

**The Social and Cultural Experiences of Food Security in the Takla Lake First
Nation: Informing Public Health**

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B.A., University of Northern British Columbia, 2005

Thesis Submitted In Partial Fulfillment Of
The Requirements For The Degree Of
Master Of Arts
in
Interdisciplinary Studies

The University of Northern British Columbia

March 2007

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Your file *Votre référence*
ISBN: 978-0-494-28451-3
Our file *Notre référence*
ISBN: 978-0-494-28451-3

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Abstract

Food security is a concept that refers to the ability of people to have access to food that is nutritionally adequate, safe, culturally appropriate and socially acceptable. Many First Nations communities are faced with issues of food security due to isolation, low socioeconomic status, threats to traditional food sources and inflated costs of store-bought food. To date, however, little research attention has been given to the actual lived experiences and perceptions of food (in)security from members of First Nations themselves. This research sought to hear from members of the Takla Lake First Nation in northern British Columbia about what they feel affects their ability to be food secure.

The research involved participant observation and content analysis of key informant interviews with 15 elders from the Takla Lake First Nation. Findings suggest that food security concerns are seen to be intensifying amongst younger generations in the community and are attributed overwhelmingly and directly to the cumulative legacies of multiple colonial processes (i.e., the reserve system, residential schools, and the social and environmental upheavals associated with ever expanding commercial resource extraction on traditional lands). It is argued that both the research process and findings should be used to better inform public health initiatives aimed at improving the dietary practices of First Nations populations.

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Acknowledgements

First and foremost, I would like to thank the men and women of Takla Landing who participated in this research. Thank you for welcoming me into your homes and sharing your stories, your time, and your lived experiences with me. Thank you to Margo French who assisted me throughout my field work and beyond. Thank you also to Chief John Allan French who believed in and supported this project from the beginning. Your support has been invaluable to the development of this thesis.

I am also very grateful to my supervisor, Dr. Neil Hanlon, who knew where my thesis was going before I did and kept me on track throughout the process. Your patience and attention to detail was much appreciated. Thank you also to my committee members, Dr. Glen Schmitt, Paul Michel, Dr. David Snadden, Dr. Laurie Chan and Dr. Antonia Mills, for your comments and suggestions.

Finally, I would like to thank my husband Paul for your constant support and encouragement. You always took an interest in what I was doing and listened to my endless thesis ramblings without complaining.

The funding for this project was provided by the Michael Smith Summer Research Grant and the Sunlife Student Financial Award.

INTRODUCTION

I first became interested in the topic of food security while employed by the Chiefs' Health Committee. I traveled throughout northern British Columbia with a mobile diabetes project as a vision technician, screening patients with Type 2 diabetes. The more remote the community, the higher number of patients we treated with diabetic retinopathy, an eye condition common in advanced diabetics. When I asked people about the prevalence of diabetes in the communities I visited, they suggested that the causes of these high rates of diabetes were linked to access to healthy food. I visited on-reserve stores to see for myself what food was available and was dismayed to see that the majority of food was non-perishable items and shipped into the community on a biweekly or monthly basis.

When I returned to Prince George, I thought about the broader consequences of food security and began to question whether, and in what ways, the formal health care system was addressing the specific nutritional needs of First Nations on reserves. I began reading articles about food security and was particularly intrigued by the writings of Harriett Kuhnlein, a leading authority on traditional food resources of Indigenous People. Her large body of work, which discusses the rapid changes to traditional food systems and the causes and the consequences of these changes, resonated with my own experiences with the mobile diabetes project. I realized this topic would be a beneficial research project to the Takla Lake First Nation, who I had worked with over the past three years on a community capacity project (Takla Capacity Initiative Project, 2004). While working on this and subsequent health promotion projects, the community members often asked for research such as this thesis to be conducted due to their

concerns about the decreasing availability of traditional foods. Because the community had already identified a need for issues of food security to be researched, and I was comfortable working with the people in Takla Landing, I consulted with the Chief and received approval to begin the present study.

Research Questions

The purpose of this research is to hear from First Nations about what they understand to be food security and insecurity, what factors are leading to growing food insecurities in their communities and what can and should be done about these concerns. This information is a starting point for thinking about how to respond to this issue.

The main research questions are:

- How and why has diet for the Takla Nation changed since the 1960s?
- What are their present views on their diet?
- How can we use this knowledge to better inform socially and culturally appropriate nutrition education and public health interventions?
- How can these interventions be carried out in ways that build on the strengths of the Takla Nation?

No single research method is followed in my thesis; rather, I take a multiple methods approach to ensure that the findings are well supported and trustworthy.

Ultimately, this thesis is a result of my fieldwork and the interpretive lens I bring to bear on the community's experiences and perceptions of food security issues in Takla Landing. It is not my intention to claim to represent the views of the Takla Lake First Nation. At the same time, I cannot claim to be an impartial observer; I share the concerns about threats to traditional food systems that are linked to an ongoing history of colonial relations. Nevertheless, I was conscious not to lead the participants in their analysis of the

issues and designed the interview guide in a way that allowed participants to formulate their own views about the root causes of dietary change and nutrition concerns.

Understanding and acknowledging the views and opinions of community elders is an important foundation for future efforts to address nutritional issues in this and other First Nations communities.

Structure of Thesis

The first chapter of this thesis situates the case study in the context of literature on food security, public health practice, aboriginal health issues, and the interconnectedness of these issues in specific places. Chapter Two introduces the Takla Lake First Nation and provides an in depth look at the social and cultural factors that influence food security in their daily lives. The geography of the traditional territory and the struggles the community of Takla Landing face due to remoteness are also discussed, in addition to changes in the traditional way of life due to colonial influences. Chapter Three reviews the methodology I used throughout this research. The chapter begins with a discussion on primary and secondary data sources followed by a detailed description of how the research was conducted, the tools used (e.g., interview guide) and how the data were analyzed. Chapter Four provides the results of my study, namely the three main themes that emerged: sense of place, intergenerational discontinuity, and colonial influences. The concluding chapter summarizes the findings and provides a short discussion of future research directions and implications for the design and implementation of culturally appropriate and place specific nutrition interventions.

~ Chapter 1 ~
LITERATURE REVIEW

The term food security refers to the concept of ‘people having access to enough food, including the ready availability of nutritionally adequate, safe foods for an active, healthy life and the ability to acquire these foods in socially acceptable ways’ (Holben & Myles, 2004, p: 1058). To put this definition in a northern and First Nations context, the security of traditional foods refers to ‘the continual and predictable availability and access to food, derived from northern environments through Indigenous cultural practices (Paci *et al.*, 2004).

Food insecurity is associated with both over- and under-nutrition and affects human development throughout the life cycle, but especially the young and elderly (Cook, 2002). Furthermore, dietary patterns of concern range from low intakes of water and fresh fruit and vegetables to high intakes of soft drinks and snacks high in fat (Campbell *et al.*, 2002). In Canada, there are no universal programs available for populations vulnerable to food security (McIntyre & Tarasuk, 2002).

This review of literature on food security is broken down into four sections. The first section will discuss food security as a modifiable behaviour. In many instances, people have the choice of eating a healthy diet and can make an informed decision on whether or not they choose to eat healthy foods. The second section will discuss affordability, access, and availability. Socioeconomic status is a major indicator in food choices and can be prohibitive in the options that are available to a family who may be on a limited budget. Access is another important consideration in food security. Many rural communities are also isolated and choices are limited due to the delivery patterns of food.

During winter months, food is delivered weather permitting, while in the summer months there may be access to a wider variety of foods. Finally, availability of healthy foods is dependent on the affordability and access to healthy foods. Healthy food choices may be available for purchase, but if the price is inhibiting, those foods are still inaccessible. Furthermore, foods have to travel a long distance and fresh fruit and vegetables are often past their prime by the time they reach the community. This transportation concern limits access as people will choose not to purchase food items that are not fresh.

The third section of this literature review will discuss models of public health. I will review traditional public health in the context of an urban, top-down approach to health care and contrast it with the new public health model and the need to focus on social determinants of health. Finally, a discussion of food security in a First Nations context will follow, thereby positioning this research within the literature and highlighting its usefulness in this growing field of study.

Food Security and Choice

Many recent studies have supported the idea that food security is a modifiable behaviour that can lead to poor health outcomes (Willows, 2005; Young, 2003; Che & Chen, 2003; Dowler, 2003; Hanley *et al.*, 2000). Food choices can be determined by socioeconomic status (Gibson *et al.*, 1998), but education is the key component necessary to make healthy food choices. However, inequalities in access to education need to be addressed before modifications to nutrition can be considered feasible.

Gibson and *et al.* (1998) address factors associated with socioeconomic status, education, and diet. Like Drewnowski *et al.* (1994) and Martinez and Nalezienski (1981), they suggest that parental education and nutritional knowledge are the main influences on

a child's diet. They argue that there are three main reasons to ensure parents are educated in nutrition. First, food preferences and habits are normally established in childhood and tend to be maintained throughout adulthood. Secondly, nutritional influences can impact childhood development. Finally, a child may be more open to modifications in food choices than an adult. For these reasons, Gibson *et al.* (1998) suggest that the mothers' socioeconomic and educational status strongly influences the ability to promote healthy dietary choices in their children that will follow through to adulthood. Further, Campbell *et al.* (2002) suggest that dietary patterns of concern range from low intakes of water and fresh fruits and vegetables to high intakes of soft drinks and snacks high in fat. They too argue that the quality of diet is heavily influenced by socioeconomic status, which is itself often a reflection of an individual or parent's level of education.

Affordability, Access, and Availability

The ability to be food secure is not a simplistic concept that is based on choice alone. Affordability, access, and availability of healthy foods are realized problems on reserve and are considerations for public health policy.

In 1991, the Aboriginal Peoples Survey reported that the unemployment rate among aboriginal adults living on reserve is 31%, compared to 10% for the general population (MacMillan *et al.*, 1996). While this rate seems high, unemployment rates on more rural and remote reserves can reach as high as 41% (Health Canada, 2003). Furthermore, the income levels on reserves were only half of all Canadians with an annual income less than \$15,000. Other socioeconomic challenges that Aboriginal populations face are a large proportion of single parent families, poor living conditions, inadequate water supplies and waste disposal, and restrictions in the availability of food

(MacMillan *et al.*, 1996). These figures have not changed much from the 1996 reporting and the figures reported in the 2001 Aboriginal Peoples Survey. For instance, the overall unemployment rate reported by Statistics Canada for the on reserve population for 2001 is 29.9% in BC alone, which is a clear indicator that the socioeconomic status of this population is not improving. Overall, these figures are indicators of the continued level of poverty of the Aboriginal population in Canada face.

