420	1	60	60
Broughton Is .	375	2	61	69
Fort Norman	285	1	39.5	39.5

Table 43. Number of Hours Per Week of Retail Food Store Operations: Total hours open are the total number of hours in each community in which at least one food store is open.

In a community, focal prices are usually lower in the larger or dominant store, i.e., the one with the largest food sales. (The only exception was Store C in Frobisher Bay, this may change under new management.) Also, the selection of foods is usually greater in the larger store. The combination of longer hours, less selection, and higher prices makes them the northern version of southern convenience stores.

Product offerings in the secondary stores vary with the size of the market. In the smallest communities (e.g. Broughton Island) the smiler stores generally carry the most frequently purchased grocery items carried by the main store. In larger communities the smaller stores may go beyond groceries and may carry sane fresh fruits and vegetables and/or frozen meat (Cape Dorset and Fort Rae). In the largest community visited (Frobisher Bay) the stores also carry slightly different products, or are specialized. Frobisher Bay has two specialty stores: a country food and handicraf ts store and a candy and cigarette store. The two 'general secondary stores both have images quite distinct fran the ma jor focal retailer. Both specialize in foods not carried by the major retailer, and maintain different hours.

At Fort Rae, there are three stores, one of which is new. Competition for customers is strong and longer store hours in the evenings and on the weekends have resulted. One store manager stated that "... people= more store hour sensitive than price sensitive ". The store manager had not altered his store hours to meet his competition but he was considering it. Hours are discussed in more detail for each community in "Shopping at: Other Stores" on page 45 in the consumer chapter.

5.2.3 Prices

As a part of the on site data collection prices were collected from the 15 stores in the six communities. Prices were collected for a basket of 39 grocery items. Examination of a basket of goods, and collection of prices on that basket of gods was done for the following reasons:

1. To compare product availability across stores and communi t ies.
2. To evaluate product condition for a set number of products.
3. To check for instances of double ticketing.
4. To explore the possibility of price discounting for lower quality products .
5. To examine the price difference within and between communities.
6. To check the relationship between current prices and those examined in the 1982 G. N.W. T. food price indexes.
7. To examine the relationship between the prices charged, the stated markup policies, and the expenses incurred.

Item 7, the relationship between prices, markups, and expenses was unable to be explored in this report as so few retailers were willing or able to provide the necessary information.

The basket of goods was selected to represent likely purchases by both natives and nonnatives. The basket contained products from the four major food groups: meats, dairy, fruits and vegetables. From these groups well balanced meals could be prepared. As a major focus of this study is the use of alternative transportation modes for shipping food to the North, it was imperative that foods be included that required quick delivery (fresh fruits and vegetables, fresh and frozen meats) and those that could be delivered more slowly fashion (canned goods and staples). The last category of food examined was snack foods, a very popular type of food, not only in the North, but in all of North America. The exact products examined in the survey are listed on the form used by the researchers to collect the data. It is reproduced in "Price Listing with Quality Definitions" on page 170.

The list describes each product by brand and size. By specifying the brand name and size of the product comparisons can be readily made across the stores and the communities. If one of the brand names listed on the price list was not available in the store, the new brand name was recorded, and the product was still included in the price survey. This was done because the brands can vary across the country, and hence across the Northwest Territories, The sizes indicated on the price list are the most commonly available sizes of each product. When the matching size was not found in the northern stores the size was recorded. Later all prices were converted, basal on the recorded size, to the size shown on the price list. By proceeding in this manner the comparison prices thus represent the price a consumer in each of the communities would pay for an equivalent amount of each product.

5.2.3.1 Product Availability, Condition, Ticketing and Discounting

Of the 39 products on the list, most were available in the six communities. The only exception was fresh meats. These were only available in Frobisher Bay. The inventory study confirms that the lack of fresh meat is common throughout the Northwest Territories (Table 35) .

Canned butter was available in all three western communities but in only three of the five western stores that were visited. It was not available in any of the eastern stores. Specific product availability by community is summarized in "Appendix G. Product Availability by Community" on page 207. The product was listed as available in the store if it was in the store on the first day of the researchers' visit, or within three days. This was done because product availability, especially for perishables is often dependent upon the time of the week. This generally appears to be the case where perishables are resupplied once a week by air. The day or two before the new shipment there are generally few perishables on the shelves. Because of the high cost of air freight retailers are hesitant to order too many perishables because if they aren 't sold quickly the goods must be thrown out--resulting in a loss fran wholesale price, handling, and transportation charges.

The quality of the food in most of the stores was acceptable by northern standards. Prior to observation a quality rating scale was developed for use in this study. This is included with the price list in the Appendix. Almost all goods rated good (top rating) with most of the remainder being rated as in okay condition. The vast majority of the poor ratings were in the store classified as in poor condition.

All theproducts were examined for double-ticketing. There were so few examples of this that it appears that they only occurred due to sloppiness, and not any direct policy. It was also observed that in some stores fresh produce and fresh dairy did not have price stickers indicating their price. The price lists were kept at the cashiers' counter or posted near the cooler containing dairy products.

Most of the retailers indicated that they do discount sane merchandise. The most frequently mentioned items that are discounted are produce and other feds that have not sold as expected. One store had a reduced bin whereby damaged merchandise was marked down and sold. In most other stores the managers indicated that they have a policy of reducing the price on damaged/spilt merchandise.

5.2.3.2 How Prices are Determined

The relationship between the costs of managing a retail focal store in the North and food prices in the North is examined in this section. Retailers were asked to describe their pricing policies. Two of the 15 stores refused to provide any information on their pricing policy. The other 13 all were willing to discuss the rotter and explain their method of determining prices. These responses were collapsed into five methods discussed below:

1. Wholesale Cost Plus Markup
2. Wholesale Cost Plus Transportation Plus Markup
3. Wholesale Cost Plus Transportation Plus Inventory Costs Plus Markup
4. Wholesale Cost Plus Lowest Cost Transportation Plus Markup Plus Air Freight
5. Hudsons Bay Company's Price Plus a Percentage Markup

Although the markup policies can be placed into five categories, the variations in price determination among the stores is far greater than the list suggests. The markup must be large enough to cover all expenses not included in the markup formula as well as generating a profit large enough to keep the firm in business. Some of the expenses to be covered are rent or mortgage, utilities, labour, losses due to damaged/spilt merchandise, shoplifting, repairs, capital improvements, and finance charges. Many of these expenses can be substantial. It is difficult to judge the 'proper markup without knowing sales, expenses, and bottom line profits. So few retailers provided this information that an evaluation of the markups, and resulting profit levels could not be completed in this report.

The markup policies in sane stores varied depending upon the type of the product: perishable or nonperishable. In other stores there was no such differentiation. Most stores seined to use the cheapest transportation available for each type of good. Where pricing policies really differed between firms is when supplies of food products ran out before the next shipment. There are three typical responses: no supplemental supplies—no more merchandise until the next ship arrives, additional supplies are ordered and brought in using the more expensive mode of transport (air) and marking up the price on the goods to reflect the increased costs or ordering additional supplies through air and maintaining the lower price. All three policies were observed in the communities visited by the researchers.

As the major retailer of both food and general merchandise in the Ninth, and hence often the price leader, the Hudson's Bay Company's pricing policies are outlined in detail. Below is an excerpt fran testimony presented by Mr. Tiller of the Hudson's Bay Company to the Northwest Territories General Assembly. Mr. Mann, the general manager of the northern stores division of the Hudson Hudson's Bay Company Company stated that the policy stated in the Hansard is still appropriate today.

> In the case of foods we have two policies, one for nonperishables and one for perishables. In the case of both categories, markups are clearly established and carefully monitored. mr example, markups range from 10 percent on butter and mi lk to 20 percent on canned tomatoes, 25 percent on poultry and up to 30 percent on meats and frozen packaged goods. Markups for perishables and nonperishables are identical to those in southern markets.
>
> First of all, dealing with nonperishables, retail prices are based on landed costs, using freight rates via the basic route, plus the required markup. The basic route is the least expensive method of moving the goods into the market, whether that be seali ft, waterways or winter road. We attempt to order an annual supply of this type of merchandise. In practice, this is sometimes not possible for such lengthy periods. When more stock is necessary, in the case of basic focal items such as flour, sugar, lard, canned milk and tea, it must be brought in via air transport which is extremely costly. In such cases, basic foods are costed at the basic freight rate, for example, and are retailed accordingly....
>
> Now, in the case of perishables, perishables include meat, produce, bread and dairy products and must be flown into the market at very high costs. The retail price on these products bears the full freight. However, the markup percent is taken on the prime cost of the goods, plus the basic or least expensive freight for surface transportation. Additional freight costs are then added to establish the selling price. The result of this is that, for example, a five pound of potatoes in Pond Inlet retails at $7.10, with an actual freight cost of $5.15, or $1.03 a pound to move it into Pond Inlet. One litre of milk has a local retail price of $3.34. Of that, $2.58 represents the freight cost to move it into Pond Inlet. (Northwest Territories Legislative Assembly Hansard, 1982, pp. 432433)

5.2.3.3 Prices of Selected Products in the Six Communities.

The food prices in the six communities varied considerably across the communities. This can be seen clearly by examining the minimum and maximum prices for each of the products in Table 44. The range of prices for sane products is considerable. Although the average price of each product in the six communi ties provides very little information it is included to give the reader a ref erence point for the prcducts.

Summary Statistics on Prices for all Six Communities

Product	N	Mean Price	Minimum Price	Maximum Price
Grind Peas	12	1.50	.81	2.09
Baked Beans	11	1.71	1.10	2.60
Soup	12	.98	.65	1.39
Peach Halves	12	1.98	1.32	3.99
Canned Butter	3	3.90	3.21	4.60
Evaporated Milk	13	1.57	.95	3.34
Apple Juice	10	2.67	1.37	4.93
Oranges	11	1.82	.77	2.69
Apples	11	1.66	.63	2.66
Bananas	7	1.50	.72	2.00
Potatoes	9	1.24	.53	1.45
Onions	10	1.31	.57	1.75
Carrots	8	1.66	.62	2.13
Beef Roast	1	4.99	4.99	4.99
Ground Beef	1	2.80	2.80	2.80
Pork Chops	1	3.80	3.80	3.80
Whole Chicken	0	—	—	—
Frozen Gr. Beef	10	4.39	2.81	6.50
Frozen Chicken	5	3.52	2.27	4.99
Fresh Butter	12	3.49	2.76	5.06
Dozen Eggs	13	3.04	1.79	3.99
2% Milk	10	5.18	2.21	7.18
Flour	13	4.74	2.78	8.60
Sugar	13	3.58	1.89	5.90
salt	13	2.24	1.14	5.96
Bagged Tea	13	3.50	2.58	4.45
Lard	13	1.89	1.25	2.75
Soft Drinks	14	.95	.75	1.25
Potato Chips	13	2.77	1.80	5.00
Frozen Pizza	8	6.22	3.29	8.85
Crackers	11	2.61	1.83	4.06
Bread	14	2.41	1.35	2.95
Corn Flakes	12	2.36	1.33	3.50
Peanut Butter	12	3.51	2.44	5.27
Salad Dressing	9	6.00	4.40	9.56
Strawberry Jam	8	2.19	1.65	2.79
Macaroni	12	1.13	.85	1.50
Frozen Peas	7	4.38	2.97	6.26
Powdered Milk	12	4.09	2.98	6.25

Table 44. Summary Statistics on Prices for all Six Communities

A more meaningful basis of comparison is the use of index figures for the six communities (Table 45). For purposes of this study the prices in the six communities were compared to the prices prevalent in two Yellowknife food stores during the same period of time (Summer, 1985). The index value was computed by summing the product prices for all 39 products. The numerator or denominator was subsequently adjusted to remove from the total sum any products not available in the communities. These calculations resulted in the food price indexes shown in Table 45. The food price indexes vary from a low of 1.08 in Fort Rae to a high of 1.80 in Cape Dorset. This means the prices of food (at least the products included in the price list) in Fort Rae are 8% higher than the prices of the same items of focal in Yellowknife. Similarly the prices of food in Cape Dorset are 80% higher than in Yellowknife.

Food Price Indexes

Community	1985 Index	1982 GNWT Index
Fort Rae	1.08	1.12
Fort Norman	1.32	1.41
Robisher Bay	1.49	1.41
Broughton Island	1.61	1.53
Norman Wells	1.66	1.63
Cape Dorset	1.80	1.68

Table 45. Ccmpa.risen Food Price Indexes: The 1985 indexes were derived from the price surveys collected in this study. They, and the GNWT indexes, use Yellowknife as the city of comparison.

In the next chapter the authors examine the relationship between food prices and other factors. As six observations (focal price indexes from the six communities) is not sufficient to determine if a relationship exists a larger set of food price indexes was used. In 1982 the G.N.W.T. produced a list of food price indexes for 47 communities. The authors were hesitant to use this data unless the relationships captured in the indexes could be shown to exist in 1985. A comparison between the food price indexes in this study and the 1982 food price indexes for the same communities show them to generally be the same by rank order. The fact that the focal price indexes do not match exactly is to be expected. The composition of and the calculation of the G.N.W.T. food price indexes are not the same. It is likely that the same basket of feed was not used in the calculations preventing direct comparisons. A larger proportion of perishable products would increase the price indexes of communities that depend heavily on air delivery, while affecting little the price indexes of communities that are accessible by road. The price indexes increased for the three eastern communities

which import perishables by air, while that of the community accessible by an all year road, Fort Rae decreased slightly. One of the camnunit ies with a winter road, Fort Norman, also showed a decrease in the food Price index. The only community which did not follow this pattern was Norman Wells which also has a winter road. A listing of the two food price indexes are shown in Table 45.

Many of the retailers suggested that one of the main reasons for high food rests in the Ninth are the high transportation Charges. Using the price surveys from the six communities it is possible to examine to see if there is a relationship between the differences in prices and the differences in transportation rests. To do this certain facts need to be outlined:

All three western communities have road access. These immunities therefore have access to low transportation costs and low inventory requirements.

The lowest cost mode of transportation is water. This is closely followed by road, with air shipment being about ten times as expensive.

All *the* canmunities have water and air access.

Given these facts one would expect the West to have lower prices. This is especially true for perishables because in the East all perishables must be shipped by air. But only nine of the 39 products have lower average prices in the West. Products with significantly higher prices in the West are: milk, sugar, soft drinks, corn flakes, peanut butter, powdered milk, evaporated milk, fresh butter, and fresh eggs. This includes three perishable and six nonperishable products. This is contrary to the expected results.

The expected feed price differences between the eastern and western communities may due to different pricing policies among the fifteen stores masking the effects of differing transportation costs. Therefore, to adequately examine the ef feet of transportation it is necessary to be able to remove the effects of pricing policies from the analysis. Five of the 15 stores price surveyed Hudson's Bay Company stores. Since all Bay company stores use the same markup @icy, as outlined by Mr. Tiller in the N.W. T. Hansard, (" - Prices are Determined" on page 92) focal prices should be the same in all the stores unless the transportation or wholesale rests differ.

An examination was done of perishable and nonperishable products in the five Hudson's Bay Company stores. The price of the basket of perishables was similar for four of the five communities, but much lower for one of the communit ies: Fort Rae. The price of the perishable feds at these five Hudson's Bay Company stores are: Fort Rae $15.76, Fort Norman $26.65, Frobisher Bay $24.21, Cape Dorset $26.85, and Broughton Island $27.09. Fort Rae was the only one of the five communities that was accessible by truck. ; In the four other immunities the perishable foods had to be shipped in via air. This difference in price clearly reflects the influence of transportation costs on food prices. Other factors that may have had an effect on the relatively low food prices for Fort Rae are 1) its close proximity (by road) to Yellowknife which has some of the lowest food prices in the Northwest Territories and 2) possible price competition between the three stores in the community.

