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ISBN 0-315-53791-4

The Southernization of Food Habits on Baffin Island, 1955-1985

by Leslie Cole

A thesis presented to the School of Graduate Studies,  
University of Ottawa, in partial fulfilment of the  
requirements of the degree of Master of Arts in Geography

University of Ottawa, March 1988

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## Abstract

This study examines the influence of southern urban dwellers and their institutions on the food habits of Inuit in the Eastern Canadian arctic. It is an exploration of the process of acculturation, focusing on food habits as a critical indicator of cultural change.

The historical evolution of four Baffin Island communities is reviewed with particular emphasis on the efforts of southern government workers to modernize Inuit lifestyles from the 1950s to the 1970s. Southerners' indirect and unintentional demonstration of non-nutritious food habits is found to be more important than their direct efforts to improve nutrition.

A "sudicity" index is developed to measure the degree of acculturation in each community at several points in time. The sudicity values for the four communities are compared with food habits for 1961, 1971 and 1981. The limits and value of the sudicity index are discussed. Common southern influences, such as welfare rations and school lunches, which affected food habits but are not included in the index are explored. Persistence of a proportion of country foods in the diet of many Inuit families is recognized as a form of resistance to acculturation.

The study finds that southerners and their institutions were significant influences in the increase of non-nutritious carbohydrates in Inuit diets. Satellite television, as the most recent and potentially most powerful promoter of consumer culture, is seen as a serious threat to the Inuit's ability to continue to resist complete acculturation to southern food habits.

## Résumé

Cette étude examine l'influence des habitants des villes de sud et de leurs institutions sur les habitudes alimentaires des Inuits de l'arctique Canadien de l'est. Il s'agit d'une exploration du processus de modernisation centré sur les habitudes alimentaires comme indicateur de la transformation culturelle.

L'évolution historique de quatre communautés de l'île de Baffin est revue en accordant une importance particulière aux efforts des fonctionnaires gouvernementaux pour moderniser le style de vie des Inuits entre les années 1950 et 1975. Le témoignage alimentaire indirect et inconscient des gens de sud s'avère être une influence plus importante que les efforts intentionnels pour améliorer la nutrition.

Un indice de "sudicité" a été développé pour mesurer le degré d'acculturation de chaque communauté à divers moments dans le temps. Les valeurs de sudicité des quatre communautés ont été mises en relation avec les habitudes alimentaires en 1961, 1971 et 1981. S'ensuit une discussion de l'utilité et des limites de l'indice de sudicité.

Les influences sudistes communes, telles les rations fournies par l'assistance sociale et les déjeuners scolaires qui influencent les habitudes alimentaires mais ne sont pas incluses dans l'indice, sont étudiées. On identifie la persistance d'une certaine proportion de nouritures indigènes dans l'alimentation de plusieurs familles Inuits comme une forme de résistance à la modernisation.

En outre, cette étude constate que l'influence des gens de sud et de leurs institutions joue de façon significative dans l'augmentation des hydrates de carbone non nutritifs dans la diète des Inuits. Et la télévision par satellite en tant que promoteur le plus récent et possiblement le plus puissant de la culture de consommation, est perçu comme une menace sérieuse pour la capacité de continuer à résister à l'acculturation alimentaire complète.

## Acknowledgements

There are a number of people whose assistance and support was vital to the successful completion of this study and I would like to thank them here.

I am grateful to Graham Rowley, of Carleton University, for his enthusiasm about my study and suggestions of critical unmeasurable influences based on his long personal experience in the North.

I am thankful to Roger Roberge, of the University of Ottawa, for his assistance at a critical stage in my work and his guidance in my struggle with the paucity of comparable Northern statistics.

To my supervisor, Rolf Wesche, I would like to express special thanks for his support through the long process of writing and for his faith in my ability to make sense of a difficult and unwieldy issue.

I would also like to thank my employer, David Kardish at CUSO, who was generous and flexible in allowing me weeks off work when I needed them to write chapters.

Finally I thank my husband, John Crump, for his unwavering support from the beginning, tireless proofreading and unselfish sacrificing of computer time so that my work could be completed.

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## List of Acronyms

- CBC - Canadian Broadcasting Corporation
- DEW - Distant Early Warning
- DIAND - Department of Indian Affairs and Northern  
Development
- DNANR - Department of Northern Affairs and National  
Resources
- GNWT - Government of the Northwest Territories
- NSO - Northern Service Officer
- NWT - Northwest Territories
- RCMP - Royal Canadian Mounted Police
- USAF - United States Air Force

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## Chapter 1

### Introduction

Food habits are a fundamental element of culture and are not easily influenced by contact with another society. Because of this, changes in food habits are a significant indicator of acculturation.

The food habits of traditional cultures are defined by their environments. Farming cultures eat what they grow. Hunting and gathering societies eat what they can procure from the forest or the sea.

The food habits of industrial societies are more complex because most food consumers do not produce their own food and must acquire their food with cash. The variety of foods available depends more on income and on transportation capabilities than on the environment. And food habits may be the result of a number of factors, of which in recent times, environment seems to be least limiting. However one of the common traits of modern foods is convenience. Foods which require little or no preparation and satisfy hunger quickly (such as refined carbohydrates) are trademarks of modern Western (and North American) society. Thus, as white bread was the mark of the upper classes in the early industrial society, softdrinks and hamburgers are the marks of a modern Western consumer culture.

While local culture has historically been seen as the primary determinant in choice of foods, the worldwide penetration of Westerners as development workers on a social front, and of their advertising and television on a commercial front, has disseminated an alluring image of North American culture and food habits since the 1950s.

Through both fronts, a process of what might be seen as the homogenization of culture has begun. "Coca-cola" is a word which now is part of every language. McDonald's hamburgers are sold in dozens of countries around the globe.

Unfortunately, the food habits of the dominant culture are not the healthiest in the world. In the 1970s, malnourished babies in Zambian hospital wards were diagnosed as "Fanta babies" on their medical charts because their mothers believed the advertising billboards which showed prosperous white mothers and children drinking the softdrink, Fanta. They had spent their small incomes on bottles of Fanta instead of feeding them breastmilk or cheaper and more nutritious local foods. [Lappé & Collins 1977]

Similarly the foods of North American consumer culture have contributed to a deterioration in the health of traditional arctic communities. In the late 1960s and through the 1970s, Canadian Inuit developed health problems which could be linked to a change in their food habits. Decaying teeth, heart problems, diabetes and ear infections were all new diseases which had appeared with the increase of carbohydrates and sugars in their diet.

The lure of the consumer culture is surprisingly powerful and pervasive, given the many negative side effects which accompany it. Food habits are an element of culture considered one of last to give in to acculturation, yet they appear to have been profoundly undermined by the spread of the dominant Western consumer culture. It is therefore particularly revealing to examine the process of change in food habits of a society which has been transformed from traditional producer society to modern consumer society since WWII.

This thesis will examine this process of change in Inuit food habits in the Canadian eastern arctic from the 1950s to 1985 in an attempt to gain a better understanding of the powerful lure of the "southern" consumer lifestyle. The author will explore both direct and indirect influences of southern consumer culture on four sample communities on Baffin Island in the Northwest Territories through this period.

The objective of this study is to examine the influence southerners and their institutions have had on the food habits of Canadian Inuit. The study will employ both a formal "sudicity" index to measure degrees of southernness in four sample communities and a less formal historical review of the changes in each community over the three decades. The sudicity index is adapted from Louis Edmond Hamelin's general nordicity index but has been designed more specifically to gauge degrees of acculturation for the purpose of examining changing societies. The case studies are chronological, descriptive accounts of Inuit lifestyle and food habits in communities of varying sizes and degrees of isolation. The community profiles describe direct attempts of teachers, welfare officers, southern government administrators and southern policy makers to change Inuit life in these decades and suggest some of the indirect ways in which they contributed to food habit changes. By combining these two approaches, the researcher will be able to compare sudicity at three points in time while using the case studies to explain the context and anomalies not evident from sudicity values.

The researcher has gone to the archival records of the federal Department of Indian Affairs and Northern Development as well as the field studies of economists, anthropologists, and nutritionists to gather observations on the food habits of Inuit families in the 1950s and 1960s. Their records shed some light on the attitudes and

expectations of southern government workers in the North during this period while revealing ways which they contributed to changes in Inuit lifestyle. Government and academic reports on the geography, economy, communications, nutrition have provided information about Inuit food habits in the 1970s and 1980s.

In reconstructing this process of change, the researcher has faced the difficult challenge of using a wide variety of sources, very few of which were written for the purpose of recording changes in food habits. Fewer still are the recorded views of the people who have undergone this change. The author has had to piece together the history of food habits in these communities from fragments of information in extensive collections of government and academic records. However, it must be recognized that these records are coloured by government policies and academic theories of their time. There are many instances where a comment or suggestion has been made by a government officer in a community and no response or follow-up has been preserved. A person with particular interest in food may have provided a detailed description for one community over the year or two they were there, while a worker in another community, with no interest in food, may have only revealed information in asides or casual comments. To some extent, the varying amounts of information available about each community, have dictated the depth of explanation the researcher is able to provide about particular influences. The lack of standardized data has also severely constrained the extent of formal comparison of similarity possible among communities.

The study will begin with two chapters which review relevant literature in a variety of fields and outline the general pattern of food habit change in northern Canadian native communities. A number of theories and frameworks which might be employed in examining the process of food habit change

are reviewed and a general sudicity index is developed to highlight significant southern influences.

The researcher then looks at each community in depth showing the events and influences which may have contributed to food habit changes in four sample communities on Baffin Island. The sudicity of the four communities at three points in time is compared in a subsequent chapter. The study concludes with a critique of the sudicity index used and discussion of significant influences not measured by the index.

## Chapter 2

### Northern Nutrition and Food Habits

I like the white man's food but I think the old food was better for Eskimos. In the old days we had more food from animals and we didn't get sick so much. We ate the food raw. We used to eat seal, whale, caribou, ducks and ptarmigan all raw, though we used to cook the goose, and goose cooked is very good. We also used to cook the polar bear, though some people ate it raw.

Pitseolak, Cape Dorset, 1971

Nutritionists and anthropologists around the world have observed significant changes in food habits as economies change. For example, subsistence farmers in less developed countries generally have diets based on cereals and legumes which they grow themselves [Behar 1978]. However, when a wage economy is introduced, bread (made from imported wheat) or refined and imported rice is also often introduced to rural households. These new imported and processed foods are often more expensive and less nutritious than their traditional subsistence diet [Hoyt 1965].

Hunting and gathering societies in northern Canada traditionally lived on a diet composed almost entirely of animal proteins from wild game and fish which they were able to acquire for themselves. In most areas, carbohydrates, in the form of cereals or grains, did not appear in the native diet until they were incorporated into the fur trading economy in the 1920s and 1930s [Schaefer 1971, Brody 1975]. However, in the parts of the eastern and western arctic where Inuit came in contact with whalers during the latter half of the 19th century, these staples were introduced earlier [Duffy 1978]. The new staples, which included

imported flour, sugar, lard and tea, were given in exchange for furs or labour and formed only a minor part of a primarily meat and fish diet until cash was introduced after WW II.

Modern analysis of the vitamin, mineral and protein content in the traditional Inuit diet has shown that these foods provided a healthy balance of all essential food components [Sinclair 1953, Draper 1977]. Vitamins like A and C are found in greater quantities in raw wild fish and game than in the domesticated and cooked beef and processed meats of southern urban diets [Schaefer 1959, Hoppner et al. 1978]. Protein content in wild meats is considerably greater than in domesticated while fat content is significantly lower [Canada, D.I.A.N.D. 1978]. (see chart) Draper (1977) reported that the all-meat diet was extremely low in carbohydrate content and provided only 10 grams of glucose per 2500 calories eaten.

Nutritionists and physicians working in the arctic before 1950 reported that there was no evidence of arteriosclerosis, adult onset diabetes, hypertension or dental caries (the "civilized" diseases common in southern Canada) among Inuit eating a traditional diet [Sinclair 1953, Schaefer 1959, Draper 1977].

While the Eskimo was beset by serious nutritional crises, these problems arose not from deficiencies in the quality of his native diet but from periodic breakdowns in his food supply as a result of natural forces. He required no knowledge of nutritional principles in order to be well nourished. He ate a balanced diet for one simple reason: there was little else to eat. [Draper 1977, p 315]

Figure 2:1 Protein and Fat Content of Meats and Fish

Northern Foods

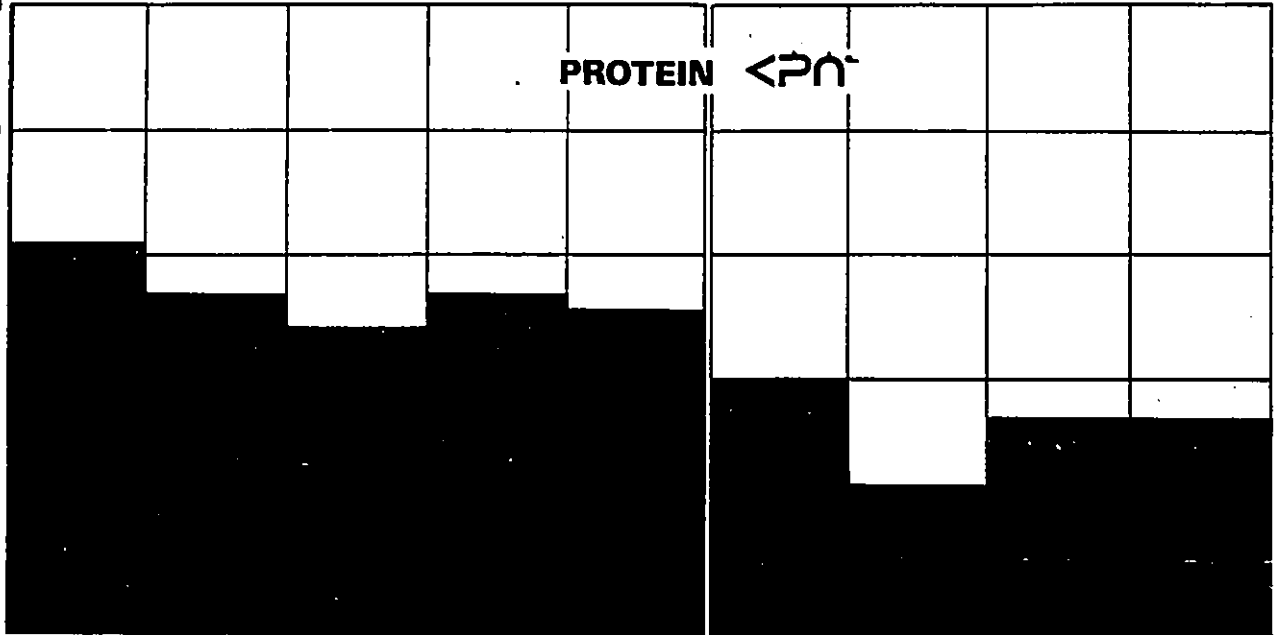
$\Delta$   $\circ$   $\Delta^c$   $\sigma$   $\sigma^c$   $\rho^c$   $\Gamma^c$   $C$   
 $\wedge$   $\Delta$   $\sigma$   $\Gamma^c$

per 100 gms meat

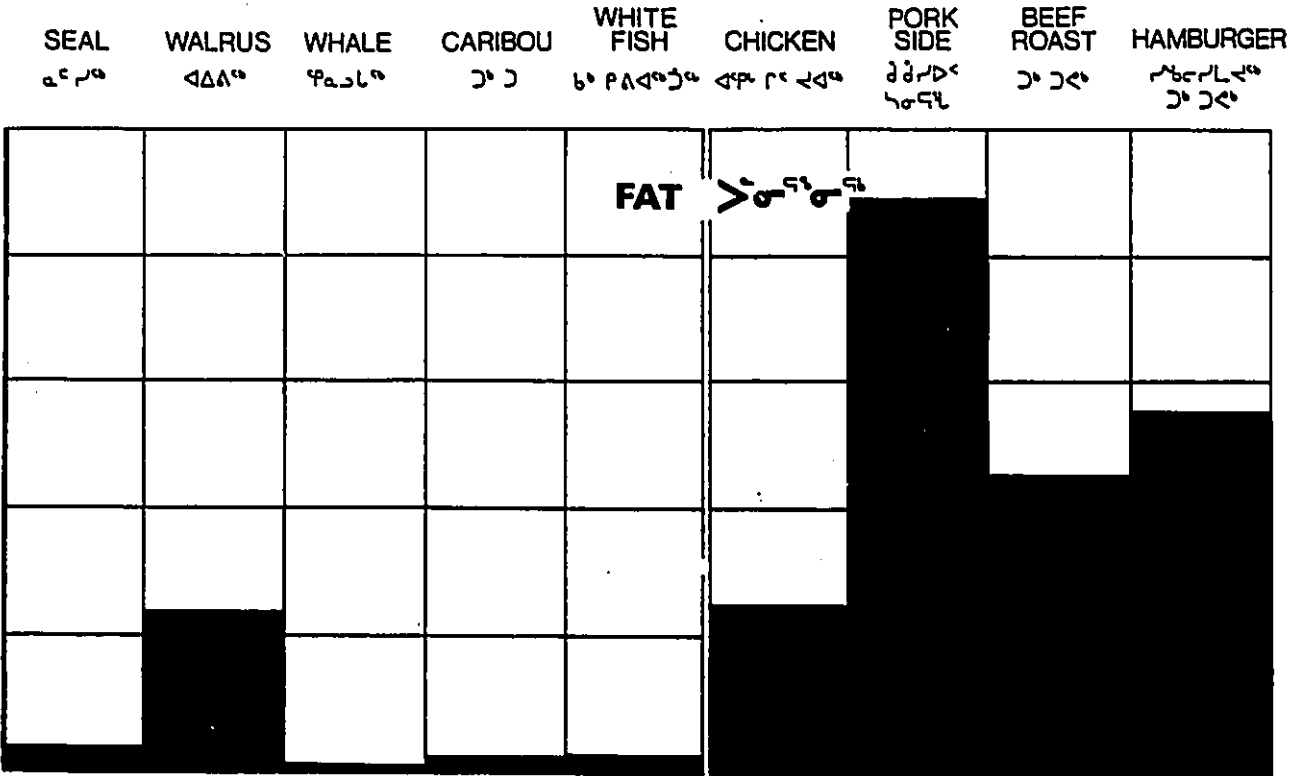
grams  
 50  
 40  
 30  
 20  
 10

Land food  $\sigma$   $\sigma^c$   $\rho^c$   $\Gamma^c$   $C$

Southern diet  $\sigma^c$   $\rho^c$   $\Gamma^c$   $C$



grams per  
 100 gms  
 meat



from Inuktitut Summer/Fall 1978

In the 1950s, Inuit communities began to undergo a dramatic transformation. Distant Early Warning (DEW) line stations offered many Inuit their first wage employment. Public concern about a widespread tuberculosis epidemic among the Inuit and a post-war drive to improve the lives of those less fortunate than people living in the modern southern industrial society, prompted the federal government to send teachers, nurses and administrators north. Permanent settlements were established to make administration of medical services, education and social assistance easier.

Diamond Jenness (1968) commented

In essence...the scheme was a "little Colombo plan" for arctic Canada, but with the difference, that the experts were permanent employees of the Canadian government, and their surveillance was more intense than would have been possible had they been working in a foreign land. (p 140)

In order to attract properly qualified southerners to the North, the government instituted a policy of providing monetary rewards and living standards as comfortable as elsewhere in the country for those who went to live in northern settlements. As well as living in southern-style houses they also had access to plentiful supplies of southern foods. Anthropologist Hugh Brody observed

Just as the living conditions of the Whites are those of the southern middle class, so they eat almost exclusively southern foods. Each family orders its supplies and buys supplementary foods from the Hudson's Bay store, which caters to southern tastes at higher than southern prices...[Brody 1975, p 35]

It was in the late 1950s that the Hudson's Bay Company, the major food supplier in the arctic, began to stock canned vegetables and canned meats and candy. Shortly afterward it

introduced soft drinks, potato chips, and new convenience foods. [Canada, DIAND, 1978] It was about this time that Inuit began using cash for the first time, rather than tokens or credit vouchers.

By the late 1960s there were noticeable changes in the Inuit diet in the Canadian arctic. Henry Isluanik of Eskimo Point relates

Before I went to the hospital with T.B. in 1961 we did not use store foods. But at that time the stores carried flour, biscuits, oatmeal, tea, jam and sugar and perhaps other things. When I came back from the hospital there were a lot of foods in the store: bacon, steak, some ribs, and many more tinned goods. In choosing food, if the people knew it was meat they bought it. If they didn't know what it was they would try it, sometimes you would like it, sometimes you would not....Sometimes things were quite different from what you thought they were and you made a big mistake. That happened to me with baby food. Sometimes if the colours on the package were pretty I would try the food. [Canada, DIAND, 1978, p 30]

Otto Schaefer, a physician working in the arctic through this period provided some of the first documentation of the increase of refined carbohydrates in the Inuit diet and its effect on health. Using traders' records of sales, he calculated a quadrupling in sugar consumption in the Pangnirtung area from 26 pounds per capita per year in 1959 to 104.2 pounds per capita in 1967. (Schaefer 1970, Schaefer 1971) Sugar represented 18.1 per cent of all carbohydrates consumed in 1959 and rose to 44.2 per of carbohydrates in the Pangnirtung Inuit diet in 1967. (This was still marginally lower than the Canadian average in 1960 which was 46.7 per cent of carbohydrate calories from sugar).

TABLE 2.1  
 Sugar Consumed in Pangnirtung-Cumberland Sound 1959-1967

YEAR	SUGAR (lbs per cap)	% OF TOTAL CARBOHYDRATES
1959	26	18.1
1960	37.6	22.4
1964	65.5	30.2
1967	104.2	44.2

[from Schaefer 1971, p 10]

Another early and significant change reported by Schaefer and an associate, D.W. Spady, was the link between the increase in bottlefeeding babies (encouraged by medical practitioners in the arctic in the late 1950s) and an increase in infant mortality rates. Government records revealed an increase in infant mortality from 164 deaths per thousand reported births in 1951-54 to 232 deaths per 1,000 births from 1955-58 [Spady 1982]. Although there has been some discussion about whether the higher number of deaths in the later years could be partly attributed to better reporting of births, there is general agreement that bottlefeeding contributed to many infant sicknesses and deaths [Hobart 1976, Spady 1982, Schaefer and Spady 1982, Postl et al 1984].

By the mid-1960s carbohydrates made up a significant part of the Inuit diet in most arctic communities and, in some, the balance had shifted from protein to carbohydrates for providing the bulk of the Canadian Inuit diet. Frobisher Bay and Inuvik were ahead of other arctic communities in seeing these changes because more of their residents had wage employment and many depended on institutions to provide

their food. Inuit still living in hunting camps or having ties with families in hunting camps had higher proportions of proteins in their diets. (see TABLE 2.2)

TABLE 2.2  
Daily Consumption of Major Nutrients in Inuit Settlements,  
1964

	TOTAL CALORIES	PROTEINS (gms)	FAT (gms)	CARBOHYDRATES (gms)
Holman Island	2859	280	79	230
Coppermine	2536	271	64	213
Pangnirtung and Cumberland Sound	2788	318	53	254
Frobisher Bay	2097	128	57	254
Urban Area, U.S.A (1955)	3200	103	155	275

[from Schaefer 1971, p 11]

While Inuit families had a choice about whether they wished to take wage employment or not, and were encouraged to maintain their traditional hunting and trapping existence into the 1960s, there were a number of other enticements and unusual circumstances which pulled Inuit into settlements from their hunting camps. Some families moved so that their children could have access to government funded schools and medical services. Others were forced to move when the provider of the family was taken to a southern hospital for treatment of tuberculosis. In some cases, a hunter would return from treatment with a permanent disability that meant he could not survive as a hunter anymore. Some found the southern lifestyle of living in heated houses and purchasing food more appealing than the hard life of a hunter's family.

Some came for short term jobs and stayed, living on social assistance and occasional casual labour jobs.

A Nutrition Canada survey conducted in 1971-72 found that Inuit ate more meat than the national average, consuming as much as 1800 grams of fish or wild game a day. However, they also consumed more sugar, soft drinks and other beverages than the national population with foods composed primarily of sugar making up 20 to 50 per cent of the the carbohydrate intake in the various physiological groups. Their mean calorie intake was lower than the national average. Their consumption of fruits, vegetables and dairy product were substantially lower than the national average [Nutrition Canada 1975].

The report has been criticized because surveyors visited only four Inuit communities across the arctic (Eskimo Point, Coppermine, Pelly Bay and Frobisher Bay) and averaged the results. As the four included one large, urbanized centre (Frobisher Bay) whose population was almost equal to the population of the three other communities combined, the results did not represent the average Inuit diet or show the range of difference among the communities [Canada, Food Prices Review Board, 1975]. However, the survey was an indication of a nutritional problem which was developing in many communities and was already significant in Frobisher Bay.

Through the 1970s, food prices climbed steadily with inflation putting many nutritious imported foods out of reach of low income Inuit families. Duffy (1978) observed

For most Inuit the chief criterion of food choice was not nutritive value but economic value; that is, what filled the belly most for the cheapest price. For many Inuit the answer was candy and sweet stuff. (p173)

In 1978, Neil Galbraith reported to a nutrition conference that Coral Harbour, a central arctic community with a population of 450 people, had consumed 100,000 chocolate bars (or approximately 220 per capita) and 4,000 cases of soft drinks (almost 90 cases per capita) in a single year, paying \$175,000 for these non-nutritious foods [Canada, DIAND, Inuktitut, 1978].

Peter Usher (1985) observed that in 1961, 66 per cent of Inuit lived in centres with populations of less than 250. In 1981, most lived in centres with populations between 250 and 1500. According to Spady (1979), for 83 per cent of these newly "urbanized" Inuit at least half of their diet was "store-bought" foods.

Researchers and consultants promoting the traditional native economy have chosen to look at figures such as Spady's or Nutrition Canada's from the perspective of the proportion of native foods rather than imported foods in the northern native diet. They maintain that the native diet is still made up of much more protein and nutritious wild meats and fish than the average North American diet [Usher 1981, Torrance 1983, Usher 1985].

Since the mid 1970s, both the federal and territorial governments have encouraged and promoted the production and trade of "country foods" in the North. And a number of studies have been undertaken to measure the amount of country food in the native diet. Usher (1985) maintains that production of meat and fish was 216 kilograms per capita for the eastern arctic in 1984. Although this is less than half the estimated amount produced in the same region in the 1960s, it is almost twice as great as the per capita meat and fish consumption in Canada as a whole. (see TABLE 2.3)

TABLE 2.3  
Annual production of meat and fish in the Northwest  
Territories

Years	Location	kgs/capita	Source
1964-68	Sachs Harbour	666	Usher 1971
1965-66	Clyde River	519	Haller et al
1965-66	Broughton/Padloping	507	1968
1965-66	Cumberland Sound	610	"
1970-75	MacKenzie Valley & Beaufort Sea	158	Berger 1977
1976-77	Baker Lake	321	IDS 1978
1972-73	Pond Inlet	204	Treude 1977
1981	Baffin Region	216	Simpson 1984
1981-83	Keewatin Region	214	Gamble 1984
-----			
1980-81	Canada (consumption)	117	Statistics Canada 1982

[from Usher 1985, p 26]

Usher explains that the decrease in production of wild meats in native communities does not indicate a parallel decrease in the amount consumed because at least a quarter of the meat produced before 1970 was fed to dogs. As snowmobiles replaced dog teams, the game required by native households decreased. [Usher 1985]

An economic study of the Baffin region completed in 1984 suggests that the value of country foods exceeded the value of imported foods in the preceding year. The study reported that a total of \$13.9 million of southern food was imported while an estimated \$17.3 million of country foods were produced in the region [Worrall, 1984].

This researcher would argue that although a substantial portion of the average Inuit diet was composed of native foods in the early 1980s, other less nutritious "store-bought" foods were significant expenses and health hazards to Inuit families. In a recent survey of food purchase behaviour in the Northwest Territories, Green, Green and Bone (1986) found that native and non-native purchasing habits are significantly different. The Inuit food purchases suggest the diet pattern revealed in the Nutrition Canada 1972 survey is now widespread -- and not limited to major urban centres as critics of the survey maintained.