Store-bought food choices on reserve are generally regarded as limited. Even where healthy food options are available, however, costs may be prohibitive for families on fixed incomes. Many First Nations communities are isolated and food supplies are often shipped in weekly or monthly, depending on weather conditions or local need. Willows (2005) comments that research tends to overlook constraints on both supply and demand. For example, if the local store purchases fresh fruits and vegetables, there is an amount lost to spoilage which cuts into profits. Likewise, if the consumer is receiving monthly assistance, they may be less inclined to purchase perishables that they may have to throw away if unused. For these reasons, foods bought and sold in remote locations tend to be those with a long shelf life, and which are more often higher in salt, sugar, saturated fats and carbohydrates, and thus lower in nutritional value (Milburn, 2004). Furthermore, outside influences other than the individual affect choice and availability of food. For example, store managers decide what food is sold in the store and these choices can be based on numerous decisions outside the influence of consumers.

Food insecurity is closely linked to poverty and socioeconomic status (Kuhnlein & Chan, 2000). Socioeconomic status as a determinant of health is a complex framework that needs to consider a multilayered approach in order to address the needs of the First

Nations population. Tsey *et al.*, (2003) suggest that policy makers need to look at long term approaches and programs that build on community strengths by narrowing the gap in social inequalities. They argue a joint approach that empowers Aboriginal people to take control of their circumstances, along with supportive roles that policy makers and practitioners in the community can take, will facilitate a positive change. Seal (2004) discusses an approach to bridging this gap between policy makers and community members. She argues that, although there are benefits to a national approach to food security, there are also bureaucratic barriers in place that need to be addressed prior to an intervention taking place. Research has already identified that the Aboriginal population in Canada is at risk of food insecurity and those on reserve are more likely to be food insecure than those in urban centres (Kuhnlein *et al.*, 2001; Lee *et al.*, 1971; Dowler, 2003; Paci *et al.*, 2004; Kuhnlein & Receveur, 1996). However, little consideration has been given to how food insecurity can be addressed with a culturally appropriate method of intervention.

Poverty can be defined in absolute and relative terms. Absolute poverty is defined as having inadequate income to secure minimum levels of food, clothing and shelter, and relative poverty is defined by making comparison to the general standard of living in a given society (Booth & Smith, 2001). Although the idea of relative poverty is noteworthy, absolute poverty best defines the aboriginal population on reserve throughout northern British Columbia. Further to these notions of poverty, people who live on low or uncertain incomes are more likely to be at risk of food insecurity (Booth and Smith, 2001). As outlined above, the First Nations population in Canada falls under this category of risk (Dowler, 2003). Poverty has a devastating effect on health status: 'it

creates dependency, limits self-expression, and contributes to the demoralizing acceptance of substandard community infrastructures' (Tookenay, 1996, p: 1582). Furthermore, there is a growing amount of literature that addresses the impacts of poverty on health outcomes as a social determinant of health (Kuhnlein & Receveur, 1996).

Although there are links between socioeconomic status and diet, there are also links between access to food and diet. Access often refers to the availability of healthy foods at all times (Cook, 2002) but Dowler (2003) suggests that foods may be available but inaccessible due to high costs and poor selection. Paci *et al.* (2004) state that traditional food systems rely primarily on local sources of foods and the means in which food is gathered and processed is at the household level. For people who have limited access to nutritious foods due to socioeconomic status, a traditional diet is optimal. When barriers are in place preventing a local food economy, less nutritious foods may be introduced and with them a range of health problems.

McIntyre and Tarasuk (2002) show that low income families often run out of money for food because the grocery budget is deemed flexible, whereas payments for rent and power are fixed. These determinants can often push a family from vulnerable to food insecure if there are any increases in these fixed payments. Dowler (2003) points out that families who live in the northern parts of Canada are especially vulnerable due to the extreme cold in the winter months. Delivery of food supplies and access to traditional foods become more restricted the colder the temperature. Weather may prohibit delivery of goods and animals that are hunted may be more difficult to find. She argues that government policy is typically introduced in the south and expected to be put in practice in the north without consideration given to geography. This is a dangerous approach and

puts families more at risk of food insecurity. Further to Dowler's (2003) argument, Wilson & Rosenberg (2002) suggest that people who live on reserve have poorer health outcomes than their urban counterparts and that socioeconomic status and health improve once an individual or family moves to an urban area. These authors argue that this is due to the increased accessibility of health services and reasonably priced food supplies. They do, however, point out that a decrease in participation in traditional activities also negatively impacts health.

Other limitations are suggested by Holben and Myles (2004) who argue that households unable to secure adequate amounts of food have limited access to financial resources, lack transportation, live in remote areas, or have limited access to food stores. Brady (2003) states that the delivery of health care services are extreme for geographical reasons alone. She, like Minore *et al.* (2004) discusses the need for a continuum of care. Many people, tired of repeatedly telling their signs and symptoms of ailments to different health professionals, tend to give up hope and stop coming to the make shift clinics. Overall, socioeconomic status not only impacts food security but it also increases the likelihood of experiencing discrimination at health care visits and receiving substandard care (Johnson, 2001). These barriers increase the possibility that people will not use services that will assist them in food choices or to help educate them on the benefits of healthy foods for fear that they will be faced with discrimination.

Children are also more likely to be susceptible to food insecurity. The results published from a study conducted by Omar *et al.* (2001) found that children living in rural and remote areas are more likely than their urban counterparts to live in poverty and to be faced with food security issues. Other studies have shown that people living on low

wages or dependent on welfare benefits have lower nutrient intakes and poor dietary patterns, often depending on cigarettes to dull hunger (Dowler, 2003). Dowler (2003) also suggests that people living in northern, remote regions face a greatly reduced range and variety of foods which decreases diversity.

Location has always been an issue for service delivery in northern British Columbia. Whether that service is health care, or availability of healthy food choices, the people who live in remote communities have unequal access to these services when compared to their urban counterparts (e.g., Hanlon & Halseth, 2005; McGregor *et al.*, 2005). Recent literature has indicated an increased recognition of how geographic isolation can alter health outcomes. Kuhnlein and Chan (2000) discuss the importance of recognizing the extent that land is contaminated throughout northern Canada. Although there are similar instances of contamination in urban environments, rural communities have a greater impact as traditional territories that provide food year round are destroyed along with the overall food system. Once this food system is compromised there are few replacement options. Unlike identified contaminated areas in urban settings, rural communities have very limited resources to replace a food system or make alterations that are acceptable for the community members. When a traditional territory is contaminated, most people will have to travel long distances to access foods. As MacNair (2004) argues, transportation limits access to foods. Walking is only viable for short distances and costs associated with transportation can be prohibitive. The cost of a reliable vehicle and its maintenance may prevent people from accessing healthy foods if they have to travel long distances. Also, dependence on the good will of family and

friends to assist with transportation is common but it is not a reliable option (Brody, 2004).

Finally, physical access to appropriate food resources has been identified as a barrier to positive health outcomes. Physical access may include daily access to food stores but also access to emergency food (MacNair, 2004). Many people living in rural and remote communities do not have the benefits of emergency food organizations and are too small and remote to support large pools of volunteers and informal caregivers (Hanlon *et al.*, 2007). Little consideration is given for reserves or northern communities who lack these resources. Policies developed with larger urban settings in mind cannot simply be transposed onto remote communities.

Recognizing the barriers to health on a local level, lending mutual support and working to change the circumstances and surroundings that act as barriers to health, are points to consider for a new approach to public health to be successfully delivered. With little consideration for the specific health needs of northern communities in general and reserves in particular, the national approach of suggesting that people work through their own health care without government support is unreasonable. If the educational resources are not available locally, it is a difficult task to develop an approach to health care when the knowledge of how to carry this out is limited.

Models of Public Health

Public health can be defined as ‘an approach to medicine that is concerned with the community as a whole’ (Public Health Agency of Canada, 2005). Its main functions are to assess and monitor communities at risk, form policies to solve identified health problems, and to ensure all people have access to appropriate and affordable care (Public

Healthy Agency of Canada, 2005). Traditionally, public health in Canada has been administered with 'institutional rigidities' (Romanow & Marchildon, 2004). More specifically, the focus of public health has gone from illness care to illness prevention and finally to health promotion. The Public Health Agency of Canada's mission statement is 'to promote and protect the health of Canadians through leadership, partnership, innovation, and action in public health' (Public Health Agency of Canada, 2005). Past policy has not been effective in fulfilling this mandate in a food security context. As a result, new initiatives have been developed to help aid in bridging the gap between public health intervention and food security issues within the First Nations population.

Through these initiatives, the rigidity of traditional public health has been replaced with an approach in which individuals and communities alike strive to achieve and maintain a level of health that goes beyond simply being ill or healthy. The new approach is holistic and is influenced by culture, beliefs, social, and economic and physical environments (Health Policy and Communications Branch, 2001). However, this approach to public health has not brought about positive changes to the Aboriginal population throughout Canada, nor does it address regional and educational limitations.

The shift from illness care to health promotion in the 1980s initially relied heavily on the distribution of brochures and pamphlets left at public offices in rural communities. The expectation was that this would somehow bring about changes in peoples' lifestyles and behaviours (Health Policy and Communications Branch, 2001). In 1984, the *Canada Health Act* attempted to remove financial barriers to health care by introducing public health policy which has played a leading role in equalizing access to health care services

in Canada (Wilson *et al.*, 2001). However, restricted access to health care due to geography, education, and socioeconomic status continued. Health Canada then focused its challenges on reducing inequalities to health care, increasing the effort on prevention, and enhancing people's capacity to cope with health concerns.

It eventually became apparent, however, that individualistic and top-down approaches were too simplistic and were not achieving their intended outcomes (Riches, 1999). One significant factor that has been ignored throughout policy processes is that health issues in a First Nations community should focus on educating youth. However, this approach can only be successful if it incorporates elder participation first. An individualistic approach is too narrow in scope to recognize the specific needs of each community.

Health promotion is now the dominant approach to public health policy. The focus of health promotion is on education and behaviour changes that encourage healthy eating habits. This template is often promoted without a framework of how to reach this ideal and little consideration is given to how an individual, or a community as a whole, can access healthy and affordable services in a safe, consistent manner. This approach also does not allow for other variables in health promotion. For example, links have also been found between socioeconomic status and health (Wilson *et al.*, 2001). This is the case on reserves in northern British Columbia where the unemployment rates are considerably higher than the national average. Quality of housing, ability to purchase health insurance, and the ability to follow physician's instructions are important factors that contribute to health inequalities. The condition of housing on reserves is often poor due to substandard construction, there is no private health insurance due to the associated

costs, access to medications is limited, and lack of nutritious diets and exercise are also factors that limit the ability to promote health (Newbold, 1998).