For the case of nonperishables, sealift rates are lower in the East than barge or truck rates in the West. If transportation forms a large part of the price of a nonperishable product, one would expect the price to be less in the East. This was not the case, nonperishables were pried lower in the West. (Fort Rae $16.41, Fort Norman $17.03, Frobisher Bay $22.58, Cape Dorset $23.52, and Broughton Island $24.67.) Given the Hudson's Bay Company's pricing policy for the Northwest Territories, these results appear to be contrary to this policy. Reasons for this apparent discrepancy could be due to one or more of the following reasons:

1. different wholesale prices between the stores in the East and the West

2. inclusion of the additional inventory costs in the products' prices

3. or the method of calculating the cost of the transportation rates (the Hudson's Bay Company uses an internal transportation network, not the commercial barges)

This examination of the food prices indicates that the relationship between food prices and transportation costs is not an easy one to capture because of the many variables that can affect food prices. Even when the pricing policy was held constant a straightforward relationship could not be found between prices and transportation charges for non-perishable goods. It is however clear from these observations that when focal is shipped by air food prices are dramatically higher. This analysis is pursued further in the next chapter.

5.2.4 Perceived Success.

When asked if they believed the focal operations in their stores to be successful, all fifteen managers said yes. The reasons put forward for success were as varied as there are stores, but there was one point which several managers did concur: the sales of food was successful, but the food operations were not profitable, and could not be maintained on their own. Two stores indicated that the food was sold close to cost, and was supported by the sale of other merchandise. Another explained that the food operations provided no profit, but acted as a drawing card, bringing people into the store, where they would also spend money on some more profitable items.

5.2.5 Problems Faced by N.W.T. Retailers.

As each store's anonymity was guaranteed in this report the problems are discussed generally.

It was suspected that one problem retailers might face is in getting supplies. Most firms (over 90%) indicated that there was no problem in securing a supply of food. The only real exception to this were new retailers having difficulty finding suppliers willing to sell in small quantities in the North. One retailer also indicated that some of the wholesalers he had contacted did not want to service his store as they were servicing his competitor. Several retailers also indicated that because of the long distances involved, close ties need to be kept with the suppliers. As Table 42 indicates northern food stores buy from all over Canada.

There were two types of products where a couple of retailers indicated supply problems: fresh meat and country focal. Fresh meat was mentioned as difficult to get because it spoils easily. The other product mentioned was country fed. None of the interviewed stores in the three western communities carried any country food. In the East, Frobisher Bay had a store that specializes in country foods. In addition several stores sold one type of country food: arctic char.

Although few retailers mentioned difficulties with suppliers, many mentioned difficulties with the air carriers in delivery of the supplies. All retailers purchasing supplies expressed problems with the service being provided by Nordair. They all had had experiences where Nordair had made late deliveries, and/or had left their order in Fort Chimo, the stop before Frobisher Bay. All the retailers found this very distressing because the airlines are used mostly for perishable items. When the new product fails to arrive sales are lost as consumers typically shop the stores on the day new produce is scheduled to arrive.

Another problem faced by northern food retailers is the lack of trained personnel. This shortage impacts the businesses at three levels: management, repair, and clerks. The most critical need and most difficult level to fill is that of a manager. There are many challenges to being a store manager in the North. The manager must be a jack of all trades. He must be knowledgable and be able to do demand forecasting, inventory controls, bookkeeping, labour relations, financing alternatives, and often some distinctly northern skills are required such as fur trading skills, issuing of credit and sane knowledge of the local native language. Few northerners have had the training necessary to run a retail business. (Only one of the 75 managers who responded to the mail survey have had any formal training.)

Stores have had difficulty hiring northerners as managers. For example in two of the stores visited concerted efforts had been made to recruit and train natives to assume store management. To date these effort have not been successful. Southerners are generally reluctant to take a northern retail manager job because of the isolation, different lifestyle and high pressures. The general impression received from the managers is that the level of compensation and the breaks from the job are tco low. For comparison purposes, some store managers also pointed out that their net pay is much lower than that of equivalent G.N.W.T. employees. This may be a contributing factor to the high turnover that seems to exist at the management level in the North.

Repairmen in the North for such things as coolers, freezers, and furnaces are virtually nonexistent, and usually must be flown in from the South at tremendous expense. Skilled bookkeepers and accountants are also in very short supply. One retailer expressed the need for an experienced produce clerk.

Finally most managers expressed dissatisfaction with the work habits of many of its employees. In southern Canada employees are expected to show up each day for work at the appointed time. This may not happen in the North, causing additional problems for the manager. The problem is especially acute in the summer when employees sometimes leave with their family for a month or more. Many of the managers also indicated that they generally have a high turnover of employees.

Another problem mentioned by several of the stores is financing. Some indicated problems with financing the sealift purchase or working capital. The retailers indicated that banks have been reluctant to lend to northern stores. Several stores indicated that they were disadvantaged vis a vis their competitors because their competitors were supported by public subsidies. One store manager went so far as to say that the government support of these stores constitutes unfair competition.

5.2.6 Losses/Expenses.

As can be seen from Table 46, the losses from spoilage, freezer burn, mold, and credit are minor. More stores reported having 'a lot' of shoplifting losses than any of the other loss categories, but 40% of the stores reported no losses from shoplifting.

Amount of Losses from Various Sources

Loss	None	A Little	Sane	A Lot
Spoilage	33% (5)	53% (8)	13% (2)	—
Freezer Burn	47% (7)	47% (7)	7% (1)	—
Mold	53% (8)	40% (6)	7% (1)	—
Shoplifting	40% (6)	27% (4)	—	33% (5)
Credit Losses	53% (8)	20% (3)	13% (2)	13% (2)

Table 46. Losses experienced by category, and their frequency.

5.2.7 Types of Credit

All questionnaires (both mail and in person) asked whether or not credit was granted in the stores for food purchases. Sixty-me of the stores, or 81% of the sample stated that they do allow sane type of credit for food purchases. (It was offered in 60% of the independents, 84% of the imperatives, and 92% of the Hudson's Bay Company stores.)

In the personal interviews the managers were also asked What type of credit was available for food purchases. Two of the 15 stores accept bank credit card for purchases. One indicated that credit was approved centrally by the firm. The others all indicated that credit was established locally either by the discretion of the manager (n=2) or by other local procedures (n=6).

In one store the credit system was really more of a draw system whereby the customer's monthly cheque was deposited at the store when it arrived. All purchases in the month were deducted from the balance remaining in the account. In other stores, the manager knows the sources of income of his customers and strongly encourages them to pay off their accounts by depositing all or part of their cheque with the store.

5.2.8 Cooperative Profits and Community Benefits.

In the personal interviews, there was a question for cooperatives asking them to what use they apply the firm's profits. Only two cooperatives were interviewed. Both indicated that on the feed retailing operations that they were not currently making a profit. Both were engaged in other money making activities that helped to support the feed operations (hotel and snack bar; handicrafts, dry goods, and gasoline). Both indicated that one of the services being provided to the community was employment for some residents.

5.3 RESTAURANTS

The managers of all restaurants in the six cunmunities were contacted. The questions which were asked are summarized in Table 47. Very little additional information was gained from the restaurants regarding food supplies. It is interesting to note that in the six immunities there was only one restaurant that was not owned by a food retailer or a hotel. Of the 14 restaurants in the six communities only five were restaurants similar to those found in the South-sit down dining with food prepared by chefs (or cooks) and served by waiters and waitresses. Three were in Frobisher Bay and two were in Norman Wells. Two of the Frobisher Bay restaurants stated that there was a lack of skilled rooks, and that they had to bring them up from the South. The remaining restaurants were what would commonly be referred to as snack bars in the South. The restauranteurs reiterated the retailers' statements that there are a lack of repairmen in the North.

Restaurant Ownership and Location

Community	Number of Restaurants	Number of Restaurants Owned by: Food Retailers	Hotels
Frobisher Bay	7	3	2
Cape Dorset	0		
Broughton Island	1	1	
Norman Wells	4	1	2
Fort Norman	0		
Fort Rae	2	2	

Table 47. Restaurant Ownership and Location

The restaurants tend to order food supplies more frequently than the focal retailers, and to keep less feed in inventory. Resupply is generally from the local retailers. A few restaurants bulk order but the majority get their needs from local sources. When asked if they had difficulty getting supplies most indicated no problems (7 of 12). The problems listed by the remaining restauranteurs were: lack of supplies, machinery repair, and dependable shipments via air. Three in Frobisher Bay mentioned problems with Nordair such as tardiness of orders, orders being bumped off the plane, and orders being left in Fort Chimo rather than continuing the flight to Frobisher Bay.

5.4 BUM/DiM ORDERING

In four of the six visited communities that were visited there was no local contact person through which consumers could make bulk or direct purchases. In Frobisher Bay and Norman Wells retailers were offering bulk purchase as a sideline to their instore retailing basis. In Norman Wells bulk ordering was done on an informal basis where the store manager places bulk orders at consumers' request. In some western communities (Fort Rae and Norman Wells) many of the consumers indicated that they frequently shopped outside their community. With more interurban access in the West these sales aren't generally what is described as bulk purchases, but more as outshopping behaviour because the quantities of purchase are not large.

The access to bulk/direct ordering information was the highest in Frobisher Bay. The community has an adult education centre where information is kept regarding bulk purchases. They have summarized the information in a one page handout (both sides). It indicates that there is one local retailer that will assume the responsibilities of ordering, packing, booking cargo space, and delivery to entrance of a residence for a fee above cost. Unfortunately the supplier for the sealift for this local retailer, as well as all the other bulk suppliers, issue their catalogues in French. This makes the task of ordering difficult as the language of rest residents is either English or Inuktituk.

5.5 CONCLUSION

The stores in the North are generally small, have few competitors and do little or no advertising. There is much less leeway in planning orders for a small market than a large one, as the tolerance for mistakes in demand forecasting is slimmer. Gverordering can not be readily absorbed by the population, and underordering, or a sudden increase in demand, can dramatically upset planned inventories. In a large market with many canpetitors the effect of one on the entire market is minor. As the communities in the North are quite small the actions of a competitor can dramatically affect another food retailer. 'This too can drastically affect the inventory and capital needs of a retailer.

Inventory management is further implicated by the limited access to the communities. Most of the communities in the Northwest Territories are not accessible by road. Most northern focal retailers rely on use of water and air transportation to import the focal products. As the rates for air delivery (whether it be through the carriers or through the post office) are quite high, retailers generally try to use this mode as little as possible. This means products that can be shipped via barge are shipped that way. This saves dramatically in transportation charges but the inventory costs (financing the purchase, building, maintaining, and heating the warehouses) increase. As orders for sealift must be placed 3 to 4 months before shipping, and hence 12 to 16 months before the supply is expected to be used up, accurate demand forecasting is crucial to the firm.

Not only are air freight rates high, but the eastern retailers in this study have indicated that the service provided by the airlines leave much tobe desired. The unreliability of delivery puts severe strains on a business that needs the merchandise to sell (both focal retailers and restaurant owners voiced this complaint).

Another problem faced by northern food retailers is the lack of trained personnel: managers, accountants, repairmen, butchers, etc. This coupled with the different work habits of many northerners make the management of local clerks difficult.

5.6 REFERENCES

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6.0 CHAPTER 6: ANALYSIS OF N.W.T. FOOD PRICE INDEXES

6.1 INTRODUCTION

The controversy surrounding the pricing of foodstuffs in the Canadian North has generated a considerable body of anecdotal evidence regarding the effects-of various factors on food costs. However, to this point there has been little statistical analysis regarding the effects of community based variables on food prices in the North. This report is a first step in the pursuit of a more rigorous approach to the question of competition in the retail food trade in northern communities.

The interest in focal pricing in the North has generated a considerable body of survey and census based data compilations in a variety of publications. This report gathers together these sources and integrates them into a multiple regression based statistical analysis of transportation, demographic, purchasing power, and store ownership variables. This type of analysis allows an objective determination of the likely effect of each of these factors on focal prices in northern communities. The question of competition in food retailing can therefore be addressed. It is assured that variations in the food price index mirror levels of competition in food retailing in the North.

6.2 METHODOLOGY

Factors which have been hypothesized to affect food prices are:

-transportation and handling costs
-low stock turnover
-market size
-high costs of operating retail store
-number of food retailers (local retail competition)
-'type' of food retailers
-buying power of community

These factors are developed and discussed in detail in the literature review. In this section the operationalization of the variables for analysis is discussed.

In order to study the effect of these variables on focal prices some figure must be used to compare food prices across each of the immunities. Price surveys were only conducted in six communities for this study. A larger sample is necessary for analysis. Therefore the 1982 food price indexes developed for 47' Northwest Territories communities are used (See Table 2).

The effect of transportation costs on food prices comes in several forms . It is generally added to the wholesale price of the food, and directly affects food prices. If air transportation is used significantly by the communities, then the prices of food is likely to rise substantially. If water transportation is used once or twice a year for nonperishables, the cost of maintaining that inventory indirectly impacts the food prices. Finally access to roads and hence trucks can substantially reduce food costs. The price of each form of transportation varies with the destination and the volume. To accurately include the dollar amount of transportation costs would require a massive study detailing the volume of food shipped by each of the available means, the quantity of each shipment, and the costs for each of the shipments. This information is not presently available. In lieu of this, several surrogate measures were created based on transport rates of the three modes.

One is the maximum charged rate of shipment fran the nearest major source of supply for each community called MAXCOST. It is included to determine whether frequent resupply is a major component affecting price indexes. Generally these would be perishables shipped via air or truck. Analogously a variable called MINCOST, the minimum transportation rate charged is used to determine whether sealift or barge shipment significantly affects the price indexes. It primarily reflects shipment of nonperishables. The final transportation rate variable, REALCOST, reflects the most likely mode of shipment for nonperishables.

Alternatively the effect of transportation costs on the food price indexcanbeexamined through the use of three variables which simply indicate whether or not each of the 47 communities can receive food by each of the three ties: air, water, road. These mode variables are used because of concern about the accuracy of published transport rates, i.e. published rates are the "listed" rates While the actual rates may be lower. In addition, use of multiple modes by retailers for supply is best handled with these mode variables. Such multiple mode use is not uncommon, as discussed in Chapter 5. While these are crude measures of the effect of transportation on focal costs, no more rigorous treatment is found in the literature.

The literature indicates that the type of feed store has an impact on food prices. Supermarkets, which are virtually nonexistent in the Northwest Territories, generate the lowest food prices. Next lowest are chain stores which can capitalize on bulk purchases. Next would be independents, which are profit motivated, and hence want to maintain customer support While making a profit. Finally the highest prices are associated with cooperatives whose main motivation for operation is rarely profit.

Categorizing the Northwest Territories stores into chain stores (basically the Hudson's Bay Company), independents, and cooperatives, the types of stores in each community are included in the analysis of the food price indexes.

Market size has been shown to have an impact on food prices. Generally the smaller a market the higher prices of goods because a) there are fewer sales in which to spread the overhead costs, and b) it is less likely that the store can get volume discounts on feed or transportation. The surrogate that is used for market size in this study is the population of each community.