Inuit families are less likely to buy nutritional foods like fruit, vegetables and dairy products and are more likely to buy non-nutritious snack foods, canned foods and bakery products than their non-native counterparts. While 72 per cent of non-native households buy fresh fruit and vegetables and 54 per cent buy dairy products, only 37 per cent of Inuit buy fresh fruits and vegetables or dairy products. Similarly 77 per cent of Inuit buy snack foods while only 56 per cent of non-natives buy those foods. [see TABLE 2.4]

TABLE 2.4

**Types of Food Purchased in the Northwest Territories 1986**

	Percent Purchasing each food type	
	Inuit	Non-Native
Canned Foods	53 %	46 %
Fresh fruit & veg	37	72
Meat	39	46
Dairy	37	54
Staples	47	21
Snack foods	77	56
Bakery Products	44	36
Miscellaneous	57	49

[from Green, Green and Bone 1986]

Schaefer, Spady, Jean Steckle and others have observed a deterioration in health among Inuit over the three decades since the Canadian government established permanent settlements in the arctic -- a deterioration which they attribute to the change in diet. Cases of diabetes, hypertension and high risk cholesterol levels -- unknown before the mid 1950s -- are being reported among Inuit adults. A phenomenal increase in recurrent ear and chest problems, associated with bottlefeeding and causing high morbidity and mortality rates, are reported among Inuit children. Dental caries is common among all ages in the western arctic and children in the eastern arctic [Schaefer, Timmermans et al. 1980].

Medical anthropologist Cynthia Eaton (1977) explained that maturity onset diabetes has been linked to acculturation for three main reasons. Acculturation generally means decreased energy expenditure (and therefore more cases of obesity), increased emotional stress from the acculturation process and a dietary change through the introduction of refined sugars and an increase of refined carbohydrates. Cleave (1975) observes that the 20-year incubation period for diabetes had lapsed by the mid-1970s and Canadian Inuit were beginning to suffer the consequences of increased refined carbohydrates and sugar in their diet.

What Draper (1977, p 316) says of the Alaskan Inuit is equally true for the Canadian Inuit

Presented with an array of exotic new foods which he is not equipped by personal experience or education to evaluate, he tends to choose badly. In general, the items he selects are below the average quality of the U.S. mixed diet and of the foods they replace in his native diet. His nutritional status is deteriorating in terms both of undernutrition and overnutrition in direct relation to the proportion of processed foods in his diet.

## Diet as an Indicator of Acculturation

While nutritionists have commented on the association between changing food habits and increased urbanization in northern native communities, their interest has generally been in the medical consequences rather than the factors which influenced the changes. Spady has contributed one of the few studies which attempts to correlate factors like the population of a community or wage employment with food consumption patterns. In his 1979 study of maternal and infant feeding practises he found that the higher the population of the community in which a woman lived, the more likely she was to bottlefeed her baby. Similarly he found a correlation between mothers who had wage employment outside the home and babies who were bottlefed. He also found that mothers who smoked or drank alcohol were more likely to bottlefeed than those who didn't [Spady 1982].

### Spady concluded

The rapid spread of bottlefeeding by Native mothers during recent years is a phenomenon probably attributable to a number of factors such as: acculturation to trends exhibited by the majority culture, increased availability of milk and other infant food substitutes, and an increased rate of children born to unwed mothers and then adopted and cared for by relatives. [p 140]

Spady's study also looked at the consumption of native foods by families as related to the size of community. He found that the proportion of families eating mainly native foods decreased as the size of community increased. Conversely he reported that the proportion of families using mainly store foods increased with the size of community. However, in all communities he found that the majority of Inuit ate half native and half store bought foods. (See TABLE 2.5)

TABLE 2.5

Consumption of Native Foods compared with Population of  
mother's place of residence, 1979

Population	% Mainly Store	% Half Store Half Native	% Mainly Native
<b>&lt; 500</b>			
Inuit	11.8	68.6	19.6
White	100	--	--
<b>500 -1000</b>			
Inuit	26.4	56.0	17.6
White	82.6	13.0	4.3
<b>&gt; 1000</b>			
Inuit	28.6	61.0	9.5
White	96.7	3.3	--

[from Spady 1982, p 158]

Schaefer saw a similar correspondance between degree of urbanization and nutrition problems associated with imported or processed foods in his 1976 study of Arctic Bay and Inuvik. He found adult natives in Inuvik had three times greater risk of abnormally high serum cholesterol levels and ten times the risk of gallbladder disease when compared to adult natives in Arctic Bay. Skinfold measurements (and the corresponding incidence of obesity) of Inuvik women were double those of Arctic Bay women and those of Inuvik men triple those in Arctic Bay.

In a study of convenience foods eaten in an Alaskan Inuit town of 250 people in the 1970s, anthropologist Michael Nowak found that convenience foods were widely used in households where the head of the family was less than 50 years old. Families headed by Inuit in their twenties ate a majority of meals composed entirely of convenience foods and had no all-traditional meals. Nowak (1975) observed that the acceptance and use of convenience foods were indicators of

the degree to which the Inuit had successfully joined the Western (or what this researcher calls 'southern') economy.

Nowak comments

Their availability attest to the thoroughness with which that culture now permeates the Arctic; their acceptance is an indicator of the introduction of Western priorities into Eskimo life; their use reflects an economic position where some Eskimos are able to purchase such foods. [p 57]

As a geographer, this author's interest is in dietary change as an indicator of acculturation or modernization and this study will attempt to establish if there is a significant relationship between exposure to southerners and southern lifestyles and the changes in food habits in Inuit communities. This study will therefore examine the various ways in which southerners -- both intentionally and unintentionally -- contributed to changes in Inuit food consumption.

This study will concentrate on the eastern arctic, considered the least urbanized area of Inuit settlement in the world. It will look at increasing population, increasing southern, non-native presence, and increased communications with southern society as agents of acculturation. These are factors which might be considered general geographic measures of modernization. This study will also comment on other factors peculiar to the eastern arctic which have contributed to changes in food habits. These include the evacuation of tuberculosis patients to southern hospitals for a year or more, school lunch programs, social assistance and changes in hunting technology.

## Chapter 3

### Acculturation, Diffusion and Consumer Culture

It is perhaps useful at this stage to review some of the existing literature on modernization, acculturation and the influence of the dominant Western culture on other cultures.

Modernization is a term which was popular in the 1960s and used to describe the process through which traditional societies in less developed regions adopted the modern ideas, techniques and lifestyle of the societies of North America and Europe.

David McLelland's analysis of the modern "achieving society" is considered a seminal work in this field. McLelland believed that the achievement motivation was central to modern society. He maintained that individualistic, achievement-oriented societies could be shown to develop more rapidly than societies which encouraged conformity and cooperation. Further, he asserted that traditional societies had to change their values if they were going to advance economically and become as "modern" as the industrialized nations.

...if people want the benefits of the advanced culture of modern civilization -- which they do whenever they come in contact with it, and such contact is inevitable -- then they must accept many of the values and culture patterns which support such a civilization. [McLelland 1961, p 395]

In fact this theory of modernization required that a traditional society become acculturated (or modified through the influence of the dominant and 'modern' culture) in order to enjoy the material benefits of the 'modern' culture.

In the 1970s the term modernization took on the negative connotation of a development philosophy bordering on cultural imperialism. However it is a useful theory to keep in mind when examining the changes in food habits and lifestyle in Inuit communities through the 1960s because one can see that it is reflected in reports from government administrators and teachers working in the Canadian arctic in the 1960s. Throughout this work the term modernization will be used in the literal sense of the word meaning adoption of modern ideas and techniques [Gage Canadian Dictionary, 1983, p 735].

Two common geographical approaches to modernization have been the theories of innovation diffusion and the geography of modernization. The theory of innovation diffusion attempts to explain and map the change in the spatial distribution of a modern commodity or habit and its change over time. According to Lawrence Brown

The spread of a phenomenon, idea or technique throughout a population or region incorporates basic geographic elements of distance, direction and spatial variation, and thus forms a valid field of geographic interest. [Brown 1981, p 16]

In his review of innovation studies, Brown divides the theory into two streams: the adoptive perspective and the market or infrastructural perspective. The adoptive perspective assumes that individuals make rational choices about the innovations they adopt based on information available to them. Hagerstrand was a supporter of this approach, maintaining that innovation diffusion is primarily the outcome of a learning or communication process.

Brown, on the other hand, is an advocate of the market perspective which focuses on supply and availability of the innovation and examines strategies which are used to promote

or facilitate the adoption of innovations. He sees the demonstration effect as a significant influence in lowering resistance to adopting a new idea or product. Brown, Hagerstrand and others identify early adopters, late adopters and agents of change, mapping the spread of innovations.

Rogers (1983) explains diffusion as a process by which an innovation is communicated over time through certain channels among members of a social system. He maintains that different rates of adoption of innovations can be explained by five basic factors

- 1) relative advantage - economic, social prestige, convenience
- 2) compatibility with existing values
- 3) complexity - the ease with which an innovation can be understood determining the speed at which it will be adopted
- 4) "triability" - the possibility of trying on a limited basis
- 5) observability - the possibility of seeing results from peers' adoption of an innovation

Rogers suggests that

...mass media channels are often the most rapid and efficient means to inform an audience of potential adopters about the existence of an innovation...On the other hand, interpersonal channels are more efficient in persuading an individual to adopt a new idea, especially if the interpersonal channel links two or more individuals who are near peers. [Rogers 1983, p 17]

Unfortunately, although it appears the theories of innovation diffusion might be useful in explaining food habit changes, they are difficult to apply to a change which has already occurred in the Canadian North. Ideally, a

researcher could choose a key food or a number of key foods and map purchasing behaviour of these key foods in different communities over time. However, the major commercial retailers of food for the eastern arctic, the Hudson's Bay Company does not keep store records for recent decades and will not divulge quantities of any specific items sold. [Hudson's Bay Company, 1986] It is thus very difficult to trace adoption of key foods in more than a general and descriptive manner, relying on nutritionists' studies and administrators observations.

As this researcher's interest is in the influences which acted upon Inuit food habits over recent decades, a general picture of a large number of communities is not as useful as a detailed understanding of a small number of cases.

Another approach would be to identify early adopters of a key food and trace the spread of the use of a food in an individual community. However, this method might be best applied to situations where the innovation is occurring at present and can be observed over a period of a year or two. In an historical study it is virtually impossible to identify individual early adopters and late adopters 20 to 30 years after the fact. Again, a researcher can only find more general descriptions of food habits of representative families or general community consumption patterns.

The geography of modernization is another theory which attempts to examine patterns of urbanization in a spatial context. Applied by Peter Gould (1975) in Tanzania, this method uses geometrical maps to represent the distribution of a number of key indicators of modernization at five points in time. Gould has chosen 41 modernization factors from post office savings to development loans, Asian population to quality stores. Unfortunately, Gould plots different factors for each of the five time periods, with

little overlap, and so the maps for each periods cannot be easily compared.

Gould admits that this method offers only a description of time-frozen patterns in space and does not explain how or why modernization occurs. Critics agree that this method is deficient because it does not examine the processes which underlie and affect the patterns and is generally based on ethnocentric assumptions that urbanization and modernization are good [Riddell, 1981].

This researcher's interest is precisely in the how and why certain "modernizing" changes take place so this approach is not suitable for this study. However, some of its key indicators of modernization may, in fact, be significant influences contributing to changes in food habits and will be discussed as they apply to particular cases.

'Genre de vie' is another geographical concept that appears to have some bearing on the issue of a change in traditional culture such as that of the Canadian Inuit before WW II. In fact Max Sorre, in describing the concept refers to Inuit culture as "one of the best examples of faithful reflections of environmental conditions in genre de vie" [Sorre 1971] Genre de vie is defined as a complex of habitual activities and permanent traits recognizable as manifestations of a way of life. Sorre explains that the introduction of an innovation or technological change can upset a genre de vie and industrialization, which requires functional specialization, can dismember one.

Sorre maintains that there are situations where 'invaders' can impose new ways and introduce new habits without destroying the cultural foundation but there are situations where the process of assimilation is so extensive that a culture adopts a completely new genre de vie. The aspect of

this theory, perhaps most relevant to this study is the notion that the twentieth century is witnessing a standardization of genres de vie based on modern urban living.

While this is an interesting way of looking at acculturation and modernization, it does not help this researcher understand how food habits change or what factors might be most significant in influencing changes. Communications theory and the related consumer behaviour theories are more useful in dealing with food habit changes.

Early communications theorists, like William Schramm and Daniel Lerner, believed that mass media had an important role to play in modernizing people in traditional societies and in speeding the acculturation process. Lerner (1967) suggests that advertising of modern commodities is also educating about modern lifestyles.

By their nature...the mass media raise aspirations and expectations -- ads and commercials are specifically designed to do just this in advanced countries by publicizing desirable new commodities. In developing countries, media produce more profound effects on aspirations by showing people new and more desirable lifeways. [Lerner 1967, p 317]

It is interesting to note that Canadian native groups used this argument to request local native language programming on CBC radio in a brief to the special senate committee on mass media in 1969.

At present, Canada's broadcasting does not serve as an agent of social change. It is more concerned with upholding the existing social order. It is oriented towards the middle class, the consumers -- the people who buy the goods its advertisers have to sell. [Canada 1971, p 69]

However, the federal department of communications in 1971, saw the potential for native language broadcasting to bring about social change from a slightly different perspective and, in its report on northern communications in 1971, suggested

Broadcasting, properly used, can help promote the social changes needed to bring native peoples into the mainstream of Canadian life and preserve their heritage from the past. Their traditional culture has been and continues to be destroyed by the impact of modern technology. A part of that technology -- broadcasting -- can help restore the balance. [Canada, 1971, p 69]

Stuart and Elizabeth Ewen, in their work on mass media and consumerism assert that mass media have played a major role in "Americanizing" not only immigrants to North America but also the continent's native peoples, including the Inuit and Indians of northern Canada. They maintain mass media are an ongoing channel to inculcate and effect common perception explaining to us what it means to be part of a "modern world". It is a world defined by the retail (individual) consumption of goods and services; a world in which social relations are often disciplined by the exchange of money; a world where it increasingly makes sense that if there are solutions to be had, they can be bought. [Ewen and Ewen 1982, p 42]

Jerry Mander has written an interesting and convincing treatise called Four Arguments for the Elimination of Television (1978). In it, he is particularly critical of advertisers and advertising. Mander maintains that food advertising is an example of advertisers' strategy of creating needs for expensive and unnecessary products.

People do need to eat, but the food which is advertised is processed food: processed meats, sodas, sugary cereals, candies. A food in its natural state does not

need to be advertised. Hungry people will find food if it is available. To persuade people to buy the processed version is another matter because it is often more expensive, less naturally appealing, less nourishing and often harmful. A need must be created. [Mander 1978, p 127]

Barnet and Muller in their work on the power of multinational corporations (1974) assert that multinational food corporations are well aware of their ability to influence the food choices of people in less developed regions.

The companies say they are not to blame if primitive people want to indulge their taste at the expense of their children and their health...But the reality is that companies are investing heavily in campaigns to sell nutritionally marginal foods to economically marginal people [p 184]

A related concept which is potentially useful in analysing the modernization of food habits is the 'demonstration effect' which has its roots in consumer behaviour theory. James Duesenberry (1967) is generally credited with having coined the term although a number of others described similar behaviour in different terms in earlier decades. For example, Leibenstein (1950) explained collective demand in terms of a "bandwagon effect". Leibenstein maintained that there was a desire of people to wear, buy, do, consume and behave like their fellows; the desire to join the crowd, be "one of the boys," etc. - phenomena of mob motivation, mass psychology either in their grosser or more delicate aspects. [Leibenstein 1950, p 184]

Duesenberry suggested that this mimicking behaviour was motivated by a dissatisfaction created by seeing someone else with goods superior to one's own. He suggested that the

American goal of a high material standard of living "converts the drive for self esteem into a drive to get higher quality goods" and this drive operates through "inferiority feelings aroused by unfavourable comparisons between living standards." [Duesenberry 1967, p 31]

The demonstration effect is considered to be particularly significant among low-income groups who, it is suggested, buy small (or large) luxuries (often sacrificing necessities to do so) as a kind of compensatory consumption for their lack of social mobility. Caplovitz (1967), in his study of why the poor pay more for consumer goods, asserted

In some ways consumption may take on even more significance for low income families than for those in the higher classes. Since many have small prospect of improving their social standing through occupational mobility, they are apt to turn to consumption as at least one sphere in which they can make some progress toward the American dream of success. [p 12]

Nutritionists and sociologists agree that social status associated with foods eaten by a higher economic class (like white bread, convenience foods and soft drinks) is a major influence in persuading people to adopt new foods. Nutritionist Diva Sanjur (1982) suggested that foods acquire status in two ways "through association with different socio-economic classes and by their relative availability. Foods which are eaten regularly by more affluent families and foods which are less readily available to the poor (because of cost) are seen as highly desirable". [p 48]

The demonstration effect can be an influence on food habits either through personal contact with people of a higher socio-economic class or through mass media, particularly television. In native communities of northern Canada this exposure has occurred through the introduction and

increasing presence of white southerners, through native tuberculosis patients' and native students' exposure to southern institutions and through the gradual introduction of mass media since the late 1950s.

Although a number of studies have been made of the impact of mass media on the lives of native northerners few have broached the area of their role as agents of a demonstration effect as it relates to food habits. Hanks, Granzberg and Steinbring (1983) looked at social change and mass media among the Oxford House Cree in northern Manitoba from 1903-83. Dealing specifically with the role movies and television played in people's lives and their effect on behaviour, they found that 18 months after television had been introduced to Oxford House it had usurped the role of elders in telling stories to younger adults and children. They also observed that children's behaviour was more aggressive and that they spent less time playing with their peers after the introduction of television.

Coldevin examined the impact of frontier television on the Inuit of Frobisher Bay in 1973, a year after television had been introduced to the eastern arctic community. At this time, Coldevin estimated that 76 per cent of the population spoke only Inuktitut and 77 per cent had no formal education. After surveying the heads of households in a sampling of homes in Frobisher Bay and in an Inuit community without television, Coldevin concluded that those who had been exposed to television had higher aspirations for vertical mobility for their children and expressed a higher dissatisfaction with their present life than Inuit in the community without television. He also suggested that television had had little impact on their knowledge of national or international issues. [Coldevin 1973, 1977]

Neither of these studies looked at the effect of television on Inuit food habits. This researcher has found only two academic studies included a discussion of the influence of media on food buying habits, one by Nancy Hanks about the Cree of northern Manitoba and one by D.J. Dicks about the Inuit of the eastern arctic.

Hanks (1980) looked at changes in buying patterns in two Cree communities from 1976 to 1979 -- a period during which one community was exposed to television for the first time. The other has had television since 1973. Hanks found that sales of consumer items such as televisions, cosmetics and snack foods increased with exposure to television.

Dicks looked at the relationship between innovations in communications services (particularly the telephone) and changes in socio-economic behaviour in five Baffin Island Inuit communities . Dicks found that there was a weak indication that the number of telephones was associated with the level of food sales and a stronger indication that the number of business phones was associated with the level of dry goods sales.

In Frobisher Bay, Dicks found that, while there was a moderate increase in population until 1970 which accelerated rapidly after 1971, food sales increased rapidly after 1965 but dropped in 1971. He found food sales generally followed the same pattern as the ratio of telephones per 1000 people. In Igloolik, food sales also increased with the increase in telephones per 1000 people. In Cape Dorset, Dicks found that food sales increased at a rate generally parallel to total population growth until 1971 and then surged in 1972 and 1973, while telephones increased steadily to 1972 and then fell off slightly. [Dicks 1975, Dicks 1977]

He concluded

Communication over vast distance has played a major role in bringing the Inuit into contact with industrialized societies. The outsiders who once came by wooden ship now come by airplane or even as disembodied voices and pictures. [p 120]

However, these studies are limited to the influence of mass media and do not discuss the parallel effect of affluent non-native southerners' temporary residence in northern native communities. This researcher is interested in looking at the influence of southerners, through both media and direct contact, in a more comprehensive manner.

The only comprehensive study on cultural changes as they relate to food habits and nutrition in northern Canada is an unpublished report prepared by Ron Duffy for the Northern Social Research Division of DIAND entitled Historical Factors Affecting Food Consumption in Northern Canada (1978). In it Duffy looks at both Indian and Inuit food habits across the Northwest Territories from the days of the earliest contact with non-native explorers and whalers.

Duffy's work is a rich historical description containing a great deal of useful information about historical changes in food habits and their possible relationship to elements of a new cultural system. He maintains new items of material technology, alternatives to hunting as a livelihood, a world view conflicting with the traditional native view, and new sources of energy and materials have been the most important elements of European contact which have affected native food habits.

As he deals with the entire region of Canada north of 60 degrees latitude, Duffy's conclusions are, necessarily, quite general and are limited to the period before

television was widely available in Inuit communities. He does not deal with the concept of the demonstration effect or attempt to compare degrees of exposure to southern lifestyles and their influence on food habits.

One framework which appears to offer a means of measuring southernness is Louis-Edmond Hamelin's nordicity index. Hamelin's nordicity or polar index was first introduced at geography conferences in Liege and Paris in 1964 and was published in an article in 1968 and as a book in 1978. It also formed the thesis of a geography of Canada by Hamelin published in 1975. The index is composed of 10 criteria with a scale of polar values assigned for each. The criteria include six physical variables and four human variables which are gauged according to northerness and assigned values from 0 to 100. Total nordicity is then ranked from Middle North to High North. Hamelin maintains that the index offers a means of defining degrees of northerness and of showing changes in degrees of northerness -- particularly what he calls "denordification". [Hamelin 1968, Hamelin 1971, Hamelin 1978]

A number of difficulties with this index are readily apparent. One is that the variables which are being assigned numbers represent are quite different. Some are simple physical measures like temperature or latitude which are assigned corresponding values of 0 to 100. Others are descriptive characteristics such as vegetation and degree of economic activity which are somewhat subjectively assigned corresponding values of 0 to 100. In both cases, the critical breaks between, for example, a value of 40 and a value of 50, are fairly arbitrarily assigned by Hamelin, based, one assumes, on his long experience in the North but not mathematically verifiable.

In spite of its mathematical imprecision, the index has been generally accepted as a descriptive tool and has been applied in a variety of situations. The index is useful in conveying the concept of Northerness and serves as a base for comparison of degrees of northerness by highlighting key criteria.

André Cailleux (1972) applied the index in the Antarctic with some modifications, including a more detailed graduation of scale and a limit to what might be considered "polar". Cailleux suggested that without latitudinal limits of what could be considered polar, the index could as easily be applied to inaccessible or uninhabited areas in the Sahara. It is interesting to note that Hamelin accepted Cailleux's modification limiting the boundaries of polarity measures and in his 1978 book on nordicity set a southern boundary for the Canadian North at 45° N.

Burns, Richardson and Hall (1975) also suggested modifications to Hamelin's nordicity index to make it less subjective and more precisely quantified. However, their measures of numbers of roads, railways and aircraft movements were not included in Hamelin's revised 1978 explanation of the nordicity index. This author would support Hamelin's use of rounded nordicity values, particularly in measuring human criteria, as the statistics for the Canadian North are often educated guesses rather than mathematically accurate data.

Other authors have welcomed the index as a means of measuring hardship or the limits of the human ecumene which includes the dynamic element of non-physical variables allowing for changes over time [George 1976, Miles 1976, and Lessard 1976]. The federal government's system of isolated post allowances (bonus payments for federal workers in the North) from 1970 to the early 1980s was based on a similar

index composed of many of the same variables including four climate parameters, population, vegetation and temporary freeze-up/break-up isolation. [Hamelin, 1972]

This researcher is interested in explaining the relationship between exposure to southerners and southern media and the change of food habits in the Canadian North -- something which none of the works cited above have explained satisfactorily. In order to do so, this work proposes to test a means of measuring exposure to a southern lifestyle by applying a clearly defined theoretical framework to a number of sample communities in eastern arctic. It will compare measures of modernization with changes in food habits in Inuit food habits from 1955 to 1985, including some discussion of the influence of television and mass media on these habits.

Hamelin's framework, generally used to measure nordicity or northerness, will be inverted and modified for use as an index of "sudicity" or southernness in northern Canadian communities. Modifications of the index will include the addition of measures of exposure to southerners and mass media as well as the elimination of physical variables which are considered peripheral to the question of modernization.

The researcher proposes to test the index in four sample communities on Baffin Island. Sudicity values of these communities will be compared with changes in food habits at three points in time over the period from 1955 to 1985 to see if there appears to be any significant correspondence between increasing southern influences and increasing consumption of non-nutritional southern foods.

## Chapter 4

### Sudicity and Diet Change

This study proposes to look at diet change and the influence of southerners on that change. It will focus on four communities in the eastern arctic over the period from 1955 to 1985. The researcher anticipates that significant changes in food habits among Canadian Inuit over this period will correspond to increasing exposure to southern lifestyles.

The researcher has chosen to examine a small number of communities closely rather than looking at the more general patterns of a larger number of communities for several reasons. Although a more common geographical approach might be to look at the pattern of the diffusion of southern food habits over a larger sample of communities, the nature of the data available on food habits in the Canadian North prevents the researcher from pursuing such an approach. Most studies of nutrition or food consumption have looked at one to three communities in detail or have averaged information for communities according to size or location. There are therefore no comparable sets of data on food habits in all arctic communities which would allow the researcher to map the patterns of change in food habits in a large sample of communities at three points of time since WWII.

In order to find informally comparable data about southern influences and food habits, even for a small sample of community, a researcher must sift through thousands of pages of general archival information about the communities to find occasional paragraphs commenting on food habits or southerners' attempts to shape Inuit homemaking skills. It is beyond the scope of a Master's thesis to do this same

procedure for a sample of 25 or more communities. The researcher has therefore been compelled to undertake a study which employs both informal case studies and a formalized sudicity framework. Detailed historical case studies of four sample communities will be used to examine and explain the process of change in an informal manner. The researcher will also make a more structured comparison of the southern influences in each community using a formal sudicity index, composed of a number of measures of "southernness". The index is intended to be a general measure of southernization which could be applied to any Canadian northern community. For the purposes of this study it will be tested in four communities which represent a cross section of size and degree of isolation in the eastern arctic.

The detailed case studies will both elaborate on the ways in which particular southern influences may have contributed to changes in food habits and will explain how events particular to a certain community (such as a dog epidemic in Pangnirtung) had an impact on Inuit lifestyle and food habits, which is not explained by a simple and general sudicity index.

It is important to note that the historical data available on food habits and southern influences have largely been dictated by the personal interests or work or study-related responsibilities of the academic or government observer preparing any single report. An anthropologist examining energy flow in one community may include a detailed description of weights of food consumed over a one year period but there may be no similar data available for another community or another year in the same community. At the other extreme, a school principal who is concerned about nutrition in her community may simply describe a single incident where lack of knowledge about store-bought

foods led to a meal which was expensive, wasteful and completely non-nutritious. Thus the kinds and depth of information on each community varies considerably and the case studies length and complexity reflect these differences.

The decades from 1955 to 1985 have been chosen as the study period because they are years of rapid expansion and consolidation of southern federal government services. They also represent decades of population migration from the south to the North. While it is generally believed by health workers that southerners and their institutions moving into the North had an influence on Inuit lifestyles over this period, this study proposes to examine this period of change more closely to understand how and why changes in food habits have been affected by southerners.

The communities will be compared at three points in time to show both the range of southern exposure among the communities at each point in time and the change in each community over the three decades. The detailed case studies will describe the historical evolution of southern influences and food habits in the years leading up to the points of comparison in an attempt to shed some light on the process of change. Thus the first part of each case study will briefly describe the contact history before WWII and then detail the changes in the community leading up to 1961, the first year for comparison of suicidicity. The second time frame will cover the period from 1962 to 1971 and the third from 1972 to 1981, with some comments about changes up to 1985.

The years 1961, 1971 and 1981 have been chosen as dates for comparison of measures of "southernness" because of the census data available for those years. However in the case of some of the criteria used to gauge southern exposure the years will be approximate as the census does not provide data

for all the criteria considered. Data which relate to food habits and are not from the census years will be compared to the nearest census date.

The four communities chosen for the study are Lake Harbour, Cape Dorset, Pangnirtung and Frobisher Bay. They have been chosen because they represent a cross-section of both the size and degree of economic activity found in the eastern arctic - from the small hamlet of Lake Harbour with a population of 255 to the regional urban service centre of Frobisher Bay with a population of 2330 (1981).

#### Sudicity and Nordicity

The researcher has chosen to adopt an index of "sudicity" as a means of comparing degrees of "southernness" or exposure to southern lifestyles. The index is derived from Louis-Edmond Hamelin's "nordicity" index which was created to delineate the boundaries of the North and to allow comparison of degrees of "northernness" of sites within the larger area defined as the North. [Hamelin 1968, Hamelin 1978].