Other views on policy development involve debates over the influence of research results generated by qualitative versus quantitative processes. Dyck (1999) states that health concerns have always been viewed by policy makers quantitatively to determine the location, allocation, and accessibility of formal health care services. This is a limited approach to health care and the qualitative aspect must also be considered. Dyck (1999) suggests that through qualitative techniques such as interviews, people can reveal their experiences of health, illness, and health care and how policy has impacted the individual. This qualitative technique is becoming recognized as a beneficial method to determine the needs of remote and under serviced communities. As Kearns (1993) maintains, providing health care services can both positively and negatively affect a person's experience of place. More current literature is beginning to address the need to understand a person's sense of place and its associated meanings in relation to their health (Wilson 2002, Weaver 2002, and Minore *et al.*, 2004).

Although traditional public health approaches have evolved since their inception, socioeconomic determinants of health continue to be overlooked or inadequately addressed. Robertson (1998) suggests that the "new public health", which has emerged in the academic literature over the past few decades, but which has yet to make significant inroads in the practice of public health, is nevertheless an alternative that finally comes to grips with the socioeconomic determinants of health and the societal changes necessary to improve health. Robertson (1998) argues that the growing gap in health outcomes is the result of government inaction or misguided health policies, rather than individual

health behaviours and lifestyle choices. Jong-wook (2005) also proposes that interventions will only be successful when the social determinants of health are considered. This author states that although public health recognizes the need for favourable social conditions in health outcomes, health will not improve until the nature of specific conditions are more clearly and widely known.

Funding accountability has also been an obstacle that is difficult to overcome in public health delivery. While the government has committed billions of dollars to Aboriginal health over the years, they have not committed to spending strategies (Webster, 2005). Webster (2005) suggests that there is a need for a huge structural reform with radically different priorities in order to improve the health of the First Nations population. Until this is done, he concludes that there will be very little impact on health outcomes. Newbold (1998) adds that while service provision is not a health problem, it is a means to an end and should be addressed as a health issue. He suggests that while providing money to assess health concerns on reserve is one aspect of health promotion, broader social provisions must also be considered. Self reported problems and individually developed solutions are ways that policy development would benefit from community input.

Past policy has predominately focused on health care policy while ignoring the broader range of determinants such as socioeconomic status, living conditions, education, and geographic location. Newbold (1998) suggests that by refocusing public policy towards the health of First Nations and ensuring a continuum of health care delivery, there can be significant positive implications for health outcomes. In other words, diet itself is not a health problem but diabetes and other chronic disease as health outcomes

are related to diet. Measures need to be taken to look at all the determinants of health and not just the outcome itself.

The Public Health Agency of Canada has long recognized the food security issues that face the Aboriginal population but they have only recently recognized the need for a culturally sensitive approach to this health concern (Public Health Agency of Canada, 2005). Ehman (2004) states that in 1996, a report from the Royal Commission on Aboriginal Peoples stated that an additional 10,000 Aboriginal health professionals were necessary throughout Canada in order to provide culturally sensitive and appropriate care to reserve communities. To help achieve this goal, the federal government announced in 2004 that it will provide \$100 million over a five year time frame (Ehman, 2004). Ehman (2004) suggests that this will not impact the immediate need nor will it be of great benefit long term. He argues that currently there are only four or five new Aboriginal graduates from medical schools across Canada per year while there is a need for approximately 375 students. As a start, promotion of math and sciences in elementary schools is suggested by government to increase the number of science students. However, this conflicts with encouraging parents and teachers to promote traditional careers resulting in differing viewpoints between parents and administration.

It is apparent that public health policy is not targeting the population most in need. Initiatives are established in urban centres and incorporated in rural settings without any consideration given for differences in population, geography, or social issues (Cossom, 2002). It is essential to build on the strengths and capacities of Aboriginal communities in order to make an initiative a success. Policy makers must consult with the local Chief and council and elders on reserve because they have first hand knowledge

regarding the needs of the community. In 2002, a recommendation was put forward that stated “Health Canada strengthen its community-based health promotion and disease prevention programs by ensuring that specific initiatives are developed and delivered by Aboriginal people for Aboriginal people” (Rural Health in Rural Hands Report, 2002). This statement is an essential step to put into practice in sustaining long term success with any Aboriginal focused initiative.

Barriers to Food Security for First Nations

The First Nations population faces many barriers to food security, but the main reasons cited below relate to colonialism. A self-reported restriction to maintaining a traditional diet was government imposed barriers (personal correspondence with M. Nelson, 2001). Examples included restrictions by the Department of Fisheries and Oceans that capped the amount of fish caught and times of year it could be caught. Others reported high levels of stress related to their fears of losing their fishing equipment due to restrictions and legislation they often did not understand. These restrictions have resulted in a change from traditional foods to market foods increasing food insecurity in the Aboriginal population throughout Canada (Paci *et al.*, 2004). Related to this argument, Duhaime *et al.* (2004) reports that contamination of affordable country foods result in changes to dietary habits.

Geographic isolation is a barrier to food security that has been reported in much of the literature. The creation of reserves dates as far back as the late 1800s and continued to be modified into the early twentieth century (Harris, 2002). Wotherspoon and Satzewich (2000) argue that for native people, reserves were defined as ‘homelands’ where they could maintain a traditional lifestyle by hunting and gathering. For

authorities, however, reserves were meant to be locations where First Nations people could be re-socialized. Kelm (1998) suggests that reserves constrained the ability of First Nations to maintain a traditional lifestyle and made it almost impossible to introduce new crops to their diet due to the poor quality of land they were allotted. Furthermore, most reserve communities in northern British Columbia are rural, remote, and have limited access to services. *A Statistical Profile on the Health of First Nations in Canada* (2003) reported that most First Nations communities are not located near urban centres and that most services are considerable distances away from the community. This degree of isolation is a factor in the services received but may also impact access to food and overall wellness. By and large, the implementation of reserves was critical in deteriorating traditional lifestyles of hunting, fishing, trapping, and gathering. These practices resulted in social and cultural issues of isolation, limited service availability, and ineffective policy.

Along with the negative implications of the reserve system, First Nations experiences of health differ significantly from the non-native population throughout Canada (Andrews, 2004). Even though there are high rates of chronic disease and poor health outcomes in many First Nations communities, connection to the land is still considered to be essential to their health (Brody, 2004). It has also been argued that the western way of knowing will never truly understand the First Nation's holistic worldview. Wilson (2002) suggests that landscapes are important in maintaining physical, emotional, mental, and spiritual health. This holistic approach to health differs significantly from the western model of health that argues for a biomedical approach to health care. Weaver (2002) also discusses the holistic concept of health that is prominent

in the First Nations culture. She argues that the native perspective of resilience is rarely reflected in the literature, but is the very basis of health understandings from an aboriginal viewpoint.

Weaver (2002) provides a perspective of wellness from a First Nations viewpoint as an excellent reference guide for understanding the strength and wellness perspective of the Aboriginal population. She discusses the importance of the medicine wheel and how a problem in one area disrupts the balance in other areas. She also describes how wellness and spirituality are inseparable, that wholeness or integrity of people, families, communities, and nations are all facets of wellness. She further states that wellness is reinforced by a sense of cultural identity but that identity has been defined by outsiders for too long. The idea of wholeness and identity is felt more strongly in rural and remote communities than in the urban centres (Kearns, 1993). In smaller communities with limited services, families must depend upon one another for help through difficult times (Brady, 2003). This sense of belonging and support can be therapeutic to people in need but if that informal support system is suddenly unavailable, their health may also be at risk (Wilson, 2002). It is these types of support systems that the western approach to health does not address.

Another colonial construct that has had significant impacts on the health of First Nations is industrial development. Most traditional territory throughout British Columbia has been impacted by industry over the past few decades. Mining and logging activities and the introduction of transportation corridors have been prominent in the territory for decades. The result of resource extraction has been contamination of rivers, lakes, and the land. This contamination has limited the availability of resources as a fear of eating

contaminated foods has altered lifestyle patterns and food choices. O'Neil *et al.* (1997) argue that, due to contaminants in the majority of traditional foods, limitations on consuming these foods are necessary in order to guard against negative health outcomes.

Since time immemorial, First Nations peoples have lived off the land, rivers, lakes, and seas (Steckley & Cummins, 2001). Elders tell stories that have been passed down through generations that describe their traditional practices of hunting, fishing, trapping, and gathering (personal correspondence with J. Jacques-Parent, January 2005). First Nations traditional territory is rich in resources that have always been able to sufficiently sustain human life. The full impact of colonization resulted in changes to the territory that is echoed today in all aspects of lives of First Nations.

Nutritional implications resulting from change in diet

It has long been recorded that the nutritional status of the First Nations population lags behind that of the general population. Lee *et al.* (1971) state that Aboriginals are increasingly exposed to cultural influences from the western world that impact their health outcomes. Up until this time, there was limited published information on the nutritional status and dietary habits of the First Nations. These authors assessed the benefits of nutrition education programs to assist in establishing new food habits. The thinking at this time was that a population cannot successfully change their diet without nutrition education. This was progressive thinking at the time as most fly-in communities were still being shipped canned and packaged food with little concern about nutritional value (Receveur *et al.*, 1997).

Since the 1970s, there has been a considerable amount written about the implications of a switch from a traditional to a market food diet and the resulting health

impacts it has on the First Nations population (Kuhnlein *et al.*, 1995; Kuhnlein *et al.*, 2001; Milburn, 2004). First Nations in Canada have described their change in diet as a result of a reduced density of species, restricted harvesting sites, limited time for traditional harvesting, interruption of knowledge from adult to youth due to employment of adults and school for children, social contact and education, and the availability and accessibility of new food products (Kuhnlein *et al.*, 2001). For example, chronic diseases such as diabetes, cancer, heart disease, and dental disease are viewed by the Indigenous population as the result of adopting the ‘white man’s diet’, and ignoring traditional foods (Kuhnlein *et al.*, 1995). Furthermore, Milburn (2004) states that the decreased use of traditional food and the lack of knowledge and skills in combining traditional and market foods have had major consequences for the health and wellbeing of many First Nations. Other researchers such as Blanchet *et al.* (2000) present findings from their studies that indicate that, while the majority of the First Nations’ diet and energy intake is from market foods, the majority of nutrients consumed are from a traditional diet. The researchers also found that elders were more likely to consume a traditional diet than were the youth. This is a good indicator that traditional foods may still be available but choices have changed. Paci *et al.* (2004) support this argument and suggests that, like other economies, the traditional food economy is not fixed but is continually changing. These changes may include the mode of hunting, fishing, trapping, or gathering or even non human influences such as weather which can affect the quality and quantity of traditional foods.