Market size is not only affected by the number of potential customers, but also by the likelihood that purchases will be made. AS was indicated in the results of the consumer survey reported in Chapter 4, the natives make fewer retail food purchases than do non-natives. Therefore a primarily native canmunitywiththe same total population as a primarily non-native community would make fewer purchases at the local retail focal store, hence providing less sales volume for the store resulting in higher costs to the store's owners.

Another factor that affects the volume of sales that a store may achieve is the amount of disposable income available within the community. Unfortunately data reporting the disposable incomes of immunities is not available. For the purposes of this study average income per community will be used as a surrogate for disposable income. Normally this is a good substitute, but due to the high levels of subsidization of housing and utilities, and the use of country food by native peoples. This may not be true in the Northwest Territories. The issue of disposable income is an area where further research is needed.

For each of the 47 communities, data are available on the food price index (GNWT, 1982), the ownership of the stores in the community (Chapter 5), the total and native population of each of the immunities (Statistics Canada, 1981), the average income in each community (GNWT, 1982; Revenue Canada, 1982), the transportation rates for all three relevant modes (McLaughlin, 1985), and the availability of access to air, water, and surface modes of transportation (McLaughlin, 1985).

The effect of each of these variables is assessed by the use of a multiple regression analysis. Basically the goal of multiple regression analysis is to predict the value of a single variable (in this-case the value of the food price index for a community) by using the values of other variables. The variable that is being predicted is called the dependent variable, while the other variables used for prediction are called the independent variables.

6.3 FOOD PRICE INDEX EQUATION

The equation developed through the multiple regression approach shows the likely direction of the relationship of each of the independent variables.

The generated equation utilizing the significant independent variables may be feud below.

INDEX =151.8 + 7.3 (WATER) + 7.3 (AIR) -22.7 (SURFACE)

-10.2 (BAY) +2.0 (COOP) - 6.1 (INDP)

r=.&) ; n=47 cases

where WATER through INDP are the independent variables and INDEX is the dependent variable. The variable definitions are listed below:

INDEX = focal price index October 1982 in N.W.T. communities

WATER = service by water transportation available in 1984

AIR = service by air transportation available in 1984

SURFACE = service by surface transportation available in 1984 (both permanent and winter roads)

BAY = presence or absence of a Hudson's Bay Company store in 1985

COOP = presence or absence of a cooperative store in 1985

INDP = presence of absence of a independent store in 1985.

6.3.1 Non-significant Variables

The reader should note that a number of variables that have been hypothesized to affect the price of food in the North did not prove to be of importance. The variables that are not included in the equation are listed below:

STORES = number of stores in the community in 1985

POP= population of the community in 1981

INCOME = average income in the community in 1982

NATIVE = the percent of the community's population that was native in 1981

MAXCOST =Air rate if available, if not available then truck rate, if neither then barge rate

MINCOST = Barge rate if available, if not available then truck rate, if neither then air rate

REALCOST = Truck if available, if not available then barge rate, if neither then air rate

The absence of significance in the transportation rate variables coincides with the finding by the Rod prices Review Ward (p. 22). This is important in that transportation rates are often perceived to be a major culprit in the higher prices of foodstuffs in the North. The three transportation rate variables were tested for inclusion in the regression equation. None significantly added to the explanatory power of the equation.

It is also interesting to note that focal prices are not significantly affected by the purchasing power in a community, by the percent native in the community, or by the population size of the community. It also may be indicating that the the northern immunities are so snail that the increase in market size in the larger communities is not large enough to generate economies of scale. The size of the stores in all the communities are small by southern standards. Part of the reason for this is undoubtedly the fact that the variations of community and store sizes in the North are limited to only the small end of the continuum. That is although there may be a relationship between store size, market size, the costs of operating a store, and the prices charged these relationships could not be establish in this analysis. The small variation in size between the northern stores is not large enough to have an impact on prices. It is likely that when a wider range of store sizes (i.e. including the large southern stores) is used a relationship between these variables and price would exist. This fact coupled with the higher operating and inventory costs in the North, washes out any effect the small increase in market size could have on productivity or efficiency in the stores.

The absence of the NATIVE variable indicates that communities with substantial mtive populations do not suffer disproportionately with regard to focal costs.

6.3.2 Ancillary Results

Detailed examimtion of the regression analysis reveals the following interesting facts.

* The mode of shipment available toa community accounted for 49% of the variation in the food price index. The presence of land access (roads) was associated with lower food price indexes, while the presence of air access was associated with higher prices. Another 14% of the variation in the food price indices for the Northwest Territories communities was accounted for by store types.

* The size of the community is negatively related to the focal price index. That is there is a tendency for lower prices to exist in larger communities (r = -.51 between POP and INDEX).

It was also found that:

1. The larger a community the more likely that an independent store was located there (r = .92 between POP and INDP).
2. The larger the community the larger the number of stores (r = .92 between POP and STORES) located in the community.

6.3.3 Equation Interpretation

The values of the ccef f icients (the numbers before the independent variables) must be interpreted with caution. In the ideal case the values of the coef f icients may be used to determine the magnitude of the effect of each of the independent variables. Unfortunately, due to problems with the data this interpretation may not be made. However, some general comments can be made regarding the direction of the effects the independent variables have on the food price index.

The signs of the coef f icients may be interpreted since they are general indicators of the direction of the effect of the independent variables. For instance, the availability of water and air transportation has a positive effect on the value of the food price index. Air transport being the most expens ive mode of transportation would therefore have the suggested direction of effect. But, water transportation is somewhat more problematic since it is generally considered to be the cheapest mode of transportation.

One would anticipate that water transportation would have a reducing effect on the food price index and not the positive one indicated by the regression equation. This seeming contradiction may be accounted for by the fact that those communities with water and air access but not surface access are the more remote communities. The air and water variables reflect the perishable/nonperishable dichotomy in the index. Communities without road access must rely on air for supplies of perishable items. The expense of such a supply pattern causes the water mode variable to be associated with higher prices. In essence the air and water coefficients reflect their dominant form of good, nonperishable for water, perishable for air. Only the surface mode can supply both types of goods at relatively low rates, hence, its negative coefficient.

The negative inefficient for road access indicates that communit ies with surface access have lower focal price index values. Winter roads are included in the surface variable because they provide low cost shipment when barge is not available. It also enables those communities to ship perishables other than by air.

The final variables in the equation are the variables representing the presence or absence of types of ownership of food retail stores. The presence of an independent store in a community tends to coincide with a decrease in the feed price index, while having a operative store is positively associated withan increase in the index. For statistical reasons the coefficient for the presence of a Hudson's Bay store is

uninterpretable. The fact that independents are associated with lower prices is attributable to the fact that 62% of the independents used in the regression analysis are located on roads while only 33% of the Bays and only 15% of the cooperatives are located on a road. Hence their 'average' transportation costs are lower.

In the 47 cunmunities used in this analysis there are 42 independents. Sixty-two percent of the independents (n=26) are located in a community with road access. The INDP and SUREACE are therefore highly interrelated. The reason for lower prices in these communities is the road access, not necessarily the presence of the independents. The independents probably chose those locations to do business because operating costs would be less so the probability of making a profit and staying in business is higher.

Higher prices are associated in communities with cooperatives. One explanation is provided by the literature which suggests that all cooperatives tend to suffer from less efficient management than other types of stores. Other possible explanations are that they are designed to meet other goals than profits or that they do not have sufficient capital to undertake the most cost efficient purchasing/inventory management . additional research is needed to determine the reasons cooperatives tend to be located in immunities with higher than expected focal prices.

One note of caution is in order. The regression equat ion provided should not be used to make judgments of the relative impacts of the independent variables. Due to violations of sane of the assumptions of the technique, the coef f icients are not interpretable other than their sign. It would be wrong therefore to say, for instance, that the presence of a Hudson's Bay Company store causes a greater decline in the focal price index than a independent store. It can only be said that cooperat ives are associated with higher prices.

6.3.4 Ranking of Variables by Importance

The ranking of the independent variables in order of importance in their ef feet on the food price index is:

SURFACE
INDP
COOP
WATER
AIR
BAY

All of the variables except BAY have relatively strong statistically significant simple correlation coefficients with INDEX. The RAY is included in the regression equation since it was felt that either all or none of the store types should be included.

6.4 VULNERABLE COMMUNITIES

The identif ication of vulnerable immunities is one of the stated objectives of this study. To identify vulnerable communities a definition must first be established. As the definition is more of a" policy decision than a research result, the authors list several factors that either alone or in combination could be justification for classifying a community as 'vulnerable. A vulnerable community is one whose residents general welfare is more sensitive to changes in focal prices.

1. Vulnerable communities are those where the residents rely heavily on the local retail store(s) and are unable to access alternative supplies of food (either country food or bulk purchases) .

   a. Most non-natives rely almost exclusively on on the local retail store(s). (Bulk purchasing is done more by rim-natives than natives, but only a small proportion of rim-natives bulk purchase foods . Residents in Norman Wells are an exception.)

   b. Native dependence on the local retail focal stores has increased over the years with an increase in income, combined with a decrease in the share ethic. (Some interviewees stated that the share ethic has weakened in the last decade.)

2. Vulnerable communities can be defined as those with low disposable incomes. (In this study household income is used as a surrogate measure.) Using this definition predominantly native communities are vulnerable because natives as a group they have lower incomes.

   Disposable income is a function of cash income plus any received subsidies. Substantial subsidies, as are present in the North, may disrupt the relationship between cash income and disposable income.

3. Immunities which must rely on air shipment for perishable transport may be considered vulnerable.

4. Communities where there is only one focal store may be vulnerable to higher prices due to monopolistic pricing and management inefficiency.

   Since policy decisions have not yet been made the researchers suggest the following. The most vulnerable Northwest Territories communities are predominantly native with low reliance on country food, have a single store, and are in the East. These are generally remote communities with low per capita incomes.

Since all evidence suggests that native consumers are developing similar food shopping patterns to non-natives, food expenses for native families may be expected to rise.

6.5 CONCLUSIONS

The analysis presented in this report has revealed that variations in the food price index may be largely accounted for by looking at the ef feet of mode of transportation and type of store ownership. But, the equation indicates that corporate chains have at worst had a neutral ef feet on variations in the focal price index, while cooperatives tend to be associated with higher food price index values. The equation does not imply that food rests in the North are not too high. The equation indicates the likely direction of effects that other factors have on the existing price structure. Food prices might well be too high but this analysis indicates how store type and transport mode access may af feet the index.

A regression equation is provided that allows for prediction of the f@ price index of a community using the above mentioned variables. While the equation may be used for prediction, its usefulness as a measure of the relative ef f ects of the variables on the index is limited. It can reveal the direction of the ef feet but not its magnitude.

The analysis also shows that transportation rates to a community are not a factor in determining the value of the food price index. This is signi f icant since this often cited as the reason for community variations in the index.

The results obtained in this report are based on a limited data base for 47 communities in the Northwest Territories. With the availability of more and better data such an analysis should be repeated. Such data would include wholesale prices, wholesaler locations, shipment points, actual shipment prices, and the absolute and relative types and amounts of food ordered. This report has indicated the usefulness of this approach to analyzing the variations in feed prices and -petition in the Canadian North.

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7.0 CHAPTER 7: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

7.1 SUMMARY

This report was commissioned by Consumer and Corporate Affairs Canada to analyse the Northwest Territories food retail markets. The food retail markets were examined by gathering data from two populations in the Northwest Territories: retailers and consumers.

All focal retailers in the Northwest Territories were contacted by mail and asked to answer a questionnaire designed to gather basic information about their focal stores. The types of information received from them were: size, supplier names and locations, non-food products and services, and management experience. In addition, 15 store managers in six communities selected for on-site interviews, were asked abut problems they face, reasons for success, costs of operation, etc. .

In the six communities consumers were interviewed. They provided information about their shopping habits, their use of alternative sources of food, and their perception of food in the communities.

The major findings are divided into three sections. The major findings are:

1. Results from Retailer Inventory Survey

   * There are 115 food retailers in the Northwest Territories. They consist of 35 Hudson's Bay Stores, 32 cooperatives, and 48 independents.

   * The average number of food products carried in a store is 812, in 145squaremetres (1558 square feet). There are approximately 850 persons employed in the retail stores in the Northwest Territories, or an average of 8.2 persons per store.

   * Store managers have an average of 8.1 years of retailing experience.

   * Major non-food products and services offered in northern focal stores include fishing supplies, hardware, clothing/ footware, hunting equipment, credit, fur buying, handicrafts, and special and bulk orders. The stores are therefore more of a general merchandise store than purely a food store.

   * The only food category that is not readily available in all immunities is fresh meat. This is because of its extreme perishability. Frozen meat on the other hand is generally available.

* Perishables are generally shipped via air or where available, truck .

* Nonperishables are shipped mainly via trucks or by water transport. Many retailers, however, supplement these supplies with airlifted supplies later in the year. The available evidence seems to indicate that the cost of focal is liner when annual sealifts are utilized, even when the extra costs of financing and warehousing the inventory are considered.

* Store managers do not always order nonperishable foods by the cheapest means of transportation available; i.e. water or road. Air shipment is used more than is warranted. This practice is most often found in imperative stores.

* Country fish is sold in 25% of the retail food stores in the Northwest Territories. The sale of other country foods is generally restricted to specialty stores which are located in the larger communities (e.g. Frobisher Bay and Inuvik).

* Large retailers, the cooperative association, and the chain store (Hudson's Bay Company) are able to place orders directly with manufacturers and thereby achieve lower prices than retailers that must order from wholesalers. (A comparison of prices from manufacturers and wholesalers was not undertaken as a part of this study so the amount of savings is uncertain.)

* Suppliers for the Northwest Territories retail stores are concentrated in three major centres: Edmonton, Winnipeg, and Montreal. However suppliers are located all across Canada.

2. Results from the Indepth Examination of Six Communities

Retailer Survey

* Frobisher Bayis the largest of the three eastern communities, Fort Rae is the largest of the three western communities. The largest community in the East and West respectively had a greater number of retailers, a greater number of open hours for food shopping and lower food prices than the smaller immunities visited.

* If a community has more than one store the largest generally has the largest selection and usually the lowest prices. The other (secondary) stores generally have higher prices, smaller and/or different selection of feds and are open more and/or different hours than the primary stores.

* The relative prices between the six communities and the prices in Yellowknife are similar to these found by the G. N.W. T. in 1982, i.e., from lowest prices in Fort Rae and highest prices in Cape Dorset. The order is as follows:

a. Fort Rae
b. Fort Norman
c. Frobisher Bay
d. Broughton Island
e. Norman Wells
f. Cape Dorset

* The most frequently mentioned problem, shared both by the food retailers and the restaurant managers, is unreliable air delivery of perishable goods.

* Shortage of reliable and skilled clerks was also mentioned by retailers as a difficulty northern retailers must face.

Consumers

* Forty-six percent of the consumers indicated that they use credit for at least some of their food purchases.

* The average number of food shopping trips per week is 3.7.

* The mean number of dollars spent on a grocery trip was $48.35.

* Inuit, Indians, and non-nat ives exhibited differences in the types of food purchased at the local food store on the day of the intercepts .

* Non-natives spent more per capita on food than mtives.

* Consumers were generally satisfied with the quality and selection of food available in the six communities. In all six communities, the majority of consumers considered the price of food as high.

* Director bulk food purchasing is used bya small minority of the consumers in five of the six communit ies. The exception was Norman Wells, where the 71% of the consumers do make sane food purchases outside the community. Most residents of Norman Wells felt that the prices charged by the single retailer were excessive and therefore must be bypassed if possible.