The sudicity index used in this study was designed for the purpose of comparing degrees of southern exposure in Northern Canadian communities. It may be applied to any community in the Northwest Territories, the Yukon or Nouveau Quebec and may also be relevant for communities in the northern part of Canadian provinces. With some modifications it might also be used to gauge "Westernization" in other less-developed areas of the world. In fact the sudicity index measures the same influences. However the more common term "Westernization" did not seem accurate when applied to northern communities where the influence which is called "Western" in most parts of the world in fact emanates from a region to the south. Hence the term "sudicity".

This index is intended for use in communities where traditional, non-industrial societies are becoming acculturated to modern, industrial societies. For societies where the traditional economic activity is agriculture rather than hunting and gathering, some of the variables included in the index might be modified slightly.

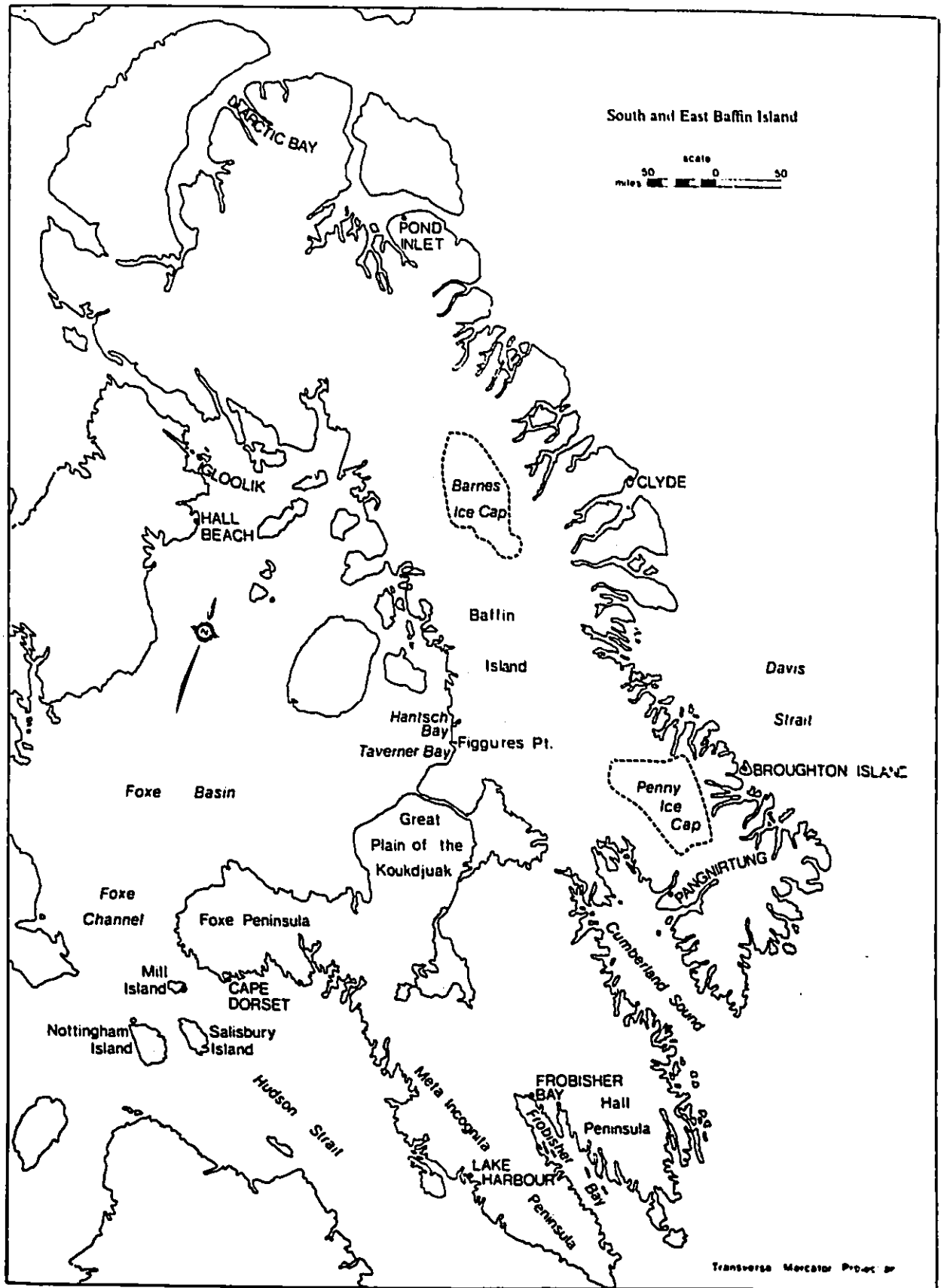
It is hoped that this index might be usefully applied to show changes in degrees of acculturation or modernization over time and to reveal differing degrees of acculturation at different locations at the same point in time. This study of four eastern arctic communities will be a preliminary test of its usefulness.

Hamelin's nordicity index is based on ten criteria which he considers relevant to the North. They include six physical variables and four human variables. Hamelin recognizes that some of these variables - particularly the human factors - will change over time causing what he calls a "denordification" of some northern sites and communities. He considers the measurement of denordification a useful application of his index.

Des calculs périodique de l'indice permettraient même de suivre ce dynamisme géographique, évolution que saisait pas, seul, le trait taïga-toundra à évolution énormément plus lente. [Hamelin 1968, p 422]

This study will use an inverted form of the nordicity index - using only human criteria - to demonstrate both the comparative degrees of southernness of four Baffin Island communities at each point in time and the changes in that "sudicity" over the three decades surveyed. It is anticipated that larger communities with more exposure to southern media and greater access by air or land will show

Figure 4.1



greater "sudicity" and that Inuit families in these communities will show a tendency to eat more "southern" store-bought foods.

Thus the researcher hypothesizes that:

Significant changes in food habits among Canadian Inuit since WWII correspond with increasing exposure to southern lifestyles.

The increased presence of white southerners in Inuit communities, increased population, increased access to southern cities by air, seas or land transport, increased economic activity and increased telecommunications indicate an increased exposure to southern lifestyles and thus should correspond with an increased proportion of southern foods in the Inuit diet.

This hypothesis will be tested using the proposed sudicity index (which gauges these variables). Sudicity calculations will be expected to produce higher values in communities where higher proportions of southern food are eaten by Inuit. Higher proportions of southern foods would be indicated by increased proportions of carbohydrates in the diet and decreasing amounts of country foods. Where possible, Inuit consumption in the eastern arctic will be compared to average "modern" Canadian or U.S. consumption of carbohydrates or meat and fish.

Historical profiles of each community are an integral part of this study. These are considered essential to any understanding of the process of change and important in demonstrating the context of the variables measured in the sudicity index. They will also allow the researcher to discuss influences on the changing diet of the Inuit which are peculiar to a particular community or fall outside the variables in the index.

### The Nordicity Index

Hamelin's nordicity index measures northernness in polar units or VAPO (valeurs polaires) using ten criteria. Each of the ten criteria is gauged in values ranging from 0 to 100 VAPO. A total of 1000 VAPO is theoretically obtained at the pole. Hamelin's physical criteria include latitude, summer heat, annual cold, types of ice, total precipitation and vegetation cover. The human criteria include accessibility other than by air, air services, population, and degree of economic activity. [Hamelin 1978] (See Table 4.1)

Hamelin sets a minimum latitude and a minimum number of polar units for summer heat and annual cold. Only sites at 45° N or more and with a total of at least 20 VAPO for summer heat and annual cold can be measured by the nordicity index. Hamelin also considers a total of 200 VAPO for the ten criteria to be the southern limit of the North. From 200 to 500 VAPO is what he calls Middle North, from 500 to 800 VAPO is the High North and 800 to 1000 VAPO is the Far North. [Hamelin, 1971]

### A Sudicity Index

For the purposes of this study, the researcher has decided to use only Hamelin's human criteria as physical variables are not considered to be directly relevant to a study of acculturation and food habits. The researcher also suggests that the values for Hamelin's physical factors for these four communities would be very similar because all four are on Baffin Island, above the tree line and within a range of five degrees of latitude. Further, physical variables would show very little change over this period. Therefore, including the physical criteria would not introduce any substantial deviation in the comparative southernness of these communities.

Table 4.1 Summary table for the calculation of the northern index

Criteria	Classes	Polar Units (if VARY)
1. Latitude	Up to 90°	100
	70°	77
	50°	55
	45°	33
	0	0
2. Summer heat	0 days above 5°C (45°F)	100
	40 days above 5°C	80
	60 days above 5°C	70
	80 days above 5°C	60
	100 days above 5°C	45
120 days above 5°C	30	
133 days above 5°C	20	
> 150 days above 5°C	0	
3. Annual cold	6/50 degree days below 0°C (32°F)	100
	5/50 degree days below 0°C	85
	4/700 degree days below 0°C	75
	3/900 degree days below 0°C	65
	2/900 degree days below 0°C	45
	1/950 degree days below 0°C	30
1/50 degree days below 0°C	15	
0	0	
Types of ice		
	4a. Frozen ground	
4b. Floating ice	Continuous permafrost 457 m (1,500 feet) thick	100
	Continuous permafrost less than 457 m	80
	Discontinuous permafrost	60
	Ground frozen for 9 months	50
	Ground frozen for 4 months	30
Ground frozen for less than 1 month	0	
4c. Glaciers and snow cover	Permanent pack ice (Arctic Ocean) (e.g., Beaufort Bay)	100
	Pack ice on port-Arctic seas	90
	Pack ice for 9 months	64
	Pack ice for 6 months	36
Pack ice for 4 months	20	
Pack ice for less than 1 month	0	
5. Total precipitation	Ice sheet 1,524 m (5,000 feet) thick or more	100
	Ice sheet 762 m (2,500 feet) thick	95
	Icecap about 304 m (1,000 feet) thick	60
	None	20
Snow cover of less than 2.5 cm (1 inch)	0	
6. Natural vegetation cover	100 mm (< 4")	100
	200 mm (< 8")	80
	300 mm (< 12")	60
	400 mm (< 16")	30
500 mm (> 20")	0	
6. Natural vegetation cover	Rocky desert	100
	Tundra clumps; 50% cover	90
	Sparse tundra; almost continuous	80
	Dense tundra and shrubs; humid steppe	60
Open woodland (in birch); parkland; bushes	40	
Dense forest (coniferous or broad-leaved)	0	

Criteria	Classes	Polar Units (if VARY)
7. Accessibility other than by air (heavy transport, pipe line, and winter road)	No service	100
	Seasonal service: once per year for two months for three months for six months or two seasons	80
	Year-round: by one means (with difficulty) by two means by more than two means	60
		55
8. Air services (either private or government)	Charter flights, 1,600 km (1,000 miles)	100
	Charter flights, 480 km (300 miles)	80
	Charter flights, 160 km (100 miles)	65
	Charter flights, 48 km (30 miles)	60
	Regular service, twice per month	40
Regular service, weekly	35	
Regular service, twice weekly	15	
Regular service, daily or better	0	
9. Resident or wintering population		
	9.a. Inhabitants in settlement	
9b. Population density of the area (50,000 km <sup>2</sup> or 100,000 miles <sup>2</sup> )	None	100
	About 25	90
	About 100	85
	About 500	75
	About 1,000	60
	About 2,000	40
About 3,000	30	
> 5,000	0	
10. Degree of economic activity	Uninhabited	100
	Exploitation but no exploitation	90
	Reserves known	70
	0.4 per km <sup>2</sup> (1 person per mile <sup>2</sup> )	50
1 per km <sup>2</sup> (1.5 persons per mile <sup>2</sup> )	45	
4 per km <sup>2</sup> (10 persons per mile <sup>2</sup> )	0	
10. Degree of economic activity	No production, none foreseen	100
	Exploitation but no exploitation	80
	Reserves known	75
	30 persons living off the land; airstrip	60
	Low level of commercial sea fisheries	50
	Gathering, extraction, handicrafts	45
Flour site; small factory, light investment	30	
Mineral concentration, storage, terminal	20	
Small scale agriculture	15	
Major "secondary" enterprises; well developed agriculture	0	
Interregional centre with multiple services; heavy investment		

Three new human criteria have been added to Hamelin's measures to provide additional information about the "sudicity" of these Northern communities. The proposed "sudicity" index will thus include seven variables which are considered relevant measures of southern exposure. They are total resident population, proportion of non-native population, accessibility (other than by air), air services, degree of economic activity, income per capita and communication. The index can thus be considered an index of acculturation rather than a more general index for defining northern boundaries, which Hamelin's is intended to do. (see Table 4.2)

It is recognized that this index has some of the same weaknesses as Hamelin's nordicity index, in that some of the variables are descriptive and the hierarchy assigned to them cannot, therefore, be easily quantified. However, these variables are considered key indicators of modernization and, as this index is intended to be descriptive rather than mathematical, it is felt that it is more important to include the variables with approximate sudicity values assigned to them, than to exclude them because they cannot be precisely quantified. Also, wherever possible, the researcher has followed Hamelin's hierarchy for nordicity values, reasoning that his index has been refined over time and testing and his values are thus less arbitrary than this researcher's first attempt would be. Where the researcher diverges with Hamelin's assigned range of sudicity values, it is explained below.

Table 4.2  
Sudicity Index

		Sudicity
<b>Value</b>		
Population	5,000 or more	100
	3,000	90
	2,000	85
	1,000	75
	500	60
	300	40
	100	20
	25	10
	00	0
Proportion of Non-native Population	50 % or more	100
	30 %	80
	20 %	60
	15 %	45
	10 %	30
	5 %	15
	0	0
Accessibility (heavy transport by water or land)	Year round - by more than two means	100
	- by two means	80
	- by one means	60
	Seasonal - for six months	55
	- for three months	40
	- for two months	20
	- once a year	15
	No service	0

Air Services	Scheduled - daily or more	100
	- twice a week	80
	- once a week	60
	- twice a month	40
	- winter or summer only	20
	Charter - once a month or less	10
	- very occasional - less than five times a year	0
Degree of Economic Activity	Interregional centre, multiple services	100
	Major transportation centre, secondary industry	80
	Mining or military development	60
	Tourism, small scale commerce	40
	Handicrafts, cooperatives or collectives	30
	Trapping, plus seasonal wage labour, (cash crops)	20
	Traditional trapping, Hunting (agriculture)	10
	No production for cash, none foreseen	0
Income Per Capita	equal to the Canadian average	100
	80 % of "	80
	60 % of "	60
	40 % of "	40
	20 % of "	20
	< 10 % of "	0
Communications	TV and radio by satellite	100
	Taped TV transmission, plus radio and movies	75

Public radio (CBC), plus choice of movies (more than one/week)	55
Public radio (CBC), regular weekly movies	35
Shortwave radio (taped public service - Northern Messenger)	20
Shortwave radio - random recep- tion of international broadcast	10
No movies, radio or television	0

Total Possible: 700

Ranges: > 525    Highly Southern  
           350-525    Moderately Southern  
           175-350    Limitedly Southern  
           < 175     Traditionally Northern

Each of these criteria will be gauged, as in Hamelin's index, with each factor assigned a value ranging from 0 to 100. Numbers will be rounded to the nearest interval of 5. Using the sudicity index, the total value possible will be 700. At 700, the lifestyle of a community could be considered entirely "southern". With a sudicity value of less than 175, a community will be described as traditionally northern. With a sudicity value of more than 525, a community is considered highly southern. For the mid-ranges, from 175-350 and 350-525, communities will be labelled limitedly southern and moderately southern, respectively.

It is expected that sudicity values would be modified over time by technological change, population growth and general economic development (as nordicity values have been). In most cases, sudicity would be expected to increase with increased communications and government services becoming available in Northern Canadian communities. However, there

may be some cases where sudicity decreases, as when a mine closes and population and services are withdrawn from a site.

It would perhaps be useful at this point to explain the choice of the seven sudicity criteria and the calibration of each.

i) **Population** - Population would appear to be a simple number which indicates the size of a community and the potential for influence from others on one's traditional lifestyle. Larger communities are considered more urban and therefore more "southern".

However, in the Canadian North, population has historically been a difficult and unreliable yardstick because of the number of transient workers and nomadic residents who are sometimes counted and sometimes excluded from population figures. For the purposes of this index, the population figures used will be resident population for each location, as recorded by the national census. It is recognized that Northern Canadian population counts from all sources have been criticized for underestimation and unreliability by some demographers. [Lu & Mathurin 1973, Hamelin 1979, Joyce 1982] However, it is considered outside the scope and capabilities of this study to recount the resident population from previous decades. Thus the researcher will use the census numbers from all three decades as published.

The sudicity values assigned by the index for total resident population correspond almost exactly with the inverse of Hamelin's nordicity values for population. A population of 5,000 is set as the threshold beyond which a community would be considered entirely "southern". The researcher has added one additional level to the ranges of population -- that of 300 (between 100 and 500) -- because the majority of

communities North of the 60th parallel had populations of less than 500 in 1981 and less than 300 in 1971. [N.W.T. Explorer's Map 1984, Hamelin 1978] The additional level allows for greater differentiation between degrees of northerness among these smaller communities.

ii) **Proportion of non-native Population** - The researcher has chosen to include the proportion of non-native population as a criterion in determining sudicity because almost all non-natives in arctic communities are southerners and the presence of southerners is believed to be significant in contributing to a "demonstration effect" with southerners acting as demonstrators or role models. Native Northerners may aspire to attain their "southern" lifestyle (and adopt southern foods) because they see their traditional Northern lifestyle as inferior to the new southern one. [Duesenberry, 1967] In the past, southerners have also acted as instructors in southern living, teaching hygiene, home economics, and skills for wage employment.

This criterion has been measured in percentages ranging from 0 to 50 per cent. At 50 per cent non-native population, a community would be considered entirely southern under this criteria. It is interesting to note that this is one criteria that may show a decrease in value over the three decades covered by this study.

This happens where the Inuit population has grown at a faster rate than the non-native population of southerners hired for jobs in the community or where Inuit have taken over jobs previously held by southern non-natives.

iii) **Accessibility (other than by air)** -- Accessibility by land, sea or air is considered an important factor indicating the ease with which southern goods could be

obtained in the community or southerners might be able to visit the community.

For this criterion, the researcher has used a direct inversion of Hamelin's nordicity values for accessibility starting at 0 for no service by sea or land and assigning a maximum of 100 for year round service by more than two means. Year round access by road, railroad, and water or pipeline is considered access equal to that of southern communities and therefore would make a community southern under this criterion.

iv) Air Service -- Air transport has been a key factor in opening up the Canadian North to southerners and southern influences. [Jenness, 1964, McBain 1970, Rowley 1980] Before the advent of air service in the Canadian North, goods and people could be transported into the community only during a brief summer shipping season. This meant that most coastal arctic communities and northern riverine communities received shipments of foods or visits from southerners only once a year. Air service offered a speed and flexibility which dramatically increased the pace of government involvement, the amount of industrial activity and the variety of southern commodities available in the Canadian North. It will therefore be gauged separately in the sudicity index.

Hamelin's values for air services included a mix of measurements for frequency and distance of flights. The upper end of his scale (or more northern) was measured in distance while the lower end (or less northern) was measured in frequency. For the purposes of gauging southern exposure, frequency is considered more important to southern exposure so the values assigned for sudicity are all according to how often flights go into the community. A site which sees charter flights less than five times a year would be given

a value of 0 sudicity while a community which has daily (or more frequent) scheduled air service would be assigned a value of 100 because it is considered extremely accessible to the south.

v) Degree of Economic Activity -- Types of economic activity are commonly used by geographers to gauge the level of development (and, in some senses, sophistication) of a community. The basic divisions of economic activity are primary, secondary, and tertiary.

For the purposes of this index, activities are delineated in a manner similar to Hamelin's, although not identical. The top and the bottom of the range are Hamelin's inverted -- giving 0 for an inter-regional centre with multiple services and heavy investment and 100 for a site with no production (for cash) and none forseen.

The rest of the scale, however is less concerned with fishing and agriculture than it is with activities more common in the arctic. Traditional hunting and trapping and handicrafts are low on the scale because they are considered activities which do not demand complete acculturation in order to participate and can be conducted with very few resident southerners. Tourism is higher on the scale because it brings in southerners and southern influences. Mining, military and major secondary industrial development are high on the scale because they are generally conducted with a large non-native and southern workforce.

vi) Income per Capita -- Income per capita is the most commonly accepted measure of standard of living [Palmer 1973] and is a factor which is used by development theorists and policy makers to gauge the development of Third World nations. It is useful here because it indicates how much a

Northern native family is able to purchase of the trappings of a southern lifestyle (and particularly how much southern food).

This is perhaps the element of the sudicity index for which it is most difficult to calculate sudicity because different agencies and researchers use different criteria to define personal income. Some researchers calculate income per capita using only earned income, while others include government pensions and allowance. However the factor which presents the most difficulty in measuring income in the North is whether or not to estimate and include the value of food procured from hunting.

As a measure of standard of living, it is certainly more accurate to include this food, because in many northern Canadian communities it makes up a significant part of the total food consumed. However, if a researcher is interested in the access which income gives to southern material goods and, particularly southern foods, including the estimated value of hunted foods makes the total income less representative of the ability of a family to acquire southern goods.

As with population, it is beyond the scope of this study to recalculate income per capita. Thus the researcher will rely on existing calculations made by economists and agencies in the North for calculating sudicity. Income per capita is not a calculation provided by Statistics Canada and so must be calculated from other census data (as in 1981 numbers) or taken from studies of income done by other agencies (as in 1971 numbers). (See explanation in Appendix II)

All income figures will be adjusted to the 1971 Consumer Price index to make them as comparable as possible. Sudicity is measured according to how the income per capita for each

community compares to the Canadian national average income per capita. An income equal to the national average is considered fully southern and given 100 points. An income which is less than 10 per cent of the national average is considered fully traditional or northern. In real cases, it is unlikely that average income per capita would reach either extreme.

vii) Communications -- Communications, particularly mass media, are widely accepted as significant influences in determining buying patterns of all consumers. (The very lucrative worldwide advertising business thrives on this concept.) Because the vast majority of movies, television and radio are produced in the major southern urban centres, these media are also major influences in acculturating people to the mainstream "southern" North American society. [Ewen and Ewen 1982] In the 1960s mass media were also considered tools for "modernization" of less-developed nations and societies. [Schramm 1967, Lerner 1967]

The sudicity index includes a range of mass media from no exposure to radio, television or movies (given a value of 0) to television and radio by satellite (given a value of 100) which is considered full access of southern media and its influence.

Before proceeding to the formal structured comparison of sudicity for each of the sample communities, the researcher will use the following four chapters to outline the historical profiles of Lake Harbour, Cape Dorset, Pangnirtung and Iqaluit. These descriptive accounts are intended to show the evolution of each of the communities towards a more southern lifestyle and more southern food habits. The sudicity values for each community will be noted in the historical profiles and compared in a following chapter. The profiles will provide detail which is

significant to any full understanding of the changes in Inuit diet over the years from 1955 to 1985.

The profiles are ordered according to community size in 1981, starting with the smallest, Lake Harbour, followed by Cape Dorset, Pangnirtung and Iqaluit (or Frobisher Bay).

## Chapter 5

### Lake Harbour

Lake Harbour is the smallest of the four communities examined in this study. Located on the southern coast of the Meta Incognita Peninsula, on southern Baffin Island at 62° 51' N 69° 53' W, it was described in 1960 as "a beautiful and well-located settlement" [Graburn 1963] and into the 1970s considered an example of a healthy and self-sufficient traditional settlement. [Kemp 1971]

The Inuit of the Lake Harbour area have been in contact with Whites for more than a century. From the 1860s, whaling ships passing through Hudson Strait stopped along the southern coast of Baffin Island to pick up Inuit to work for them as boat pilots and guides. It was during this period that the Baffin Island Inuit were first exposed to white man's diet. According to the journals of C.F. Hall (1865) and A.P. Low (1903), the Inuit who worked in the whaling service or mining mica in the area were fed three meals a day by their employers.

In 1865, Hall recorded that each meal consisted of "a sea biscuit, coffee and a slice of salt junk (meat)". In 1903, Low observed that men and their families were provided with a (pilot) biscuit, coffee and molasses from the whaling station but supplied their own meat. According to Duffy (1978)

By the end of the first decade of the twentieth century, most of the Inuit in the Canadian Arctic had been exposed to the white man's food directly or indirectly as a result of whaling activities.

When the whaling industry collapsed about 1910, a few small trading posts were established at the sites of old whaling stations. The Lake Harbour Hudson's Bay post, which opened

in 1911, was the first on Baffin Island. Trapping replaced whaling as a seasonal activity which provided limited means for the Inuit to acquire goods introduced by the whalers - including guns, ammunition, clothing and selected food-stuffs. Duffy, however, maintains that the Inuit of the eastern Arctic never fully abandoned hunting for trapping. "They did not become trappers instead of hunters, but for the most part, hunters who trapped." [Duffy 1978, p36]

#### Post WWII-1961

As late as 1951, the average number of traps set by an Inuk during the winter did not exceed 20 or 30 (Duffy 1978). The few skins trapped could be traded at the local Hudson's Bay post for the new essentials - which by 1949 included flour, baking powder and tea. [85/98/251-1-2, 1949]

The Inuit of Lake Harbour continued to live the 'traditional' camp lifestyle of the post-whaling period in the late 1960s. While in the neighbouring communities of Cape Dorset and Frobisher Bay through the 1950s, the federal government had begun to take an active hand in providing wage employment for the Inuit, administrators and government agents saw Lake Harbour as a successful hunting and trading community whose inhabitants should be encouraged to maintain their traditional existence.

The RCMP report from Lake Harbour for the year ending December 31, 1957 observed

For the most part Eskimos in this area continue the way of life which has been past [sic] on to them from years past; that of hunting and fishing.

[85/126C/100/167/3, 1958]

The commanding officer of 'G' Division (the division of the RCMP responsible for Northern Canada) added this comment to the local constable's report before passing it on to the

director of the Northern Administration and Lands Branch of the Department of Northern Affairs and National Resources (DNANR):

In view of the fact that the Eskimos of Lake Harbour are living off the land, it is considered that they should be encouraged to continue in this manner. (ibid)

Six years later, when Frobisher Bay was already facing 'modern' problems of unemployment, drunkenness and violence, the RCMP reported that in Lake Harbour "nearly the entire populations lives off the land". Citing "a relatively well balanced diet and good housing conditions" as the major reasons for the good health of the Inuit in the area, the local constable concluded, "This is a particularly well-adjusted and economically solvent community."

[85/1951/A1000/167/1, 1961]

In this first year of comparison of suicidity, Lake Harbour could be considered a 'traditional northern' community where most people lived as hunters and ate food procured from the land.

In fact, before 1965 the actual community of Lake Harbour had very few permanent inhabitants. The 1956 census estimated that there were 264 people in the area but, in 1960, the RCMP reported only three heads of families were permanently employed in the settlement. Ninety per cent of the Inuit families lived in five camps at varying distances from the community and traded into Lake Harbour.

[85/1951/A1000/167/1, 1961]

However, reports written by a researcher in the employ of DNANR during this same period expressed his and others' deep concern about the apparently declining population of this small community and revealed the more complex nature of its society. Nelson Graburn spent the summer of 1960 in Lake Harbour doing a study of the community for the Northern

Coordination Research Centre. He described the people of Lake Harbour as

a curious mix of "sophistication" and "primitiveness", perhaps more so than other communities. At least 25% have visited Frobisher Bay (and returned) within the past 5 years with some consequent influence. [Graburn 1963]

The population of the Lake Harbour area had declined from 264 in 1956 to 114 by 1960, largely because of emigration to Frobisher Bay, approximately 120 kilometres away across the Meta Incognita Peninsula. In the year 1957 alone, the RCMP reported that 93 people left Lake Harbour in search of wage employment in Frobisher Bay.

[85/1266/1000/167/3, 1958]

This emigration had mixed consequences for the community. On one hand, Graburn observed that by 1960 those who were not 'hunting-oriented' had left for Frobisher Bay. The smaller population in the Lake Harbour area had less competition for the relatively abundant game in the area and thus were able to maintain a self-sufficient lifestyle while other communities in southern Baffin were beginning to rely increasingly on government relief rations to get them through lean months or years on the land.

The RCMP report for the year 1961 commented

Most Eskimos are not anxious to work during the summer, as they find that by seal hunting they are able to support themselves and obtain meat for their families, and a year's supply of dog food at the same time, whereas, if they are employed they have only a short period in the fall to obtain fresh meat for their own use and usually run out of dog feed before spring.