Chan (2005) argues that the availability of market foods should not be mistaken for food security. The most popular market foods consumed by the First Nations

population are high in fat with little nutritional value. This nutritional inadequacy results in obesity, which is a risk factor in chronic disease such as diabetes and coronary disease. Blanchet *et al.* (2000) argue that while most nutrients come from a traditional diet, they found that traditional food was low in calcium and vitamin A found in milk, dairy products, and yellow and green vegetables. They concluded their study by suggesting that, while traditional foods were the major source of nutrients, market foods were also important for the nutritional status of the population. Doran (2004) also proposes that iron, calcium, and folate are an essential part of nutrient intake but the First Nations population must be knowledgeable in choice and preparation of market foods in order to benefit from them nutritionally. She also suggests that it is tempting to choose low-nutrient market foods and these are the same foods that are often preferred by youth.

It has been established in the literature that food security is a problem within the First Nations population. The switch from a highly nutritious traditional diet to reliance on market foods that are low in nutritional value is one of the reasons for poor health outcomes. Food security is a public health concern, and interventions that consider socioeconomic status, geographic isolation, and the health benefits of combining a traditional and nutritious market diet, need to be evaluated before the health of this population can be improved. It would be impractical to suggest that First Nations people go back to a traditional diet completely. Cultures continue to change and evolve, and with that comes changes in food systems. Education on the health benefits of a traditional diet and how it can be successfully complimented by nutritious market foods is a critical component of nutrition education that public health needs to consider.

~ Chapter 2 ~ STUDY CONTEXT

The community of Takla Landing is located in the northern interior of British Columbia. Since the 1960s and the encroachment of industry on their territory, the Takla Lake First Nation has experienced a dramatic change in diet and lifestyle which has threatened their food security. Many of the elders who witnessed these colonial encounters are still living in the community today and are willing to speak about their experiences. For these reasons, this is a good community to research issues of food security. More importantly, however, the Chief and council and community members are interested in this research and are supportive of the project (Appendix A). Finally, I have worked with the band in various research capacities for the past three years and have made significant contacts while maintaining a level of trust among the community members.

There has been very little written about Takla Landing. One of the few reports even states that ‘the Takla Lake region has had a long but relatively uneventful history...’ (Wilson *et al.*, 1992 p: 4). Comments such as these lead one to believe that there is little to write about this band. A closer look at the past 150 years and more of contact reveals important encounters with different waves of colonialism (e.g. the Hudson’s Bay Company, Catholic Missionaries, the residential school system, B.C. Rail, and commercial forestry and mining activities), many of these within the lifetimes of the elders who currently reside in Takla Landing.

This chapter gives an overview of the people of Takla Landing and their traditional territory. The first section provides basic information about the people and the geography of the traditional territory of the Takla Lake First Nation. The purpose of this section is to present background information about the population of this First Nation and

the struggles they face due to geographic remoteness and of the environment that has sustained this group since time immemorial. The second section discusses colonial influences that have had a direct impact on the Takla Lake First Nation's way of life and their relationship to their territory.

About the People

The Takla Lake people are known in Carrier as the *tatl'aht'een* or 'headwaters people'. It is likely that this term is derived from the term *tha-tla*, which Father Adrien - Gabriel Morice, a Catholic Missionary who spent a considerable amount of his career in the Takla Lake area, had stated to mean 'the farthest end' of Takla Lake (Mulhall, 1986). Sekani is spoken by several members of the band, although Mulhall (1986) suggests that this language spread from the east and was not originally spoken in this territory. The results of a dialect survey conducted in 1988 by linguists Jim Kari and Sharon Hargus argued that Babine-Witsu Wit'en is the main language now spoken at Takla Landing, although the place names surrounding the area are Sekani terms (cited in Wilson *et al.*, 1992). More recently, I spoke with various community members who state that there are three language groups: Carrier, Sekani, and Gitksan. Early ethnographers such as Daniel Harmon from the Northwest Company, John Tod of the Hudson's Bay Company, and George Dawson, an ethnographer and geologist, described the use of the Sekani language throughout the territory. More recently, in the late 1980s, linguists Jim Kari and Sharon Hargus defined linguistic boundaries and confirm these three language groups are within the boundaries of the traditional territory (Wilson *et al.*, 1992).

Aside from the various language groups in the region, there are four clans; bear/wolf, frog, beaver, and caribou. These clans all had Carrier names until the 1920s

when a white storekeeper, who was unable to pronounce the clan names, changed them to English words chosen by the symbols that were representative of each clan. For example, the *Lesillyoo* is the frog clan (Hall, 1992). Another colonial influence that assisted in changing clan names from Carrier to English was the potlatch ban. The potlatch, outlawed in 1884 and repealed in 1951, was a cultural practice involving the redistribution of wealth and debt repayment (Wotherspoon & Satzewich, 2000). It was also a way for people to reinforce cultural values, pass on oral history, and to strengthen ties between community members (Steckley & Cummins, 2001). Songs, drumming, the distribution of gifts, and the assumption of names were activities typical in this ceremony (Cole & Chaikin, 1990). Potlatches were usually hosted during significant points in people's lives and all clans in a community participated in the event. Banning this ceremonial practice and forbidding these traditions also meant prohibiting the clan system and traditional names associated with clans. Officials were diligent in establishing English names in place of traditional language words, resulting in English words that were insignificant to the band (Bracken, 1997).

Clan members automatically belong to the mother's clan and each member takes every other member as a brother or sister. Marriage is permitted within the same clan only if one of the spouses changes their home clan (Hall, 1992). In these cases, one spouse will choose the clan of their father, which is done during a potlatch or a similar festive ceremony (personal correspondence with S. Barnes, 2001).

As previously mentioned, there are very few secondary accounts available about the Takla Lake First Nation. Representatives of the Hudson's Bay Company, which had established trading posts throughout Takla territory, wrote about the people in general

terms but were typically much more interested in the wildlife in the area. Indian agent W.J. McAllan was also present in the area in the early 1900s and wrote almost exclusively about land allocation for the establishment of reserves (Mulhall, 1986). In 1954, a researcher named V.C. Serl traveled to the community and completed an ethnographic study of the Takla Lake First Nation. After this, limited research was done until the early 1980s, when Douglas Hudson conducted a comparative study of hunters and gatherers and the social and economic changes since the 1920s for his doctoral dissertation (Wilson *et al.*, 1992). These various secondary sources, along with government data and the more general literature on First Nations and colonialism in the Canadian context, form the basis of the information presented in this chapter.

Population

Population counts were first recorded in the late 1800s by Indian Agents employed by the Royal Commission on Indian Affairs for the Province of B.C. The population counts were not considered to be accurate and many people in the community of Takla Landing suggest the numbers were very different. One of the reasons for this discrepancy is that the elders remember a time when the population plummeted as a result of disease (personal correspondence with TL-02) while others suggest that not everyone would have been counted by the Indian Agent, especially if they were on their trapline during Census taking (personal correspondence with TL-06). Furthermore, oral history describes the early 1900s as a time when band members would gather together for ceremonies during the summer months and large numbers of people were present from four to five different families. This account contradicts Census estimates during that time. For instance, the Census reported only one family in 1879, consisting of seven members who lived in

Takla. There was a total of twenty people reported in 1912, 38 in 1915, and twenty families recorded in 1954, with no explanation as to why there was a shift from individual to family counts. In 1959, Bear Lake (Fort Connolly) amalgamated with Takla Lake, which accounts for the spike in population to 452 people in 1990 (Ministry of Native Affairs, 1990).

One factor accounting for the uncertainty of official population estimates is that population levels on reserves fluctuate frequently throughout the year. For instance, many children are away at school during the fall and winter, whereas adults may be away at different times of the year due to seasonal hunting, trapping, fishing, or gathering trips in the bush, or for temporary work in camps or neighbouring town centres. These factors may have led to undercounting since Censuses were first taken in the community in the early 1900s. The best estimate of the current population is that there are 170 living on reserve and a registered number of approximately 750 people. On-reserve numbers suggest that the community is of an average size in the province of British Columbia (Ministry of Native Affairs, 1990).

Band demographics have shifted dramatically over the past 30 years; this community was once made up of a younger population, but many of the youth have now moved to Fort St. James or Prince George to continue their education. Nuswadeezulh, the community school, only provides education to grade ten, so most of the thirty school - aged children will move out of the community to complete high school. Employment is limited to forestry or mining industries, but these opportunities are minimal: 90% of the population is actively seeking employment but unable to find work at any given time.

Geographical Profile

The community of Takla Landing is located approximately 375km northwest of Prince George, British Columbia, the nearest settlement of 50,000 people or more. The nearest town centre for supplies is Fort St. James, a community of just under 2,000 people that is located 170km south of Takla Landing (West, 2005). Members of Takla Landing travel to Fort St. James to purchase supplies for hunting, fishing, and trapping, as well as groceries and other basic necessities. Prior to the 1990s, and the completion of a logging road between Takla Landing and Fort St. James, the BC Rail line provided access for goods to be brought into the community. During a time in the mid 1980s when the rail line was not operating, goods were brought to Takla Landing by plane or by speeder on the railway line (West, 2005).

As with most First Nations communities, there are no distinct boundaries between family territories. Historically, the territories have not always been mutually exclusive and agreements to share areas can be recognized or negotiated between individuals and/or families. Where territories overlap, and families recognize the Bah'lots (Potlatch) system, a feast is held to settle any discrepancies (West, 2005). When there are boundary discrepancies between nations, there are many acceptable ways to resolve the problem. Families, clan members, or trapline holders can negotiate a solution either on their own or through the mediation of a Chief. With respect to the latter, formal meetings with Chief and council can be held, a 'share area' may be agreed upon by both negotiating parties, or mediation may be requested by a third party to resolve the dispute (West, 2005). It is to the advantage of the territory owners to settle any boundary disputes especially if they are considering treaty negotiation. All treaties are a federal issue and the provincial

government does not recognize these negotiations until final ratifications are made.

Unlike Aboriginal governance, the Government of Canada does not recognize boundary overlaps and, where they are not ratified, the government will not negotiate land claim treaties (West, 2005). This is one aspect of treaty that the Takla Lake First Nation has recognized as being essential to resolve prior to entering into treaty negotiations.

Environment

Takla Landing typically experiences summers that are short and cool with temperatures ranging from 14-25 degrees Celsius. Winter months are typically cold with a considerable amount of snow from late October to early May and the average winter temperature is approximately -18 degrees Celsius (Poole *et al.*, 1999).