* Country food is available to most natives by hunting or sharing. Non-natives generally only have access to country food if it is sold in a retail feed store.

* Country food was consumed by natives in all six communities visited. Country food consumption appears to be the highest (of the six communities) in Broughton Island and Cape Dorset.

* In some Dene communities the sharing of caribou has been institutionalized. The caribou is stored in community freezers and is available free to all natives in the community.

3. Results of Food Price Indices Analysis

* The mode of shipment available to a community accounted for 49% of the variation in the food price index. The presence of land access (roads) was associated with lower food price indexes, while the presence of air access was associated with higher prices.

* Another 14% of the variation in the food price indices for the Northwest Territories communities was accounted for by store types. The presence of an independent was associated with lower feed prices, while the presence of a inoperative was associated with higher food prices.

  The fact that independents are associated with lower prices is attributable to the fact that 62% of the independents used in the regression analysis are located on reads while only 33% of the Bays and only 15% of the cooperatives are located on a road. Hence the 'average transportation costs of independent stores are lower than the other two types of stores.

* The larger the community the greater the number of stores present in the community. The larger a community the more likely that an independent store is located there. There is also a relationship between the size of the community and the focal prices, i.e. the larger the community the lower the food price indexes.

* Variations in the average per capita income by community have no relation to the focal price indexes.

* The proportion of natives in a community had no ef feet on the food price indices. This indicates that immunities with substantial native populations do not have higher food prices than similar communities with small native populations.

7.2 CONCLUSIONS

In conclusion, it is clear that not only are food prices higher in the Narthwest Territories than in southern Canada but also prices vary within the Northwest Territory-. According to the G. N.W.T. food price survey, the lowest prices occur in Yellowknife. Yellowknife has by far the largest population with regular truck transportation from Edmonton which is the site of many major wholesalers. On the other hand the highest prices occur at the remote centre of Pelly Bay. It has a small population and is not accessible by truck.

The main reasons food prices are higher in the Northwest Territories than in southern Canada are the higher operating and transportation costs facing northern stores compared to those in southern Canada. The underlying factors causing spatial variations in food prices by northern communities are:

1. Varying transportation costs of shipping foods from southern wholesalers to northern retailers because of differences in both shipping distances and males of transportation cause differences in feed prices across the Northwest Territories.

2. The strategy of using water transportation for shipping non-perishable goods is not available to all coxmnunities.

3. Not all store managers who can use water transportation for shipping non-perishable goods do so.

4. Varying market sizes results in different levels of economies of scale and hence different food prices. Twenty-f ive percent of 'the variat ion in the food prices between communities can be explained by market size, that is, the larger the community the lower its feed price index.

5 Varying purchasing power of the stores in the communities. The larger stores and/or associated stores (Hudson's Bay Company stores and cooperatives) may be able to buy and ship in large enough volumes to receive discounts from wholesalers and/or order directly from the manufacturers.

6. Uneven experience of food store managers and clerks.

In this report, the issue of high prices in the Northwest Territories was examined from four perspectives: 1) the degree of competition; 2) food purchase alternatives; 3) market development; and vulnerable communities. The discussion of these perspectives follows in sections 7.2.1 to 7.2.4.

7.2.1 The Degree of Competition

There are 115 stores in 66 Northwest Territories ccmununities. This averages out to a little over one store per community, with eleven amununities having no food retailers, fifteen having one store and one having twelve food retailers. The relatively few number of stores per community is to be expected given the size of the communities (80% have a population of less than 800 persons). The lack of a large number of retail stores in most communities could lead one to falsely conclude that there is therefore a lack of competition in foodstuffs in all these immunities. For most communities this does not appear to be true. Competition for food purchases/food purchase alternatives in the Northwest Territories includes not just market acquisition of food, but also includes other focal acquisition alternatives (including country feed). The use of or the threat of greater use of the alternatives to the local food store provides a cap on the prices retailers can charge. These alternatives are essentially competitors to the local focal store. The food acquistion alternatives observed in the Northwest Territories during this study are:

1. Food Purchases by Consumers:

   -at the local retail food store(s)

   -direct purchases from other locations

   —in large quantities, such as a special order on an annual sealift order or on a barge

   —in small quantities, such as weekly perishable orders

2. Hunting and gathering of country food (e.g. caribou, fish, seal, etc.):

   -for own household

   -shared/exchanged with other households

   -formalized sharing as in some Dene communities

3. Local focal production:

   -very little

Generally the degree and type of competition:

1. Varies by size of the community. (Competition in the smallest communities is generally from country focal consumption, while in large communities competition between stores develops. Intercommunity buying can occur in any size community.)

2. The major alternatives to the focal store which can be used to keep prices down are:

   a. Bulk Ordering

   b. Country Food Production

   c. Intercommunity Buying

7.2.2 Food Acquisition Alternatives by Communities

In this study consumer food consumption behaviour was examined in six communities. Consumer shopping behaviour, on a single trip, was examined. This was supplemented with questions regarding the use of alternative focal sources and usual shopping habits.

1. A large proportion of natives focal intake is country food, especially in smaller immunities.

2. Food from the local retail focal store has been assuming greater importance in meeting the dietary needs of native families.

3. Non-natives rely almost exclusively on the retail store for their foodstuf f s .

4. Direct/bulk purchasing is used by a small minority of the consumers.

5. Local feed production is almost non-existent.

7.2.2.1 Direct/Bulk Purchasing

Reasons for nonparticipation in bulk or direct purchasing were listed in the consumer chapter and include such things as

1. the inability to plan food needs 15 to 18 months in advance

2. the dif f iculty of financing the purchase (a yearly order generally rests about $3, 000)

3. the complicated process that must be followed to place an order

4. risks of damaged merchandise

5. storage problems

In addition the consumer:

1. must have a large enough household to eat a large quantity of goods

2. expect to remain in the community long enough to use the focal. Probably due to these factors direct/bulk buying is used on only a limited basis in the Northwest Territories. It appears that it is used mainly where consumers perceive something inadequate with the local retail situation.

Direct/bulk buying was examined in this study in the six communities where consumer interviews were conducted.

In the East only residents of Frobisher Bay do much bulk purchasing. Most direct/bulk purchasing is done in Frobisher Bay by southerners who are used to the product offerings available in the large southern cities. They supplement the product offer ings in Frobisher Bay with direct orders.

In the West 70% of the Norman Wells residents directly purchase food from other communities. The apparent reason is the relatively high price of food in Norman Wells.

"Implications of Direct/Bulk Purchasing" on page 55 summarizes some of the problems that could be encountered if widespread adoption of direct/bulk purchasing is instituted. These are:

a. Problems for the householder if major losses would result from the increased risks they are assuming.

b. Squeeze on the local focal retailer. Most northern retailers are quite small. They need to sell as much as possible to rover their expenses . If a large number of households begin buying food outside the local retail store pressures may be brought to bear on the local retailer. The loss of sales may cause:

1) increased prices on other beds sold in the store

2) could put the store out of business

For consumers this could mean:

a) households which are doing the bulk purchasing may see no overall reduction in the amount spent on food in a year

b) households who do not bulk purchase may face higher overall food prices

This is an option that should remain open and available to ccnsumers. It limits the amount of monopolistic power one or a few retailers can exert, but its use must be exercised with caution.

7.2.2.2 Country Food

Country food continues to be heavily used by native peoples. However, it appears that access to country food for some (those too old to hunt, those employed in the wage economy, non-native northerners, and those living in regional centres) is more difficult.

km-natives generally only include country food in their diets when it is available from a friend, sold at a local retail store or on the menu in a restaurant.

7.2.2.3 Local Commercial Food Production

There is currently very little commercial food production in the North. Generally, growing conditions are too harsh to raise any type of crop. The only food production encountered in the six communities examined in this report were tomatoes being raised, for the first time, in a greenhouse in Cape Dorset. Two reports have been produced by the Economic Strategy Division of the Department of Indian and Northern Affairs which outline the alternative technologies that could be employed in the North, and the funding that is currently available to finance them.

7.2.3 Market Development

The market development that exists in the Northwest Territories falls sanewhere between the two extremes of communal food gathering and the @em food retailing structure that exists in southern Canada.

1. There is a limited amount of communal food gathering and sharing. This practice seems to diminish with the size of a community and the length of time once has lived in an urbanized settlement. This makes the small eastern communities the least developed.

2. Modern supermarkets which are based on high sales volumes and frequent, cheap, delivery are impossible to duplicate in the communities in the Northwest Territories. This is because most communities in the Northwest Territories are extremely small and geographically isolated.

3. The food retailing stores in a northern community appear to offer a larger variety of goads for sale than would a store located in a similarity sized southern Canadian community. This is undoubtedly due to the fact that the vast distances between most of the northern communities makes each an island unto itself, hence it must be totally self -contained. Residents in a southern community would have to travel to larger urban centres to get many goods that are found within a northern community.

4. Because of the large differences in market size and market compos ition between the North and the southern Canada, competition and competitive offerings differ considerably.

The northern competitors are not just the food retailers but also the food acquisition alternatives discussed in the last two sections: hunting and gathering, sharing of hunted and gathered food, and direct purchases from outside the community.

Within the local retailing sector northern firms don't 'mmPete' on the same basis as do southern firms. This is generally because northern conditions make these methods unnecessary, impossible, or a waste of money. Some examples follow:

a. In the South store location is critical to store sales as consumers don't like to drive very far to do grocery shopping. In the Northwest Territories in all immunities (except Yellowknife) the distance is irrelevant. Everything in the communi ties is within walking distance in the summer or snowmobile range in the winter. In the larger communities like

Frobisher Bay everything is still within walking distance, but if a ride is preferred the cost of a taxi ride is the same to any destination within the community, hence store location is irrelevant.

b. Other competitive dimensions are hours of operation and product offerings. As the indepth study results show whenever a community has more than one store competition arises on these dimensions. The larger the community the more likely it is that stores will specialize in specific products (e.g. country food and candy in Frobisher Bay).

c. The final major southern competitive dimension is price. Price appears to be less of a competitive factor in the North than in the South, with observed prices in the secondary stores being only slightly higher than those in the primary store.

In the South almost all products are shipped to all stores frequently via the relatively cheap method of truck delivery. The cost of transportation therefore has a negligible effect on price. In the North the expensive mode of air shipment is necessary in most immunities for perishable goods and is used quite often for nonperishable goods. For heavy products such as milk a substantial proportion of the f inal price is the transportation. (I& example it cost $1.89 in postage for the mailing of one loaf of bread to Broughton Island. The retail sale price in the Hudson' Bay Company store was $2. 49). With all retailers experiencing the same transportation costs the only way to sell products at a lower price is to achieve a lower cost structure on other dimensions such as wholesale prices or facility costs.

5. In the South a conventional supermarkets dollar sales are abut ten times that of the average northern store. Given the higher prices in the northern stores this implies the northern retail stores generate less than ten percent of the volume of a southern supermarket.

The large buying power of the southern stores which themselves are usually members of a chain organization increases the volume of sales possible. Compared to its southern counterparts all northern stores are small and are unlikely to achieve large enough volume to be able to get volume discounts and/or purchase directly fran the manufacturers. The chain stores (Hudson's Bay Company) and associated stores (cooperatives), if they buy for a number of stores, are an obvious exception to this statement. It is likely however that any differences in wholesale prices could be masked by high transportation charges.

6. In the South newspaper advertising is common in the food industry. It is used to attract customers from other stores by featuring certain products and prices. In the northern communities there is very little advertising. There are several reasons for its absence.

   a. Advertis ing is often not needed as a drawing card because

      1) consumers are familiar with the product offerings and the prices.

      2) consumers often drop into the focal 'stores while buying other goods by walking across the store to the focal sections of the store.

      3) changes in prices and product offerings change too infrequently to warrant expenditures on advertising

   b. most canmunities have no local paper

7. There is little variation in market development among the communities in the Northwest Territories. The little variation that does exist appears to be related to community size, i.e., the larger the community the larger the potential market for sales, hence a more concentrated demand for food products. This leads to more stores and more offerings by those stores.

8. In Chapter 6 an analysis of the focal price indexes was done. After considering mode of shipments available and types of stores present a test was Per formed to see if market size (clef ined as population, average income per capita, and total income in communi ty) had any ef feet on the food price index. None added signi f icantly to the food price index. The reasons for this follow.

9. Most of the communities are quite small and hence can only support small stores. This small size store precludes high levels of productivity through economies of scale.

10. The high cost of transport of perishables via air probably overwhelms any ef fect of market size. Surprisingly, there is some air shipment of non-perishable products.

7.2.4 Vulnerable Communities

Possible definitions for vulnerable communities were discussed in 'Vulnerable Communities " on page 110. The following definition was decided upon by the researchers: the most vulnerable Northwest Territories communities are predominantly native with low reliance on country fed, have a single store, and are located in the East. These are generally remote communities with low per capita incomes.

Since all evidence suggests that native consumers are developing similar food Shopping patterns to non-natives, food expenses for native families may be expected to rise.

7.3 GENERAL RECOMMENDATIONS

Food prices are higher in northern Canada than in the South. As long as people continue to live in small isolated communities at great distances from food supplies, feed prices can be expected to remain high. Given the fact therefore that high food prices may be expected to continue there are some ways to reduce the overall food expenditures of northern consumers.

1. Increase the use of alternatives to the local food store:

   a. Greater use of country fed.

   b. Greater use of direct purchases (especially annual sealifts).

2. Change the composition of the food basket by substituting lower priced alternatives, i.e., avoid purchasing prepared feds.

3. Lowering retailer costs-assuming that these savings are passed on to the consumer.

4. Increase local food production.

A brief discussion of each of these alternatives follows:

a. Consideration should be given to improving the availability of country food. Formalization of sharing, either through bands, such as at Fort Rae, or through commercial exchanges, such as the country focal stores, can provide greater access to country foods for northerners. Inter as well as intra community trade could allow cumnunities to purchase or exchange country food that is readily available in the local community for some that is not. Commercial outlets for country food generate several benefits:

   1) cash to the mtive hunter

   2) access to country focal for both natives and non-natives

   3) alternative and generally cheaper meat substitutes than are found in the local food stores

   4) employment in both processing and selling

b. Increase Use of Direct Purchases

Before any action is taken to increase sealift purchases by households, an examination of its effect on food outlets is warranted. This approach is critical in smaller immunities in the North. Mass change over to sealift purchases by local residents could upset the profit margin in food stores and perhaps not only causing increased prices but possibly causing sane stores to go out of business.

5. Substitution of Lower Priced Alternatives in the Food Basket

There are four major ways to accomplish this objective.

a. Increased use of country foods; substitution of country meats for southern meats.

b. Substitution of lower priced nutritionally equivalent feds (e.g. canned fruits and vegetables could be substituted for fresh fruits and vegetables).

c. More assembly/preparation in the local communities. For example, a large proportion of the weight of both milk and bread is water. Water is readily available in the communities and can be added at that point.

d. Less use of convenience foods-more foods prepared from scratch. If the reason for the high use of convenience feeds is because of a lack of cooking skills and cooking utensils training is recommended.

6. Reducing Retailer Costs

a. Most retailers indicated that one of their major costs is high utility bills. Few figures however were made available to the researchers. Alleviation of utility costs, if they are a substantial proportion of the costs could affect prices. Some subsidies on electricity prices may already be in place but this was not examined as part of this study.

b. The lowest transportation cost of non-perishable fend is by sealift or barge. A greater use of water transport versus air freight is advised to lower food prices as water transport costs abut 10% of the air freight cost. Failure to make full use of water transport may be due to lack of storage, lack of financing, lack of adequate planning, or other reasons. Additional research is needed to determine the cause. Once it is known action could be taken to encourage retailers to reduce costs by using sealifts. For example, if one of the main causes is lack of funds to make the annual purchase guaranteed loans could help encourage retailers to take advantage of the lower shipment costs, and depending upon the interest rates charged could result in lower costs to the retailer which should in turn result in lower retail focal prices.