[85/1951/A100/167/1, 1962]

The 1962 report repeated that most Eskimos resided at camps located within a few miles radius of the settlement and only got together when they all came into the post at Christmas. When the Eastern arctic patrol boat stopped in the settlement to do medical examinations for tuberculosis in the summer of 1963, its officers remarked that it was difficult to interest Lake Harbour Inuit in construction work for the Department of Northern Affairs because they were so "independent".

The value of furs purchased by the Hudson's Bay post at Lake Harbour stayed relatively stable between \$6,800 and \$8,400 worth from 1955 to 1960. But with less than half of the 1956 population, the per capita income rose substantially from \$175 to \$215, a higher income than many were earning from wage employment in Frobisher Bay (see Table 5:1).

Table 5.1

Lake Harbour Population and Income 1955-1959

	1955-56	1956-57	1957-58	1958-59	1959-60
Per Capita Income	\$175	\$200	\$150	\$220	\$215
Population	250	240	240	150	120

The relatively self-sufficient lifestyle of the Lake Harbour people is perhaps best illustrated by the small number of requests for social assistance in the form of relief rations. In 1963, when Cape Dorset, with a population of 316, reported 298 cases where social assistance was given to Inuit families, Lake Harbour, with a population of 114 reported only 78 cases. While Frobisher Bay Inuit were given \$18,979 worth of groceries as relief rations (or \$22.42 per capita), Lake Harbour Inuit received only \$1,417 in groceries (or \$12.43 per capita). [85/1961/A560-1-3/Part 1, 1963-64]

Graburn reported that the diet of the Lake Harbour Inuit in 1960 consisted almost entirely of meat, tea and bannock.

Nearly all meats are cooked (boiled). Bannock is cooked over the seal oil lamp and probably forms 30% of the total calorie intake. Relatively little store food of other kinds is consumed. As ever, tea, made in the kettle is consumed in vast quantities. Adult protein (meat/fish) intake was estimated to average 1 1/4-3/4 lbs. per day. [Graburn 1963]

By the beginning of the 1960s the number of winter camps along the coast had declined from approximately 20 to only five. Four of these were in the North Bay area and the other was in Aberdeen Bay. Families moved into the settlement from coastal camps after break-up in the spring to wait for the annual sealift (cargo from the supply ships). Unloading the ships provided a few days' pay but during the wait the men spent much of their time away from the post hunting and fishing. Five men were employed in the community during the summer boatbuilding for the Hudson's Bay Company and the rest of the families moved out on the land to North Bay, Markham Bay, or inland to Amadjuak Lake until winter when they returned to the coast.

Seal provided the bulk of their food supply with white whale, walrus and arctic char adding variety. Caribou were hunted inland during the summer but were more important for supplying skins than adding to food supplies. [Graburn, 1963]

The large proportion of Inuit living a 'traditional' camp life perhaps masks the degree of modern or southern influences already at work in the Lake Harbour area. In December 1955, the RCMP reported that 60 Inuit from the Cape Dorset and Lake Harbour area had been evacuated to southern hospitals because they were diagnosed as having

tuberculosis. In 1956, 25 were taken 'Outside' and 35 returned after spending at least a year in health insitutions. [85/1266/1000/167/3, 1957]

Graburn refers to these recuperating patients in his 1960 report, explaining that many of those who left Lake Harbour for Frobisher Bay in search of wage employment were people who were no longer interested in hunting and, in some cases, were no longer physically capable of hunting. He notes that there were very few complete extended families left in the Lake Harbour area.

On average only two thirds are left here, the rest having drifted to Frobisher. This drift is continuing, especially amongst older people who have been out to hospital. [85/1656/NR2/3-27, 1960]

Graburn estimated that more than 150 former Lake Harbour residents had moved to Frobisher Bay by 1960. For those left in Lake Harbour, 44 per cent of their nuclear family resided elsewhere and a large proportion of their extended family. (Elsewhere, in this case, meant either in Frobisher Bay or in a southern hospital.)

One of the material consequences of these family ties in Frobisher Bay was that many Lake Harbour area camp dwellers owned modern luxury items which were not available through the local Hudson's Bay store and were not known in many larger Inuit communities further south, on the coast of Hudson Bay. Graburn reported finding handbags, electric razors, bread-boxes and an electric toaster in the Lake Harbour tents. He also counted nine radios, eight record players, seven accordions and seven cameras. He remarked

The economy of the settlement can in no way be looked upon as an "independent unit" anymore. It is especially for the mobile Eskimo - very much bound up with the whole area, and indeed the world. Though much of the

subsistence economy is intact, the means to pursue it now depend almost entirely on the goods and money of civilization. [Graburn 1963]

By 1960, Inuit in Lake Harbour were already being exposed regularly to radio broadcasts and movies - and many of the area children had attended school for at least the summer months. An United States Air Force radio station had been located in the settlement for four years during World War II. A CBC shortwave service had beamed transmissions North since 1933. Among the most popular programs was the Northern Messenger which played taped messages from Inuit in southern hospitals to their families in the North.

Although it is difficult to determine when the first Inuit acquired a radio, RCMP reports reveal that by 1959 all Inuit camps in the Lake harbour area had at least one radio and the families were listening to both the CBC Northern Messenger broadcast from CBW Manitoba and to Radio Greenland's Eskimo programming. [85/1951/A1000/167/1, 1960]

In his annual report on 'Conditions amongst the Eskimos Generally' Lake Harbour's RCMP constable suggested that it would be highly desirable for the government to establish a radio station in the eastern arctic and that at least some of the programs should be in the Eskimo language. The constable saw radio as a useful educational tool for government administrators and teachers who wished to improve living conditions in the arctic.

Another new and significant modernizing influence in the lives of the Lake Harbour Inuit was a government-operated school. A teacher set up a temporary school in Lake Harbour during the summer of 1960 and had 28 students regularly attending classes. These students were given 40 minutes instruction each day on sanitation and hygiene principles - subjects which the government considered essential to

maintain good health. Although adult education classes were not as successful, the teacher reported that a number of older men dropped into the school workshop on a casual basis. By this time movies and dances were regular weekly activities although the teacher noted they were not as popular as activities at the Anglican church.

The seasonal school was operated for two months in the summers of 1961 and 1962 before a year-round federal day school was established in the fall of 1963. The new teacher reported that although 25 students were enrolled, only 14 lived close enough to attend regularly.

#### 1962-1971

Life in Lake Harbour changed rapidly in the late 1960s. With the construction of the federal day school and low rental housing units, most of the Inuit in the area abandoned their permanent winter camps for life in the settlement. A government report on health and social services in the community noted that until the summer of 1968, there were three permanent hunting camps in the area surrounding Lake Harbour. By the end of the year, there was only Keyukjuak, 15 miles away at Tanfield. [85/BX15/85-86/220/A1000/167/1, 1968]

Ten low cost rental houses were constructed in the summer of 1967 and an additional 12 houses were scheduled for construction in 1968 [Higgins 1968] By that year, forty children were attending school regularly although only 14 of their fathers were employed full-time. This was more than triple the number of permanent wage earners in 1961 but still represented less than 10 per cent of the population. Wage jobs available for the Inuit included seasonal construction work for the federal government or summer mica prospectors and soapstone miners and the few permanent service jobs as clerks or assistants for the Hudson's Bay

Company, the church, school, nursing station or the RCMP. Per capita income was estimated at \$521 per year (or as much as \$821 if the country foods were included) with welfare providing \$39 per capita or 7.5 per cent of total income. [Higgins 1968]

At this stage, Lake Harbour could still be considered an isolated community. Communications in the settlement were rated as poor with no airstrip and no scheduled air service, although planes with skis or floats could land in the harbour. The Inuit still relied "mainly on hunting as a means of support". However, their hunting methods had changed with the introduction of new technology. The first snowmobile in Lake Harbour was purchased in the fall of 1964 and by the end of the decade every home had at least one. [Valaskakis 1976]

At the turn of the decade, geographer William Kemp made a detailed study of the flow of energy (both human and hydrocarbon) in the hunting camp a day's journey from Lake Harbour. Kemp observed that "By 1971 anyone who wanted a snowmobile or some other piece of factory-made equipment could get what he wanted through a combination of salvage, gift and purchase." He suggested that the way Inuit families lived was largely a matter of choice.

For the individual the exploitation of economic alternatives and the pattern of activity vary according to taste and lifestyle. Although lifestyle is in large degree dictated by age, the effect in the village is integrative rather than disruptive. [Kemp 1971]

Kemp believed that the hunting society of Lake Harbour could persist into the foreseeable future if the Inuit chose to live as hunters because he felt the relationship between the Inuk and his ecosystem had not changed in spite of the new technologies. The snowmobile and the dogteam, the rifle and

the harpoon coexisted in Lake Harbour - as did the younger and older generations - without apparent conflict or competition. A government report on the community prepared in 1968 agreed with his observations about the vitality of the society.

The Lake Harbour people are very proud of themselves, their settlement and their homes. They are friendly, cooperative and hardworking. Lake Harbour is socially the perfect settlement. [85/BX15/8586/220/A1000/167/1, 1968]

It is interesting to note, however, that an area economic survey conducted in Cape Dorset and Lake Harbour in 1967-68 disagreed vehemently. G.H. Higgins admitted that the people of Lake Harbour "remained very much trapping and hunting oriented" but saw this as an unviable form of economy for the area in the future. Higgins asserted

The fauna resources are no longer able to satisfy the Eskimo's expanded appreciation of "living" and the often-used term "living off the land" is rather anachronous where today's Eskimo is concerned. [Higgins 1968, p. 1]

His primary recommendation for southern Baffin Island was that Lake Harbour should be abandoned and its population "consolidated" (using Newfoundland Premier Joey Smallwood's logic) into one settlement at Cape Dorset. As a result of three and a half months fieldwork, Higgins concluded that the printmaking and craft cooperative of Cape Dorset was a viable and desirable industry and advised the government not to duplicate the investment it had already made in Cape Dorset in a site with such poor potential as Lake Harbour.

In contrast, during the 54 months Kemp spent in the Lake Harbour camp, he had come to appreciate the strong ties between the Inuit and the land. For his study, he split his time between two Inuit households which he distinguished as modern and traditional. Although he saw the obvious changes

in the lives of the Inuit, he concluded that there was room for both the Inuit wage-earner and the Inuit hunter in a future northern society.

Kemp's study included a revealing analysis of the food consumption of the Lake Harbour Inuit. Kemp calculated the number of calories the Inuit obtained from game and measured the kilocalories of fuel and food expended in both the modern and traditional households. His analysis showed that both households got 44 per cent of their calories from protein and 33 per cent from carbohydrates. An estimated 93 per cent of their protein came from hunting and 96 per cent of their carbohydrates came from food purchased at the local store.

Kemp noted that generally the amount of imported or country foods they ate was their own choice. "In this Eskimo group," he maintained, "even though imported carbohydrates were readily available and there was money enough to buy imports almost ad libitum, the balance was in favor of protein." [Kemp 1971, p. 113]

He added that the quantity of store food purchased varied considerably from month to month. In March and September 1967 and February 1968 the store purchases of both households rose significantly above average - increases he attributed to social assistance in two months and money from summer wages in the third.

The foods purchased from the store had greater variety than in the late 1950s. Kemp noted that in addition to bannock, which was still an Eskimo staple, the Inuit ate imported sugar, biscuits, candy, softdrinks, jam, peanut butter, molasses, oatmeal and crackers. Canned meats were occasionally eaten, but, according to Kemp, were not recognized as real food. Fruit was purchased in small quantities and vegetables usually only by mistake. Babies

and young children were also fed a reconstituted milk - the daily ration being about 48 ounces of water mixed with 1.2 ounces of dry milk and 1.7 ounces of sugar.

Kemp also noted that the food from the two different sources was treated differently. Country foods, acquired by hunting, were stored in bulk and available to everyone in the camp. They were shared in a fairly traditional manner which meant that the success or lack of success of a hunter was not reflected in the amount of meat his family ate. Everyone had a share. Storebought foods, in contrast, were neither stockpiled nor shared. They were eaten, when purchased, by the immediate family group of the man or woman who had bought them.

A 1972 community health report confirmed some of Kemp's observations about Lake Harbour Inuit food habits during this period. It reported that the Eskimo diet was still mainly seal and caribou "with fish acting as a change rather than a staple diet." However, there was also concern about the amount of non-nutritious store products which was being consumed. The local nurse observed "The Eskimo here like in all other settlements eat and drink a tremendous amount of candy and soft drinks."

Thus, in 1971, Lake Harbour with a sudicity value of 250, was beginning to show limited signs of southernization. Although the lifestyle of the majority of Inuit was still concentrated largely on hunting and trapping, the majority of camp dwellers had moved into the settlement, swelling Lake Harbour's resident population from 90 to 189. Where, in the late 1950s most Inuit ate a traditional diet of wild game, fish, bannock and tea, most now also ate a large number of sweets purchased from the local Hudson's Bay store.

The 1970s would see further southernization in the community with more northern housing units constructed and government organization of small business enterprises.

#### 1972 - 1985

In spite of the limited physical access to the south (through twice-weekly scheduled flights), the Lake Harbour people had wide exposure to mass media. Since 1975 they had had access to full radio and television service through the Anik satellite and they have been reading newspapers and comic books since at least the early 1970s.

In 1972 Lake Harbour was the only community other than Frobisher to support a local newspaper. [Mayes 1972] In 1975, communications researcher Gail Valiskakis reported that the local Hudson's Bay store sold 500 comic books a month to the population of 200 and that all ages read the comic books.

As the Inuit of Lake Harbour entered the 1980s the community was still considered small and relatively traditional when compared to other communities in the eastern arctic. However, its sudicity value of 350 indicates a moderately southern community. The settlement supported a population of 252 (220 Inuit and 35 non-native people according to Census Canada's randomly rounded figures). With 47 trappers in approximately 45 households in the community, marine mammal harvesting, hunting and fishing continued to be the major economic activities.

Per capita income was calculated at \$1,525 (in 1971 dollars), less than 30 per cent of the average Canadian per capita income of \$5,084 (in 1971 dollars). In 1982, Lake Harbour's Inuit still acquired 265 kilograms of country food per capita which represented more than 60 per cent of the total foodstuffs consumed.

## Summary

Lake Harbour is a small community which maintained the lowest sudicity of the four communities examined throughout the years from 1961 to 1981. It remained fairly isolated from direct southern influences into the 1970s with physical location of the community making air service difficult and a majority of households relying on hunting and trapping for a livelihood.

However indirect influences may have been more significant that many outside observers have recorded -- as family members who moved to Frobisher Bay in the late 1950s or early 1960s encouraged later changes in the smaller community's lifestyle. Travel overland by dogteam and, later, by snowmobile between Frobisher Bay and Lake Harbour was common through the 1960s and 1970s. A large number of Lake Harbour residents were taken south for treatment of tuberculosis and subjected to southern institutional food among other southern influences.

The number of trappers in Lake Harbour remained high into the 1980s, although only one trapper in three earned over \$600 in 1981. By the mid-1980s, however, the future of hunting and trapping households looked uncertain with only four trappers in a community of 252 earning over \$600 in 1984-85. One expects that the amount of country foods in the diet will also decline as more men give up trapping and hunting as their primary economic activity.

## Chapter 6

### Cape Dorset

Cape Dorset is an eastern arctic community perhaps best known for its carvers and printmakers. It is a mid-sized settlement located on Dorset Island off Foxe Peninsula on southwest Baffin Island at 64° 14'N, 76° 32'W. In the 1950s it was selected as the site of a government-sponsored artists' cooperative and was one of the first communities on Baffin Island to be assigned a resident federal government administrator or Northern Service officer.

Before 1950, the settlement's population was spread over more than 400 kilometres of coastline in seasonal hunting camps. The Hudson's Bay Company established a trading post at Cape Dorset in 1913 and the post became the locus for the seasonal round of three major regional settlement areas-- Cape Dorchester and Andrew Gordon Bay on Foxe Peninsula and Amadjuak Bay to the east. Permanent winter camps were strung out at regular intervals along the coast from Cape Dorset to Lake Harbour with camps dividing about the midway mark to trade into the two posts. [Freeman 1976] Through the 1940s the Hudson's Bay Company competed with the Baffin Trading Company for the furs of about 100 families trading into Cape Dorset.

#### Post WWII to 1961

A legendary camp boss in the area, Pootagook, was instrumental in assisting the Anglican church to convert Inuit families after he became an Anglican in the early 1900s and a lay church leader in the following decades. In 1952-53 he rallied the area Inuit to build an Anglican church on their own initiative paying for it with furs. About the same time he was approached by a southern artist,

James Houston, to ask for his approval for a scheme of economic development based on traditional carving skills. Houston would serve as the community's first Northern Service Officer and would be the major patron and 'tutor' for Cape Dorset steering the community in a direction of development which continues into the 1980s.

From the whaling era, Inuit along the coast had carved small pieces of ivory and soapstone into figures and objects to sell to American and European visitors. When James and Alma Houston visited the southwest coast of Baffin Island in 1951 to survey the artistic potential in the area, they found a number of carvers still producing elaborate ivory cribbage boards and detailed carvings of dogteams which showed the influence of those 19th century tastes. Houston later said he chose Cape Dorset as the site for an artists' workshop because he felt carvers there had retained less of the whalers' influence than the Lake Harbour Inuit and were more likely to be able to meet the demands of a modern market. [Houston, 1979]

Houston took carvings south to sell and returned in 1953 to work as both administrator and artist in Cape Dorset for the next decade. A letter from the federal government records of the period shows that a piece purchased from an Inuit carver in 1952 for \$52 was sold at the Canadian Handicraft Guild (in Montreal) for 100. Three years later in New York the same carving sold for \$1,000. It was this kind of commercial success of "Eskimo" carvings that encouraged the Department of Northern Affairs and National Resources (DNANR) to support the economic scheme proposed by Houston.

It did not take long to convince the Inuit of the Cape Dorset area that carving was an attractive alternative to trapping. In the first years many trappers carved when trapping appeared unprofitable but continued to trap when fur prices were good and animals were abundant. In January

1956, Cape Dorset's community teacher, E.M. Hinds, commented on this adaptive strategy which was common in a number of Inuit communities through the 1950s and 1960s.

Much handicraft is being done, probably because there are few foxes. It appears to be more costly to go on the trapline this year than stay home. At least they know they will get something for their handicraft, but often they spend days on their trap-line, and have to support their families at home, and get not even one fox. [85/1266/1000/167/3, 1956]

In her next monthly report, Hinds noted that the price paid for carvings in the past year had doubled or trebled and suggested that this may have encouraged a number of carvers to take their spare time activity more seriously. Hudson's Bay Company records for Cape Dorset and Pangnirtung through the 1960s show that the company consistently purchased more carvings in months when there were few furs offered for sale. [Higgins 1968, Mayes 1972] Over the next five years through uncertain and uneven years of trapping, 70 per cent of the adults in the Cape Dorset area took up carving, printmaking or other types of handicraft production as an alternative source of income. [85/1912/1000/166, 1960]

The settlement of Cape Dorset underwent a great number of changes through the 1950s. The construction of a federal nursing station and a federal day school followed quickly after the erection of the Anglican church. Through the winter of 1955-56 only three Inuit were employed in the community but by the summer of 1956, Cape Dorset was buzzing with construction of houses and other government buildings. Houston reported that there were no Eskimos around the settlement who were not gainfully employed in July of 1956. Twenty-five men were staking claims for a mining exploration company. Ten men worked on construction of houses and federal buildings 10 hours a day, six days a week at a rate of 75 cents and hour. Each Saturday the men drew food

rations on their monthly pay, which Houston remarked was a "satisfactory arrangement to them". [95/1266/1000/167/3, 1956]

Alma Houston notes that carpenters' crews bought tinned roast beef and pork as well as a number of other tinned foods. "At first the people found them 'too salty', but they grew accustomed to them." [personal communication, 1987]

Seeing wage employment from a slightly different perspective, Hinds commented that so many Eskimos were employed by white people during the month of July 1956 that there was little time for hunting seals. While Houston was overseeing the work of construction crews, Hinds was visiting tents in the settlement and in nearby camps in a federally-encouraged campaign to teach English and hygiene to the Dorset Inuit. She noted that the rations distributed and foods purchased by wage earners created a new need for education in how to use southern foods. [op cit]

Over the winter of 1955-56 hunting and trapping conditions worsened and Houston expressed concern to his superiors in Ottawa about the amount of game the Inuit were able to obtain. A number of dogs died of an undefined sickness during the winter months and without dogs they could not go sealing until the water opened in July. By May Houston reported that 30 people wanted to leave Cape Dorset to find work in Frobisher Bay. He proposed a work relief project for the community for the coming summer constructing a warehouse, a cold house, a bridge and a sewing centre.

"I am against relief but frantically anxious to find some employment that will enable these people to buy food and clothing for themselves and their children," he wrote in a letter to the director of Northern Administration and Lands Branch in May 1957.

The RCMP officer at Lake Harbour (who was responsible for Cape Dorset) was also concerned about the numbers of Inuit who were in the settlement instead of their hunting camps and expressed the opinion that "there appears to be a tendency to hang around the post a little more each year... the writer feels that the closer the natives get to a post the sooner they become dependent on handouts."

[85/1266/1000/167/3, 1957]

In June 1957, at the peak of the sealing season, there was still a large number of Inuit in the community waiting for the few days' work they would be given unloading the annual supply ship when it came in. Houston asked that Ottawa officials arrange to have the sealift stop at Cape Dorset earlier in the year so it would not interfere with seal hunting. However, by July fully a third of the heads of the 60 Dorset families were seasonally employed by whites. Houston had convinced the families not to move to Frobisher and had organized some of his proposed work projects for the summer months. Houston was aware that the wage employment he was providing was fostering changes in Inuit food habits and recognized that many of the new foods they were eating did not necessarily provide a nutritious diet. In July 1957 he reported that

Eskimo women in general know nothing of the preparation of white cooked foods beyond spreading store purchased jam over soggy almost uneatable bannock. A course in home economics would, they say, please them very much and help them improve the preparation of white food which they all rely heavily upon at the present time. The course should be definitely geared to their lives and everything should be done over a primus stove or even an oil lamp. Beans and all types of dehydrated vegetables and pudding mixes are a mystery to them and could be easily learned. [ibid]

Houston's wife, Alma, took the unusual step of writing to one of Ottawa's arctic administrators in January 1958 to ask for help arranging to have pressure cookers available for Inuit women in Cape Dorset and asking for supplies for a homemaking course. "The women here really need some help with cooking now that they are relying more and more upon store foods. Otherwise they'll live on flour and jam, as the people at Chimo did," she remarked. [85/1266/1000/167/3, 1958]

A new federal day school was constructed over the summer of 1957 and by November of that year there were 31 children attending classes in it. Those who hadn't tasted white man's food from summer rations were introduced to cocoa and oatmeal at school.

The new welfare teacher, Miss C.B. Wright, observed in her monthly report to Ottawa that all but four of her students were Inuit children who came to school every morning without breakfast. Wright took it upon herself to begin a school lunch program in Cape Dorset serving cocoa and a pilot biscuit or oatmeal with milk and sugar every morning before classes. On occasional Fridays she served caribou stew or baked beans for variety and reported

The children seem to enjoy the lunches and they certainly did enjoy the variety of caribou and beans. It is difficult to find anything that is appetizing to serve, but the children are apparently content with cocoa and oatmeal. [ibid]

The duties defined by the government for a "welfare teacher" in a northern community were varied and numerous. As well as teaching basic academics to these 30 students, Miss Wright was responsible for adult classes in English at least once a week, after school clubs, weekly movies for the community and inspection of homes and camps for cleanliness.

It is interesting to note that Miss Wright began providing meals for the children in her classes several months before she actually visited an Inuit camp and saw something of their lifestyle. Until that time, as with many southerners who came north to work, she relied upon accounts from the other white residents of the town. Her first visit to a camp was the subject of a three-page typewritten report which marvelled at the sled journey, the tents people lived in, and the lack of toys or familiar foods in the Inuit homes. According to her description, families living in this camp (Kiertu, only 6.5 kilometres from the settlement) were subsisting on flour, caribou and seal. After a four-hour visit she concluded

These people have small homes, yet everyone appears content, and they don't have such things as books, radios, or even the foods that we consider necessities.[ibid]

An interesting footnote to her visit is her complete description of the meal she prepared for herself when she arrived home in Cape Dorset -- which was made up, one supposes, of foods she considered necessities. The meal consisted of canned steak, canned peas, instant potatoes and canned apricots.

By the end of the 1950s almost all of the 70 employable men in the Dorset area were earning small incomes from furs, carvings, printmaking or casual labour. Houston reported in 1960 that there had been no relief payments in the community for the past three years. A statistical report filed in February 1960 estimated that 70 per cent of adults in the community were able to do some kind of skilled craftwork. Printmaking provided steady employment for six people. A number of women were sewing parkas, mitts, socks and skin boots for sale. Others carved in their homes.

As the new decade began the Houstons launched several new projects aimed at improving the diet of the settlement's Inuit. Pursuing her concern about the lack of nutrition in the bannock they prepared, Alma Houston taught several Inuit how to make bread and opened a small bakery and coffee shop in January 1960. She remembers

the bakery made oatmeal cookies that were a meal in themselves, fortified with powdered milk, wheat germ when available, and always made with whole grain flour.

The little bakery/coffee shop also scrounged the dried beans and dried vegetables nobody wanted from various messes and cooked them up with tinned tomatoes. To men working outdoors a plate of one of these and a large slice of homemade whole grain bread made a great hot lunch. [personal communication,1987]

The monthly administrative report for January 1960 noted "two girls are producing excellent nutritious bread" but added that the cost of the flour was so high that the bakery was only hoping to "pay the bakers a living wage" and did not expect to make a profit. [85/1912/ 1000/166, 1960] (According to Alma Houston, it would be its inability to make a profit which would close the bakery after they left the community in 1962.)

With the bakery operating successfully in the early months of 1960, Alma Houston expanded her work and began teaching a number of local women how to cook for tourists and construction workers. In the community report for June 1960, James Houston commented

They seem to be making good progress, and have served several meals to local whites and Eskimos, after having done all the preparations themselves. The instructress says the only worry their timing - again, it is hard to teach them to organize themselves to have everything ready on time. [ibid]

Alma Houston was also attempting to influence Inuit food habits by personal example. The Houstons, the Hudson's Bay Company manager and the Roman Catholic Mission all had small greenhouses and grew hardy salad vegetables and turnip greens under plastic for their own use. Alma Houston recalls, "When I had my 'greenhouse' everybody seemed to crave lettuce and radishes and (anything fresh)." She also used local 'greens' to supplement her young family's diet and, by doing so, demonstrated new uses to interested Inuit neighbours.

The best example of our foodly neighbourliness that comes to mind is that when one of the hunters would remember to bring me some seaweed, I would give his wife some special oil and vinegar dressing I made, having shown her how to blanch the seaweed. It would turn from a rather unappetizing bronze colour to a clear medium green, and made a great salad. [personal communication, 1987]

It is perhaps interesting to note that the Cape Dorset Inuit did not find the seaweed unappetizing in its natural state before they adopted non-native foods. The artist, Pitseolak, recounting her life story to Dorothy Eber, says

We used to hunt for dulse around the beaches. Sometimes when the men went hunting, they would bring back dulse for the women. Eskimo people believe that it has some medicine in it; when they are sick they feel better if they have some. [Eber 1971]

The community principal, Anne Berndtsson, was also concerned about the local women's lack of knowledge about storebought foods and how to provide their families with a nutritious diet from these new foods. In October 1961 she asked the Ottawa administrators to send the home economics teacher in Frobisher Bay to Cape Dorset to teach a two-week course on food buying and preparation. Berndtsson reported that most heads of households had some type of wage employment. Two

new stores in the settlement offered a wide variety of new and unfamiliar products. She observed that most families spent their paycheques within ten days of receiving them and lived on bannock and tea until their next pay or the next hunt.

Some of the available cash is spent upon food -- either from local stores or from Government rations. People are beginning to depend upon bannock, tea, softdrinks, gum and tinned foods for a diet.... Much food that is purchased here is merely eaten from the tin or package. Food value and nutrition are unheard of....