This environment has allowed the region to abound in traditional resources, and many oral histories recount stories of abundance (Takla Capacity Initiative Project, 2005). In the late 1800s, however, a contradictory report was made by an expedition crew situated in the Takla region for one year during the winter months. Community members have presumed that this information was presented by the expedition crew to the Indian Agents in an attempt to get the people to move to government allocated space. One of the explorers, known only as 'Q.M.', initially reported that 'the country in the Takla Lake area was very destitute of game and that as a result the Indians frequently suffer from a season of famine' (Q.M., 1866 in Wilson *et al.*, 1992, p: 12). This same explorer had reported in 1865 that Takla Landing was 'a great hunting ground for small game, especially for rabbits and grouse' (Q.M., 1866 in Wilson *et al.*, 1992, p: 12). This has been the only contradictory report of resources that I was able to locate. There are numerous interviews from elders that state that traditional resources have always been

plentiful. Recorded oral histories recount hunting for moose, deer, caribou, grouse, and rabbit, fishing in the lakes throughout the territory, picking huckleberries, blueberries, and soapberries from the mountains and trapping beaver in the summer months (Takla Capacity Initiative Project, 2004). These histories often include stories of hunting as children, with knowledge passed on from their parents and grandparents. Other studies report the area to be abundant in sockeye salmon with spawning grounds in the major river systems within the traditional territory (Cheong *et al.*, 1995). The people of Takla Landing still hunt, fish, trap, and gather for subsistence and they are successfully passing this traditional knowledge on to their children.

Colonial Influences

Traplines

Once reserves were implemented in the early 1900s, families settled on I.R. #7

(Appendix B). Bulkley House, a reserve north of Takla Landing, also has a permanent settlement of one extended family. The remainder of their traditional land is still used consistently as summer camps throughout the region and for regular hunting trips initiated from the present community base. In spite of these relocations, the Takla people continue to pursue traditional cultural activities on the land.

Traplines were implemented in the early 1900s as a means of controlling the areas that Aboriginals hunted and trapped (Kelm, 1998). They are government regulated and given to families who previously used the land. The government-imposed trapline system introduced patriarchal control of the land, which replaced the traditional matriarchal system of keyohs. Under the traditional system, oral histories accounted for the use and division of the land by families, although keyohs were always shared with neighbouring families or with those in need (Takla Capacity Initiative Project, 2004). Information that I

had collected from a trapline study done in 2004 showed that there are approximately 37 registered traplines in Takla's traditional territory.

Traplines are important to First Nations families, and for the nation as a whole, for reasons that include a means of maintaining a traditional way of life, an important source of income, and a means of demarcating boundaries of clan territories (West, 2005). Every effort is made to maintain these traplines to prevent further loss of traditional ecological knowledge as well as to prevent environmental degradation from industrial development.

Residential Schools

Residential Schools were implemented to evangelize, educate, and assimilate First Nations people into the dominant Euro-Canadian society (Miller, 1996; Hanson & Hampton, 2000). These schools were operated primarily by churches and funded by the federal government (Hanson & Hampton, 2000). By 1920, government regulations mandated that all aboriginal children attend residential school (Steckley & Cummins, 2001) and by the mid 1960s, there were over 10,000 children in attendance in British Columbia alone (Barton *et al.*, 2001).

It is now well understood that the education provided to these children was extremely poor at best. The schools were more concerned with imposing western middle class ideals than with providing students with skills in literacy, science, and mathematics. Attending school required a dramatic change in language, customs, diet, and lifestyle. Control of children was considered to be manageable as long as they did not have the outside influences of their families: "In the eyes of the federal government, the further away the native children were from their families, the better" (Miller, 1996, p: 187). In

addition, strict disciplinary action was imposed on native children for speaking their own language and visits with family were kept to a minimum.

The brutal and demoralizing effects of residential school continue to influence First Nations people today (Barton *et al.*, 2001). The policy of removing children from their homes has resulted in loss of family structure, family cohesion, and the quality of family life. Children who attended residential school suffer from loss of culture, identity, and language as their traditional way of life was considered to be inferior and uncivilized (Kelm, 1998).

Most elders from Takla Landing, along with their children, attended Lejac residential school, which was located two hours outside of Prince George between Vanderhoof and Fraser Lake. Named after Father Jean-Marie Lejacq, an Oblate missionary who co-founded the school in 1873, the school was administered by the Catholic Church and funded by the federal government from 1922 to 1984. Like other residential schools, there have been accounts of abuse, neglect, and other hardships from those who attended Lejac (Kelm, 2000; Miller, 1996).

Industrial Development

The community of Takla Landing is a typical example of the negative impacts of industrial development on First Nations communities. The band's territory extends over 27,000 square kilometres and the community is isolated with the exception of a seasonal logging road that is maintained by Canadian Forest Products Ltd. (operating as Canfor), a leading forest products company based out of Vancouver, British Columbia. There has been considerable industrial activity in this area since the 1960s when the British Columbia Railway (BCR) first encroached on their region. Forestry and mining are now

industries that are prominent throughout the territory. Once industry came to the area, there was a noticeable shift from a subsistence lifestyle to one that has been introduced to western ideologies (Takla Capacity Initiative Project, 2004).

This community has continually experienced a change in their traditional way of life since the establishment of the reserve itself in the early 1950s. Shortly after people were relocated to the community of Takla Landing, the Hudson's Bay Trading Post was established along the south side of Takla Lake. The band members traded regularly with the Trading Post until its closure in the late 1950s. Hunters, trappers, and fishermen would trade their furs and fish for groceries and dried goods. However, the daily presence of Europeans and the introduction of new and different ways of life, including food, have altered the traditional way of life forever for the Takla Lake First Nation.

The Takla Lake First Nation's traditional territory has always been fertile and rich in plants, fish, and wildlife. However, this population lives in extreme poverty. Forestry and mining companies have exploited this territory for the past five decades at the expense of its inhabitants. Past mining explorations and extractions have only minimally employed community members and rarely have they been compensated for their land that is often left unusable after the mining companies pull out. There are examples of mine closures from the 1970s where the whole production site and equipment was buried with no regard for the environment (Healthy Land Healthy Future Project, 2006). Oil barrels are left scattered throughout the area, culverts are rusting in their lakes and rivers, and dumps that consist of varying garbage, such as pipes, railway ties, and discarded rebar, are left to rot near rivers, lakes, and breeding grounds for small animals (Healthy Land Healthy Future Project; Field Notes, 2006). While there are regulations now in place on

the disposal of waste and the proper destruction of industrial pollutants, the damage is already done to a considerable portion of this territory. People will rarely gather berries, hunt, fish, or trap where they know there is potential contamination from industrial activity. This fear of contamination has altered traditional practices for this community.

In summary, industrial development is a continuation of colonialism. Since industry began to encroach on this territory, there has been little consultation with, or accommodation of, the Takla Nation. Large corporations rarely consider the need to speak to the people who have inhabited the territory since time immemorial, instead considering profit margins to be of more importance than maintaining the land for future generations.

Cultural Resilience

It has been established, through ethnography and oral history, that the Takla territory has been used extensively for hundreds of years (Takla Capacity Initiative Project, 2005). Since the arrival of industrial forestry and mining, the Takla people have continually tried to maintain their ties to the land. One elder stated that “it’s the only place we live on and get our food; this is how we survive - off the land and its resources” (Takla Capacity Initiative Project, 2004). Others simply state that their land is their life and they would not consider moving. Unfortunately, dominant society has not acknowledged the strong cultural attributes of the First Nations. Since contact, it has been assumed that the First Nations should be able to assimilate into the dominant society without any long term consequences. It has long been apparent that this process is flawed and, furthermore, the First Nations people are becoming empowered by their determination and belief in stewardship of the land in their quest for their rights and land. Despite the many social

disadvantages they face, First Nations are demanding meaningful consultation and accommodation of their traditional uses of the land when industry proposes further development, and are becoming more skillful in negotiating for their rights. There is now the sense that after more than a century of colonization, attempts at assimilation and ongoing industrialization have created an urgency to preserve and revive native culture.

As one elder stated:

“Now everything changed, it’s not like a long time ago. We all turned to the white mans ways, if we’re short of food; we go to the store and buy it, before we couldn’t. Now the younger kids don’t know how to fish, they don’t even know how to set a net, some of them don’t know how to dry meat or speak language.”

Takla Capacity Initiative Project, 2005

It has clearly been identified that there are problems with cultural identity due to the impacts of colonization such as residential schools, cultural genocide, and forced relocation. Self-determination, accommodation, and compensation from industry will give back a portion of what was taken in order to help rebuild their cultural identity.

Living Conditions

In 1991, the Aboriginal Peoples Survey reported that the unemployment rate among aboriginal adults living on reserve is 31%, compared to 10% for the general population (MacMillan *et al.*, 1996). In the community of Takla Landing, the annual income is typically less than \$13,000 (personal correspondence with the controller of the Takla Lake First Nation). Other socioeconomic factors that are dominant in this community are poor living conditions, restrictions in the availability of healthy food, and limited access to health services.

Poverty has shown to have a devastating effect on health status; 'it creates dependency, limits self-expression, and contributes to the demoralizing acceptance of substandard community infrastructures' (Tookenay, 1996, p: 1582). These characteristics of poverty are widespread in Takla Landing. The majority of this population is dependent on government sanctioned social assistance and live in substandard housing that is in desperate need of repair. Dowler (2003) suggests that people living on low wages or dependent on welfare benefits have lower nutrient intakes and poor dietary patterns. People living in northern and remote regions face a greatly reduced range and variety of foods which further decreases diversity. Both of these sources of food insecurity are present in the Takla Lake First Nation. Poor housing conditions coupled with poverty therefore puts the people of Takla Landing at greater risk for poorer health outcomes.

In spite of these heightened risks, health care provision is limited. Primary health care consists of a community health representative (CHR) and community health nurse. The CHR receives short term training in order to provide limited services which can be insufficient for meeting the needs of the community. The community health nurse is expected to service the community 24 hours a day and faces the potential of employee burn out. A general practitioner visits the community one afternoon per week but the general care of the population is left to the support staff living on reserve.

Along with limitations on the availability of health care services in Takla Landing, other concerns are long travel distances to obtain medical treatment. The nearest full health service community is Prince George, which is approximately 365km southeast from Takla Landing. Carrier Sekani Family Services funds a Medical Transportation Vehicle (MTV) that takes patients to necessary medical appointments. Through the CHR,

who books medical appointments, the MTV brings patients to Fort St. James, Vanderhoof, and Prince George. From these locations, patients may take the Greyhound bus, the Northern Health bus, or fly to the location of their appointment. Associated costs of food and accommodation are covered only if the trip lasts more than six hours or for patients who must make an overnight trip. All patients must apply for and be eligible for funding through Carrier Sekani Family Services prior to receiving transportation or medical care. This process can be daunting for many community members although the CHR typically aids in this process.

Impact of colonization on diet and nutrition

“When elders speak of the strength of their people, they invariably mention food.”