7. Local food production has generally been economically infeasible. The two reports by Economic Strategy Division list the current status of technology for local food production.

8. Government Assistance

If policy makers decide that prices are so high that some form of subsidization is desired for northern residents there are many facts that must be considered before a plan is implanted.

a. Should all foodstuffs be subsidized or only necessities?

b. If only necessities how does one decide what is a necessary food product and what is a luxury?

c. Should all northerners have their food costs subsidized or some segment of the population such as: natives, non-natives, old people, children, pregnant women, etc.?

d. How should a subsidy be implemented? On freight charges, on amount spent by consumers, on a per capita basis, on school lunch programs, on local food production, etc.?

7.3.1 Recommendations for Vulnerable Communities

If the previously stated identification of vulnerable communities is accepted then, the potential solutions to this vulnerability may include

1. Encouragement of additional use of country focal.

2. Encouragement of substitution of lower priced for higher priced foods: canned/frozen for fresh, country for store, basics for processed.

3. Being sure the local retailer operates efficiently, enabling him to keep prices low. This could be assisted by:

a. Management training to ensure retailers know how to minimize costs.

b. Encouragement of use of sealifts by retailers. Some retailers may require financial assistance for large yearly purchases and/or warehouse space. Loans for foodstuffs in the North may be considered high risk by conventional banks because the retailers themselves are vulnerable due to the small market size, damage and losses.

7.4 RECOMMENDATIONS FOR FUTURE RESEARCH

While DIAND has investiaged many aspects of the food question, this report has uncovered many areas that require further research. (The DIAND reports are listed in the references to Chapter 2.) These research areas are listed below:

1. Additional research on the independent food stores. Specifically 1) the locational aspects of such stores and 2) their competitive position within the local community and 3) their impact on feed prices.

2. Many of the northern stores are quite small, yet many have more than one store. Is there "overstoring" in the Northwest Territories? Are sane of the small stores artificially being kept alive through subsidies and/or by charging higher prices?

3. What type of volume is necessary for a northern store to remain profitable while maintaining service and reasonable prices? How many northern food retailers are too small to be profitable without Charging higher than otherwise necessary prices? Are these stores too small because of the small size of the community in which they are located or because there are too many stores in the community?

4. Does the size of the store (size of their buying power) affect the prices charged in the local stores?

5. Does consumer shopping behaviour (e.g. type of foods purchased, size of purchases, frequency of purchases) vary by type of store and size of community?

6. From this study it was found that food shopping behaviour varies between Indians/Metis, Inuit and non-natives. A mOre indepth study needs to be done to see if these differences exist because of differences in culture, education, experience with southern feds, or some other reason.

7. A study of consumer behaviour in more communities is desirable to determine if the apparent trend toward greater reliance on the local retail focal store is common across the Northwest Territories.

8. Additional information on the retail food store/country food tradeoff being madeby consumers? Do mtives rely more heavily on the retail food store in large communities? Do non-natives rely more heavily on country feds the longer they live in communities? Is there a greater role for country foods in retail stores?

9. Additional research is needed to determine if, after considering all rests (including air shipment between communities), inter-community exchange of country foods and retail sales of country foods makes sense economically and culturally in some or all northern communities.

10. An unanticipated finding in this study was that water transport is not used whenever it could be. This area needs further research in at least two major areas.

    Why do sane store managers elect to use high cost air for non-perishable goods when they could use low cost water transportation? Why aren't retailers using the cheapest form of transportation whenever possible? Is it do to convenience, lack of storage space, less damage to goods, lack of financing, size of the retail operation or sane other factors? The responses to these questions could have tremendous policy implications.

    What are the financial consequences of choosing one form of shipment over the other? Preliminary evidence indicates that water shipment should be used whenever possible. A more detailed financial analysis examining the tradeoffs between buying in bulk once a year, getting lower shipping and volume purchase discounts while incurring greater inventory costs versus frequent small purchases by air.

11. An examination of northern native retail employmentisneeded. How many native employees work in the food retail industry? In what capacity? How long have they held these positions? What types of jobs in the retail business are they qualified for? What types of jobs are available? Is there anydifferenoe in work habits between natives and non-natives holding a similar retail job?

12. Future research is needed in the area of suppliers. This research may wish to consider whether or not major suppliers only service their primary customers, forcing newer and/or smaller competitors to find other suppliers. These other suppliers may be smaller wholesalers with higher prices.

13. An examination of wholesaler versus retailer prices.

14. This study found that northern food retailers have suppliers in both large and small centres across the country. Do the various supplier locations have an effect on food prices?

15. How do the utility rates affect the retailers and hence the prices consumers pay for fed?

16. An investigation into why high focal price indexes are associated with operative? Are the higher prices due to marginal locations, or problems within the cooperatives such as managerial inefficiencies, shortage of capital, or some other reason?

17. An examination of disposable income levels as opposed to actual income levels is needed. The high level of subsidization in the North makes the actual income levels an inaccurate measure of a consumer's purchasing power.

18. A recent report (Indian and Inuit Health, 1985) examined the nutritional habits of northern programs designed to improve the nutrition level supplied by food and the nutrient value of some northern feds. The study did not address food costs and the cost/nutrition tradeoffs the consumer must make. A nutritional study, based on food costs be is needed. A result of the study should be the development of menus or nutritional plans stressing the substitution of low cost alternatives for the higher priced nutritionally equivalent feeds. This seems especially critical in the North where many native consumers, having recently changed fran country feeds to southern foods, are unfamiliar with food groupings, menu planning, and cooking skills necessary for the various foods and their substitutes.

19. Additional research is needed to determine the reason for the high use of convenience foods by northern residents.

20. Does store size have an impact on food prices? That is, given the range of store sizes in the Northwest Territories, does volume of operations have an impact on costs incurred by the firm (productivity in both capital and labour) and hen- on the Prices charged by the firms?

21. Are the food stores in the Northwest Territories operating efficiently? Are improvements, which would result in lower food prices possible? Northerners realize that direct/bulk purchasing is possible, however only a minority of people directly purchase fed. Although some consumers indicated that they did not know how to go about bulk purchasing focal it appears that the reason this alternative is not more widely used is that the retail stores are adequately supplying the consumer needs. Evidence for this conclusion comes from the fact that a large number of consumers bulk purchased food in the past but decided to discontinue it. (Various reasons were given, and are listed in the consumer chapter.)

22. The typical food basket for a northern consumer is unknown. An indepth study of the food consumption behaviour by natives and non-natives in various types of northern communities is needed. This information is necessary to see what the true impact of the northern retail focal prices is on the household budget. All evidence indicates that northern consumers eat differently than their southern counterparts . Sane of these practices should lower the food expenditures (more country focal and less eating out) while others may increase it (convenience feeds). Knowledge of the purchase patterns of northerners, and the reasons why would lead to potential ways to reduce expenditures. For instance if convenience feeds are bought because rooking skills are lacking, training may be necessary.

23. An examination of the level of outpurchase behaviour in the communities. Those communities with a large number of residents engaging in outpurchase behaviour may have local retailing problems (e.g. price, freshness of goods, etc) and/or recent arrivals from southern Qnadian cities who find local store feds inadequate and prices high (compared to southern supermarket offerings).

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APPENDICES

APPENDIX A. CLASSIFICATION OF N.W.T. COMMUNITIES

Community Population / Ethnic Opposition	Less than 400	400 to 800	over 800
Nonnative Population in Excess of 25% of Total Population	Enterprise Nanasivik Paradise Gardens Port Radium Tungsten	Fort Resolution Norman Wells	Fort Simpson Fort Smith Frobisher Bay Hay River Inuvik Pine Point Yellowknife
Native Population in Excess of 75% of Total Population	Arctic Bay Arctic Red River Bathurst Inlet Broughton Island Chesterfield Chimo Bay Colville Lake Detah Enterprise Fort Norman Grise Fiord Hall Beach Holman Jean Marie River Kakisa Lake Kipisa Lac Le Martre Lake Harbour Nahanni/Butte Paulatuk Pelly Bay Rae Lakes Reliance Repulse Bay Resolute Bay Sachs Harbour Sanikiluaq Snare Lakes Snowdrift Trout Lake Whale Cove Wrigley	Aklavik Cape Dorset Coral Harbour Clyde River Fort Franklin mrt Good Hope mrt Liard mrt McPherson mrt Providence Gjoa Haven Igloolik Pond Inlet Spence Bay Tuktoyaktuk	Baker Lake Cambridge Bay Coppermine EskimoPoint Pangnirtung Rae-Edzo Rankin Inlet

source : Statistics Canada, 1981 Census.

APPENDIX B. DOCUMENTS USED IN MAIL SURVEY

B.1 COVER LETTER

The University of Western Ontario

School Of Business Administration
London, Canada
N6A 3K7

July 7, 1985

STORE MANAGER
RETAIL FOOD STORE
ADDRESS
Northwest Territories

Dear Store Manager,

As a manager of a Northern retailing food store, you are aware of the importance of the food industry to Northerners. Consumer and Corporate Affairs, as a part of a larger project involving other agencies, has funded this project to learn more about food retailing in the North.

Only by asking you, the retail food store manager, can we begin to understand the food distribution system in the North. We want to understand the problems and challenges facing food retailers in the North. It is therefore very important that the enclosed questionnaire be completed and returned. The information obtained from you will be used to get an overall picture of food retailing in the North.

You may be assured of complete confidentiality. The questionnaire has an identification number for mailing purposes only. This is so we may check your name off of the mailing list when your questionnaire is returned. Your name, the store's name, and your community's name are not on the questionnaire, and should not be placed on it. None will be identifiable in the reports describing this project.

The results of this research will be used to develop and to recommend policy to the Canadian government. It will be printed in a report 'Northern Retail Food Study' by the federal government. in December, 1985. It isoneof nine studies requested by the Ad Hoc Interdepartmental Committee on Northern Food Costs and will be forwarded to Northern interest groups upon completion. You may receive a summary of the results by writing "copy of results requested" on the back of the return envelope, and printing your name and address below it.

I would be most happy to answer any questions you might have. Please write or call. The telephone number is (519) 452-1317.

Thank you for assistance.

Sincerely,

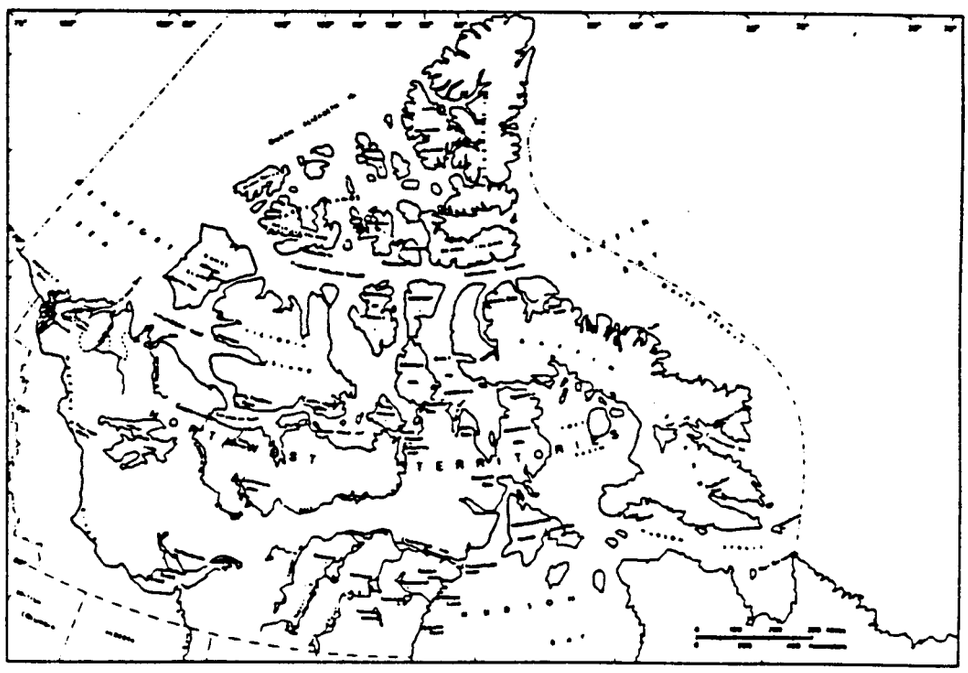
Donna H. Green, M.B.A.
Research Director

B.2 MAIL RETAILER QUESTIONNAIRE

NORTHWEST TERRITORIES RETAIL FOOD STRUCTURE

This survey will help us better understand the current retail food structure in the North. Please answer all of the questions. If you wish to comment on any questions or qualify your answers, please feel free to use the specs in the margins. Your comments will be taken into to account.

Thank you for your help.



School of Business Administration
University of Western Ontario
London, Ontario N6A 3K7

TB-/CT-REG.B3505-20

We'd like to know if your store sells anything besides food. Therefore the first two questions ask about the other products and services that your firm offers.

Q. 1. Please circle, from the following list, each of the goods and services that your store offers. (Circle each that *applies.)*

1 TOBACCO (FOR EXAMPLE, CIGARETTES)
2 HUNTING EQUIPMENT (RIFLES, AMMUNITION, *TRAPS)*
3 HUNTING *VEHICLES* (SNOWMOBILES, OFF TERRAIN VEHICLES)
4 FISHING SUPPLIES
5 SUNDRIES (SOAPS, COSMETICS)
6 HARDWARE (SCREWS, HAMMERS)
7 POST OFFICE
8 SPECIAL ORDERS
9 FUR BUYING
10 CHEQUE CASHING
11 CREDIT FOR FOOD *PURCHASES*
12 HANDICRAFTS
13 TELEPHONE POR PUBLIC USE
14 CLOTHING/FOOTWARE
15 BULK ORDERS
16 HOME DELIVERY
17 NONE OF THE ABOVE

Q. 2. What percent of the gross sales in your store are fOr FOOD products?

1 LESS THAN FIVE PERCENT
2 FIVE TO NINETEEN PERCENT
3 TWENTY TO 49 PERCENT
5 50 TO 75 PERCENT
6 OVER 75 PERCENT

The next few question ask about the type *of* food products sold in your store, and how you get your f& suppli es.

Q. 3. Below is a list of various types of country food. Please look the list over. For each type of country food please circle 0 if you do not purchase it for resale. For each type of country food that you do purchase for resale, please circle 1 2 or 3 to indicate who your supplier is.

NONE	FOOD	LOCAL	OTHER	
0	1	2	3	WHALE
0	1	2	3	SEAL
0	1	2	3	CARIBOU
0	1	2	3	OTHER COUNTRY MEAT
0	1	2	3	COUNTRY FISH
0	1	2	3	LOCAL BERRIES
0	1	2	3	LOCAL DUCK
0	1	2	3	OTHER: PLEASE SPECIFY_____
0	1	2	3	NONE

2

Q. **4.** *Please list the* name and location of your major food suppliers. Below each supplier's name *circle* all product classes which you purchased from him.

NAME OF MAIN SUPPLIER _____
LOCATION OF OTHER SUPPLIER _____

Goods purchased from this supplier: (CIRCLE ALL THAT APPLY.)