[85/684/A680/1/14/2, 1961]

In her report Berndtsson provided a vivid description of haphazard and, she contended, potentially hazardous buying habits of Inuit families new to settlement life. Arriving at a summer tent after the mother's daily trip to the store, Berndtsson observed

She had purchased the following food items: one can beets, one can asparagus, one small jar pickles, one can apricots, one can tuna fish, one dozen or more tins of soft drinks, numerous packages of gum and candy, plus twenty pounds of flour and three pounds of shortening. The tins were opened and passed out to the individuals in the tent. The person who happened to fall prey to the tin of cold, mushy asparagus -- took one, tasted it, immediately discarded the entire tin with its contents outside the tent door and moved over to help a young brother devour delicious sweet pickles. These foods washed down with a tin of Mason's root beer, followed by a package of gum would be novel for any picnic. However, I thought, surely something must be done here -- something long range, something of a permanent nature -- a diet like this will kill them.

[ibid]

Cape Dorset's sudicity value for 1961 was 195, at the lower end of the range considered limitedly southern (175-350). Its population was still small and its accessibility limited. However its economy was much more cash oriented than in either Pangnirtung or Lake Harbour and signs of southernization were already evident in the Inuit diet.

### 1962-1971

In mid-January 1962, Berndtsson's request was answered. The home economics teacher from Frobisher Bay conducted a one-week course in Cape Dorset on how to use store-bought foods. The school principal was very positive about the results. In a memorandum to the regional administrator written February 15, 1962, she noted that some new nutritious foods -- notably cans of milk -- had begun to appear on shelves in Inuit homes.

Her memorandum reveals some of her personal feelings about the approach government decision-makers took to improving the lives of the Inuit of the eastern arctic.

At last, a visitor came who was interested in the women - not just another man who came in, talked with the administrator and then left again. This visitor, Miss McKinnon, was not just a visitor. She worked with the women as fellow members of society. They realized that she recognized their problems, recognized their keenness to learn and to put their acquired knowledge to work - thus to make life a little better for their families.

[85/684/A680/1-14/2, 1962]

The mothers of Cape Dorset pursued their interest in southern-style homemaking lessons by circulating a petition asking for a permanent home economics teacher to be placed in Cape Dorset and submitting their petition to the Council of the Northwest Territories when it met in their community in August of that year.

Later government records suggest that only half of their request was fulfilled. A government file on home economics courses in the Arctic contains requests and approvals for paying a local woman to teach sewing lessons in Cape Dorset through 1963. However, there is no reference to any further cooking classes. [85/684/A680/1-14/2, 1963]

Houston's request for a community freezer was approved in 1962 and a unit sent into the community that summer to be put into use by the fall. Freezers were also sent in to Pangnirtung, Pond Inlet and Igloolik that year with a reminder that the freezers were intended to be used by the Inuit as storage space for country foods and not as storage for full year's supplies of southern foods for government employees as it appeared it had been used in Frobisher Bay.

In the decade since he had arrived in the community James Houston had helped establish the printmaking shop, overseen the construction of 10 rigid frame houses, helped set up a cooperative parka and handicraft business and encouraged the establishment of a tourist business. Over the same time, Alma Houston taught sewing and cooking, grew garden vegetables in a greenhouse, translated a number of recipes into Inuktitut syllabics and oversaw the opening of a bakery and a coffee shop.

By the mid-1960s Cape Dorset was suffering social adjustment problems which were attributed to rapid economic changes in the community. The population more than doubled between 1961 and 1966, from 166 to 357, as camp dwellers moved into the settlement to participate in the new wage activities. By 1971 the population had almost doubled again to 597 inhabitants. Each summer during this period there was intensive construction of new housing and community buildings.

A report on social conditions written in the summer of 1964 enumerated the problems of juvenile delinquency in the community over the past year. Lawless activities of the 19- to 24-year-olds ranged from petty theft of food and money from the Hudson's Bay store, the mission and the cooperative to gas-sniffing, homebrewing and indecent assault of a teacher. The government-commissioned report noted

The quantity of material investment made over the past five years in the shape of such projects as the Cooperative Retail store, the new school, the school hostels, the sewing centre, the Community Hall etc., has not been accompanied by enough social investment, or perhaps, in some cases, not the right kind.

[85/1912/1000/166, 1964]

The report, which was filed without the author's name, also remarked on the deterioration of white-Inuit relations in the past two or three years and lamented the struggles for power and naked materialism evident in the community. "Above all there is a gross materialism which forbids a man even to join the crew cleaning up his own garbage without seeking pay for it." [ibid]

It was not for lack of economic security. The average monthly (per capita) income was estimated at \$276, not including country foods. The researcher considered this a fairly healthy economic standard. The report recommended that there should be no further material development in the community until the new society had been consolidated. It also supported a longstanding community request that Cape Dorset be assigned its own resident RCMP detachment. Until this time it was still being served by the Lake Harbour RCMP constable 300 miles away.

In 1965 the RCMP established a detachment at Cape Dorset but there was little change in the pace of material development. In the summer of 1966, 25 low rental housing units were

erected in Cape Dorset and in 1967 an additional 24 were built. By 1968 there were 75 houses occupied by Inuit families. (At the same time there were 10 houses in Lake Harbour.) There were also 21 non-native people living in Cape Dorset running the school, nursing station, power plant, the West Baffin Eskimo Coop and the Hudson's Bay Store.

From its organization in 1959, the West Baffin Eskimo Cooperative had become the focus of the community's economic (and social) activities. Established under the guidance of James Houston and Terry Ryan (who from 1960 ran the print shop and acted as cooperative manager), the cooperative had two parts. The producer division oversaw carving, printmaking and sewing production. The consumer division was a retail store handling general merchandise.

By 1968, G. Higgins's area economic survey asserted that in Cape Dorset

The cooperative touches on the livelihood of every Eskimo family in the community. For many it is the only source of wage employment while for others it is a large contributor to income through the purchase and sale of Eskimo handicraft products. In addition, intangible rewards for which the cooperative is responsible rest in the social, educational and psychological sphere. These are, altogether, considerable and work for the benefit of every Eskimo. [p. 82]

This was not the opinion of all observers. In a study on Eskimo camp bosses, David Raine suggested that the establishment of the government-organized cooperative was instrumental in moving the social authority of the Inuit community from the traditional respected elder to an English-speaking Inuk, Oshaweetok, who was more familiar with the changing culture. However, leadership and power in the settlement was really in the hands of white government

employees who included the managers of the print shop and the cooperative, the government administrator and the treasurer of the community council.

Raine noted that there was a brief revival of camp boss influence in 1968 when a Tayarak Inuit group moved to Cape Dorset from Sugluk. The camp boss from Sugluk gave direction to his people, reprovved misconduct and organized hunts. Oshaweetok, chairman of the new community council, organized the first community walrus hunt in a number of years and distributed the food in the community. [Raine 1971]

By 1971, the next year for sudicity comparison, Cape Dorset was the third largest community on Baffin Island (after Frobisher Bay and Pangnirtung). There were almost 200 children in grades K-6 in the community and a number of older children were attending boarding school in Churchill. There was scheduled air service twice a week and two retail stores offering food stocks. A community report prepared for Health and Welfare recorded that seven Inuit had incomes between \$7,500 and \$15,000 a year while 45 earned between \$3,000 and \$7,500. [Dept of Health and Welfare, 1972]

While nutrition was reported only as "fairly good" in 1971, it is interesting to note that a 1967 report had referred to extensive dental problems in the community.

Adapting traditional cooking forms only slightly, country meats and fish were eaten raw or boiled (with meat in winter often eaten while still frozen). The broths that meat and fish were cooked in were drunk afterward, occasionally with dry soup mixes or canned potatoes added. In spite of the rapid modernization of Inuit life in Cape Dorset, a 1968 study of housekeeping patterns in the community found that country foods such as seal, caribou, fish and fowl when in season) continued to be the primary sources of meat for Inuit families. [Thompson, 1969]

Charles Thompson, in a comparison of housekeeping in Baker Lake and Cape Dorset, noted that a large number of store-bought products had been introduced into the Dorset Inuit diet and were eaten in addition to the usual flour, sugar, tea and salt. In some households, products from the Hudson's Bay Company or co-op made up a greater portion of the diet than country food. "No family in Cape Dorset lives exclusively on what can be termed a 'land' or traditional diet." Thompson also noted canned foods were most often eaten cold directly from the can and soups, if heated, did not always have water added to them.

Thompson reported that most Dorset households did not appear to buy or eat food in a regular southern pattern. Instead they alternated between abundance and scarcity depending on whether there had been a successful hunt recently or there was cash available. Almost all houses experienced times when there was only bannock and tea in the house and some families existed primarily on bannock and tea with only occasional additions of meat or store products. [ibid]

During his stay in Cape Dorset from April to mid-July, Thompson observed that a number of Inuit women were taking cooking classes from the Anglican minister's wife. The women appeared to use the class as a social occasion and often did not use what they had learned or share it with their older daughters who, in fact, did most of the cooking and housekeeping.

Thompson felt it was unfortunate that men were not included in the adult education classes offered by the government-employed home economist because he believed men were the dominant figures in the settlement's homes.

Although the women were traditionally the dominant figures in the tent household (and in camp still retain that position), their authority seems to have been usurped when they moved into housing in the settlement.

The home does not "belong" to the woman: she has had nothing to do with building or furnishing the house; she is not responsible for buying food or any other articles in the house. [Thompson 1969, p.20]

In fact, Thompson maintained that the men did most of the food purchasing and thus were more likely to be the catalysts for innovations in diet. Anthropologist John Matthiasson noted a similar significant role played by Inuit men in food purchasing in the northern Baffin Island community of Pond Inlet during the 1960s. Mathiasson believed the men's domestic role was significant even in a camp situation.

Although women would also give instructions to their husbands about what to buy, the men wouldn't know how great their purchasing powers actually were until they had arrived in the settlement and begun their actual trading. Consequently, men played an important role in the domestic economies of their families, for ultimately it was they who decided what foodstuffs and luxury items such as candy, cloth and so on were to be purchased. [Matthiasson, 1976, p.205]

It is perhaps not surprising that observations of two visiting male scientists about Inuit domestic duties are quite different from those of the female teachers and principal who lived in the community year round. (However, one wonders how the government policy-makers in the south sorted through these contradictory reports to decide on a policy of homemaking and nutrition education that would be most effective and beneficial!)

#### 1972-1985

Cape Dorset entered the 1980s as a prominent and relatively prosperous community. It supported a population of 785 in 1981 with a relatively small proportion of its population

(40, or just over 5 per cent) being non-native. Printmaking and carving were still the major economic activities in the community and the average annual income of \$3,612 per capita (or \$1,525 in 1971 dollars).

As in Lake Harbour there was limited access to southern centres through twice weekly scheduled flights through Frobisher Bay. CBC radio and television had been available via Anik satellite since 1975. With a sudicity gauged at 375, the community was considered moderately southern. The number of trappers in the community fell rapidly in the early 1980s from 134 in 1980-81 (for 135 households) to 53 in 1984-85. [NWT Data Books 1982-3, 1986-87] However the number of artists in the community remained high with at least one artist in each of the 300 families in the community in 1987. [The Fifth Estate, 1987]

With fewer hunters per household in 1980-81 than either Pangnirtung or Lake Harbour, the proportion of country foods was also considerably lower. Just under half of the food eaten by Cape Dorset families was country foods in 1982 compared to over 60 per cent in both other communities.

A community nurse practising in Cape Dorset in 1986-87 reported that the diet she observed is very poor. "Junk food - candy, pop, and convenience foods are the main part of their diet. They eat a little fruit and hardly any vegetables." Heather Crump remarked that some Inuit still hunt and many people still eat seal, caribou, fish, ptarmigan and birds eggs. But she contends the country foods do not balance out the poor foods they eat. She added

Last year the store chartered 16 cases of pop in -- at \$3,000 for the ride. Junk food is in big demand and people want it. They paid up to \$1.75 for one can of pop when it was chartered....Someone estimated that \$1,000 per day is spent on junk food and tobacco. On average every man, woman and child in Cape Dorset buys 500 cans of pop per year. [Crump 1987]

Both teachers and nurses continue to attempt to improve eating habits by discussing diet with their patients and students, handing out pamphlets in English and Inuktitut and running videos in the nursing station waiting room. Crump said few of the older people seem interested but some of the younger mothers appear to be limiting sweets in their children's diets and buying some of the more nutritious foods available in the two local stores. She believes much of the problem stems from the traditional eating habits of eating food when raw and frozen and at irregular intervals according to hunger and availability. "Convenience foods such as Kraft dinner, frozen chicken drumsticks and TV dinners are simpler to prepare and more in line with what they're used to." [Crump, 1987] Television commercials can only reinforce that behaviour.

### Summary

Cape Dorset is an interesting example of a group of Inuit who appear to have adapted readily to a wage earning lifestyle in the late 1950s and become moderately southern over the next three decades. Until the mid-1960s, the settlement was considered a model of the kind of economic development which would bridge the traditional hunting lifestyle with the southern wage economy. It was so successful that economists like Graburn (1963) suggested that the more traditional hunting community of Lake Harbour be abandoned and its population consolidated with Cape Dorset's.

However economic prosperity was paralleled by deterioration of diet as Inuit families ate more and more foods purchased from the store and took less time to hunt for food. In the 1980s, although there was an artist in virtually every household, there was a wide range in the earnings gained from carving and prints. The most successful artists may earn \$35,000 or more in 1987 but many earn less.

Aspirations to southern material goods cannot be fulfilled on per capita incomes that are only 30 per cent of the national average and attempts to encourage purchases of more nutritious (and often more expensive) foods cannot compete with commercials which promise "the real thing" with the simple purchase of a "Coke". Even at \$1.75, it is an affordable southern luxury.

## Chapter 7

### Pangnirtung

Pangnirtung is a mid-sized Inuit community on the northeastern shore of Cumberland Sound, Baffin Island at 66°08'N and 65°43'W. From the mid-1800s the site was a base camp for visiting whalers and scientists and a trading centre for the Inuit who lived along the shores of the sound.

Pangnirtung was one of few eastern arctic communities which was the location for a number of non-native institutions before World War II and had an unusually sizeable white population (12) by 1932. (Mayes 1978). A Hudson's Bay post, an Anglican mission hospital and an RCMP post were all established in Pangnirtung in the 1920s.

However a researcher in the early 1970s remarked

As late as the mid 1960s Cumberland Sound provided an exception to serious concerns expressed as to the ability of most Inuit to support themselves by hunting and trapping. (Mayes 1978 p 116)

What was it that made Pangnirtung able to sustain a fairly traditional lifestyle and diet in the face of considerable southern influence? A review of the community's history may help to explain.

Cumberland Sound is a large body of water at the south end of Baffin Island. Pangnirtung is situated on a tundra flat at the north end of the sound near the mouth of the Pangnirtung fiord. In 1840 it was estimated there were 1000 to 1500 Eskimos living along the shores of the sound. By 1870 the population was approximated at 300 to 400, reduced by

diseases which the Eskimo had developed through contact with Scottish and American whalers. [Mayes 1978]

Over the period from 1840 to 1910, many of the Sound's Inuit were employed by whalers as pilots and whale hunters. The whalers operated from small land bases employing several Inuit families year round and many more during the spring whaling season.

According to Franz Boas the women and children of some Inuit families stayed at the whaling station at Queqerten from October to July. The men went out in whaling boats for six weeks through October - November and again through May and June. The entire family stayed close to the whaling station through the winter and went out sealing from the end of March to early May. Other families were hired for the spring season only. They lived in camps the rest of the year and sold the blubber and baleen of whales they harpooned in the fall to the whalers who travelled to their camps by "sledge" in the off-season from November to March.

As in the Lake Harbour area, the Inuit were paid in rations of biscuits, coffee, molasses, tobacco, ammunition and clothing. Boas describes the exchange of labour for goods in Cumberland Sound in the 1880s.

When the Eskimo who have spent the summer inland return at the beginning of October they eagerly offer their services at the station, for they receive in payment for a half year's work a gun, harmonium or something of that nature, and a ration of provisions for their families with tobacco every week. Every Saturday the women come into the house of the station at the blowing of the horn, to receive their bread, coffee, sirup, and the precious tobacco. In return the Eskimo is expected to deliver in the kitchen of the station a piece of every seal he catches. [Boas 1888, p467]

Each Inuit family was issued four pounds of ship's biscuit, a quarter pound of coffee, two and a half pounds of molasses and four plugs of tobacco each week. [Jenness, 1964] It may be argued that this weekly ration left an imprint on the culture that is reflected not only in diet but also in language. Harper (1972) notes

One interesting trace of whaling days remains in the Baffin Island Eskimo word for Saturday - sivataaqvik - which literally means the time when biscuits are acquired, since it was on that day that weekly rations were given out. [Mayes 1978, p21]

However anthropologist Diamond Jenness maintains that the whalers' food rations were intended as a supplement and not a replacement for country foods and did not disrupt the traditional Inuit diet. He says the whalers

insisted that their employees hunt seal and narwhal, as before to obtain their daily supply of meat neither undermining the diet of the native nor completely disrupting their aboriginal economy. [Jenness, 1964, p11]

During the whaling era, the Anglican church took an interest in the Inuit of this area and sent missionary E.J. Peck to minister to their spiritual needs. In 1894, Peck opened a mission at a Scottish whaling station on Blacklead Island near the mouth of Cumberland Sound. Peck had transcribed Cree syllabics into Inuktitut and began teaching the Inuit how to read using prayer books and the New Testament. [ibid] The Anglican church would play a significant role in both the health and education of Cumberland Sound Inuit for the next 50 years.

When the whaling industry collapsed in 1910, the small settlements around the whaling stations began to be abandoned. A number of ex-whalers set up independent trading stations and operated in the area until the Hudson's Bay

established a post at Pangnirtung in 1921. Few Inuit lived at the post but many began trading white fox furs for the food and supplies they had become accustomed to receiving from the whalers. [Jenness, 1964]

An RCMP post was built at Pangnirtung in 1926 and a school and hospital were opened in 1928. The hospital was operated by the Anglican church with financial assistance from the federal government. The government paid the salary and expenses of a full-time doctor who was responsible for all of Baffin Island. The first doctor, L.D.Livingstone travelled to camps by boat and dog team and used a radio to give medical advice to people hundreds of kilometres away.

As early as 1928 Livingstone wrote to the director of the branch of the federal government responsible for the Northwest Territories urging the government to give Inuit meat and fish as relief rations (rather than the traditional flour or pilot biscuits) wherever possible. [85/827/7242, 1928] At the same time he convinced the department to have manufactured a special pilot biscuit made with nutritious ingredients. These were distributed to the destitute (along with several hundred pounds of dried buffalo meat). In 1930 Livingstone ordered 600 pounds of the nutritious pilot biscuits for Pangnirtung. [85/827/7242, 1930]

The manufacture of the special pilot biscuit was suspended in 1931 because of cost but revived in the 1940s. Government records show 250 pounds of biscuits were shipped to Pangnirtung in 1946 and 300 pounds in 1948.

The Eskimo biscuit appears to have been a subject of hot debate for several decades. In 1944, R.A.Gibson, Deputy Commissioner of the Northwest Territories wrote to the director of federal Nutrition Services observing that

Eskimos of the Eastern Arctic adhere to the belief originated by the whalers and early explorers that pilot biscuits and tea, sweetened with molasses, are the best food the white man can supply. [85/827/7242, 1944]

Pett replied that he was concerned that using biscuit as relief rations reinforced Inuit beliefs that imported food were needed to improve their diet. Pett repeated Livingstones's suggestion of encouraging the use of native foods which he maintained provided a healthier diet. [85/827/7242/1944] However Eskimo biscuits were reintroduced to the arctic with media fanfare in the 1950s -- touted as being capable of increasing the height of a child by two inches. [Leiterman 1956]

#### Post WWII to 1961

The existence of a hospital in Pangnirtung since 1928 meant a number of tuberculosis patients from the Cumberland Sound camps could be treated there rather than being sent to the sanatorium in Hamilton, Ontario where most other tuberculosis sufferers from the eastern arctic were sent. Ten patients were admitted to Pangnirtung hospital with tuberculosis in 1953 and an additional 10 in 1954. Of these six were sent out to southern hospitals on the government ship, the C.D.Howe. From an area population of 629, these numbers are comparatively small. (Lake Harbour RCMP reported 85 Inuit were sent south with tuberculosis from the Cape Dorset - Lake Harbour area in 1955 and 1956 [85/1266/1000/167/3, 1956])

Tuberculosis patients at the Pangnirtung hospital, as all other patients admitted there, were fed country food supplied by local hunters. Thus unlike the great numbers of Inuit who went to southern hospitals they did not have to get accustomed to southern institutional foods. [Mayes 1978]

The 1953-55 reports from the RCMP note that Pangnirtung was not a good area for fur-bearing animals. The yearly catch of fox was seldom over 600 or approximately one per person. During this period local Inuit received more income from selling white whale hides and blubber to the Hudson's Bay post in Pangnirtung than from selling furs.  
[85/1925/1000/170, 1954]

Cumberland Sound was, however, considered a good country for game, and seal, whale, caribou and walrus fed the area population easily. Arctic char were also fished extensively in the area and, for some camps, provided their sole food source through the lean months of January and February when other game was scarce. [ibid]

The Inuit of this area, in fact, seemed to prefer to live as hunters rather than as trappers. The Pangnirtung RCMP constable reported in 1955 that local Inuit traded only a small proportion of the seal skins they obtained, keeping most of them for their own use in making clothing or shelters. Johnson was proud to report that most local area Inuit were "excellent providers" and felt the government was to blame for any who weren't. He used his annual report on Inuit in his area in 1955 to criticize the new federal family allowance scheme for encouraging some Inuit to live on relief rations commenting

It is the writers (sic) opinion that most inefficient hunters could be made self-supporting if they were refused relief and moved to better hunting areas or placed in good camps. Many of (the Inuit who lived on relief rations) were good hunters and providers before they received Family Allowance but after living on Family Allowance for a number of years saw no reason why they should hunt for a living when food could be had monthly on family allowance. In many cases Family Allowance did more harm than good for the Eskimo....  
[85/1925/1000/70, 1955]

A government-paid welfare teacher, Dorothy Robinson, was assigned to Pangnirtung in the mid-1950s and her monthly reports to Ottawa through her first years in the settlement provide some interesting information about Inuit diet and lifestyle of the time.

One of her first comments to her superiors is a criticism of the timing of the annual supply ships' arrival in Pangnirtung in 1956. The C.D. Howe brought freight for the RCMP, the school and the hospital and the Rupertsland brought supplies to the Hudson's Bay store. Both arrived earlier than expected that year. Thus, they were unloaded by Inuit living in the settlement rather than by Inuit from nearby camps who usually came into the settlement for a few days in the summer specifically to do this job. Robinson remarked

Many of the people from around Cumberland Sound are dependent on the money made from handling freight for their sole cash income for this part of the year. Those who were not in town will have a serious loss. The money, of course, was still distributed but went chiefly to those permanent residents who have the least need for it. [85/1925/1000/170, 1956]

Robinson reported that almost everyone who lived in the settlement was either employed at one of the non-native "establishments" or an older person on relief. Most of these people lived on "monotonous and poor" diet consisting of flour, baking powder, sugar and tea. These foods were supplemented by fish, caribou and seal which were brought to them by Inuit who were living in camps. Inuit in town would exchange money or goods for country foods [ibid]

By January 1957 Robinson was contributing substantially to the "modernization" of area Inuit showing weekly movies at three locations in the settlement and (unintentionally) attracting camp dwellers to town for the showings. In

February she expressed concern that a number of men who came into the settlement from camps to watch the Friday evening movies were staying in town until Tuesday because the store was closed over the weekend and they couldn't do their trading until Monday. She noted, however, "so far no way of avoiding this, without upsetting other schedules, has been devised." [85/1925/1000/170, 1957]

Although women and children occasionally came into Pangnirtung when the men came to trade, usually the men came alone and left as soon as they had finished trading. The RCMP seem to have enforced this policy of short stays in the settlement fairly strictly until at least 1958. The annual report for 1957 remarked

Some of the poorer types of Eskimos have been trying to move into Pangnirtung and loiter away the Summer months, but all the Natives have been told that they cannot live in Pangnirtung unless they are employed by one of the White Concerns. [ibid]

A January 1958 report from Pangnirtung noted

General welfare problems in this settlement seem negligible -- owing probably to the amount of "country food" available, the fact that most of the people still live in small scattered groups, and the lack of contact with DEW line, mining, and general western culture.[ibid]

In June 1958 Robinson reported that five area men had been hired to help a mapping company move supplies. It was the first time men from Pangnirtung had been taken away from the area to work and Robinson remarked in her monthly report

It will be interesting to see if there are any results from comparison with the much higher wages received there, and the local customary wage. [85/1925/100/170, 1958]

That month, for the first time Robinson also mentioned patients returning from the tuberculosis sanatorium in Hamilton, Ontario. Seventeen people returned -- 12 of them children. These Inuit would have been living on a southern hospital diet for at least a year and would all be issued "TB rations" (the usual relief rations of flour, sugar, baking powder and tea) for their first six months back in the area.

As 1961 approached Pangnirtung was still primarily a service post for the Inuit who lived in camps along Cumberland Sound. A small proportion of area's Inuit population lived in the settlement and those who did were there expressly as employees of the hospital, the RCMP, the Hudson's Bay Company, or the school. The subsistence value for Pangnirtung in 1961 was 195 and the abundance of country foods seems to have been significant in maintaining the traditional hunting and trapping economy in the area to that date. (However, an unexpected crisis in 1962 would change life dramatically for area Inuit in a way that government workers reporting to the south up until 1960 could not have foreseen.)

While the camp population of the Pangnirtung area was recorded by the RCMP at more than 650 in 1955, the population of the settlement of Pangnirtung was only 114 in June 1961. Of these 96 were Inuit and 18 were non-native. Camp populations along Cumberland Sound recorded by the 1961 census numbered more than 580 Inuit.

Dr. Otto Schaeffer was a physician on the arctic patrol boat which visited eastern arctic communities examining Inuit for tuberculosis symptoms. During this period and accumulated data about food habits of the Cumberland Sound Inuit which formed the basis of a number of papers published in the 1970s. Schaeffer was able to get records of food imports for Pangnirtung-Cumberland Sound for the years 1959 to 1967. These showed a quadrupling in Inuit sugar consumption over

that period from 26 pounds in 1959 to 104.2 in 1967.  
[Schaefer 1971]

Sugar constituted 18.1 per cent of the total intake of carbohydrates in 1959 and 22.4 per cent in 1960, less than half of the Canadian average of 46.7 per cent in 1960. This could be considered quite a modest amount, reflecting the largely traditional diet of the majority of Inuit in the Pangirtung-Cumberland Sound area. By 1967 sugar intake would almost equal average Canadian intake making up 44.2 per cent of the total carbohydrate intake. (ibid p10)

### 1962-1971

In the winter of 1962 a fatal dog epidemic devastated the dog population of Cumberland Sound, crippling Inuit hunters and forcing more than 300 area Inuit to move into the settlement of Pangnirtung temporarily.

For at least 70 people it meant the end of their camp life. For many others it gave them a taste of the food and shelter which the government was willing to provide for those who needed assistance -- showing them an option in life which most of them had not considered before. Although many families went back to living in camps in 1963, by 1968 the settlement's permanent population would almost quadruple to 533 -- absorbing the entire Inuit population of Cumberland Sound except for two camps close to the community.

This highly contagious and deadly dog disease may also be considered an indirect cause of a major change in the diet for all Inuit in the Pangnirtung area. It is one of those random factors which cannot be measured by a general index of suicidity such as the one proposed by this researcher. However it was a critical factor - perhaps the critical factor -- in the modernization of diet for Pangnirtung Inuit and, thus, will be examined in some detail here.

In an annual report for the year ending December 31st, 1961, the RCMP constable stationed at Pangnirtung reported that the Inuit men in the area were busy, morale was high and game was abundant. There were 138 people living in the settlement of Pangnirtung and 414 living in 12 camps around Cumberland Sound. However even as the report was being written a dog team from the south coast of the Sound was visiting Pangnirtung after a trip to Frobisher Bay, bringing with it a strain of what experts later identified as infectious hepatitis distemper.

All 12 area camps traded into the settlement over the Christmas season and all teams came in contact with the disease. By February 8th the RCMP constable reported that a third of the dog population (of 800 to 1000) had died of the disease. In one camp 85 of the 121 dogs had died. By March 7th a government administrator's report on the welfare conditions at Pangnirtung estimated that 80 per cent of area dogs had died. [85/1952/A1000/170/1,1962] For hunters this meant that they were virtually immobile, severely restricting their ability to hunt seals either for food or for sale of skins for cash.