(Kelm, 1998; p: 19)

By all accounts, the First Nations population in British Columbia in general and the Takla Lake First Nation in particular inhabit a territory that is rich in resources. Although stories are told of food shortage and hunger prior to contact, systems of exchange, trade, and sharing prevented widespread starvation. This culture of sharing, paired with the richness of the natural environment, permitted this population to flourish.

Hunting, fishing, trapping, and gathering were activities carried out based on seasonal accessibility to resources. Char, lake trout, salmon, and Dolly Varden run throughout the Takla traditional territory. Fishing is a year round activity; winter time, when the ice freezes, nets are set across their lakes. They are set early morning, left overnight and pulled in again the next morning. Throughout the summer months trolling for fish is as popular as setting nets. The catch is typically smoked and dried, or simply boiled for variation. Summertime is a busy season for gathering berries, and hunting

moose, caribou, mountain goat, grouse, groundhog, and bear. This food is preserved through canning, smoking, and/or freezing to last throughout the winter months. More important than collecting food for preservation throughout the winter months is the method of preservation itself. If, for example, berries are not completely dried prior to storing them in a cache, the possibility of mould setting in and ruining the complete food supply is highly possible. This can result in starvation or a food crisis. For this reason, many people would often have two to three different food storage areas to prevent the loss of their food resources over the winter months. As there was such an emphasis put on preservation and storage, there was little interest in domesticating animals for food. Overall, the traditional diet of the Takla Lake First Nation is rich in protein and polyunsaturated fat (Duhaim, 2002). Although some argue that the variation in a traditional diet was limited, it adequately supported the population (Kelm, 1998).

Once industrial development encroached on this territory, there were significant changes in the Takla Lake First Nation way of life. The construction of transportation corridors and the establishment of the Hudson's Bay Trading Post in the community of Takla Landing brought in western influences and made access to the outside world easier. The introduction of a western diet that was high in saturated fat and low in nutritional value became more prominent in the area, Native trappers began to trade their fur for foreign food items that westerners considered staples, and drugs and alcohol were brought in by non native workers. It was evident from these early influences that the traditional way of knowing would be impacted by outside influences and ongoing changes would forever alter the traditional way of knowing.

Another colonial construct that resulted in altering the diet of the Takla Lake First Nation was government enforced attendance to residential school. Not only were there negative influences on the education provided to First Nations children, but there are accounts of food being inadequate; a diet of rotten meat, 'blue' milk, and limited vegetables were regular complaints (Kelm, 1998). There are numerous stories of foreign types of food introduced in their diet, portions being inadequate, and little or no variation offered; porridge for breakfast, soup and bread for lunch and dinner, and snacks between meals of bread and jam were the norm (Moran, 1994). Furthermore, caregivers at the school did not eat the same food as their wards. At times, the children were allowed to hunt rabbit for stew or to catch whitefish, but by the time the fish were returned to the school they were often rotten (Moran, 1994). It is unsurprising that traditional foods were not provided or allowed, as this was another means of integration and assimilation into western ideals.

Before these children entered residential school they maintained a healthy diet and way of life. By the time they returned to their communities, they were accustomed to consuming a diet low in nutrients and foreign to their bodies that would often make them sick. Residential schooling thus not only resulted in poor self-esteem, limited development of parenting skills, limited education, and poor attitudes of self-respect, it also went a long way in severing a cultural connection between the Takla people and their traditional foods.

It has previously been determined that a change from traditional foods to market food has increased food insecurity in aboriginal people throughout Canada (Paci *et al.*, 2004, Kuhnlein & Receveur, 1996) and the Takla Lake First Nation is no exception.

Chronic disease is on the rise and the elders are concerned for their own health as well as the health of their children and grandchildren. They know that the traditional diet is a healthy diet for their bodies but they face many obstacles to maintain their traditional way of knowing. Poverty and social issues are the main determinants of poor health outcomes in this community. It is difficult for people to be food secure when cost, access, and outside influences are continually eroding their ability to maintain their health.

A great deal of the Takla Lake First Nation's colonial encounters occurred as late as the 1960s and continues today. The introduction of transportation corridors and western ideologies has resulted in negative health outcomes. A population that was once food secure and thrived off the resources available on their land now has concerns that these lands and the sustenance it provides have been contaminated. Oral histories recount stories of the abundance of wildlife and fish that has been depleted in recent years; forestry and mining have been responsible for changes in migration patterns of animals and environmental degradation.

Despite the continual influences that impact this community, however, the people of Takla Landing stand united in their belief that their traditional diet has many health benefits that cannot be matched by a western diet. The elders struggle to pass this knowledge onto their children and grandchildren and are hopeful that they will maintain, or incorporate, a traditional diet into their western diets well into the future.

~ Chapter 3 ~ METHODOLOGY

My thesis explores the social and cultural experiences of food security in the Takla Lake First Nation. I will be employing a mixed methods triangulation approach in order to understand the human experience and human environment that I studied. This approach also assists in validating my findings and ensuring the results are rigorous (Baxter & Eyles, 1997; Katz, 1994).

The purpose of this chapter is to outline the research I conducted, discuss how the data were gathered and the steps I took to analyze and interpret the information collected. The first section includes a discussion on primary and secondary data sources that I collected. The second section describes the qualitative mixed methods approach I took, including the sampling frame and survey tool used to gather primary data. The third section describes how I analyzed the data and the tools and procedures used to facilitate this analysis.

Data Sources

Data collection for this project included both primary and secondary data sources, participant observation, and respondent validation. The different sources of data are triangulated in order to increase the validity of my research.

Secondary data are an important part of this project and were collected from sources such as the internet, academic literature on the health of First Nations throughout Canada and beyond, information provided from employees at the Takla Lake First Nation band office, and information collected from capacity building projects at their Prince George office. Very little has been published on the Takla Lake First Nation, so the

majority of this information relied on statistical profiles from the Government of Canada, government archives, reports written by community members, and oral histories. Other secondary data sources that were relevant to this research included literature and oral histories on the general treatment of the First Nations population throughout Canada since contact and their experiences of colonial encounters. This component of data collection supports a holistic approach to the research.

Primary data were collected from open-ended interviews with community members in Takla Landing, along with collection of my own personal field notes. Community members were chosen as participants based on their knowledge of traditional foods as well as the importance they attribute to a traditional diet. I initially spoke with a key community contact to establish who the interviewees would be. Patton (2002) defines a key informant as a person who is knowledgeable about the dynamics of the community and who is ‘useful in helping an observer understand what is happening and why’ (Patton, 2002, p: 321). This information would be almost impossible for me to obtain on my own as I am an outsider hoping to gain personal information about community members. As I was going to be in the community for a limited period of time, I wanted to ensure that the interviewees were the most knowledgeable about a traditional diet. The Takla Lake First Nation is a matrilineal society in which women are typically the heads of families. For this reason, a majority of women were identified as key interviewees. Because of my interest in long term change in diet, I sought to hear from long time residents of Takla Landing. Although it would have been informative to interview youth and their parents as well, I felt that it was most important to speak with elders first; they have witnessed colonization of their territory, have lived experiences of how colonial

influences directly impacted their lives, and can speak to ongoing changes within the community which result from these contributing factors of change. In addition, elders have traditionally played key roles as advisors and keepers of the cultural legacy in First Nations communities (Castellano, 2002). For this reason alone it would be unacceptable to speak to the youth prior to consulting with the elders. Furthermore, this research is timely in that it is important to speak to the elders while it is still possible. The youth and their parents would be interesting to interview to determine how they feel colonial influences have affected the elders and have shaped their own lives, but this was not possible due to time constraints and size limitations on this research project.

Participant observation is defined by Hay (2000) as “a fieldwork method in which the researcher studies a social group while being a part of that group” (Hay, 2000, p: 193). This final source of data collection was essential for my research in that it provided information that I may not otherwise have obtained through interviews or literature reviews. Participant observation is useful as it portrays people’s actions rather than their recollection and allows for spontaneity that would be unlikely in an interview setting (Hay, 2000). Patrick and Middleton (2002) state that an over-reliance on survey/interview methods have the potential to obscure other perspectives, or can bias the evaluation of data collected. By using a range of methods, various perspectives can be incorporated into the research.

Through the collection of secondary data, which provided me with background information on the community of Takla Landing, as well as a grounding in wider experiences of First Nations colonial encounters in Canada, I was better able to ask informed questions if a response was unclear or incomplete. Ongoing secondary data

collection allowed me to fill in any gaps that were present through the collection of primary data. Likewise, primary data collection, by means of key informant interviews and participant observation, filled in gaps in secondary data and added depth to this background information. This triangulation of data therefore validates findings and provides a more complete representation of issues.

Recruitment of Key Informants

The sample size of my primary data collection was undetermined at the beginning of my research, but I aimed to interview people until I reached saturation (Patton, 2002). That is, I interviewed respondents until no new themes emerged. In all, I interviewed fifteen elders from a total of twenty seven during the summer of 2006. At the request of the Chief, the people interviewed are anonymous. All transcribed interviews were coded and numbered for referencing. The purpose of these interviews was not to privilege or to show preference. The experiences I recorded from the elders were consistent with a qualitative study design and, as such, the information I collected was not weighted.

There are two main sampling methods as identified by Patton (2002); random sampling and purposeful sampling. Random sampling is typically used in quantitative research and controls for selection bias (Patton, 2002). I chose purposeful sampling to ensure I had ‘information-rich cases’ that ‘yields insights and in-depth understanding rather than empirical generalizations’ (Patton, 2002, p: 230). Unlike quantitative research, in which the goal is to obtain generalization from a large random sample base (Patton, 2002), I was interested in obtaining an in-depth understanding of a targeted group of respondents, which provides both individual and general perspectives (Hay, 2000).

Before I could begin my research project, it was essential for me to gain the acceptance of the members of the Takla Lake First Nation. I spoke with Chief John Allan French in early September 2005 and explained the research I hoped to do and how this research would benefit the band members. Prior to the meeting with the Chief, I had been in contact with service providers, such as the school principal, the public health nurse, and the community health representative, to discuss some of the food security issues on a local level. After making these initial contacts, I spoke with the Band Manager in October 2005, and gave him a detailed description of my project in writing. Once this was reviewed by the Chief, I received a letter of support (Appendix A).