1 CANNED GOODS
2 FRESH FRUITS AND VEGETABLES
3 FRESH MEATS
4 FROZEN MEAT
5 FRESH DAIRY
6 STAPLES
7 SNACK FOODS
8 BAKERY PRODUCTS

NAME OF SECONDARY SUPPLIER _____
LOCATION OF SUPPLIER _____

Goods purchased from this supplier: (CIRCLE ALL THAT APPLY.)

1 CANNED GOODS
2 FRESH FRUITS AND VEGETABLES
3 FRESH MEATS
4 FROZEN MEAT
5 FRESH DAIRY
6 STAPLES
7 SNACK FOODS
8 BAKERY PRODUCTS

NANE OF OTHER SUPPLIER _____
LOCATION OF SUPPLIER _____

Goods purchased from this supplier: (Circle all that apply.)

1 CANNED GOODS
2 FRESH FRUITS AND vEGETABLES
3 FRESH MEATS
4 FROZEN HEAT
5 FRESH DAIRY
6 STAPLES
7 SNACK FOODS
8 BAKERY PRODUCTS

Q. 5. For the following categories of food please indicate how frequently you reorder that type of food from your supplier(s) and what form of transportation is used to ship them.

Canned Goods:

1 NEVER, I DON'T CARRY ANY CANNED GOODS IN MY STORE.
2 ONCE A YEAR.
3 TWO TO SIX TIMES A YEAR.
4 SEVEN TO TWELVE TIMES A YEAR.
5 TWICE A MONTH .
6 ONCE WEEK OR MORE .

1 DELIVERY OVER LAND
2 DELIvERY VIA WATER
3 AIR DELIVERY, VIA POST OFFICE
4 AIR DELIVERY, NON POST OFFICE

Fresh fruits and vegetables:

1 NEVER , I DON 'T CARRY ANY FRESH FRUITS OR VEGETABLES.
2 ONCE A YEAR.
3 TWO TO SIX TIMES A YEAR.
4 SEVEN TO TWELVE TIMES A YEAR.
5 TWICE A MONTH.
6 ONCE *A WEEK OR* MORE.

1 DELIVERY OVER LAND
2 D= IVERY VIA WATER
3 AIR DELIVERY, VIA POST OFFICE
4 AIR DELIVERY, NON POST OFFICE

Fresh meat:

1 NEVER, I DON'T CARRY ANY FRESH MEAT IN MY STORE.
2 ONCE A YEAR.
3 TWO TO SIX TIMES A YEAR.
4 SEVEN TO TWELVE TINES A YEAR.
5 TWICE A MONTH .
6 ONCE A WEEK OR MIRE.

1 DELIVERY OVER LAND
2 DELIVERY VIA WATER
3 AIR DELIVERY, VIA POST OFFICE
4 AIR DELIVERY, NON POST OFFICE

Frozen meat:

1 NEVER, I DON'T CARRY ANY FROZEN MEAT IN MY STORE.
2 ONCE A YEAR.
3 TWO TO SIX TIMES A YEAR.
4 SEVEN TO TWELVE TIMES A YEAR.
5 TWICE A MONTH.
6 ONCE A WEEK OR MORE.

1 DELIVERY OVER LAND
2 DELIVERY VIA WATER
3 AIR DELIVERY, VIA POST OFFICE
4 AIR DELIVERY, NON POST OFFICE

Fresh dairy products (for example, milk, cheese, ice cream) :

1 NEVER , I DON ' T CARRY ANY FRESH DAIRY PRODUCTS IN MY STORE.
2 ONCE A YEAR.
3 TWO TO SIX TIMES A YEAR.
4 SEVEN TO TWELVE TIMES A YEAR.
5 TWICE A MONTH.
6 ONCE A WEEK OR MORE.

1 DELIVERY OVER LAND
2 DELIVERY VIA WATER
3 AIR DELIVERY, VIA POST OFFICE
4 AIR D= IVERY, NON POST OFFICE

Staples (for example, flour, sugar, tea, salt, lard) :

1 NEVER , I DON' T CARRY ANY STAPLES IN MY STORE.
2 ONCE A YEAR.
3 TWO TO SIX TIMES A YEAR.
4 SEVEN TO TWELVE TINES A YEAR.
5 TWICE A MONTH .
6 ONCE A WEEK OR MORE.

1 D= IVERY OVER LAND
2 DELIVERY VIA WATER
3 AIR DELIVERY, VIA POST OFFICE
4 AIR DELIVERY, NON POST OFFICE

Snack food (for example, potato chips, candy, crook ies, soda pop) :

1 NEVER , I DON 'T CARRY ANY SNACK POOD IN MY STORE.
2 ONCE A YEAR.
3 TWO TO SIX TIMES A YEAR.
4 SEVEN TO TWELVE TIMES A YEAR.
5 TWICE A MONTH .
6 ONCE A WEEK OR MORE .

1 DELIVERY OVER LAND
2 DELIVERY VIA WATER
3 AIR DELIVERY, VIA POST OFFICE
4 AIR DELIVERY, NON POST OFFICE

Bakery Products (for example, bread):

1 NEVER , I DON 'T CARRY ANY BAKERY PRODUCTS IN MY STORE.
2 ONCE A YEAR.
3 TWO TO SIX TIMES A YEAR.
4 SEVEN TO TWELVE TIMES A YEAR.
5 TWICE A MONTH.
6 ONCE A WEEK OR MORE .

1 DELIVERY OVER LAND
2 D= I VERY VIA WATER
3 AIR DELIVERY, VIA POST OFFICE
4 AIR DELIVERY, NON POST OFFICE

Each store in the Northwest Terr i tory is d i f f erent. In order for us to see if there •re ●ny genera 1 patterns that apply to firms *of* a certa in size, or with other specific characteristics, we *need to ask several* questions ●bout your specific store. This information will be used for● nalysis purposes only.

Q. 6. Please indicate the amount of floor space used for each of the following. *(Please* indicate what unit of measure you •re using.)

_____ total retail area for ALL products in store

_____ retail space for food products

_____ total inventory storage area for all products

_____ inventory space for food products

_____ total freezer space (retail ●nd storage)

_____ total *cooler (refrigerator) space (retail and storage)*

Q. 7. How many different food items do you ESTIMATE that your store carries? (If there is more than one facing of an item it should only be counted once.)

APPROXIMATELY_____FOOD ITEMS

Q. 8. What is your estimate of your firm's market share in your communi t y? (That is, what percent of the community's retail food dollars is spent in your retail food store?)

_____percent

Q. 9. What was the total gross sales of food, in your store, last year? (If you don't know, please estimate.)

$_____

Q. 10. Please review the following list and select the answer that best describes who owns the retail store that you are managing. *(CIRCLE THE NUMBER* THAT APPLIES)

1 COOPERATIVE ASSOCIATION
2 THE BAY
3 FAMILY OWNED INDEPENDENT
4 OTHER INDEPENDENTLY OWNED STORE (NOT OWNED BY A CHAIN)
5 OTHER (PLEASE SPECIFY) _____

Q. 11. On average, over the last year, what was the number of full-time employees (30 hours or more per week) in your store? *(Please* include yourself and any other family members that work full-time in the store. Circle the correct category.)

1 ONE--I AN THE ONLY FULL-TIME EMPLOYEE
2 TWO--MYSELF AND ONE OTHER FULL-TIME EMPLOYEE
3 THREE--MYSELF AND TWO OTHER FULL-TIME EMPLOYEES
4 MORE THAN THREE (PLEASE SPECIFY) _____

Q. 12. In addition to the full-time employees listed in the last question, how many part-time employees, in an average week, work IN your store? (Do not include temporary employees, hired to unload the barge, or for other similar work. Do include any family members which regularly work part-time in your store.)

0 ZERO
1 ONE
2 TWO
3 THREE OR MORE (PLEASE SPECIFY) _____

Finally, a couple of questions about your background.

Q. 13. How many number *of* years of experience do you have in the retail trade?

_____ YEARS

Q. 14. Have you had any formal training in retail trade? (Please circle all categories that apply.)

1 ON THE JOB TRAINING
2 RETAIL TRADE TRAINING AT TECHNICAL SCHOOL
3 OTHER: _____
4 NONE

Is there anything else you would like to tell us about the feud retailing structure in your community, problems associated with being a food retailer in the North, or your customers? If so, please use this space for that purpose.

Also, any comments you wish to make that you think may help us in future efforts to understand food costs in the North will be appreciated, either here or in a separate letter.

This completes the survey. I wish to thank you for completing the questionnaire. Your contribution is sincerely appreciated. If you would like a copy of a summary of the results from this survey, please print your name and address on the back of the return envelope. We will see to it that you get it.

APPENDIX C. ACE TO FACE RETAIL SURVEY INSTRUMENTS

C.1 ACE TO FACE RETAIL QUESTIONNAIRE

C.1 FACE TO FACE RETAIL QUESTIONNAIRE

NORTHWEST TERRITORIES RETAIL FOOD STRUCTURE

FOOD RETAILERS

Interview Guide

This survey will help us better understand the current retail food structure in the North. In each of six communities, a survey is being conducted with each of the retail food outlets in the communities.

The questions that appear on the following pages are to be used to guide the interview with the retail food store manager. If any additional information is provided by the manager it should be recorded on this form.

Before beginning the interview inform the manager that the prices on several specific items will be recorded. The food price survey is attached.

TB-/CT-REG.B3505-20

The major focus of this study is food retailing. Before we ask detailed questions about it we'd like to ask a few questions about the other offerings in the store.

Q. 1. Please circle, from the following list, each of the goods and services that your store offers. (Circle each that applies.)

1 TOBACCO (FOR EXAMPLE, CIGARETTES)
2 HUNTING EQUIPMENT (RIFLES, AMMUNITION, TRAPS)
3 HUNTING VEHICLES (SNOWMOBILES, OFF TERRAIN VEHICLESI
4 FISHING SUPPLIES
5 SUNDRIES (SOAPS, COSMETICS)
6 HARDWARE (SCREWS, HAMMERS)
7 POST OFFICE
8 SPECIAL ORDERS
9 FUR BUYING
10 CHEQUE CASHING
11 CREDIT FOR FOOD PURCHASES
12 HANDICRAFTS
13 TELEPHONE FOR PUBLIC USE
14 CLOTHING/FOOTWARE
15 BULK ORDERS
16 HOME DELIVERY **
17 NONE OF THE ABOVE

Q. 2. (INTERVIEWER ANSWER ONLY IF 11, CREDIT, WAS CIRCLED ABOVE, OTHERWISE GO TO Q. 3.)

Which of the following types of credit do you accept? (CIRCLE ALL THAT APPLY .)

1 BANK CREDIT CARD (FOR EXAMPLE VISA OR MASTERCARD)
2 FORMAL APPLICATION PROCEDURE, CENTRAL APPROVAL
3 FORMAL APPLICATION PROCEDURE, LOCAL MANAGEMENT DECIDES
4 MANAGER'S DISCRETION

Q. 3. (INTERVIEWER, ANSWER ONLY IF 16 (DELIVERY) IN Q. 1 WAS CIRCLED)

Is there a fee for home delivery?

0 NO
1 YES--PLEASE S E _____

Q. 4. What percent of the gross sales in your store are for FOOD products?

1 LESS THAN FIVE PERCENT
2 FIVE TO NINETEEN PERCENT
3 TWENTY TO 49 PERCENT
5 50 TO 75 PERCENT
6 OVER 75 PERCENT

Q. 5. What are the opening and closing times, on each day of the week, for food sales?

_____SUNDAY
_____MONDAY
_____TUESDAY
_____WEDNESDAY
_____THURSDAY
_____FRIDAY
_____SATURDAY

For the next set of questions, we would like your opinion, as manager of this food store of the 'realities' of managing a retail food store in this community.

(INTERVIEWER, FOR THIS SET OF QUESTIONS DO NOT PROMPT THE RESPONSES, ONLY RECORD THE INFORMATION THE MANAGER PROVIDES, THE POSSIBLE CATEGORI ARE ONLY INCLUDED TO MAKE RECORDING AND CODING EASIER!)

Q. 6. Would you say the food operations in your store is successful?

0 NO
1 YES

Q. 7. On what basis is it successful (or unsuccessful)? (INTERVIEWER. IF RETAILER LISTS MORE THAN ONE BASIS, TRY TO GET HIM TO RANK THE,

_____
_____
_____
_____
_____
_____

Q. 8. What are the biggest problems you encounter in managing this food store?

(INTERVIEWER, DO NOT PROMPT! THE ITEMS LISTED BELOW ARE POSSIBLE CATEGORIES SUGGESTED BY THE LITERATURE. IF THE MANAGER'S STATEMENTS FIT, INCLUDE THEM IN THE PROPER CATEGORY.)

FINANCING IT _____
(CAPITAL INVESTMENT PROBLEMS) .

SPOILAGE THROUGH
FREEZING AND THAWING _____
EXTENDING SHELF LIFE _____
POOR CONDITION UPON DELIVERY _____
INADEQUATE STORAGE FACILITIES

TRANSPORTATION OF FOOD PRODUCTS
POOR SERVICE _____
HIGH COSTS _____
LACK OF ADEQUATE HANDLING FACILITIES _____
DELAYS _____

HIGH COST OF UTILITIES _____

STAFF PROBLEMS _____

COST OF MAINTAINING INVENTORY YEAR ROUND _____

STORAGE AND WAREHOUSING PROBLEMS_

CUSTOMER CREDIT _____

DETERMINING DEMAND _____
(FORECASTING SALES AND THUS STOCK REQUIREMENTS)
ANY SPECIFIC PRODUCT CATEGORIES MENTIONED?
CANNED GOODS _____
FRESH FRUITS _____
FRESH VEGETABLES _____
FRESH MEATS _____
FROZEN MEATS _____
FRESH DAIRY _____
STAPLES _____
SNACK FOOD _____
BAKERY PRODUCTS _____

OTHER (PLEASE SPECIFY) _____

_____

_____

Q. 9. What would help you to do a better job in food retailing?
(INTERVIEWER, IF RETAILER LISTS MORE THAN ONE ITEM, TRY TO GET HIM TO RANK THEM.)

_____

_____

_____

_____

_____

In the next set of questions I will be asking you about your supplies. We'd like to know 1) how you decide what foods to carry in your store, 2) what types of food you carry in your store, and 3) how your supply needs are met and 4) any problems you have with your supplies or suppliers.

Q. 10. Do you consult with people, outside the store but inside the community, when deciding what to order?

0 NO ---GO TO Q. 12.
1 YES

Q. 11. Who do you discuss the orders with? (BY JOB TITLE)

_____

_____

_____

Q. 12. How do you decide what new products to carry?

_____

_____

_____

Q. 13. Do you purchase any of the following foods locally? If so what? (Circle all that apply.)

1 LOCALLY BAKED GOODS.
2 LOCALLY GROWN CROPS.
3 LOCALLY GROWN GREENHOUSE FOOD PRODUCTS.
4 OTHER (PLEASE SPECIFY) _____
0 NONE, DO NOT PURCHASE ANY FOOD LOCALLY.

Q. 14. Do you purchase, for resale, any of the following types of country food?

(INTERVIEWER GO THROUGH THE LIST ONCE TO ANSWER THIS QUESTION, FOR EVERY TYPE OF COUNTRY FOOD THEY DO NOT PURCHASE FOR RESALE CIRCLE ZERO, IN BOTH OF THE LISTS BELOW. THEN IF ANY HAVE NOT HAD THE ZERO CIRCLED ASK THE FOLLOWING TWO QUESTIONS, **AND CIRCLE THE APPROPRIATE RESPONSES.)**

For each of the types of country food that you use please indicate if **your** supplier is (l)-the food **retailer,** _(2) a local **hunter, trapper,** or fisherman, or (3) other.