The federal government's regional administrator for the eastern arctic surveyed the situation at Pangnirtung in mid-February and recommended that any camps which could not provide enough food for their own people through the winter should be evacuated to Pangnirtung. There, he proposed, a temporary work program could be organized to keep the Inuit occupied and earning their relief rations until replacement dogs could be found. In keeping with the approach of the local RCMP, the administrator showed a serious concern about this forced migration to Pangnirtung changing the traditional life of area Inuit and maintained that this emergency measure would not mean Inuit would be encouraged to set up permanent residence in the settlement. On the contrary he reported,

It was agreed by all involved that this would be a temporary programme to see the Eskimo people through this difficult time. Every encouragement would be made to have them resume their normal activities once the situation permitted. [ibid]

The make-work programme included a crafts project, casual labour moving fuel oil drums and an organized community hunting scheme. By the end of March there were 65 people on the government payroll in Pangnirtung. By early May there were 464 Inuit in the community and 90 men working for the government in various occupations around Pangnirtung for an income of \$20. per week (50 cents an hour for 40 hours/week).

The community hunting program organized the men into groups which rotated weeks working in the settlement and weeks hunting. Each group would spend a week at the edge of the ice floe hunting seals and divided the catch among all the settlement's families when they returned. The government shipped in a supply of cheap canned pork for the Inuit to buy and the local Hudson's Bay Company supplied the other staples of flour, sugar, tea, lard, and baking powder.

In August Keith Crowe, the settlement's first federal administrator, sent in to manage the employment program, reported that he expected the permanent population of the settlement to double even after the dog population could be restored.

There are also signs that the move from camp to settlement is going to have a permanent effect on the pattern of life in the area. Some of those who moved have indicated that they do not wish to return to camp. If this trend continues, the resident population of Pangnirtung may be doubled or even tripled within the next year or so, and with it, the need for housing, services, staff etc. [ibid]

Crowe's prediction was a bit premature. It would take more than five years for the majority of camp families to move into Pangnirtung to live permanently. In January the next year he reported to the regional administrator in Frobisher Bay that there were 70 camp people still living in Pangnirtung because of a lack of dogs. About 70 dogs had been flown into the settlement from other arctic communities and 10 of the 12 camps had been reoccupied.

The serious dog shortage in Pangnirtung prompted the government to experiment with a new motorized 'autoboggan' or snowmobile as an alternative to the dog team. The local Inuit mechanic, Joanasee, was trained to maintain it and teach others how to operate it. [85/1952/A1000/170/1, 1963] Partly because of its efficiency and partly because it was impossible to obtain enough dogs to supply all the area hunters, the snowmobiles became a popular replacement for dogs and the number of native-owned increased rapidly. From the experimental one introduced in 1962, the number rose to 17 by 1964 and 36 by mid-1966, with the prediction of the number doubling by the end of the year. [Anders, 1967]

This change in technology had a number of implications for area hunters. The snowmobile allowed hunters to travel further than they had with dogteams and did not need to be fed a part of the catch. However the machine was a significant capital investment and required cash to pay for its fuel. This meant more hunters needed or wanted wage employment to pay for their hunting trips.

The federal government anticipated a steady increase in the number of Inuit leaving camps for settlement life and so extended elements of the make-work projects into small scale industries which could employ Inuit interested in wage labour. A skiff-building project was launched in 1963 and a commercial char fishery in 1967. In early 1968 a crafts cooperative was incorporated to purchase carvings for resale

to southern markets. And in 1970, a snowmobile repair shop was set up.

While the number of full-time wage earners only increased from six in 1956 to 11 in 1961, the number of summer construction workers and casual labourers increased more rapidly. Wage earnings from all sources in Pangnirtung grew more than sevenfold between 1956 (when they totalled \$5,200) and 1964 (when they totalled \$38,000). They increased by two and a half times again (to \$98,000) in 1965. At the same time, the average household in Cumberland Sound spent \$493 or 23 per cent of its total income on ammunition and motor fuel for hunting. [Anders, 1967]

The increasing amount of wage income may be seen as an indicator of a shift from a land-based to a cash-based or consumer economy. Another indicator of this shift to a cash-economy is the proportion of pelts traded compared to the seals killed. RCMP in the late 1950s reported that a large proportion of the pelts of seals killed by Inuit hunters were kept for domestic use in clothing, hunting bags and dog traces. By 1963-64 Anders' area economic survey estimated nearly all the ringed seals killed by Inuit were traded.

Anders observed that by 1963-64 earnings from wage employment equalled or exceeded the income from native products in the Cumberland Sound-Pangnirtung area. He reported that only eight of the 12 camps around Cumberland Sound were still occupied and they operated with 50 per cent fewer dogs than before the 1962 dog epidemic. However he maintained that hunting was still a way of life for the area Inuit as much as it was a commercial activity. [Anders, 1967]

The federal government also began building houses in Pangnirtung to accommodate Inuit choosing settlement life over camp life. A large scale housing program was started in

1966. Dances, movies and organized community games also provided incentives for camp dwellers to move into Pangnirtung in the late 1960s.

This change in residence coincided with an increase in the proportion of starches and sugars in the Pangnirtung Inuit diet. As mentioned above, Otto Schaefer's data about the increase in sugar and carbohydrates in the Inuit diet indicate that sugar consumption in the Pangnirtung trading area which had been 26 pound per capita per year in 1959 increased to 65.5 pounds per capita in 1964 and 104.2 pounds per capita in 1967. [Schaefer 1971]

By 1971, the next year compared for sudiicity, Pangnirtung's permanent population was 690, of which about 75 were non-native. Only 18 Inuit still lived in a single hunting camp on Cumberland Sound. The primary school offered Grades 1-6 for 229 students. There was both a private retail store and a government-supported cooperative competing with the local Hudson's Bay store. Nordair flew into the community twice a week in winter and three times a week in summer. Freight came in by both air and sea. [Health and Welfare, 1972] A new motel and fishing lodge were opened in the community that year in anticipation of the tourist traffic expected to visit the proposed national park at the end of Pangnirtung Fiord. Pangnirtung's sudiicity was gauged at 330, in the range considered moderately southern.

However it is interesting to note that in spite of the dramatic 'Westernization' of the material life of the Inuit, hunting and fishing were still the primary occupations of the majority of Inuit in Pangnirtung. Only 21 people were employed full-time by government agencies and an additional 18 were supported by government pensions and disability allowances. In 1971 the community health nurse for the Baffin region reported that (in spite of the increasing amounts of sugar consumed) general health was good and

nutrition was satisfactory, largely because native food was used extensively and encouraged by health officials. [ibid]

#### 1972-1981

A number of administrative actions of the early 1970s consolidated the settlement lifestyle of Pangnirtung Inuit. The federal government's housing construction programme completed 108 houses for Inuit families by 1973, effectively moving the entire Inuit population of Cumberland Sound from canvas tents to heated, pre-fabricated one-room houses. [Mayes 1978]

The territorial government assumed responsibility for most government services in the North in 1970 and, in 1972, Pangnirtung became one of the first arctic settlements to take hamlet status. In 1973, geographer Robert Mayes recorded 18 non-native employees of the government of the Northwest Territories lived in Pangnirtung - a number which represented more than half the total non-native population of 32.

The church-supported hospital was closed and replaced with a government nursing station in 1972. A national park was created northeast of Pangnirtung creating a small number of seasonal jobs for Inuit who were willing to provide transportation or serve as guides for tourists.

Mayes' study of Pangnirtung done in 1972-73 found the per capita income to be \$970, less than a third of the Canadian average of \$3751 but up 40 per cent from the 1969 Pangnirtung per capita income of \$578. Wages provided 52 per cent of family income in Pangnirtung while furs contributed only 14.3 per cent. For those who had lived in camps this was a complete reversal from seven years earlier, in 1965-66, when 52.3 per cent of their income came from furs and only 11.1 per cent from wages. [Mayes 1978]

After a year long study of the income and expenditures of five Pangnirtung families, Mayes concluded

Although starvation is no longer an important consideration, the acquisition of nutritious, healthy Western foods presents a problem...On average more sugar than flour is eaten, the amount of fresh fruit and vegetables is about half the amount of soft drinks consumed and cookies and cake exceed by three times the amount of fruit and vegetables. This pattern does not stem from the non-availability of certain foods, but is purely a factor of uneducated choice. [Mayes 1978, p316]

Mayes found that calories obtained from game represented only 26 per cent of the total intake of food for Pangnirtung families living in the settlement in 1973. That was a dramatic decrease from 73 per cent in the Cumberland Sound camps in 1964. Over the same period, sugar intake had increased from 78 grams per person per day to 107 grams per person per day. (Mayes 1978)

Another sign of acculturation which Mayes observed was the number of seal carcasses left on the ice after taking pelts because seal meat was considered old-fashioned Eskimo food. On the other hand, consumer habits mimicked southern Canadians with local Inuit choosing certain brand names like "Coke" because it was considered better than the others. Mayes agrees that "most of this stems from the southern role model" which at this stage was almost entirely the model of southerners living in the community. Although a number of Inuit owned radio and television sets, reception was entirely random until the Anik satellite was launched in 1975. [Mayes 1987]

That Pangnirtung residents were aware of the effect their diet was having on their health is evident from their complaints to a visiting reporter in 1974. Elder and former shaman Malaya Kulujuk asserted

Our food was our medicine. Our people would eat fresh seal blood. We would make the blood into a kind of gravy....We never used to be so sick. The white man's food is not good for us. [Bendinder, 1974]

A nutrition workshop held for community health workers in Baker lake in 1977 prompted a nutrition education project in Pangnirtung which included cooking classes, school lessons and tasting parties. Pangnirtung became the first community to introduce colour-coding of inexpensive nutritious foods in the local Hudson's Bay store. The manager of the store cooperated by making the preferred nutritious foods available and displaying them prominently. During the year-long federally funded program soft drink sales decreased by 50 per cent and juice sales increased by 75 per cent. [Schurman 1981] (This feat becomes more impressive if one is aware that there is only one word in Inuktitut for both beverages.)

Life in Pangnirtung changed significantly in the decade from 1971 to 1981 with the introduction of southern commercial radio and television and expansion of air service to daily flights from Montreal. The new national park and associated tourism industry brought more outsiders to the community and produced a few new jobs.

In 1981, the next sudicity comparison year, the majority of people were still involved in marine mammal harvesting, carving or handicrafts. The population grew from 690 to 835 over the decade but the non-native population actually fell from 75 to 50. Income per capita was calculated to be \$1,606 (in 1971 dollars) per capita substantially less than the Canadian average of \$5,084 (in 1971 dollars). [1981 Census, Statistics Canada 1987]

Pangnirtung's sudicity measured 395 at the upper range considered moderately southern. However the community still

had an large number of Inuit whose occupation was trapping -- 179 in 155 households and the great majority of them earned over \$600 a year from trapping unlike in communities such as Frobisher Bay or Cape Dorset where 15 per cent or fewer earned more than \$600. [NWT Data Book, 1982-83]

### Summary

Life in Pangnirtung changed dramatically over the three decades from 1961 to 1981 as the majority of families in the Cumberland Sound district moved in from hunting camps to settle permanently in the community. Although Inuit of the area had been in contact with non-native southerners for almost a century since the first whalers visited the area, it was not until the late 1960s that they gave up their hunting and gathering lifestyle for more sedentary and "southern" existence.

Until then, Inuit hunters had been able to incorporate useful elements of southern culture into their own seasonal round on the land -- using imported guns for hunting, supplementing an all meat diet with bannock and tea, buying occasional imported goods with occasional cash earnings. In the 1960s, the great loss of dogs to disease and the introduction of snowmobiles shifted the balance in the Inuit's relationship with the land. Hunters could no longer acquire all their basic needs from the land. They needed cash to buy snowmobiles and other desired southern goods -- and, it appeared, their children would need schooling to earn an income in the future.

The community grew from a settlement of 114 people in 1961 to a hamlet of 835 in 1981. By the beginning of the 1980s, Pangnirtung had become a moderately southern community with satellites providing a complete range of southern television programs and advertisements and daily flights of commercial aircraft connecting the hamlet with southern Canada.

However, marine mammal harvesting continued to be a major activity for many adults in the community and the community continued to produce the largest amount of country foods per capita of all Baffin Island communities (342 kg per person, Worrall 1982).

It may be the rich wildlife resources of the Cumberland Sound area which have made the difference in allowing the people of Pangnirtung to retain their hunting lifestyle longer than many other Baffin communities -- and in maintaining a higher proportion of country foods in their diet into the 1980s. If this is so, it will be their ability to conserve and protect the habitats of their food sources and to balance the time demanded for a wage earning existence with the time needed for hunting which will determine how long hunting will continue to be a major means of obtaining food.

## Chapter 8

### Iqaluit (Frobisher Bay)

Iqaluit is the regional centre for transportation, commerce and government in the eastern arctic and, as such, is the largest of the Inuit communities examined in this study.

Located at 63° 44'N and 68° 31'W, the townsite is situated on a rocky irregular coastline near the northeast head of the water body Frobisher Bay, on southern Baffin Island. The rivers which flow into the head of the bay were considered the best fishing places along the south coast of Baffin Island in the pre-settlement era and the modern town is located at the site of a traditional fishing camp (thus the name Iqaluit, which means 'fish' in Inuktitut). The Inuit who now live in Frobisher Bay have migrated from camps and settlements along the coast of Baffin Island from Cumberland Sound to Cape Dorset. Some lived in camps along the north shore of Frobisher Bay until the late 1950s hunting seal, walrus, whales, caribou and polar bear. (Kemp, 1976)

The first contact these Inuit had with Europeans was in 1576 when Martin Frobisher landed there on an exploratory voyage. He returned in 1577 to extract samples of ore which he believed was gold, and again in 1578 with 15 shiploads of colonists to mine the deposit. Both mining and settling were unsuccessful at this stage. However, Europeans returned to hunt for whales in the 19th century and employed a number of local families at whaling stations and on whaling boats.

As in Pangnirtung, Cape Dorset and Lake Harbour Inuit families were exposed to non-native foods through the whalers and quickly accepted bannock, tea and biscuits as supplements to their native diet of seal, fish and caribou. A Hudson's Bay Company post was established at Ward Inlet,

near present day Iqaluit, in 1914. However the site of the modern community was not chosen by the Inuit or the Hudson's Bay, but by the United States Air Force (USAF). (McBain 1970)

#### Post WWII to 1961

The USAF constructed an airbase on Frobisher Bay in 1942-43. The base was the largest in northern Canada and served as "a vital link in the chain of strategic Northern Air Stations on the route to Europe". (85/A1000/169/2, c1965) After WW II, the base was turned over to the Royal Canadian Air Force until 1951 when new strategic concerns brought the American air force back to Frobisher Bay to construct a Pine Tree radar station and use the air base to support shipment of material for the Northeast Air Command to Greenland.

A number of area Inuit were employed at the base as dishwashers, waiters, garbagemen and drivers and were paid a combination of wages and food, often earning more than a man could by hunting or trapping. (Arctic News 1956, Jenness 1964, McBain 1970) According to the 1951 census, there were 304 Inuit in the Frobisher Bay area in that year, of which 50 lived in a makeshift settlement outside the base year round. Between 20 and 30 others camped near the base each summer and worked as casual labourers. (McBain 1970)

In 1954, Canada's federal Department of Northern Affairs and National Resources established its regional headquarters at Frobisher Bay and, in 1955, began building a civilian townsite about five kilometres from the military base on Apex Hill. By that time some Inuit had been working for wages for 10 years. (McBain 1970) In 1957, when the DEW line construction boom ended, there were approximately 1200 people in the town, of which about 490 were Eskimos. The

government townsite housed about half the Inuit families while the rest lived in the makeshift village at the base.(ibid)

Government records from the late 1950s provide some interesting information about daily life in Frobisher Bay in this period of rapid change. A memorandum written in December 1956 by A.F.Flucke about the general plans for Frobisher Bay outlined three purposes for the government townsite. One was to provide a civilian townsite for Eskimos and white people who had regular employment. Another was to provide a centre for visits of Eskimos living as hunters and trappers. But perhaps the most revealing was the aim to "instruct and develop the Eskimo people on a basis of equality with their white fellow Canadians".(ibid) (The Inuit and Indian peoples had been 'granted' Canadian citizenship by an act of Parliament in 1945 and federal policy relating to native peoples through the 1950s was aimed at ensuring that they be allowed equal participation in the modern economy as Canadian citizens.) (McBain 1970)

Local administrator Doug Wilkinson oversaw the erection of the first six prefabricated houses in the civilian townsite in 1955. He considered the new plywood structures with water and sewage services "an important cog in the machinery for development of a new social existence for the wage earning Eskimo, his wife and his family." (85/1267/1000/169/7 1956) In a letter to the chief of the arctic division of DNANR he suggested that the federal government's efforts to lure Inuit out of the village at the base had been so successful that many more houses would have to be shipped in for those wishing to move out of shacks.

Wilkinson also noted that he was modifying federal policy for Inuit summer labourers in his employ to allow them to eat only one of three meals a day at the department's mess

hall. Wilkinson informed Ottawa superiors that the Inuit had requested the change because they did not want to pay \$60 a month for meals when they could hunt on their days off and get meat for themselves. (An Inuit transport driver earned \$300 a month. Wilkinson earned \$425.)

Wilkinson reasoned

It is, I feel a good step. The Eskimos employed at the town get off hunting three or four days in the month and both hunting and fishing have been good. In this way they get the food they like. As well, by having their breakfast and supper at home, they are with their families more, and their [sic] is more incentive for the wives to prepare meals for the families. (ibid)

In the winter of 1956-57 there were 17 native families living in the government townsite (up from three in 1955-56), 41 in the village at the base and 20 to 40 in camps along the bay. There were 126 school age children in the two Inuit communities but only 36 attended regularly because the majority lived in the village at the base which was five kilometres from the federal school at the townsite. All but one of the heads of households in the base village had jobs on the base while all those who lived in the government townsite were employed by DNANR. (85/1267/1000/169/8, 1957)

The RCMP's annual report for 1956 noted that even those Inuit families which lived in camps, hunting and trapping seal through the winter, moved into the village by the base each summer to get casual employment unloading supplies from ships. Country produce was still very important to these people while food purchased from the Hudson's Bay store was becoming increasingly important for wage earners.

The RCMP report voiced a concern that "some families are most reluctant to divert their cash income to purchase good food in spite of the fact that they have the financial

means" and in spite of the store's large stock of, what the report called a "variety of useful foods at a reasonable price". Instead, the writer lamented, "Accordians, soft-drinks, candy, fancy clothes etc., are often the first items to be purchased." (ibid)

The federal government was also concerned about the eating and spending habits of the new town residents. In 1960 it appointed a home economics specialist, Mary McGuire to work in the vocational training centre in Frobisher Bay. In the summer of that year Mrs. McGuire organized a four week homemaking course which included lessons in basic nutrition, adequate portions, cleanliness and preparing noon meals on a primus stove. Her aim was "to develop in the students the realization that changed living conditions necessitate a new way of life and new attitudes to many phases of family living". (Duffy 1978)

Inuit graphic artist Alooook Ipellie's reminiscences of childhood in Frobisher Bay in the late 1950s and early 1960s demonstrate a fascination with the new southern foods.

Writing in 1980 at age 29. Ipellie recalled

In those days I remember that the United States had an Air Force base in Frobisher Bay. We, as Inuit kids, would go over to their base to wait outside their kitchen in hopes of being offered something to eat. We often succeeded and the smell of their food was like nothing we had ever smelled before...There came a time when at least once a day I would start to dream of having tons and tons of Quallunaag food right in our little hut. Even if all the food could not go in, I would think of becoming a genius at storing food and somehow get it all in there. (Ipellie, 1980)

Ipellie also reveals something of an Inuit child's attitude to school -- and particularly to school lunches of fortified biscuits and hot chocolate provided by teachers in most

eastern arctic schools.

While the games were enjoyable, the ones we Inuit children enjoyed most were the cookies and hot chocolate the school served in the mornings and afternoons of each day right after recess. They sure tasted good and kept us coming to school as much as possible. No fair child in his right mind wanted to miss those treats. If we didn't go to school one day, we had this feeling that we sure skipped something good. (Ipellie 1975, p50)

While government officials in Frobisher Bay worked hard to improve the life of area Inuit by bringing modern southern services to them, a newspaper report written in early 1956 may reflect the more general southern Canadian attitude to the changes taking place in the arctic. A correspondent for the Edmonton Journal called Frobisher Bay "the most expensive experiment in race rehabilitation ever attempted" and observed that "To put a white man's roof over five Eskimo families, to teach their children 17 English words, has cost the taxpayers of Canada \$250,000." The reporter believed that this was "the first serious attempt to convert the Eskimo to the white man's way," and although he appeared to approve of the intent, he clearly disapproved of the cost. (Leiterman, Edmonton Journal, April 10, 1956)

The town of Frobisher Bay expanded more rapidly than the government had expected. An architect who was sent to survey the townsite in September 1957 observed that the site had originally been chosen to accommodate a maximum population of 1000 and could not serve many more than that. However the government was now predicting a population of 3,000 to 5,000 by 1967. There were plans for 26 new houses to be built in 1957 and 42 more in 1958. But the architect estimated at least 250 more units would have to be built to meet the expected population growth. (85/1267/1000/10, 1957)

By 1959 there were 100 Inuit in regular wage employment as carpenters, mechanics, manual labourers and heavy equipment operators working for DNANR, the Department of Transport and the USAF. In 1958 and 1959 Toshio Yatsushiro did a study for DNANR on the Inuit attitude to wage employment in Frobisher Bay. Surveying about half of the employed Inuit, he found that the majority were satisfied with their jobs, their treatment at work and the amount they were being paid. There was also a large majority who believed that life was better for the Eskimo then than it had been 20 years earlier. They attributed the improvement to the money they were earning which allowed them to buy southern goods and to the new government services in health, education and housing. (Yatsushiro 1960, 1962)

However Yatsushiro noted there was considerable ambivalence about choosing between full time wage employment and full-time hunting. The majority, in fact, told him that they would be happier if they were given more time off work to hunt. Yatsushiro suggested that the Inuit work schedule, as a matter of policy, might be arranged so that they could go off on extended hunts periodically to procure country foods for their families. He also strongly recommended that a self-governing body be established for the Inuit so that they could have a voice in shaping their own future and in dealing with undesirable social behaviour without intervention from outside agents. (Yatsushiro 1962)

Interestingly, government policy in 1956 had included the aim to provide a means for Inuit to govern themselves. A general memorandum from DNANR's arctic division in Ottawa informed Northern Service Officer A.F. Flucke

Nothing at Frobisher is more important in connection with the Eskimo people than the task of developing a sense of responsibility and competence in directing their own destinies. This means that at the earliest possible date a start should be made to form

consultative bodies for the townsite that have for their aim the participation of the people in all decisions, and which will lead ultimately to the formation of a municipal government.

(85/1267/1000/169/8, 1956)

Wilkinson held meetings to consult with the Inuit who worked for DNANR and an Inuit cooperative, established in 1958, was supported by the federal government because it was considered a means to familiarize local Inuit with southern decision making.

By 1961, the first year marked for comparison of sudicity, Frobisher Bay had a population of 1426, of which 843 were Inuit. The major source of both employment and social welfare for the Inuit had shifted from the American air force to the Canadian government departments of transport and northern affairs and national development. The town had excellent communications with southern Canada with two commercial flights a week and newly opened local CBC radio station which offered pre-recorded programs in English, French and Inuktitut as well as an local open-line program in Inuktitut.

Since 1959, when Frobisher Bay was officially named the regional headquarters for DNANR the government's staff had expanded rapidly and included welfare officers, teachers, technical staff, accountants, clerks and support staff, of whom close to half were Inuit. (85/bx15/A100/169/2, c1965) With a sudicity value calculated at 455 in 1961 it was well on the way to becoming a southern styled urban centre.

By the early 1960s Frobisher Bay was the first community in the eastern arctic to include in its population a group of Inuit who no longer had the traditional skills necessary to live as hunters on the land. McGill anthropologist Jacob Fried described them as quasi-aculturated people swamped by

urbanization effects -- a people whose relationship with the environment, as the source of all the basic necessities of life, had been permanently disrupted. Fried distinguished between the older Inuit who had moved into Frobisher Bay after years living as hunters and trappers and the younger generation which had spent their childhood in Frobisher Bay. The acculturated group was described as generally semi-skilled workers aged 18 to 35 with some formal schooling and a fair grasp of English but "still socially peripheral to the dominant white social elements of the community." (Fried 1963)

Frobisher Bay was also a community which was beginning to suffer from some of the negative side effects of rapid cultural change. Late in 1961, DNANR formed a committee on social adjustment whose first issue for discussion was crime related to alcohol consumption in Frobisher Bay. A report presented to the committee showed that there had been 100 convictions for liquor offenses in Frobisher Bay in 1961 in a estimated population of 367 older than 16 years of age. The rate for liquor offences per 1000 population was more than 20 times that of the general Canadian population. (85/1948/A560/1/3/1, 1962)

It had been illegal for Inuit to drink alcohol until May 1960 when a court order gave Inuit the same legal rights as other Canadian citizens. A territorial liquor store opened in Frobisher Bay in the summer of 1961 but liquor had been available in the community for a number of years before then. The report stated that excessive use of alcohol was a factor in 90 per cent of all criminal offences committed over the years 1957-61. (ibid)

The regional administrator in Frobisher Bay suggested that there were a number of reasons why Frobisher Bay Inuit had more drinking problems than other eastern arctic communities. Two primary reasons were the large number of

displaced and transient people in Frobisher Bay and the many residents of the regional Rehabilitation Centre who were living there because they were what he called "basically social problems". The committee suggested encouraging more participation of Inuit in local recreational activities and more health education.

Although the number of criminal offences committed in Frobisher Bay dropped temporarily after a three week waiting period for beer was instituted, excessive alcohol consumption continued to be a problem among many Frobisher Bay Inuit. (85/1948/A560/1/3/1, 1962) In the 1970s, there would be two plebiscites held about different ways to limit the sale of alcohol in the community.

By the mid-1960s government activities operating out of the regional centre included education, Inuit housing, engineering, works, welfare services, socio-economic development and administration of territorial ordinances and game management. The federal government's year-round staff numbered 131, of whom 63 were Inuit. Geographer Sheila McBain described the government presence in the community as "overpowering" since the USAF had turned over the base to the Canadian government in 1963. (McBain 1970)

The town had facilities for 300 students as well as vocational training and adult education programs to "help prepare the Eskimo population for the social changes that are taking place." (85/bx15/A100/169/2, c1965) Recreational facilities included a bowling alley, a curling rink, a skating rink, rifle and badminton clubs and a commercial theatre which showed movies six evenings a week. There two snack bars and a bakery although the Hudson's Bay department store-supermarket continued to be the sole source of groceries.

There were no longer any camps in the bay area but only 185 of a population of 1085 were employed. This number supported approximately 600 dependents, with an estimated 300 others receiving social assistance. Although only 16 men could be considered consistent hunters, McBain reported that every wage employed man she surveyed in Frobisher Bay spent his entire vacation hunting seal and caribou. (McBain 1970)

This could not compare, however, with opportunities to obtain country foods in a settlement like Pangnirtung. Schaefer's study of per capita daily food consumption in 1964 revealed that, while Pangnirtung and Frobisher Bay populations were eating equal amounts of carbohydrates in 1964 (254 grams/day), Frobisher Bay Inuit were eating only 128 grams of protein per capita each day or less than half of Pangnirtung's 318 grams. (Frobisher Bay's protein consumption was still higher than the U.S. average of 103 grams per day.) (Schaefer 1971)

John and Irma Honnigman undertook studies of socialization in Inuvik and Frobisher Bay in the late 1960s with particular interest in the role that southerners played in modernizing northern native Canadians. The Honnigmans maintained that the Inuit of Frobisher Bay were "under the tutelage" of Euro-Canadian government employees learning a new language, a new way of making decisions and new ways of behaving.

Although they did not look at food habits in either town they did come to some interesting conclusions about influences in the acculturation process. The Honnigmans asserted that because Euro-Canadian government employees in these northern towns monopolized power and established all policies and laws governing life in Frobisher Bay they were major agents of what they called "tutelage". They observed "Since Euro-Canadians apportion many desirable rewards of

town life, they also possess powerful means of sanctioning learning." (Honnigman & Honnigman 1968)

Besides the personal example and direction of the southerners, the Honnigmans asserted that movies were the most important mass medium for teaching Inuit southern ways.

Movies, the major spectator activity for Frobisher Bay Eskimos, undoubtedly exceeds any other mass medium (except possibly school books) as an efficient medium of tutelage. (Honnigman 1968)

By 1971, the second year for comparing suicidity, there were two commercial theatres and a private club showing movies every night. The Honnigmans observed that fast-moving adventure movies were the most popular type of movie while 'drawing-room comedy' was least popular which they attributed to difficulties in understanding the language.