Having obtained approval from Chief French and ethics approval from the University of Northern British Columbia (UNBC)'s Research Ethics Board (Appendix C), my next goal was to identify a community member who would be able to help me identify potential interviewees, aid in organizing the interviews, and attend all interviews as a translator and/or to clarify any questions or concerns that arose. In February 2006, I was in the community working on another project and used this opportunity to seek out an assistant. I met with a key community contact, Margo French, and explained the project to her. She agreed to work with me as a paid fieldwork research assistant, funded by UNBC's Michael Smith Summer Research Grant. As Hay (2000) states, it is important to consider pre-testing interview guides to 'ensure the questions are not ambiguous, offensive, or difficult to understand' (Hay, 2000, p: 60). Following this advice, I did a pre-test of the interview guide with my community contact prior to traveling to Takla Landing, in order to confirm that the questions were comprehensible.

The majority of the interviews were conducted in Takla Landing, but I did conduct two interviews in Prince George from visiting elders. These two interviews were conducted as further pilot pre-tests in order to ensure readability and to identify any changes that should be made to the interview guide. The information collected from these initial interviews was beneficial to my research and is included in my analysis. Once these two interviews were transcribed, minor adjustments were made to the original guide. The key community contact then reviewed the guide and further adjustments were made based on her recommendations. After the initial interview guide was modified, I was confident to complete the balance of interviews.

In late April, I traveled to Takla Landing and began the interview process. Participants were given an information sheet and consent form, and were asked if the interview could be audio taped. Each interview took between 30 minutes and one hour. All participants recognized the importance of audio taping the interview and all agreed to being recorded. As Dunn (2000) argues, the audio tape will capture the full details of the interview while the researcher's notes will provide an overall summary of what was said. Another important aspect of taking notes is that an audio tape does not record non-verbal data while the gaps can be filled in with note taking at the interview. These two types of recordings allow the researcher to be as thorough as possible while providing a detailed account of the interview. When I was in the field, I audio recorded and made hand written notes at each interview and kept field notes at the end of the day to aid in the triangulation of data for analysis. As recommended by Hay (2000), comprehensive field notes ensured that I collected and made note of verbal and non-verbal information from the interviews.

Research Limitations

Prior to beginning my fieldwork, I acknowledged a number of limitations in my research.

One of the biggest limitations was the time I had to spend in the community of Takla Landing. I made five separate trips and stayed between two and five nights each time. It would have been of greater benefit to this research to stay for longer periods of time to observe traditional customs in practice although resources prevented extended visits. Individual interviews were conducted each day and the information I collected was invaluable, but to see these customs in practice on an ongoing basis would have strengthened my research.

The second limitation to my research was language translation. For many of the elders I spoke with, Carrier is their first language and English their second. The key community contact attended all the interviews with me and she was invaluable in both translation to Carrier, as well as rewording the questions to clarify meaning. There were instances when the question was unclear and they would look to my community contact for clarification. For example, the question ‘what do you consider to be a traditional diet?’ would sometimes have to be changed to ‘what dakelh food do you eat?’ Others would often have their children present at an interview and they would translate into Carrier if the elder seemed confused about the question asked of them. In order to avoid any problems with language, I ensured my key community contact was present at all interviews and, for those elders who I knew did not speak English, I arranged to have a family member present to ensure they were comfortable speaking with me.

Negotiating Consent

Negotiating consent in a First Nations community also had its challenges. As Davison *et al.* (2006) state, the reality of community-based qualitative research is quite different than the ethics review standards of an institution. As per the requirements of UNBC's Research Ethics Board, I would review the research project with the participants on an individual basis and would ask them to sign the consent form after I reviewed the information sheet and details of the consent form with them. This process is not always culturally appropriate, and is even offensive to some people for at least two reasons. First, culturally acceptable practices, such as the giving of tobacco, are often already in place in the community and asking for a signed consent form in addition to the community practices can often be puzzling or insulting (Davison *et al.*, 2006). The Takla Lake First Nation have a strong oral history, so when a researcher comes to their community and asks for them to sign a document, it is typically not well received. Second, the consent form indicates that a participant has agreed to participate in the research project at a given point in time (Davison *et al.*, 2006), but does not consider the consent as being an ongoing, renegotiated process, as it is in a First Nation context.

During my interview process, I did ask for signed consent and was never refused. I took extra time to explain why I needed their signed consent and how this research could benefit them, their children, and their grandchildren. The reason for their acceptance of my request may be that I had a trusted community member with me which validated the work I was doing, or the fact that I have previously worked in and with the community, which made people more at ease when I requested they sign a consent form. Kobayashi (1994) is sensitive to the fact that an insider's view of cultural practice is

effective in collecting data, gaining legitimacy and access, but this can only be achieved when working within one's own cultural community. Once the researcher ventures outside this field, they are constructed as the 'other'. As researchers, we cannot escape this dichotomy of insider versus outsider, but it is important to recognize this relationship when entering into a field that is a different culture than our own.

When collecting data, I must also be aware of the notion of 'betweenness' as defined by Nast (1994). She states that betweenness highlights the fact that we will always work with others different from ourselves and that we are always in a state of betweenness based on gender, age, class, or ethnicity. Thus, betweenness implies we are never 'outsiders' or 'insiders' in an absolute sense. In my research, I may be considered an outsider as I am not from the community of Takla Landing and am not First Nations. I cannot completely understand their particular experiences of colonization, poverty, and social determinants of health. On the other hand, I may be able to get an 'inside' glance based on the community contacts I have made during my previous years work, as well as through recent contacts made with this research. As a result, I conducted my research as both an outsider and an insider.

Standardized Interview Guide

The interview guide consisted of open and closed ended questions and was broken down into four sections: traditional food collection, traditional diet consumption, market food consumption, and background questions (See Appendix D). The first section was used to get a sense of what the key informants considered to be a traditional diet, how often people in the household hunt, fish, trap, or gather, and to make note of changes in traditional diet and why they thought change occurred. These questions would help

answer how and why traditional diet has changed over the years. The second section focused on finding out what traditional foods people still eat and what they feel is going to happen to a traditional diet in future generations. My goal with these questions was to ascertain the participant's own views on their current diet. The purpose of the third section was to determine how often they shop for groceries, where they shop, and if their food preferences are easily accessible. The final section addressed background information, such as the age of the interviewees and how long they lived in the community.

All participants were asked questions from a semi-structured interview guide which consisted of questions that were 'content focused' and addressed questions that are relevant to the research questions (Hay, 2000). In a semi-structured interview, the interviewer is not restricted to ask the questions in a particular order, but can be flexible depending on the individual interview. If the interviewer sees that the interviewee needs to be redirected back to the topic, the interviewer has the flexibility to bring the participant back to the main topic (Hay, 2000).

The advantages of the semi-structured interview guide are that interviews can remain fairly relaxed, conversational, and situational (Patton, 2002). Also, the guide allows for the questions to be comprehensive, and logical gaps in data can be anticipated as the interview is in progress (Hay, 2000). This type of interview guide is especially important in First Nations communities, whose cultures centre on the informal setting of oral history that has a storytelling approach to answering a question (Kelm, 1998).

Although there are many benefits to the semi-structured interview, there are also limitations that should be identified. Due to the generality of the interview guide,

important topics may be omitted inadvertently. That is, once a conversation starts, unless the interviewer has notes made on all areas they want to identify, some detail may be left out. Also, the wording and sequence of questions may influence answers, thus reducing the comparability of responses. It is essential for interviewers to be aware of these limitations in order to decrease the possibility of eliminating pertinent information required from the respondent. In a First Nations context, omission of information is possible due to the cultural difference in collecting data. Interview guides may be viewed as a colonial construct and informants may be reluctant to speak openly in this setting. As well, First Nations participants may view this process as culturally unacceptable, thus limiting the availability of information (Davison *et al.*, 2006). I was aware of these limitations prior to conducting interviews. During the interview process, I made notes after each response and identified any gaps that I wanted to ask the interviewee about. Quite often, a response included the answer to multiple questions. I ensured that I did not ask the question a second time in order to avoid confusion.

Analysis

Grounded theory was used to analyze primary data because of its sensitivity to First Nations ways of knowing and its suitability to explore meanings and impressions of food security issues. Grounded theory suggests that there should be a continuous interaction between data collection and analysis (Corbin & Strauss, 1990). Strauss and Corbin (1997) state that, in grounded theory, 'the researcher attempts to derive a theory by using multiple stages of data collection and the refinement and interrelationship of categories of information' (p: 5).

Grounded theory also highlights the importance of meaning and narrative to how people think and act. In First Nations' cultures, sharing is more important than ownership and knowledge of the landscape equates to survival. Oral histories are told that educate generations of people on the knowledge they need to survive off the land (Kawagley, 1995). Thus, grounded theory seeks to uncover relevant conditions as well as to determine how people respond to changing conditions. This theory is evident in practice in First Nations populations facing considerable change. By taking control of their changing lifestyle, they have remained determined to ensure their children and grandchildren are knowledgeable in their traditional way of knowing.

A sequence of grounded theory steps was used to analyze the data that I collected (Strauss & Corbin, 1997; Glaser & Strauss, 1967). The steps included an initial content analysis of interview transcripts and field notes to identify themes, the building of categories based on these initial themes, re-reading the interviews and field notes to help refine categories, and making comparisons on key points that were presented in the interviews.

Content Analysis

Content analysis usually refers to analyzing text rather than depending on field notes or knowledge obtained from participant observation (Patton, 2002). It is a common form of analysis in qualitative research. Berg (2004) argues that the purpose of content analysis is to condense interviews and field notes into an objective coding scheme that is systematically comparable. The process I followed to interpret the data is outlined in detail below.

Each interview was transcribed by a research assistant. I listened to each tape once the transcriptions were complete to ensure accuracy, corrected any errors or misinterpretations, and cross referenced them with notes I made at each interview to ensure all information, both written and audio, was recorded in the final draft. I then read through each interview transcript, which is an important step for me to take that helps me get in close contact and familiar with the data (Tuckett, 2005). I also made notes on the margins of the interview guides of any concepts or ideas that were prominent in the text. This process highlighted the issues I felt would become themes or concepts (Miles & Huberman, 1994). Once this was completed, I reviewed the transcriptions a second time, looking for similarities or clusters of thoughts and ideas that would get me closer to establishing themes. While I did this, I wrote out my research questions again and tried to answer these questions within the text. After this process was completed, I coded the general themes I had previously noted. I numbered each interview; whenever a theme presented itself within the text, I would code the interview number as well as the question number. I also reviewed the interview guides for direct quotes that would help to highlight the themes. I believe quotes help provide actual descriptions of issues or events that aid in the general understanding of the topic being discussed. As Hay (2000) argues, the researcher can also use quotes to connect the reader and the participant who is being quoted. Interpretation of the quotes is then dependent on the reader and original participant, and not the researcher.