NONE	FOOD	LOCAL	OTHER	
0	1	2	3	WHALE
0	1	2	3	SEAL
0	' 1	2	3	CARIBOU
0	1	2	3	OTHER COUNTRY MEAT
0	1	2	3	COUNTRY FISH
0	1	2	3	LOCAL BERRIES
0	1	2	3	LOCAL DUCK
0	1	2	3	OTHER, PLEASE SPECIFY_____
0	1	2	3	NONE

(INTERVIEWER, FOR ALL ITEMS PURCHASED ABOVE ANSWER THE FOLLOWING QUESTIONS ALSO .)

For the types of country food that you indicate that you buy, could you please indicate in which of the following seasons you purchase the country food: Spring, Summer, Fall, Winter.

NEVER	SPRING	SUMMER	FALL	WINTER	
0	1	2	3	4	WHALE
0	1	2	3	4	SEAL
0	1	2	3	4	CARIBOU
0	1	2	3	4	OTHER COUNTRY MEAT
0	1	2	3	4	COUNTRY FISH
0	1	2	3	4	LOCAL BERRIES
0	1	2	3	4	LOCAL DUCK
0	1	2	3	4	OTHER: PLEASE SPECIFY_____
0	1	2	3	4	NONE

Q. 15. For the following categories of goods please indicate if you have any difficulty getting these goods, and why.

(INTERVIEWER, PLEASE USE ONE OF THE CODES LISTED BELOW TO CLASSIFY THE RESPONSES TO THIS QUESTION.)

0 NO DIFFICULTY IN GETTING SUPPLIES
1 HIGH COST OF TRANSPORTATION
2 HIGH PRICE FOR THE FOOD (HIGHER THAN THE CUSTOMERS ARE WILLING TO PAY.)
3 ITEM IS TOO PERISHABLE, SPOILS EASILY
4 LONG LEAD TIME FROM ORDER TO DELIVERY
5 DIFFICULTY IN FINDING SUPPLIER
6 OTHER

0	1	2	3	4	5	6	CANNED GOODS
0	1	2	3	4	5	6	FRESH FRUITS AND VEGETABLES
0	1	2	3	4	5	6	FRESH VEGETABLES
0	1	2	3	4	5	6	FRESH MEATS
0	1	2	3	4	5	6	FROZEN MEATS
0	1	2	3	4	5	6	FRESH DAIRY
0	1	2	3	4	5	6	STAPLES
0	1	2	3	4	5	6	SNACK FOOD
0	1	2	3	4	5	6	BAKERY PRODUCTS
0	1	2	3	4	5	6	COUNTRY FOOD

Q. 16. Please list the name and location of your major food Suppliers. Below each supplier's name circle all product classes which you purchased from him.

NAME OF MAIN SUPPLIER _____

LOCATION OF OTHER SUPPLIER _____

Goods purchased from this supplier: (CIRCLE ALL THAT APPLY.)

1 CANNED GOODS
2 FRESH FRUITS AND VEGETABLES
3 FRESH MEATS
4 FROZEN MEAT
5 FRESH DAIRY
6 STAPLES
7 SNACK FOODS
8 BAKERY PRODUCTS

NAME OF SECONDARY SUPPLIER _____
LOCATION OF SUPPLIER _____

Goods purchased from this supplier: (CIRCLE ALL THAT APPLY.)

1 CANNED GOODS
2 FRESH FRUITS AND VEGETABLES
3 FRESH MEATS
4 FROZEN MEAT
5 FRESH DAIRY
6 STAPLES
7 SNACK FOODS
8 BAKERY PRODUCTS

NAME OF OTHER SUPPLIER _____
LOCATION OF SUPPLIER _____

goods purchased from this supplier: (Circle all that apply.)

1 CANNED GOODS
2 FRESH FRUITS AND VEGETABLES
3 FRESH MEATS
4 FROZEN MEAT
5 FRESH DAIRY
6 STAPLES
7 SNACK FOODS
8 BAKERY PRODUCTS

NAME OF OTHER SUPPLIER _____
LOCATION OF SUPPLIER _____

Goods purchased from this supplier: (CIRCLE ALL THAT APPLY.)

1 CANNED GOODS
2 FRESH FRUITS AND VEGETABLES
3 FRESH MEATS
4 FROZEN MEAT
5 FRESH DAIRY
6 STAPLES
7 SNACK FOODS
8 BAKERY PRODUCTS

Q. 17. For the following categories of food please indicate how frequently you reorder that type of food from your supplier(s) and what form of transportation is used to ship them.

(INTERVIEWER, HAND THE MANAGER A CARD WITH THE POSSIBLE **RESPONSES, AS ARE LISTED BELOW. FOR** EACH TYPE OF GOOD, IF **THE PRODUCT IS CARRIED IN THE STORE,** INDICATE THE MODE OF **DELIVERY.)**

Canned Goods:

1 NEVER, I **DON'T CARRY ANY CANNED GOODS IN MY STORE.**
2 ONCE A YEAR.
3 TWO TO SIX TIMES A YEAR.
4 SEVEN TO TWELVE TIMES A YEAR.
5 TWICE A MONTH.
6 ONCE WEEK OR MORE.

1 DELIVERY OVER LAND
2 DELIVERY VIA WATER
3 AIR DELIVERY, VIA POST OFFICE
4 AIR DELIVERY, NON POST OFFICE

Fresh fruits and vegetables:

1 NEVER, I **DON'T CARRY ANY FRESH FRUITS IN MY STORE.**
2 ONCE A YEAR.
3 TWO TO SIX TIMES A YEAR.
4 SEVEN TO TWELVE TIMES A YEAR.
5 TWICE A MONTH.
6 ONCE A WEEK OR MORE.

1 DELIVERY OVER LAND
2 DELIVERY VIA WATER
3 AIR DELIVERY, VIA POST OFFICE
4 AIR DELIVERY, NON POST OFFICE

Fresh meat:

1 NEVER, I DON'T CARRY ANY FRESH MEAT IN MY STORE.
2 ONCE A YEAR.
3 TWO TO SIX TIMES A YEAR.
4 SEVEN TO TWELVE TIMES A YEAR.
5 TWICE A MONTH.
6 ONCE A WEEK OR MORE.

1 DELIVERY OVER LAND
2 DELIVERY VIA WATER
3 AIR DELIVERY, VIA POST OFFICE
4 AIR DELIVERY, NON POST OFFICE

Frozen meat:

1 NEVER, I DON'T CARRY ANY FROZEN MEAT IN MY STORE.
2 ONCE A YEAR.
3 TWO TO SIX TIMES A YEAR.
4 SEVEN TO TWELVE TIMES A YEAR.
5 TWICE A MONTH.
6 ONCE A WEEK OR MORE.

1 DELIVERY OVER LAND
2 DELIVERY VIA WATER
3 AIR DELIVERY, VIA POST OFFICE
4 AIR DELIVERY, NON POST OFFICE

Fresh dairy products (for example, milk, cheese, ice cream):

1 NEVER, I DON'T CARRY ANY FRESH DAIRY PRODUCTS IN MY STORE.
2 ONCE A YEAR.
3 TWO TO SIX TIMES A YEAR.
4 SEVEN TO TWELVE TIMES A YEAR.
5 TWICE A MONTH.
6 ONCE A WEEK OR MORE.

1 DELIVERY OVER LAND
2 DELIVERY VIA WATER
3 AIR DELIVERY, VIA POST OFFICE
4 AIR DELIVERY, NON POST OFFICE

Staples (for example, flour, sugar, tea, salt, lard):

1 NEVER, I DON'T CARRY ANY STAPLES IN MY STORE.
2 ONCE A YEAR.
3 TWO TO SIX TIMES A YEAR.
4 SEVEN TO TWELVE TIMES A YEAR.
5 TWICE A MONTH.
6 ONCE A WEEK OR MORE.

1 DELIVERY OVER LAND
2 DELIVERY VIA WATER
3 AIR DELIVERY, VIA POST OFFICE
4 AIR DELIVERY, NON POST OFFICE

Snack food (for example, potato chips, candy, cookies, soda pop):

1 NEVER, I DON'T CARRY ANY SNACK FOOD IN MY STORE.
2 ONCE A YEAR.
3 TWO TO SIX TIMES A YEAR.
4 SEVEN TO TWELVE TIMES A YEAR.
5 TWICE A MONTH.
6 ONCE A WEEK OR MORE.

1 DELIVERY OVER LAND
2 DELIVERY VIA WATER
3 AIR DELIVERY, VIA POST OFFICE
4 AIR DELIVERY, NON POST OFFICE

Bakery Products (for example, bread):

1 " NEVER, I **DON'T CARRY ANY BAKERY PRODUCTS IN MY** *STORE.*
2 ONCE A YEAR.
3 TWO TO SIX TIMES A YEAR.
4 SEVEN TO TWELVE TIMES A YEAR.
5 TWICE A MONTH.
6 ONCE A WEEK OR MORE.

1 DELIVERY OVER LAND
2 DELIVERY VIA WATER
3 AIR DELIVERY, VIA POST OFFICE
4 AIR DELIVERY, NON POST OFFICE

The next few questions ask about two aspects of marketing: pricing and promotions.

Q. 18. Do you do any advertising?

0 NO --- Go to Question 19.
1 YES

Could you please describe where you advertise, and what you advertise. _____

_____

_____

_____

Do you have any examples of the type of advertising that we may have?

0 NO
1 YES

Q. 19. Do you run sales on any of your food items?

0 NO
1 YES

_____

_____

Q. 20. Do you discount damaged merchandise (food)?

0 NO
1 YEs

_____

_____

_____

Q. 21. How do you determine the prices you charge for food? Does your policy vary by type of good? (eg. perishables versus nonperishables, snack foods)

(INTERVIEWER, DO NOT PROMPT THIS ANSWER. THE CATEGORIES LISTED BELOW ARE ONLY A FEW POSSIBILITIES. IF THE STORE MANAGER MENTIONS ONE OR MORE OF THESE INDICATE IT BELOW AND INDICATE WHAT GOODS THE MARKUP STRATEGY APPLIES TO. THE CATEGORIES ARE ONLY LISTED HERE TO TRY TO ACHIEVE SOME CONSISTENCY IN CODING LATER.)

1 WHOLESALE COST PLUS _ % MARKUP

2 WHOLESALE COST + TRANSPORTATION COST + _ % MARKUP

3 LAID DOWN COST (WHOLESALE COST + TRANSPORTATION AND HANDLING COST)

4 OTHER--PLEASE SPECIFY_____

TYPE OF MARKUP	TYPE OF GOOD
1 OR 2 OR 3 OR 4	NON-PERISHABLES
1 OR 2 OR 3 OR 4	PERISHABLES
1 0 R 2 O R 3 O R 4	_____
1 OR 2 OR 3 OR 4	_____
1 OR 2 OR 3 OR 4	_____

In the next set of questions I'll ask questions about the store and your background to help interpret the results. Your response will remain confidential. First we'd like to try to understand some of the expenses that you incur, in running your store.

Q. 22. Do you suffer any of the following losses? If SO, how much?

NONE	A LITTLE	SOME	A LOT	
0	1	2	3	SPOILAGE
0	1	2	3	FREEZER BURN
0	1	2	3	MOLD
0	1	2	3	SHOPLIFTING
0	1	2	3	SLOW OR NO PAYMENTS ON CREDIT ACCOUNTS
0	1	2	3	OTHER, PLEASE SPECIFY _____

Could you please estimate a dollar value for the above losses?

$_____ PER MONTH , or PER YEAR (Circle correct time.)

Q. 23. Please estimate the store's operating expenses for the following categories:

(INTERVIEWER, PLEASE INDICATE WHETHER THESE ARE MONTHLY OR YEARLY FIGURES.)

$_____ UTILITIES
$_____ LABOUR
$_____ RENT OR EQUIVALENT

The evidence (population) seems to indicate that the size of the market for food is quite small in many of the Northern communities. In each of the communities that we are studying in detail, we'd like to try to estimate the actual size of the food market in dollars. This information, combined with the customer's reported behaviour, may give us an idea as to how much consumers rely on the local retail stores for their food needs. In order to try to see if there is any relationship between certain characteristics of the community, and the size of the market for food, we need the answer to the following questions.

Q. 24. What was the total gross sales of food, in your store, last year?

$_____

Q. 25. What is your estimate of your firm's market share in your community? (That is, what percent of the community's retail food dollars is spent in your retail food store?)

_____percent

Q. 26. Please indicate the amount of floor space used for each of the following. (Indicate what unit of measure is being used.)

_____ total retail area for ALL products in store

_____ retail space for food products

_____ total inventory storage area for all products

_____ inventory space for food products

_____ total freezer space (retail and storage)

_____ total cooler (refrigerator) space (retail and storage)

Q. 27. How many different food items do you estimate that your store carries? (INTERVIEWER, A BEST GUESS IS ABOUT ALL WE'LL BE ABLE TO GET. IF THERE IS MORE THAN ONE FACING OF AN ITEM IT SHOULD ONLY BE COUNTED ONCE.)

APPROXIMATELY_____FOOD ITEMS

Q. 28. On average, over the last year, what was the number of full-time employees (30 hours or more per week) in your store? (Please include yourself and any other family members that work full-time in the store. Circle the correct category.)

1 ONE--I AM THE ONLY FULL-TIME EMPLOYEE
2 TWO--MYSELF AND ONE OTHER FULL-TIME EMPLOYEE
3 THREE--MYSELF AND TWO OTHER FULL-TIME EMPLOYEES
4 MORE THAN THREE (PLEASE SPECIFY) _____

Q. 29. In addition to the full-time employees listed in the last question, how many part-time employees, in an average week, work IN your store? (Do not include temporary employees hired to unload the barge, or for other similar work. Do include any family members which regularly work part-time in your store.)

0 ZERO
1 ONE
2 Two
3 THREE OR MORE (PLEASE SPECIFY) _____

Q. 30. How many years of experience do you have in the retail trade?

_____YEARS

Q. 31. Have you had any formal training in retai 1 trade? (Please circle all categories that apply.)

1 ON THE JOB TRAINING
2 RETAIL TRADE TRAINING AT TECHNICAL SCHOOL
3 OTHER: _____
4 NONE

Finally,

Q. 32. Which of the following best describes the ownership of this store? (INTERVIEWER, READ THE LIST BELOW AND CIRCLE THE NUMBER THAT APPLIES)

1 COOPERATIVE ASSOCIATION
2 THE BAY---------- TURN PAGE
3 FAMILY OWNED INDEPENDENT---------- TURN PAGE
4 OTHER INDEPENDENTLY OWNED STORE (NOT OWNED BY A CHAIN)-TURN PAGE
5 OTHER (PLEASE SPECIFY) _____----TURN PAGE

Q. 33. As a cooperative, what happens to the Profits of operating the store? (BELOW ARE ONLY A FEh POSSIBILITIES, PLEASE EXPLAIN THE RESPONSES IN THE SPACE BELOW.)

1 They are divided among our members
2 They are put back into the store
3 They are used to support community projects

_____

_____

_____

Q. 34. Does the cooperative provide any benefit or service to the community, that has not yet been discussed? (Please specify.)

_____

_____

_____

Is there anything else you would like to tell us about the food retailing structure in your community, problems associated with being a food retailer in the North, or your customers?