Frobisher Bay had a population of 2014, almost three times the population of the next largest community on Baffin Island, Pangnirtung (with a population of 690). More than 40 per cent of its population was non-native. There were 489 students in Grades K-6 in the local school and 234 students, gathered from surrounding communities, in Grades 7-12.

Most of the Inuit in the town were employed by government or industry -- or relied on government allowances for their livelihood. Very few depended on the land. The zonal nursing officer reported that nutrition in the community varied greatly. "A lot depend on caribou, seal and fish as meats," she observed. But "candies, pop and chips have replaced a lot of good value foodstuffs. Money is available for liquor but oftentime not for food." (Department of Health and Welfare, 1972)

Communications with southern centres had improved over the decade to the extent that there were commercial flights into

Frobisher Bay six times a week. CBC radio was producing several local radio programs in Inuktitut including the Listening Post, a program which conveyed messages from one community to another and morning broadcasts for women. Plans were underway to bring Frontier television into the community in 1972.

### 1972-1985

Through the 1970s and 1980s Frobisher Bay was exposed to increasing southern influences. At the same time, there were efforts on the part of both government workers and native organizations to counteract some of the negative effects of modernization of Inuit life.

The Nutrition Canada survey of 1971-72 included Frobisher Bay among the four communities examined as representative of Inuit nutrition. The survey found that Inuit had daily caloric intakes significantly lower than the national average and an inadequate intake of Vitamin A. It also found that Inuit people ate virtually no foods containing vitamin C or D. (Nutrition Canada 1975)

In July 1973 the zonal director for National Health and Welfare, Dr. Alex Williams, told a newspaper reporter in Frobisher Bay that nutrition was poor among the Inuit on Baffin Island and particularly in Frobisher Bay because foods which were high in protein and vitamins were too expensive for many families. An estimated 39 per cent of the population of Frobisher was supported by social welfare. About 60 per cent had jobs in the community, of which 90 per cent were blue collar jobs. (Coldevin 1973) Williams said, "Many people rely on soft drinks, candy and chips to fill their stomachs."

Communications researcher Gary Coldevin reported that 30.5 per cent of the population relied on store bought foods,

39.7 per cent used both store bought and country foods and 29.8 per cent relied on caught fish and game. (Coldevin 1973) Duffy reported that inflation pushed food prices up 7.7 per cent overall in the arctic between July 1972 and July 1973 with the price of beef increasing by 20 per cent, fresh fruit by 33 per cent and fresh vegetables rising by 40 per cent. (Duffy, 1978) At the end of 1973, the federal government raised welfare food allowances by as much as 50 per cent in some areas to cover the increased prices.

In 1975 a government funded Local Initiatives Project (LIP) spent several months promoting the purchase of nutritious foods in Frobisher Bay. The group organized a weekly sale of fresh foods at close to cost prices to about 50 mainly Inuit families in the community. The project showed that native families regularly bought apples, oranges, bananas, carrots, potatoes and eggs at these lower prices. (Food Prices Review Board 1975) The group also circulated a petition asking all three food stores in Frobisher Bay to sell more fruit juices and fruit, less candy, soft drinks and gum and to bring in more sugar-free soft drinks, more whole wheat and oatmeal cookies rather than those with chocolate or fillings. By April they had collected 400 signatures. (Meckler 1975)

The local newspaper asked the manager of the local Hudson's Bay store if he would agree to these requests from the group. He replied that he would try to bring in the foods that the group asked for "but he would not stop selling any product that people showed they wanted to buy." The manager maintained it was "not up to him to decide what kind of food people should buy." He said his store was a self-serve groceteria and people were free to "buy what they want and leave what they don't want." The store manager felt that what the people of Frobisher Bay needed was education "rather than anything the store could do." (Meckler, 1975) However, the local schools did respond to recommendations

from the LIP group by supplying protein rich snacks of cheese and peanut butter for elementary school students. (Duffy 1978)

Through the 1970s there was also increasing interest in organizing the procurement and sale of country foods for wage earners in the community. In March 1974 the local community association appealed to local people to help them procure country meats to sell in the community. (Inukshuk, March 1974) About the same time the cooperative in Frobisher Bay began to hire hunters to supply its members with fresh meat, recognizing that the most nutritious imported foods were the ones which were most expensive. (Duffy 1978)

Late in 1978, the Amatok Hunters and Trappers Association established a country foods store in Frobisher Bay with a special grant from ARDA to cover capital and start-up costs. The major goal of the project was "to provide a better means of nutrition for northern residents". The store sold country foods as inexpensively as possible with the price covering low wholesale prices, transportation costs and daily operations of the store but not covering capital costs. In its first two years of operation the store sold approximately \$60,000 worth of food annually, primarily fish, caribou and muktuk. (Torrance, 1983) (Unfortunately, the store was closed because of financial mismanagement in early 1987.)

However the advent of television and marketing techniques of supermarkets which heavily promote non-nutritious foods were more than a match for these local efforts. In 1973 satellite television was introduced to Frobisher Bay exposing the Inuit community to the full range of American programming and high-powered commercial advertising. In 1978 Montreal grocery stores were advertising in the Frobisher Bay

newspaper offering to deliver groceries to the Dorval airport to be put on a daily flight which reached Frobisher Bay at noon. (Duffy 1978)

In 1979, nutrition researcher Donald Spady found that Inuit in communities with a population over 1,000 (Frobisher Bay was one of two communities in that category) relied more heavily on storebought foods than Inuit in communities with smaller populations. He calculated that 28.6 per cent of Inuit in large communities (of more than 1000 people) relied mainly on store bought foods, while 61 per cent relied half on store bought and half on country foods. Only 9.5 per cent relied mainly on native foods while in communities with populations of 500-1000, 17.6 per cent relied on native foods and in smaller communities, almost 20 per cent relied on native foods. (Spady 1982) (See Table 5, Chapter 1)

According to the NWT Data Book, in 1980-81, there were 171 trappers in Frobisher Bay in a population of 2335, although only 15 made more than \$600 from trapping. By 1984-85, the number of trappers had fallen to 53 and only four of those earned more than \$600 from trapping.

By 1984 the estimated value of imported foods consumed per capita in Iqaluit was \$2,098., while the estimated value of country foods was \$544. per capita or \$870 per capita if the non-native population is excluded from the calculation. In spite of all the organized efforts to increase availability of country foods in Frobisher Bay through the 1970s, this was less than half the amount of country foods being consumed by Inuit in Cape Dorset, and less than a third of game and fish consumed in Lake Harbour and Pangnirtung. (see Table 8.1)

Table 8.1

## Estimated Imputed Value of Country Foods

Community	kg Per Capita	\$ Value
Cape Dorset	197	\$2,162
Lake Harbour	265	\$2,910
Pangnirtung	342	\$3,757
Frobisher Bay	50*	\$544
(without non-native)	79	\$870

from Worrall, 1984

The population of Frobisher Bay grew only moderately over the decade from 1971 to 1981, increasing by slightly more than 10 per cent from 2014 to 2335. The proportion of non-natives in the population decreased by almost six per cent to 36 per cent from 41.8. The community maintained its status as the major regional centre for transportation, commerce and government services and continued to receive daily flights from the south. The sudicity of Iqaluit in 1981 was 575 which could be considered highly southern and near the maximum for an arctic community.

With an annual income per capita of \$3,361. (in 1971 dollars) per capita in 1981, residents were about 30 per below the national average of \$3,490 (in 1971 dollars) per capita. However, although this is double the average incomes of other Baffin Island communities, the average income for Iqaluit includes the large number of non-native workers in the community and does not represent the average Inuit income.

A study conducted by Green, Green and Bone in 1986 showed that 90 per cent of non-natives earned over \$20,000 per year while 70 per cent of natives earned under \$20,000 per year.

Further it showed that native households in Frobisher Bay had an average of 6.83 people in them while non-native households averaged only 2.62 people. Thus incomes earned generally support larger numbers of people in native households than in non-native households.

### Summary

Iqaluit is a community which showed a considerable degree of southernization by 1961 and increased its southernness only moderately over the years examined in this study. In fact, the kind of changes which occurred in Pangnirtung in the 1960s, probably happened in Iqaluit at least a decade earlier.

Much of Iqaluit's population through the 1960s was made up of migrants from the trading areas around the other communities examined -- and particularly from Lake Harbour. Thus, Iqaluit may have taken those families which were most attracted to a southern wage economy. It also became a centre where many people who were incapable of making a living from hunting or trapping (because of physical incapacity from tuberculosis, among other reasons) gathered and stayed because of the government support available.

Apart from military activities, the town's economy has been based, from its inception, on government services. Government at three levels continue to employ the largest number of people in the town, offering good incomes to those who work. However, education requirements for many of the jobs exclude most Inuit and the town continues to depend on a large non-native population to fill most of the professional and administrative jobs.

Iqaluit has had very few hunters or trappers in its population and, in spite of efforts to encourage hunting and distribution of country foods in the community, its Inuit

produce far less country foods than Cape Dorset or Pangnirtung. However, figures from the Government of the Northwest Territories indicate that country foods still made up 34.4 per cent of the value of foods consumed by Inuit in Iqaluit in 1982, which suggests a persistent demand for game and fish.

After four decades of direct and increasing southern influence, Iqaluit may have reached a plateau in southernization, with any increase limited by physical circumstances and cultural preferences.

## Chapter 9

### Sudicity in Four Baffin Island Communities 1961-1981

The review of the history of four Baffin Island Inuit communities in the preceding chapters has revealed a wide range of factors which have influenced the southernization of the people of this region. It has also demonstrated that these factors are complex and interrelated. In the following pages the researcher proposes to compare sudicity values of these four communities at three points in time and their eating habits at those times. The historical profiles will assist in explaining some of the patterns demonstrated by the sudicity index. The usefulness of the sudicity index will also be discussed.

A comparison of the sudicity of four Baffin Island communities in 1961, 1971 and 1981 indicates a rapid southernization of these settlements over three decades. (see Table 9.1) Two of the four communities examined were in the lowest range of sudicity in 1961 and could be considered traditional northern communities. Over the three decades reviewed in this study they became moderately southern with increasing population, services and communications. A third community showed limited southern influences in 1961 and increased to moderately southern by 1981. The fourth community, Iqaluit (Frobisher Bay), was already moderately southern in 1961 and, by 1981, could be considered highly southern, although unlikely ever to become fully like a southern urban community largely because of its location on an arctic island.

Table 9.1  
Sudicity in Four Baffin Island Communities 1961-1981

	1961	1971	1981
Lake Harbour	135	250	350
Pangnirtung	150	330	395
Cape Dorset	195	310	375
Iqaluit	455	495	575

NOTE. Sudicity Values

<175	traditional northern
175-350	limitedly southern
350-525	moderately southern
> 525	highly southern

A quick review of the variables which contributed to the sudicity values in each decade may be useful at this juncture.

Hugh Brody has called the 1950s and 1960s years of "the great change" in the Canadian arctic. This is certainly true of the southern Baffin Island communities examined in this study. These were years of sedentarization of a nomadic population and acculturation of a traditional native society -- years of what this researcher would call encroaching southernization. However there are some significant differences in the rate of change in the communities and in the influences which precipitated southernization.

By 1961, Frobisher Bay had been exposed to significant southern influences from a large American military base for almost two decades. The non-native population made up more than 40 per cent of the community's population and a number of Inuit men in the area had been wage earners for more than 15 years.

The settlement was already clearly designated, although not yet fully developed, as the regional centre for government services and transportation. Thus many Inuit from the surrounding area who wanted to work for wages instead of pursuing their traditional hunting lifestyle saw Frobisher Bay as their most likely source of steady employment.

According to the researcher's sudicity index, Frobisher Bay, was a community which could already be considered moderately southern. Its population, at more than 1400, was the largest in the eastern arctic and made Frobisher Bay one of only five Canadian communities north of 60° latitude with more than 1000 people. With its large proportion of non-native residents, the community was close to the top range in sudicity for both population variables, as was its twice weekly air service. (see Appendix I for calculations of sudicity) Communications and economic activity were moderately developed with a new Canadian Broadcasting Corporation radio station opened in the community and more than 100 Inuit engaged in regular wage employment.

With a total sudicity calculated at 455, Frobisher Bay was significantly more southern than any of the other three communities surveyed -- all of which had sudicities of less than 200. Two of the other settlements, Pangnirtung and Lake Harbour, fell into the range of sudicity which is gauged as traditionally northern, and one, Cape Dorset, fell within the range which is considered to show limited southernization.

Of the other three communities, in 1961, Lake Harbour had the lowest sudicity value at 135. Pangnirtung's sudicity was only marginally higher at 150 because of its larger non-native population. In both of these communities, the great majority of area Inuit lived as hunters and trappers. The only wage earners were Inuit who were employed by traditional northern institutions such as the RCMP, the

Hudson's Bay Company or the local mission. RCMP reports from both communities for the years leading up to 1961 praised area Inuit as industrious and self-sufficient people. In fact, southern officials (particularly the RCMP) in both communities discouraged Inuit who traded into the community from staying in the town for more than a few days and encouraged them to pursue their traditional lifestyle.

As might be expected of Inuit living this lifestyle, their diets were largely traditional and composed almost entirely of country foods supplemented by bannock and tea. However this does not mean that either community was completely isolated from southern influences. Pangnirtung was the site of the church-run hospital which had served the whole of Baffin Island since 1928. Lake Harbour had had a church-run school for a number of years and had had a government teacher giving instruction in hygiene and showing movies for two summers. Lake Harbour had lost a large part of its population to Frobisher Bay and so most Inuit families had close relatives providing them with oddly sophisticated material goods, such as electric toasters and electric razors.

In both communities, radios could be found in almost every tent, although listeners relied on entirely random reception of broadcasts which originated from Greenland or Russia more often than from southern Canada.

Cape Dorset was a community which showed more signs of southernization in food habits, and with a sudicity of 195, was just within the range considered limitedly southern (175-350). The handicraft workshop and federal day school and the non-natives who ran these two new government institutions could be considered the major southernizing influences in the community. The teacher at the government school offered "lunches" of cocoa and oatmeal and showed

regular movies. The local Northern Service Officer (NSO) was providing food rations as part of the monthly pay of summer construction workers.

By 1961 the NSO, his wife and the community school principal had all expressed concern in official reports to Ottawa superiors about poor nutrition caused by imbalanced use of southern foods among the Inuit in the settlement. Each had taken steps to intervene to try to improve the Inuit's use of southern foods.

A community bakery and coffeeshop had recently opened in the community as part of these efforts and were offering fortified oatmeal cookies, bean soup and whole grain bread as healthy alternatives to the common Inuit diet of bannock, tea and jam. A cooking course had been run for a small number of Inuit women and the principal had requested a home economics course for others. Because of a common concern that Inuit men did not have enough time for hunting, the local administrator had requested that the government buy a community freezer to store country foods for common use.

Although Cape Dorset was substantially more southern than either Lake Harbour or Pangnirtung in 1961, the other two communities would at least double their sudicity in the next decade as federal government administrators and teachers moved into their communities. Over the same period, Cape Dorset's sudicity would increase by 50 per cent.

In Pangnirtung, the area Inuit's lifestyle changed dramatically within a year of this sudicity comparison because of the debilitating dog epidemic which killed 80 per cent of area hunters' dogs. More than 300 of the camp dwellers of Cumberland Sound were forced into the settlement temporarily when their dogs died in the first months of 1962 and they were unable to hunt. Although 10 of 12 camps along

the sound were reoccupied by the beginning of 1963, five years later there would be only two camps on the sound. By 1971, there would only be one.

Government make-work projects, a federal housing program and the knowledge that the government would provide for them if they were unable to provide for themselves encouraged the camp dwellers to take up permanent residence in Pangnirtung. In Lake Harbour, it appears to have been the construction of low-cost rental housing and the opening of the federal day school which drew camp dwellers into the settlement. Camps in the Lake Harbour area dwindled to one by 1968. These could be considered the boom years in the eastern arctic when construction of housing and government buildings and service jobs for new government departments provided, at the least, seasonal employment for any Inuit who wanted it.

Lake Harbour remained the least southern of the four communities in 1971, with a sudicity value of 250 indicating limited southernization. With a population of less than 200 and once weekly air service, it was the smallest and most isolated of the four settlements. However the lifestyle in the community was very similar to that of Pangnirtung, which had a substantially higher sudicity value at 330. Pangnirtung's large population, thrice weekly air service and higher income per capita gave it a higher measure of sudicity, although both Pangnirtung and Lake Harbour Inuit still relied largely on hunting for their livelihoods.

In spite of the different sudicity values, the similarity of the lifestyles in the two communities is revealed by their diets. Through the late 1960s, protein still made up 44 per cent of the calories in the diet of Lake Harbour Inuit and 46 per cent of the diet of Cumberland Sound/Pangnirtung Inuit. Compared to the U.S. urban household's 13 per cent protein (in 1955), households in these two northern communities were still heavy meat eaters, and procured most

of their protein from the land. Carbohydrates made up at least a third of the Inuit diet in both these communities through these years (33 per cent in Lake Harbour and 37 percent in Cumberland Sound/Pangnirtung). [Schaefer and Steckle, 1980] Much of carbohydrate component could be accounted for by flour and sugar which had long been part of the diet of Inuit camp dwellers. However, researchers and health workers of the era also reported increasing amounts of candy, soft drinks and other non-nutritious sweets. [Schaefer 1971, Kemp 1971, Mayes 1978]

In comparison, Frobisher Bay Inuit, by the mid-1960s, had a diet in which protein made up only 25 per cent. An estimated 50 per cent of their diet was provided by carbohydrates including a great deal of refined starches and sugars. By 1964, the Frobisher Bay Inuit diet had surpassed the U.S. average of 44 per cent carbohydrates. [Schaefer and Steckle, 1980]

Frobisher Bay's sudicity value for 1971 was 495, just below the level of sudicity which is considered highly southern (525-700). The community was by this time a fully developed regional centre with daily commercial flights arriving from Montreal and a wide range of government, commercial and service sector economic activities. Non-native southerners still made up more than 40 per cent of its resident population. However, the average income of the Inuit, at \$1,010 per capita was less than 30 per cent of the national average of \$3,490 and brought down the overall sudicity total in the community. [Palmer 1970, Statistics Canada, 1987]

Cape Dorset's sudicity for 1971, at 310, falls between that of Pangnirtung and Lake Harbour. The community's resident population had more than tripled since 1961 but had grown less than Pangnirtung's which had increased five fold. In all three of the smaller communities, the movement of Inuit

into the settlement from camps and natural increase in the Inuit population had outpaced the immigration of non-native southerners and, thus, the proportion of non-native residents had decreased over the decade.

The success of the printmaking cooperative in Cape Dorset had brought more southerners north to visit and taken more Inuit south than in either Pangnirtung or Lake Harbour. And, in spite of tallying a lower sudicity value than Pangnirtung, Cape Dorset was suffering from difficulties of the rapid culture change which were not yet evident in the larger community. Petty crime and alcoholism caused much concern among both the Inuit and the non-native population, prompting a special government study and the appointment of a permanent RCMP constable to the settlement, which before 1962 had been adequately served by the detachment that had long been based at Lake Harbour.

Cape Dorset's population relied on wage earnings to a greater extent than either Pangnirtung or Lake Harbour where the value of food hunted greatly exceeded the money earned. Cape Dorset's per capita income without imputed value of the hunt was \$794 and with the hunt was \$1,103. In both Pangnirtung and Lake Harbour income per capita without the hunt was only \$452, while income was \$1400 and \$1162 respectively when the value of country foods was included.

Although there are no comparative figures for percentage of protein and carbohydrates in the Cape Dorset diet at this time, a study of housekeeping habits in the community in late 1968 observed that some families in Cape Dorset ate more store bought foods than country meats. While game and fish were still the primary source of meat for Inuit, some families existed primarily on bannock and tea with only occasional additions of either country foods or other store products. [Thompson 1969] From this information, one could

surmise that the proportion of proteins eaten in Cape Dorset was greater than in Frobisher Bay but less than in either Pangnirtung or Lake Harbour.

The Inuit of Cape Dorset had a lifestyle which was probably more southern than the Inuit of Pangnirtung in 1971. However, because factors such as the number of wage earners in the community are not measured by the researcher's more general sudicity index, the sudicity values for Cape Dorset and Pangnirtung in 1971 perhaps do not adequately reflect the comparative southernness of these two settlements.

By 1981 all four settlements had a significant number of southernizing influences in their communities and could be gauged as moderately to highly southern.

Iqaluit had a sudicity value of 575 in 1981 and thus was a community well into the range considered highly southern by the index (>525). This is a fairly accurate reflection of the degree of southern exposure in the community and, in this case, of the sudicity of Inuit lifestyles.

The variable which contributed most to the increase in sudicity value in Frobisher Bay between 1971 and 1981 was the introduction of television. Frobisher Bay was the first community in the eastern arctic to receive television when, in 1972, CBC began providing four hours of taped television programming to the town's residents. In 1975, with the launching of the ANIK satellite, Iqaluit and all the other communities included in this study were exposed to the full array of southern television programming. This increased the sudicity measure for Iqaluit by 50 and the other three communities by 65.

Frobisher Bay's sudicity, however, is kept below the maximum by two variables which are not likely to change significantly in the coming decade. The fact that Frobisher Bay has

no access to the town by road or rail and that ships can only get into the community three months a year keeps its rudicity value for accessibility quite low. This is unlikely to change unless new technologies provide inexpensive ways to improve access by land or water.

Iqaluit's income per capita, at 65 per cent of the Canadian average, is the highest of the four communities. However it is still low enough to pull down the overall rudicity of the town and there are no plans or concrete prospects for new economic activity in the regional centre which are likely to bring Iqaluit's per capita income closer to the national average in the near future. It should be noted that because of the high proportion of non-native (who, on average, earn more than Inuit workers) in Iqaluit, the average per capita income is probably significantly higher than the average per capita Inuit income.

There were 171 Iqaluit residents (of 615 households) who were registered as trappers in Iqaluit in 1980-81, but less than 10 per cent of them (15 men) earned more than \$600 from trapping. This small proportion of the population which relied on the land to provide them with a livelihood is reflected in the amount of country food eaten by Iqaluit Inuit.

The average per capita consumption of country foods for Inuit in the town in 1984 was \$870 (at imputed equivalent value) which represented only 34 per cent of the food consumed per capita in the town. This meant that 66 per cent of the Inuit diet in Iqaluit was made up of southern store bought foods.

The actual amount of fish and game consumed per capita was less than a third of what was consumed in Pangnirtung or Lake Harbour and less than half of what was consumed in Cape Dorset. In both Pangnirtung and Lake Harbour there was at

least one trapper for every household and in Cape Dorset there was a trapper for every household but one. In these communities country foods made up at least half of the value of foods consumed per capita in 1984.

(see Table 9.2)

Table 9.2

Number of Hunters and Country Foods Consumed 1981

	Households (1981)	Hunters (1980-81)	Hunters Earning over \$600	Country Foods as % of total value (1982)
Lake Harbour	45	47	16	60.4%
Cape Dorset	135	134	17	49.2 %
Pangnirtung	155	179	133	62.7%
Iqaluit	615	171	15	34.4%*

NOTE \* estimated value of consumption of country foods for Inuit only.

Sources. Canadian Census 1981, NWT Data Book 1984-85, Worrall 1984

The sudicity values for Lake Harbour, Pangnirtung and Cape Dorset for 1981 all fall within the moderately southern range (350-525) on the index (although Lake Harbour is on the margin between ranges). However none of the three smaller communities reached the sudicity which Frobisher Bay had in 1961. The proportion of trappers who earned more than \$600 from trapping was 35 per cent in Lake Harbour and 74 per cent in Pangnirtung where marine mammal harvesting continued to be the primary economic activity. In Cape Dorset where the artists' cooperative was also a major economic activity in the community, only 13 per cent of trappers earned more than \$600.

The appearance of television and increased air service accounted for most of the increased sudicity in the three smaller communities. Income per capita for two of the three communities was similar (\$1525 to \$1606) and, in comparison to the national average, remained as low as in 1971 at approximately 30 per cent of the Canadian average per capita income.

Thus the sudicity index can be seen to have reflected reality fairly well in all but one case, where Pangnirtung's population and income in 1971 produced a higher sudicity index than in Cape Dorset where the population was much more involved in the wage economy. Sudicity values also correspond with the degree of southernization of diet except in this case where Pangnirtung's large number of hunters and trappers brought the community far more country food per capita than in Cape Dorset, where families were more involved in carving and printmaking.

If the numbers of wage earners could be incorporated into the index, it might provide more accurate values. However, as with many other number for the years before the mid-1970s, accurate figures are not available. Similarly, if income calculations were more precise and more comparable for the three decades, the sudicity values might be truer reflections of southernization in these four communities. For instance, it can be seen that if the imputed values of country foods are separated from earned income for 1971, Cape Dorset's sudicity increases and Pangnirtung's falls. Both values become better representations of reality.

One of the greatest weaknesses of the sudicity index is that its values are gauged from numbers which are, at best, approximate. This is a problem which is common in dealing with social and economic issues in northern Canada until the mid-1970s, when the Northwest Territories government began a concerted effort to collect statistics regularly in a

consistent manner which would make the data on income, population, employment and consumer prices comparable.

As mentioned at the outset, the index also suffers from some of the same weaknesses as Hamelin's nordicity index in that sudicity values for the variables represent different kinds of measurements. Population and income variables can be represented numerically. Other variables are identified by descriptive characteristics which are gauged hierarchically and with relative subjectivity, such as economic activity and communications. The index thus adds a number of values which represent disparate kinds of influences.

A further problem with the index is that the range of sudicity values assigned for each variable can only be considered a nominal and descriptive. Sudicity values, even for those variables which can be quantified, do not correspond to numbers of population or income by any mathematical formula. Instead they correspond to thresholds of population size from unorganized, sparsely populated settlements of 25 or less to towns of 5,000 or more or to incomes in comparison to the Canadian average. The numbers are assigned with some approximation and comparable only nominally for purposes of description.

Both kinds of variables are assigned values rounded to the nearest five and tallied to calculate total sudicity. Thus the sudicity totals for each community are even more approximate than the original population and income figures and are very informal in terms of quantification. The application of the sudicity index provides only nominal values for acculturation and can only be related to each other. Thus its application can only be considered generally representative of the degree of southernization in any community. This should not be surprising, as the issue of acculturation is, in fact, a qualitative question and not one which can be precisely quantified.

One further limitation of the sudicity index designed by the researcher is that it does not include a number of influences which, in the course of this study, have been found to be significant in contributing to changes in food habits. Exposure to southern foods through southern institutions such as hospitals, schools or mess halls for construction crews appears to have been important in the early years of government presence in the arctic. Government issues of relief rations and rations for pay were also means of introducing certain southern foods into Inuit diets. Changes in hunting technology influenced the amount of time and money needed to acquire country foods and, therefore, may have influenced the decisions of some Inuit to take part in the wage economy.

None of these subtleties of interrelated influences can be represented in a general index such as the one used in this study. Modifying the sudicity index to include them might make the index more accurate for eastern arctic communities but would perhaps make it too specific to be more widely applied to other northern communities in the western Canadian arctic or Alaska. As the index is intended to serve as a general and descriptive framework for measuring southernization, this researcher would argue that this kind of modification would not improve the index but rather would severely limit its usefulness.

Given the limitations outlined above, the sudicity values for the four communities in which it has been tested are remarkably true to reality. The values calculated represent the general changes in southernization in each community over time and also reflect the relative differences in southernization among the four communities at the three points in time selected for comparison. The sudicity index has therefore been useful in providing a structured description of the general degrees of southernization in

four sample communities. It has also been valuable in setting a framework for discussion of key influences in the southernization of Inuit lifestyles. This researcher would suggest it might offer a similar structure for comparison of sudicity of communities in another part of the Canadian North.

In the following chapter some critical and common influences in southernization, which fall outside the structure of the sudicity index, will be explored. The question of significant influences and basic causes will also be discussed.

## Chapter 10

### A Question of Basic Causes or Significant Influences

Throughout our discussion of dietary change we confront the philosophical question of basic causes. Attempting to isolate clear, necessary and sufficient causes may have some utility in relatively simple systems. However, human behaviour is more understandable if we conceptualize a system of complex, inter-connected forces (including biological, psychological, economic, political, technological, and other factors), so that a focus on one component as a prime mover rests more on a philosophical or stylistic preference rather than on demonstrable, empirical evidence. [Pelto & Pelto, 1983]

While the researcher may have set out to show simple relationships between the influence of southern non-natives and their media and the diet of the Inuit of the eastern arctic, the historical reality demands a more comprehensive and inclusive explanation. The preliminary sudicity index constructed to measure degrees of southernization includes seven basic variables which serve as indicators of southernness. However, it excludes a number of factors which have been significant contributors to the change in the eastern arctic Inuit diets from traditional northern to southern urban. These include exposure to southern institutional food (through local government schools, residential boarding schools in the south or southern hospitals), the workings of the social assistance system, changes in hunting technology, low incomes and inflation.

Some of these factors, such as those which involve exposure to southern institutions and laws, can be considered elements of a demonstration effect of southern non-natives

which is not adequately represented by a simple index. Others, such as changes in technology and low incomes which have affected the ability of Inuit to acquire food are also represented insufficiently by numbers in the index. Both will be discussed in greater detail here.

#### **Education, Demonstration and Imitation**

One of the limitations of the sudicity index is that it measures only the numbers of southerners in each community and does not directly measure their influence. In some cases, especially in the smaller and more traditional communities, it may be that a single individual or a handful have had more influence than their numbers would suggest. For example, in Cape Dorset, James and Alma Houston undertook a great many educational and economic projects during their years in the community in the 1950s and early 1960s. With a school principal working with them for much of that time, they appear to have had a major impact on life in Cape Dorset.

In other communities, the existence of a southern institution, such as the Pangnirtung Hospital, for more than a decade before WW II may have had a greater impact on the Inuit of Cumberland Sound than is revealed by the sudicity values. The demonstration effect of southerners and their institutions, both intentional and unintentional, thus, must be discussed in more detail than the index allows in order to understand their multifaceted and sometimes contradictory influences on Inuit food habits.

Among the most interesting southern institutions which contributed to diet change among the Inuit of the eastern arctic are those which provided food rations supplied both as payment for work and as assistance for those who could not provide for themselves. The composition of these rations and their detrimental influence on Inuit diets and health

has been recognized for at least half a century and has been a subject of criticism and debate for at least that long.

From as early as the 1920s medical officers working on Baffin Island expressed concern about the foods being distributed to Inuit families as relief rations when, for some reason, they were unable to hunt to procure food for their families. The government had taken up the custom of the Hudson's Bay company and was offering non-perishables such as flour, pilot biscuits and lard as food to tide an Inuit family over a hungry period. (These same foods had been given as rations in exchange for labour since the days of the whalers.) Doctors urged that meat or fish should be distributed wherever possible because a diet of bannock and tea was not nutritious. [85/98/251-1-2, pre WWII]

However, perhaps because the logistics of supplying meat and fish were difficult, medical officers also encouraged the manufacture of a biscuit made from nutritious ingredients and the development of an enriched flour for distribution in the North. For reasons which are not revealed in government records, relief rations continued to be largely composed of carbohydrates (mainly flour and biscuits) through the 1950s. A medical survey conducted in 1955 by Indian Health Services confirmed that "rations issued as relief were not nutritionally sound." [85/480/251-1-2/3, 1955]

With greater government presence in the eastern arctic after the war came a number of new ways to obtain food from southern officials. Relief rations were still offered to those who could not feed their families, work rations were given to those Inuit who worked at the U.S military base at Frobisher Bay, at a DEW line station or on government construction projects and family allowance offered some foodstuffs for Inuit mothers.

While some worksites offered mess hall meals for men while during their work days, the foods they were given as weekly rations were the familiar flour, sugar, lard and biscuits -- which most employers saw as supplements to wild game they assumed was being hunted by their Inuit employees. However, as the medical officer at Pangnirtung noted of unhealthy rations given by the RCMP to their Inuit "servants", "no-one seems to have checked if this was in fact the case."

[85/480/251-1-2/3, 1950s]

Family allowance and relief rations were distributed to families for different reasons, although the subtle distinctions may not have been entirely understandable to the families who received them. The chief of the arctic division of DNANR explained the differing rationales behind the two kinds of rations as follows

Family allowance is designed to supplement basic requirements and has been found particularly valuable in introducing new and nutritious foods into the North, especially special items such as milk and pablum.

Relief on the other hand is issued to families when it is found that they are definitely unable to maintain themselves -- it is the supplying of basic requirements to families in need...[85/990/15583, 1950]

Although it is true that Inuit families readily took up milk and pablum as good foods for their babies, they seldom bought it with money earned from wage labour. Instead, they relied on the government to supply this food (which, after all, it was government officials who insisted they should feed to their children). Unfortunately, as in many Third World nations at the time, neither milk nor pablum improved the diet of their children. Instead, the difficulties of mixing the dried foods in the proper proportions or under hygienic conditions made these new foods dangerous and

actually contributed to an increase in infant mortality in the Canadian arctic in the late 1950s.

In his review of historical factors affecting food consumption in Northern Canada, Duffy suggests that the choice of foods distributed as relief rations by both the Hudson's Bay Company and, later, government officials had a significant impact on the Inuit's choice of foods when they had personal incomes to purchase foodstuffs. He comments that this influence, which could have been constructive, was instead detrimental.

The major criticism with regard to relief rations was that they were not used to educate the Inuit in good eating habits, if only by example. Instead they reinforced and perpetuated the long-held belief among the Inuit that the best diet was bannock and tea because that is what the white man gave them.

In 1961, two years after credit vouchers for family allowance and relief had been changed to cash payments, Keith Crowe, the northern service officer at Pangnirtung, wrote a long memorandum to the regional administrator at Frobisher Bay detailing what he saw as the problems of government social assistance. The Pangnirtung northern service officer was concerned about the "dangers" of the relief program which supported not only the majority of Pangnirtung families but also a large number of native people across the North. Crowe used the example of one Inuit labourer and his family to illustrate how the government administrator, the trader and the Inuit are all "villains" in the scenario of increasing dependence of Inuit hunters.

The Inuit man he describes had only seasonal wage labour working for the summer on construction (as many Inuit and Indians of this period did). He spent the last paycheque in September on what Crowe considered impractical luxuries including a bicycle and three cardboard 'motorcycle hats'

for his children and a fancy new gun (although his year-old rifle was still in good condition). In early January the man applied for relief because the hunting conditions were bad and his family was hungry.

Because of the political climate of the times and the public fear of hunger among the Inuit, Crowe said it was impossible to refuse relief to someone even if he was an able-bodied hunter who had earned enough money to feed his family through the lean months. Crowe was concerned that the government was making a relief payment that was unnecessary and, at the same time, subsidizing the profits of the Hudson's Bay company which was encouraging the purchase of unneeded luxuries to what he called commercially naive people "utterly lacking in sales resistance".

After a year's responsibility for administering relief payments in Pangnirtung, Crowe was frustrated by the Inuit's lack of planning -- and lack of individual responsibility -- which he felt was the result of a lack of education about consumer prices and budgeting.

An extraordinary and increasing proportion of the Eskimo spent on items like candy, hairdye , and other low freight-cost and high mark-up. Money that could be translated into better housing, better clothing and insurance against hard times is frittered away....I do not advocate the denial to the Eskimo of luxuries and frivolities, but I do question the subsidisation of these things which is going on at present, at the expense of housing, health, and other needs.

(85/1953/A1000/170/1, 1963)

Crowe believed both the trader and the government bureaucracy should take some responsibility for educating the Inuit but he also felt the Inuit had to take some responsibility to adapt to "the Canadian way of life".

These people are trying to sit on a cultural fence, one where, to quote a common situation, they can buy and (sic) outboard motor on wages, but walk off the job in the middle of the day because they've seen a seal across the bay. As one who has great respect and sympathy for the Eskimos, I believe that they are prolonging a period of transition by their own failure to plan in a changing environment. (ibid)

Crowe recommended that the government take action to educate the Inuit about budgeting, set up Inuit cooperatives which would encourage wise use of wages and keep capital in the North -- and provide food and clothing as relief rather than giving cash.

In passing on Crowe's memo to the arctic administrator in Ottawa, the regional administrator, C.E. McKee, agreed with the substance of Crowe's remarks but disagreed about how to solve the problems. McKee maintained it was unrealistic for the government to stock each settlement with food and clothing for all the Inuit who would ask for relief. "Also," he wrote, "They have some rights to choose the foods, clothing, etc. they need." (ibid)

The individual's right to choose won out over Crowe's plea for more paternalistic direction of food acquisition. However, the government undertook other ways of "educating" the Inuit about proper use of store purchased foods. These primarily took the form of homemaking courses for Inuit women and school children which seem to have had a very limited effect on food purchasing and eating habits.

Efforts to teach Inuit women southern notions of nutrition and homemaking began during the 1950s when a book was published for wives of DEW line employees. It extolled the virtues of seal meat as a single food which met all

nutritional needs and cautioned that bannock and tea could not do the same.

Through the 1960s there were short homemaking courses held in Cape Dorset and Frobisher Bay and community nurses made efforts to encourage a diet which was composed of a balance of protein and carbohydrates.

Unfortunately the same southern authorities who were actively promoting food habits were administering school lunch programs for schoolchildren and rations for recuperating tuberculosis patients which appeared to contradict their instruction. Tuberculosis rations were composed largely of the same non-perishable carbohydrates as relief rations. School lunches were often simply a pilot biscuit and cocoa or milk and tea. Although the biscuit may have been composed of nutritious ingredients, it was not available for sale in the local Hudson's Bay store which did stock the more familiar and equally good-tasting commercial biscuits.

Duffy commented

The obvious contradiction between what the white men were saying and what they were doing themselves was confusing to the Inuit. If country food was so much better than imported food why did the white men persist in eating the imported kind? And why did they give imported foods to Inuit as relief and part-payment of wages? [Duffy 1978, p137]

In the 1970s, after the widely publicized Nutrition Canada survey which indicated that Inuit had serious nutritional deficiencies, there were a number of nutrition education projects launched by community workers, schools and even the arctic's major food retailer, the Hudson's Bay Company.

These courses and educational projects may have had profound influences on individual eating habits or on switching allegiances from one form of beverage to another (as in the Pangnirtung switch from softdrinks to fruit juices). However, recent surveys of overall food purchasing habits indicate that direct attempts to improve nutrition have had less effect than indirect (perhaps unintentional) influences which have reinforced poor nutrition.

Although rations are no longer distributed either as payment for work or as relief in the 1980s, there are other ways in which southerners reinforce poor dietary habits based largely on carbohydrates. Television advertisements promote the very convenience foods and snack foods which community nurses discourage and supermarkets, like their southern counterparts, have aisles filled with foods in appealing packages that taste good but which educators say are not good nutritionally.

### **Technology, Time and Money**

Through the 1950s and early 1960s, there was widespread speculation about the effect of sedentarization on the food supplies of the Inuit. The concentration of populations into a small number of centres in the eastern arctic was believed to be depleting the stock of wild game and fish near the settlements. There was also concern Inuit living in settlements and working for wages did not have enough time to hunt for country foods.

The introduction of the snowmobile to the arctic in 1961 relieved some of these perceived difficulties. Inuit could travel further on these mechanized toboggans and so hunting and fishing was once more spread widely beyond the settlement and those working for wages (who were weekend or holiday hunters) could get country foods in less time than by traditional dog teams. [Freeman 1976, Usher 1985]

However, the new technology presented another problem which continues to plague Inuit hunters -- it costs a lot of money. Hunters had to earn a considerable amount of money to be able to purchase a snowmobile and to outfit themselves for a hunting expedition. In fact this problem is not new to the Inuit and has been part of any discussion of the viability of the traditional economy since the turn of the century. As early as 1902, Low reported that Inuit in the eastern arctic had given up locally made weapons for imported guns. By the 1940s they were dependent on guns and ammunition to hunt. In order to purchase these new technologies the Inuit had to earn some kind of cash income. While trapping provided that income when game was plentiful and prices were high, it was not a dependable income. When prices fell as they did between 1948 and 1950, the Inuit had to find new ways to earn cash.

The appearance of the DEW line station and new government agencies in the arctic through the 1950s and 1960s offered alternative ways to earn an income. Most of the jobs were temporary or seasonal, which was probably entirely satisfactory for those who wanted to continue hunting. However in the 1970s the job market appeared to reach a kind of plateau for absorbing new workers or even maintaining former seasonal workers. At the same time inflation pushed up prices of snowmobiles, guns, ammunition and other equipment needed for hunting. This led to the observation in some communities in the 1970s that the most successful hunters were also the most successful wage earners.

[Brody 1977]

Since 1975, the federal government has supported hunters going out on the land through its outpost camp program which provides transportation and covers some costs of putting together a hunting outfit. In 1981, there were 24 outpost camps across the Northwest Territories with a total population of about 350. [GNWT, 1981]

Since the mid-1970s the lack of wage earning opportunities and low cash incomes have been a serious problem among natives in the Canadian North. Unemployment is a major problem in the entire Baffin region in the 1980s and the number of unemployed is expected to be high through the next two decades. [Worral 1984]

A labour force survey conducted in the NWT in 1984 found the unemployment rate among natives to be 31 per cent compared to seven per cent for non-natives. It also revealed that 78 per cent of non-natives aged 15-64 in the NWT were working at wage employment, compared to only 38 per cent of native. [GNWT 1985]

Income from both carving and hunting/trapping, activities which might be considered traditional in the eastern arctic, has fallen through the 1980s as a result of the anti-sealing campaign in Europe and a depression in the carving market. [Worral 1984] NWT government statistics show the number of trappers earning more than \$600 declined significantly in the early 1980s and by 1984-85 was down to less than 15 per cent in all four communities. In Pangnirtung the decrease in trappers earnings was most dramatic. Where there had been 133 of 179 trappers earning more than \$600 in 1980-81, there were only 21 of 142 earning that much in 1984-85. The total number of registered trappers also declined. (see Table 10.1)

Table 10.1

**Trappers and Hunting and Trapping Income in the 1980s**

	Total number of Trappers		# earning over \$600	
	1980-81	1984-85	1980-81	1984-85
Iqaluit	171	53	15	4
Cape Dorset	134	53	17	7
Pangnirtung	179	142	133	21
Lake Harbour	47	34	16	4

Sources. NWT Data Book 1982-83, NWT Data Book 1986-87

As noted in a previous chapter, income per capita in three of four communities examined in the study was only 30 per cent or less of the Canadian national average income in 1981. Gloomy economic predictions for the Baffin region make it unlikely that the incomes of the four communities examined by this study will increase significantly in relation to the Canadian average in the near future. Thus purchases of both store foods and hunting equipment in these communities can be expected to continue to be limited by low incomes.

Social science researchers have shown that low income families are more likely to purchase convenience foods and foods which most easily satisfy hunger, rather than foods which are nutritious. They are also more likely to purchase foods associated with status -- particularly foods associated with a more affluent socio-economic class. The medical officer of health noted this tendency among Inuit in Frobisher Bay in 1975. Mayes remarked on an Inuit preference for 'Coke' in Pangnirtung in the mid-1970s and a nurse in Cape Dorset in 1986-87 noted that an estimated 500 cans of softdrinks are purchased per capita each year in that community.

However, what is perhaps most remarkable about this scenario is the persistence of Inuit in hunting for country foods and in managing to maintain their consumption of country foods at the level they have. One researcher has estimated that Inuit in the Baffin region produced 216 kilograms of meat and fish per capita in 1984. This was almost twice the Canadian average consumption of meat and fish per capita of 117 kilograms in 1982. [Usher 1985]

While Pangnirtung and Lake Harbour Inuit consumed more than that average producing an average of 342 kilograms and 265 kilograms per capita respectively in 1982, Cape Dorset and

Iqaluit fell under the average. The highly southernized Iqaluit Inuit consumed only 79 kilograms per capita of country foods. (There are no figures available to show if they made up the difference in meat consumption by purchasing meat and fish.) Cape Dorset was below the Baffin Island average but substantially above the Canadian average at 197 kilograms per capita of country foods in 1982.

### Summary

This study began with a simple hypothesis that significant changes in food habits among Canadian Inuit since WW II correspond with increasing exposure to southern lifestyles.

However, the factors which contribute to each family's choice of foods are, admittedly, many and complex. Social science researchers can suggest major influences or minor influences but cannot categorically assign direct causes for choices. Cultural traditions are considered a major influence in determining food habits of any family and it may be that these factors have been underestimated in this geographer's approach to the question of diet change. Ultimately, the consumption of convenience foods and the persistence of a proportion of country foods in the Inuit diet may be as much or more the result of cultural traditions as of southern influences.

The researcher's sudicity index has provided a focus for discussion of the very complex question of basic influence on diet change. However, it offers only a skeletal picture of southern influences and does not explain how these influences might work on Inuit families or interact with each other. A more descriptive account of life in individual communities over the three decades studied was essential in providing a fuller understanding of southerners' and southern institutions' possible influences on food habit changes.

## Chapter 11

### Conclusion

The "southernization" of Inuit diet is only one of many dramatic changes which have taken place in arctic communities since World War II. However, it is a significant indicator of the penetration of Western consumer culture into a traditional culture. An examination of these changes in food habits reveals much about both the factors that inspired the social change and the consequences of that change.

In the span of two generations, Canadian Inuit families were transformed from self-sufficient hunter-gatherers acquiring almost all their basic needs from the land to marginal wage earners and consumers who are heavily dependent on both the financial assistance and material trappings of southerners. How much of this change was by choice and how much by design of others is a question which is not answered easily or with finality.

There has been a tacit consensus among government administrators and policy makers that "modernization" (by whatever name it is given) was inevitable and generally desirable. Federal government policy in the Canadian North was founded on good intentions and aspirations to improve the quality of life for the Inuit. Yet no one living or working in the North today would deny that government efforts to extend southern standards of health, education and social services North of 60° have had a great number of unwanted consequences.

In examining the change of diet among the Inuit of the eastern arctic, the researcher has been struck again and again by how government attempts to improve the northern

natives' standard of living have unintentionally contributed to the adoption of non-nutritious foods. By deciding to pay seasonal construction workers part of their wages in food rations of flour, baking powder, sugar and tea, government administrators may have hoped to ensure that the family at home did not suffer from the men's lack of time to hunt seals. However it also suggested that these foods constituted a complete diet without any supplements of fresh game. By opening federal dayschools for Inuit children the government was attempting to give Inuit better opportunities to take part in the wage economy. However school lunch programs initiated by 'welfare' teachers for children who came to school without breakfast provided many Inuit with their first taste of oatmeal porridge, cocoa and pilot biscuits - again reinforcing the notion that a carbohydrate diet was a healthy one.

Southern health workers and community development agents have attempted to educate Canadian Inuit about how to compose a nutritious diet from store bought foods for as many decades as these foods have been available. However, contradictory southern role models, and more recently, southern media have been more convincing than public education campaigns.

This study has shown that southerners and their institutions were major influences in the change of food habits among eastern arctic Inuit between 1955 and 1985. Whether they were the critical influences must be left unanswered. The persistence of country foods as a significant element of Inuit diets in all but the most highly southernized arctic communities suggests that Inuit culture has resisted complete acculturation of food habits. Families have adopted southern foods which required little preparation and satisfied their hunger easily and inexpensively. But even in the late 1970s students in a school hostel in Iqaluit

found ways to get supplies of the country foods associated with home and family.

However, as the national Inuit political organization, Inuit Tapirisat, suggested in 1980

...the introduction of television has meant the last refuge of Inuit culture, the home, has now been invaded by an outside culture... [Valaskakis 1983, p 132]

Thus even the food habits of less southernized communities may become more like those of southern consumers in the years ahead.

This researcher would suggest that the sudicity index constructed for the purpose of gauging southern influences in northern communities has been useful in structuring a comparison of the degree of southernization in different communities at several points in time. While it gives only a general description of the level of southernization, it allows the researcher to highlight some key indicators of southernization. Thus it serves as a base for a more complete explanation of the complex relationship between southerners, their institutions and the changing food habits of traditional northern communities.

The conclusions drawn from this study are considered preliminary and tentative. It is left to future researchers to test the index further to see if it can be usefully applied to other Canadian arctic communities in a discussion of other social changes. However, it is hoped that this study has contributed to a fuller understanding of the changes in food habits in Canadian arctic communities from 1955 to 1985.

Appendix I: Calculation of Sudicity

Sudicity values for each community have been calculated for 1961, 1971 and 1981 using the index explained in Chapter 3. The chart below includes both actual numbers or descriptions of each of seven variables and the corresponding sudicity value rounded to the nearest 5. Where actual values were not available, as in income per capita for some communities in 1961, the sudicity values for the other six variables have been averaged and the average added to the total to make the total sudicity values comparable for the three decades. These averaged values for sudicity are indicated by brackets ( ).

	Actual Sudicity			Actual Sudicity			Actual Sudicity		
	Value			Value			Value		
	1961	1971	1981	1961	1971	1981	1961	1971	1981
Lake Harbour									
Population	90	20	35	189	30	252	35		
Proportion non-native	12%	45	25	8%	25	8%	25		
Accessibility	1/yr	15	40	3 mos	40	3 mos	40		
Air Service	irreg	10	60	1/wk	60	2/wk	80		
Economic Activities	hunting	20	30	crafts	30	tourism	40		
	seasonal			hunting		hunting			
Income Per Capita	\$215		30	\$1,126	30	\$3,612	30		
Communications	shortwv	10	35	movies	35	ANIK	100		
				CBC short					
<b>TOTAL SUDICITY</b>		<u>125</u>	<u>250</u>				<u>350</u>		

Cape Dorset

	Actual Suidicity		Actual Suidicity		Actual Suidicity	
	Value	1961	Value	1971	Value	1981
Population	161	30	597	60	785	70
Non-native (%)	16.6%	50	8%	25	5%	15
Accessibility water	once/yr	15	3 mos	40	3 mos	40
Air Service	irreg	10	2/wk	80	2/wk	80
Economic Activity	crafts	30	tourism	40	sm scale	40
Income per capita			\$1,103	30	\$3,612	30
Communications	CBC, movies	35	movies	35	ANIK	100
<b>SUDICITY TOTAL</b>		<u>195</u>		<u>310</u>		<u>375</u>

Pangnirtung

	Actual Sodicity Value		Actual Sodicity Value	
	1961	1971	1971	1981
Population	114	20	690	835
Non-native (%)	18.7%	60	11%	6.3%
Accessibility	once/yr	15	3 mos	3 mos
Air Service	irreg	10	3/wk	daily
Economic Activities	hunting	20	coop hunting	tourism
Income per capita	N/A	(25)	\$1,400	\$3,805
Communications	shortwave	20	movies	ANIK
<b>SUDICITY TOTAL</b>	<u>150</u>	<u>330</u>	<u>330</u>	<u>395</u>

Iqaluit (Frobisher Bay)

	Actual Sudicity		Actual Sudicity		Actual Sudicity	
	Value	1961	Value	1971	Value	1981
Population	1426	80	2014	85	2335	85
Non-native (%)	57.4%	100	41.8%	90	36%	85
Accessibility	2 mos	20	3 mos	40	3 mos	40
Air Service	2/wk	80	5-6/wk	100	daily	100
Economic Activities	transp	70	regional	100	regional	100
	military		centre		centre	
Income per capita	N/A	(65)	\$1,010	30	\$7,962	65
Communications	movies	35	CBC stn	50	ANIK	100
<b>SUDICITY TOTAL</b>		<u>455</u>		<u>495</u>		<u>575</u>

## Appendix II

### Adjustment of Income per Capita to Consumer Price Index

Consumer Price Index based on a 1971 basket of goods

if 1971 = 100

1961 = 75

1981 = 236.9

1986 = 313.8

	YEAR	ACTUAL Income per cap	ADJUSTED to 1971 dollars
Lake Harbour	1961	\$215	\$ 286
	1971	\$1,126	\$1,126
	1981	\$3,612	\$1,525
Cape Dorset	1961		
	1971	\$1,103	\$1,103
	1981	\$3,612	\$1,525
Pangnirtung	1961		
	1971	\$1,400	\$1,400
	1981	\$3,805	\$1,606
Iqaluit (Robisher Bay)	1961	N/A	
	1971	\$1,103	\$1,103
	1981	\$7,963	\$3,361
Canadian Average	1961	\$1,676	\$2,234
	1971	\$3,490	\$3,490
	1981	\$12,046	\$5,084
	1986	\$17,088	\$5,445

NOTE 1. The 1981 income per capita is estimated from 1981 average income per private household divided by the average number of persons per household from 1981 Census. The 1971 income per capita is taken from Palmer, J. (1973) Social Accounts for the North. These values are not equivalent as Palmer's figures are for indigenous people only while census figures cover the whole population. However, this author would suggest that the number of non-native incomes in all communities except Iqaluit is small enough not to make a significant difference in the overall average incomes for the community.

Further, Palmer's figures represent only earned income while the census figures include other forms of income (such as unemployment insurance, social assistance, and old age pensions, although not family allowance). Palmer's figures, however, do include an imputed estimated value for hunting, which the census figures do not. Palmer noted that 'transfer' payments make up an average of 25 per cent of income for indigenous people in the NWT and Yukon in 1970-71. This may make numbers from these two sources closer. (see Table A.1)

Table A.1 Income with and without Hunting Values 1970-71

	Income per Cap earned only	Without Hunt per capita income
Lake Harbour	\$1,126	\$452
Cape Dorset	\$1,103	\$794
Pangnirtung	\$1,400	\$452
Iqaluit	\$1,010	\$914

calculated from figures in Palmer (1973)

NOTE 2. The average Canadian income per capita for all years is taken from the total personal income for Canada (as recorded by the census) divided by the total population. (Statistics Canada, personal inquiry 1987)

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Explanatory Note: The references listed below can be found in the Public Archives of Canada in Ottawa in the government records section. They are listed here by sequential volume number for simplicity although they are listed in a much more complex and inconsistent manner in the archives (according to when the document was received and catalogued by the archives). RG 85 is a code signifying records of the Department of Indian Affairs and Northern Development (known as the Department of Northern Affairs and National Resources from 1953-1961). A volume number follows, which is generally a signification for a group of files on a particular topic. A File is literally a file folder which may contain several hundred pieces of paper including letter, memoranda and reports which pertain to a specific topic or community. I have included a descriptive title for each file, although these are not official file names, and therefore are not used as a means of listing files alphabetically. An Acc 85-86 indicates a temporary file for records acquired in the year 1985-86. RG 134 describes government documents from the federal Department of Transport.

Throughout the text, references are abbreviated by eliminating the letters, thus RG 85 Vol 1951 File A1000/167 Pt 1 is shown as 85/1951/A1000/167/1.

RG 85 Vol 98 File 251-1-2 "Medical Services" pre WW II

RG 85 Vol 480 File 251-1-2 "Eskimo Biscuits"

RG 85 Vol 677 File 251-3-21 "Refrigeration and Cold Storage Projects"

RG 85 Vol 684 File A-681-1-14 Part 2 "Home Economics and Home Making Courses"

RG 85 Vol 684 File A-680-1-14 Part 2 "Home Economic and Home Making Courses"

RG 85 Vol 827 File 7242 "Eskimo Biscuits" c1920-1940s

RG 85 Vol 990 File 155-83 "Relief Rations etc" c1950

RG 85 Vol 1266 File 1000/167 Part 3 "General File: Lake Harbour - Cape Dorset" Jan 1956-Mar 1957

RG 85 Vol 1266 File 1000/167 Part 4 "General File: Cape Dorset" April 1957-Mar 1958

RG 85 Vol 1267 File 1000/169 Part 7 "General File: Frobisher Bay" Feb - July 1956

RG 85 Vol 1267 File 1000/169 Part 8 "General File: Frobisher Bay" Aug 1956 - Feb 1957

RG 85 Vol 1267 File 1000/169 Part 10 "General File: Frobisher Bay" July 1957-Sept 1957

RG 85 Vol 1656 File NR 2/3-27 "Northern Coordination and Research Centre" 1960s

RG 85 Vol 1912 File 1000/166 "General File: Cape Dorset" 1958-1965

RG 85 Vol 1925 File 1000/170 "General File: Pangnirtung" Mar 1954-Jan 1959

RG 85 Vol 1947 File A560 1 Part 2 "Welfare-Social Services" Jan 1964- Apr 1965

RG 85 Vol 1948 File A560-1-3 Part 1 "Committee on Social Adjustment" 1960-1962

RG 85 Vol 1951 File A1000/167 Part 1 "General File: Lake Harbour" Jan 1960-Dec 1963

RG 85 Vol 1952 File 1000/170 Part 1 "General File: Pangnirtung" 1959-1962

RG 85 Acc 85-86/220 Vol Bx 15 File 1000/166 Vol 2 "General File: Cape Dorset" 1967

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