Also, any comments you wish to make that you think may help us in future efforts to understand food costs in the North will be appreciated, either here or in a separate letter.

This completes the survey. I wish to thank you for completing the questionnaire. Your contribution is sincerely appreciated. If you would like a copy of a summary of the results from this survey, please let me know and I will see to it that you get it. We will see to it that you get it.

C.2 PRICE LISTING WITH QUALITY DEFINITIONS

NORTHERN RETAILING FOOD SURVEY

FOOD PRICE SURVEY

Product List

The attached list of food items is to be completed for each retail food store in the six designated communities.

TB-/CT-REG.B3505-20

FOOD PRICE LIST

INTERVIEWER:

1) MARK THE QUALITY OF THE FOOD IN THE FIRST COLUMN CIRCLE P FOR POOR, OK FOR OKAY, AND G FOR GOOD.

2) MARK THE PRICE IN THE SECOND COLUMN. IF AN ITEM OUT OF STOCK MARK THE PRICE AS 888.88 IF THE PRODUCT IS NOT CARRIED IN THE STORE MARK IT 999.99)

3) IF THE ITEM HAS ONLY ONE PRICE CIRCLE S , IF IT HAS TWO OR MORE TICKETS, CIRCLE D .

4) AT THE END OF THE SURVEY, RECORD OBSERVATIONS REGARDING PRICE SPECIALS AND THE CONDITION OF THE STORE.

canned *Goods*

P OK G $____.___ Canned Peas, choice, York, Green Giant (398 ml, 14 oz) D S

P OK G $____.___ Baked Beans with Pork, Libby (398 ml, 14 oz.) D S

P OK G $____.___ Chicken Noodle Soup, Campbell's (284 ml, 10 oz.) D S

P OK G $____.___ peach halves, choice, Del Monte (398 ml, 14 oz.) D S

P OK G $____.___ Canned butter, (454 g, 1 lb.) D S

P OK G $____.___ Evaporated milk, Carnation (385 ml) D S

P OK G $____.___ Apple juice, Sunrype (1 litre box) D S

Fresh Fruits (Circle lb or kg, whichever applies.)

P OK G $____.___ per lb. (or kg) oranges D S

P OK G $____.___ per lb. (or kg) apples D S

P OK G $____.___ per lb. (or kg) bananas D S

Fresh Vegetables (Circle lb or kg, whichever applies)

P OK G $____.___ per lb (or kg) potatoes (White) D S

P OK G $____.___ per lb (or kg) onions (small cooking) D S

P OK G $____.___ per lb (or kg) carrots D S

Fresh Meat (Circle lb or kg, whichever **applies**)

P OX G $. per lb (or kg) beef, rump roast, Grade A D S
P OK G $. per lb (or kg) beef, medium ground D S
P OX G $. per lb (or kg) pork chops, center cut, Grade A D S
P OX G $. per lb (or kg) whole chicken D S

Frozen **Meat**

P OX G $. per lb (or kg beef), medium ground D S
P OK G $. per lb (or kg) whole chicken D S

Fresh Dairy Products

P OK G $. butter, fresh, (454 g, 1 lb) D S
P OK G $. eggs, Grade A, large (1 dozen) D S
P OK G $. milk, 2 % (2 litres) D S

Staples

P OK G $. flour, all purpose, Five Roses (2.5 kg) D S
P OK G $. sugar (2 kg) D S
P OK G $. salt, Sifto or Windsor (1 kg) D S
P OK G $. tea, bagged, Tetley or Red Rose (227g) D S
P OK G $. lard, Tenderflake (454 g, 1 lb) D S

Snack Foods

P OK G $. soft drink, canned, Coke or Pepsi (280 ml) D S
P OK G $. potato chips, Hostess (200g) D S
P OK G $. frozen pizza, McCain's (650 g, 23 oz) D S
P OK G $. Premium Plus crackers (450 g) D S

Bakery Products

P OK G $. bread, fresh baked (675 g) D S
P OK G $. corn flakes, Kellog's (350 g) D S

Miscellaneous Other

P OK G $. peanut butter, Kraft (500 g) D S
P OK G $. salad dressing, Miracle Whip (1 litre) D S
P OX G $. strawberry jam, pure, Nabob or Smith's (250 ml) D S
P OX G $. macaroni and cheese dinner, Kraft (225 g) D S
P OK G $. frozen peas, fancy assorted (1 kg) D S
P OX G $. powdered milk, Carnation or Alpha (500 g) D S

STORE SPECIALS :

Taking into account all features of the store (cleanliness, variety, service, quality of offerings, etc.) please circle the number that best describes the condition of the store. Please elaborate in the space below.

1 - EXCELLENT 2-OKAY 3-POOR

QUALITY DEFINITIONS

Canned Goods

Poor	Okay	Good
-label missing	-slightly dented	
-rusty can	-label torn, not missing	
-badly dented can		

Fresh *Fruits and* Vegetables

Poor	Okay	Good
-rotten	-over ripe '	
-moldy	-bruised	

Fresh Meat

Poor	Okay	Good
-spoiled	-slightly discolored	
-moldy	-damaged packaged	
-badly discolored	-label missing	

Frozen Meat

Poor	Okay	Good
-extensive freezer burn	-minor icing	
-covered with ice	-ripped package	

Fresh Dairy

Poor	Okay	Good
-more than 10 days past due	-less than 10 days past due	
-damaged packaging		
-rancid		
'eggs, cracked, broken		

Staples

Poor	Okay	Good
-badly damaged	-slightly damaged	
'very OLD		

Snack Foods

Poor	Okay	Good
-ripped packages	-old, dusty	
-moldy		

Bakery Products

Poor	Okay	Good
-missing wrapper	-torn wrapper	
-moldy		

Miscellaneous

Poor	Okay	Good
'jar cracked	-label torn	
-label missing	-scratches, minor damage	
-discolouration		

APPENDIX D. CONSUMER INTERCEPT SURVEY

APPENDIX D. CONSUMER INTERCEPT SURVEY

NORTHERN RETAILING FOOD SURVEY

CONSUMERS

Inter view Guide

The questions that appear on the following pages are to be used to guide the interview with the consumer. If any additional information is provided by the consumer please record all information.

Instructions for the Consumer Interviews

Approach the shopper as he/she is leaving the retail food store. Explain that a survey is being conducted regarding the food stores in the North and that their community has been selected as one to be studied in detail. Ask him/her if he/she would be willing to answer some questions regarding his/her shopping habits.

INTERVIEWER: ANSWER THE **NEXT QUESTION ONLY IF THE CONSUMER** DOES NOT **IRECTLY** PURCHASE ANY FOOD.)

. ***10.*** Why don't you bulk purchase any food?

(DON'T PROMPT THE ANSWER, ONLY MARK WHATEVER THEY SAY, OR IF THE CATEGORY IS MISSING, PLEASE WRITE IT IN.)

1 IT COSTS TOO MUCH MONEY
2 I DON'T HAVE ENOUGH MONEY
3 I'M NOT A **MEMBER OF** THE **LOCAL BUYING GROUP**
4 I DO NOT HAVE SUFFICIENT STORAGE FACILITIES
5 I WOULD **HAVE** TO **SHARE** THE FOOD WITH OTHERS **WHO** COULDN'T PAY FOR IT
6 I **DON'T PLAN AHEAD**
7 **LANGUAGE PROBLEMS**
8 I DON'T LIKE DIRECT PURCHASES/I PREFER IN-STORE SHOPPING
9 OTHER _____

. *11.* Are there any problems buying food in this community?

(INTERVIEWER: DO NOT PROMPT THE ANSWERS. PLEASE MARK ZERO, IF THE **ITEM 1S NOT MENTIONED. HAVE THE CONSUMER RANK ORDER ALL ITEMS HE LISTS. THE WORST PROBLEM SHOULD BE GIVEN A RANK OF 1.)**

_ PRICES ARE TOO HIGH
_ CERTAIN GOODS ARE UNAVAILABLE (PLEASE SPECIFY) _____
_ SPOILAGE
_ QUALITY IS TOO LOW
_ OTHER
_ OTHER _____

21. * What is your household's total yearly income? (INTERVIEWER: PLEASE HAND THE RESPONDENT A CARD LISTING THE INCOME LEVELS AS ARE SHOWN BELOW.) Please look at this card and indicate which category (0 through 9) best describes the income level of the household.

0 LESS THAN $4,999
1 $5,000 to $9,999
2 $10,000 TO $ 14,999
3 $15,000 to $19,999
4 $20,000 TO 29,999
5 $30,000 TO 39,999
6 $40,000 TO $49,999
7 OVER $50,000

22.* What is the highest grade that you completed in school? (INTERVIEWER: CIRCLE IN THE APPROPRIATE CATEGORY.)

0 NO FORMAL EDUCATION
1 SOME GRADE SCHOOL
2 COMPLETED GRADE SCHOOL
3 SOME HIGH SCHOOL
4 COMPLETED HIGH SCHOOL
5 SOME COLLEGE
6 COMPLETED COLLEGE
7 SOME GRADUATE WORK
8 GRADUATE" DEGREE

This completes the survey. I wish to thank you for completing the uestionnaire. Your contribution is sincerely appreciated. Would ou like for us to send a copy of the results to you when they are mpleted? (INTERVIEWER: IF THE RESPONDENT WANTS A COPY PLEASE AKE DOWN THEIR NAME AND ADDRESS ON A SEPARATE SHEET OF PAPER.)

E.2 FRESH FRUITS AND VEGETABLES

Price

Community	Low	Fair	High
Frobisher Bay	1	4	21
Cape Dorset	0	3	18
Broughton Island	0	2	11
Norman Wells	1	0	16
Fort Norman	0	6	4
Fort Rae	1	4	1

Selection

Community	Poor	Adequate	Excellent
Frobisher Bay	5	10	12
Cape Dorset	5	10	4
Broughton Island	2	8	1
Norman Wells	0	9	5
Fort Norman	1	8	0
Fort Rae	2	4	0

Quality

Community	Poor	Adequate	Excellent
Frobisher Bay	8	12	7
Cape Dorset	5	10	4
Broughton Island	0	7	1
Norman Wells	0	6	7
Fort Norman	1	9	0
Fort Rae	1	4	1

Note: The numbers listed above are the actual number of consumers giving each of the responses in each of the communities.

E.6 SNACK FOODS

Price

Community	Low	Fair	High
Frobisher Bay	2	8	16
Cape Dorset	0	8	13
Broughton Island	0	3	10
Norman Wells	0	2	14
Fort Norman	0	10	0
Fort Rae	0	6	0

Selection

Community	Poor	Adequate	Excellent
Frobisher Bay	2	11	14
Cape Dorset	3	13	3
Broughton Island	3	6	2
Norman Wells	1	9	3
Fort Norman	0	8	1
Fort Rae	0	4	2

Quality

Community	Poor	Adequate	Excellent
Frobisher Bay	4	14	9
Cape Dorset	1	14	4
Broughton Island	0	6	2
Norman Wells	0	6	6
Fort Norman	0	9	1
Fort Rae	0	4	2

Note: The numbers listed above are the actual number of consumers giving each of the responses in each of the cunmunities.

Fort Simpson.	T J Grocery Ltd.**		Indpt
Fort Smith.	Hudsons Bay Co Ltd.	Rcvd	Chain
Fort Smith.	Kaesers Stores Ltd **		Indpt
Fort Smith.	North Home Supplies**		Indpt
Fort Smith.	Way-Bar Holdings Ltd.	ADDRESSEE UNKNOWN	
Frobisher Bay.	Amarok H T A Country Food Store	Rcvd	Indpt
Frobisher Bay.	Arctic Ventures, Ltd.	Rcvd	Indpt
Frobisher Bay.	Hudson's Bay Co Ltd.	Rcvd	Chain
Frobisher Bay.	Ikaluit Candy Store Ltd.	Rcvd	Indpt
Frobisher Bay.	The Purple Daisy Ltd.	Rcvd	Indpt
Gjoa Haven.	Hudson's Bay Co Ltd.	Rcvd	Chain
Gjoa Haven.	Kekertak Co-op Assoc. Ltd.	ADDRESSEE UNKNOWN	
Grise Fiord.	Grise Fiord Eskimo Co-op.	Rcvd	Coop
Hall Beach.	Hall Beach Co-op.		Coop
Hall Beach.	Hudson's Bay Co Ltd.	Rcvd	Chain
Hay River.	Godwin's Super 'A' Foods	Rcvd	Indpt
Hay River.	Hay River Meats Ltd.		Indpt
Hay River.	Red Rooster Food Store.	Rcvd	Indpt
Hay River.	Smiley's	Rcvd	Indpt
Holman.	Hudson's Bay Co Ltd.	Rcvd	Chain
Igloolik.	Hudson's Bay Co Ltd.	Rcvd	Chain
Igloolik.	Igloolik Co-op Ltd.	Rcvd	Coop
Inuvik.	End of the Road Co-op. *	DOES NOT EXIST	
Inuvik.	Hudson ' S Bay Co Ltd.	Rcvd	Chain
Inuvik.	Inuvik Inn Ltd.	Rcvd	NOT FOOD RETAILER
Inuvik.	Lake Resources	ADDRESSEE UNKNOWN	
Inuvik.	Ned & Agnes Kayotuk		Indpt

F.2 MAPS OF FOOD RETAILERS IN THE NORTHWEST TERRITORIES

APPENDIX G. PRODUCT AVAILABILITY BY COMMUNITY

Product	Frobisher Bay	Cape Dorset	Broughton Isl.	Fort Rae	Norman Wells	Fort Norman
Canned Peas	3	3	1	3	1	1
Baked Beans	3	2	1	3	1	1
soup	3	2	2	3	1	1
Peach Halves	3	3	1	3	1	1
Canned Butter	0	0	0	1	1	1
Evaporated Milk	3	3	2	3	1	1
Apple Juice	3	1	1	3	1	1
Oranges	4	2	1	2	1	1
Apples	3	2	1	3	1	1
Bananas	3	0	1	1	1	1
Potatoes	3	1	1	2	1	1
Onions	3	1	1	3	1	1
Carrots	3	1	1	1	1	1
Beef Roast	1	0	0	0	0	0
Ground Beef	1	0	0	0	0	0
Pork Chops	1	0	0	0	0	0
Whole Chicken	0	0	0	0	0	0
Frozen Gr. Beef	2	2	1	3	1	1
Frozen Chicken	2	0	1	1	1	0
Fresh Butter	3	3	1	3	1	1
Dozen Eggs	4	3	1	3	1	1
2% Milk	3	1	1	3	1	1
Flour	3	3	2	3	1	1
Sugar	3	3	2	3	1	1
Salt	3	3	2	3	1	1
Bagged Tea	3	3	2	3	1	1
Lard	3	3	2	3	1	1
Soft Drinks	4	3	2	3	1	1
Potato Chips	4	2	2	3	1	1
Frozen Pizza	3	1	1	2	1	0
Crackers	2	2	2	3	1	1
Bread	4	3	2	3	1	1
Corn Flakes	3	3	2	3	1	0
Peanut Butter	3	3	1	3	1	1
Salad Dressing	2	2	1	3	1	0
Strawberry Jam	3	1	1	3	0	1
Macaroni	3	3	1	3	1	1
Frozen Peas	3	1	1	1	1	0
Powdered Milk	3	3	1	3	1	1
Food Stores	5*	3	2	3	1	1

*Two of the five are specialty stores: country food and candy.

The numbers listed for each product for each community are the number of stores in that community which had the product on the shelves for customer purchase during the researchers' visits.