Notes that I kept during the time I spent in the community were also useful during the analysis process. When I identified a theme from the interview transcripts and/or coding scheme, I was able to cross-reference that idea with my field notes. This process

enabled me to confirm that the theme I had pulled out of the data was present in other data sources. As Patton (2002, p. 265) states, ‘the participant observer employs multiple and overlapping data collection strategies: being fully engaged in experiencing the setting while at the same time observing and talking with other participants about whatever is happening’. I believe that cross-referencing my field notes with information that was presented in the interview transcripts provided me with the ability to clearly analyze my data.

Establishing Rigour

Baxter and Eyles (1997) define rigour as being ‘the satisfaction of the conventional criteria of validity, reliability and objectivity within qualitative research’ (Baxter & Eyles, 1997, p. 506). There are various ways to ensure rigour, including the use of multiple methods, respondent selection and verbatim quotations. Practices that can enhance rigour include the use of standardized interview guides and attention paid to power relations during the interview process. Bailey *et al.* (1999) argue that qualitative evaluation has often been criticized based on evaluation methods that vary greatly from quantitative studies, but a standardized method of evaluation is inappropriate for qualitative research.

Tuckett (2005) argues that the credibility of research is dependent on the skill and competence of the researcher, and that steps need to be taken throughout the research process that will ensure credible results. One important step I took was to keep field notes, which included perceptions and thoughts about the interviews, which helped to highlight any potential influences on data collection that were present. Another important

step was to tape record and transcribe all of the interviews, which ensured that there was ample opportunity to capture the richness of the interviews (Tuckett, 2005).

Establishing rigour is paramount in qualitative research. Barbour and Barbour (2003) argue that 'respondent validation is a necessary or worthwhile endeavour with regard to corroborating interpretation of data' (Barbour & Barbour, 2003, p. 184) and I believe that it was an essential part of my data collection and triangulation. When asked a question, many elders will not answer directly, but will tell a story which contains the response to the question. I transcribed each interview, interpreted the responses as accurately as I could, compared these responses with my field notes to ensure I was not leaving any important facts out, and reviewed them a final time to ensure completeness. Once this was finished, I felt that I needed to return to the community to ask if my interpretations were correct. I spoke with the Chief and my key community contact about the best way to bring this information back to the interviewees to confirm my findings. After discussions with the Chief, it was determined that, in order to avoid confusing the elders by presenting them with information that had been altered from the original, I would review my themes and general observations with the community contact. As she was present at each interview, it was believed that this was an appropriate way to confirm my preliminary results. Once I reviewed the information with her, she confirmed that my findings were correct, made some suggestions for clarification, and brought this information back to the Chief for his approval. I did not want to misrepresent the informants in any way, and felt confident after my meeting that the information I had collected, transcribed, analyzed, and interpreted was correct.

Staheli and Lawson (1994) argue that gender relations shape the research process. Identifying gender as an influence in research presents various challenges involving the gender relationships between the researcher and the researched. During my field work, I believe that gender aided in my data collection. As noted earlier, the community of Takla Landing is a matrilineal society, so most often I spoke with the female head of the household. It was comfortable speaking to one another as we were discussing issues of food which are central to family dynamics. I do not believe that gender negatively influenced my research in any way, but potentially helped me in the field.

Also, field notes that I kept after every interview allowed me to step back from the process itself and reflect upon my experiences with each participant on an individual basis to ensure outside influences were identified and modified as necessary. Finally, I spent a considerable amount of time in the community participating in daily activities, which enabled me to witness firsthand experiences which would not be possible in field notes or through formal data collection.

The purpose of utilizing a qualitative study in mixed methods was to determine the social and cultural experiences of food security in the Takla Lake First Nation. To validate my findings, I incorporated triangulation of qualitative methods, which ensures rigour in qualitative studies. I was aware of personal biases that I may have, and recognized that I am an 'outsider' doing 'insider' research, and how these issues may have limited my research findings. These issues were taken into consideration during my fieldwork, data collection, content analysis, and validation of research.

~ Chapter 4 ~ RESULTS

The purpose of this research is to study the social and cultural experiences of food security in the Takla Lake First Nation and to examine public health policy in relation to Aboriginal health. The issue of food security was identified by community members themselves, who voiced concerns over the safety of their traditional territory due to industrial contaminants and the increasing adoption of a western diet. The results of this thesis are based on the stories and lived experiences of 15 participants. These interviews provide not only a socio-economic and environmental picture of the Takla Lake First Nation, but also first-hand accounts of the close connections between food systems, family dynamics, community development, and the environment.

There are many benefits to traditional food systems when compared to a western diet (Willows, 2005; Receveur, *et al.*, 1997; Wolever *et al.*, 1997) and a traditional diet has been associated with food security in much of the literature (Kuhnlein *et al.*, 2001; Wiseman & Gobas, 2002; Wilson & Rosenberg, 2002; Fediuk & Thom, 2003; Milburn, 2004). Elders spoke often of the abundance of traditional foods, living off the land, being physically fit, and how healthy they felt not being dependent on ‘white man’s food’. Access is a large part of being food secure, but access to traditional territory has increasingly been restricted due to government policy and industrial development. This restriction on the land increases the chances of people being food insecure and becoming dependent on processed foods.

Three main themes were identified from the interviews. These themes are sense of place, intergenerational discontinuity, and colonial influences. In order to illustrate these themes clearly, I have incorporated the use of direct quotes taken from the transcribed

interviews. The three themes are not independent of one another, but instead are interwoven. This connection between themes demonstrates the complex and dynamic culture of the Takla Lake First Nation. Attempts at colonization by the dominant society are at the root of all changes that First Nations experienced. Breaking down the themes into types of colonial influences, and their immediate influence on diet, offers a more detailed account of lived experiences.

Sense of Place

Place implies ‘a strong emotional tie between a person and a particular location’ (Windsor & McVey, 2005, p: 146) and will promote positive experiences that last over generations. Malpas (1999, p: 15) states that ‘place is essential to personal identity’ and that the only way truly to understand a person is through understanding place.

Furthermore, place provides a sense of security to individuals and groups and a sense of control over their own fates (Windsor & McVey, 2005). Some places are ‘therapeutic’, in that they promote health and healing, and are spiritually significant (Smyth, 2005). In other instances, place relates to home; the link between people and place satisfies our need to establish roots (Kearns, 1993). For First Nations, sense of place encompasses all of these meanings; their relationship to the land is emotional, spiritual, physical, and mental, and forms the basis of cultural well-being. For the Takla Lake Band, use of the land is considered sacred and a holistic approach is taken regarding sharing resources; not only with other people, but with the environment in general. As one elder stated:

“It’s sacred so we don’t over - harvest or don’t contaminate it or over pick it or whatever. Our elders always said ‘pick a little bit’ if there’s ten berries on there, you pick eight and leave two. A little bird or a little animal probably want to eat or maybe it will dry up and go back into the tree.”(TL-06)

Consideration is always given to the environment, and stewardship of the land strengthens the Takla Lake First Nation's sense of place. It seems clear that to lose one's home, and therefore one's sense of place in this cultural context, is to suffer devastation.

Reserves for the Takla Lake Band were not assigned until application was made to the Royal Commission on June 14, 1915. Seven reserves were allotted and initially held jointly with a neighbouring band, although there is no documentation to support why this was done. At the same time that the Takla Lake First Nation was allotted reserves, the Fort Connelly Band was also allotted seven reserves. In 1959, these two bands amalgamated and today the Takla Lake Band has a total of 17 reserves. The main community of Takla Landing is located at I.R. # 7, although there are also communities nearby including Manson Creek, Bulkley House, and Germansen Landing. Many of the current community members moved to Takla Landing at the time of amalgamation with Fort Connelly and have lived there ever since. However, it is interesting to note that, when asked if they are from Takla and whether they have lived anywhere else, the elders all answered that they were not from Takla and gave the names of areas surrounding the reserve, such as Akeyeh, Uti Dujut, Nat Tey Whl, or Ooslika. These areas are trapping and hunting grounds that have been used by families for generations. From information collected in the interviews, it is evident that, although the elders of the Takla Lake Band have lived in this community most of their lives, their home is still their traditional territory and not government enforced space.

The Takla Lake First Nation still hunt, fish, trap, and gather, but they are continually being alienated from their territory. Elders often tried to tell me about the spiritual connection they have to the land, but felt that there were no English words that

could describe this powerful relationship. By restricting land use, access to a healthy food system is also being undermined. There is a long history of territorial alienation which begins in the early 1900s and resonates in the community of Takla Landing today. The elders I spoke with told me stories of the impacts of industry on their way of life. They see this history as being central to the change in lifestyle and diet they have witnessed. These stories are summarized below and help to explain how the destruction of their sense of place was able to occur.

In 1969, just 10 years after the amalgamation of the Takla Lake and Fort Connelly Bands, the Great Pacific Eastern Railway, the predecessor of B.C. Rail, applied to the Federal government to extend their rail line through a number of the Takla reserves. In 1974, an agreement was reached that the railway could extend their rail line provided that the government turn over 860.79 acres of new reserve land to the Takla Lake First Nation (Takla Capacity Initiative Project, 2004). This is known as the 3 for 1 land exchange; for every acre that was taken to extend the rail line, three acres of new land would be provided. To this day, the Takla Lake Band has not received any compensation for this agreement (Takla Capacity Initiative Project, 2004).

Waves of industrial development would continue to alienate the Takla Lake First Nation from their land. Elders told me that mining prospectors first arrived in the Takla territory in the late 1800s during the gold rush and by 1872 over 1200 miners were working in the mines. Very few of these employees were from the local area and any employment that was offered to locals was on a casual basis only. Although there was a lull in mining after the gold rush, the demand for coal increased again at the turn of the century, and the Takla territory had the coal resources to provide for the demand. There

are accounts of the difficulty of removing coal from the territory, and transportation on barges often resulted in coal and slag polluting the waters (Littlefield *et al.*, 2006). This would obviously impact the availability of fish in the region, as well as contaminating the wildlife that drank from this river.

In the early 1900s, small scale logging companies moved into the region. Sawmills were built to mill wood or tie-making operations for the railway. However, it was not until after World War II that large companies began to show interest in the Takla territory (Littlefield *et al.*, 2006). It was at this time that the Takla people began to work in the mills to augment the money they would make hunting, trapping, and fishing. This resulted in a change of lifestyle from solely traditional activities to one that consisted of both traditional and western ways of working (personal correspondence with L. French, 2006). While the people in the community were offered jobs, these were often casual or low paying positions. The cost to their land was much greater than any wages received. Deforestation from excessive logging, depletion of fish stocks in their rivers and streams, disruption to the migration patterns of wildlife, and the destruction of sensitive habitats were all results of industrial development. At this time, there were no regulations intended to prevent environmental degradation (Littlefield *et al.*, 2006). While today environmental assessments and impact studies are required by law prior to industrial development, there is already a considerable amount of damage done to the region.

In addition to environmental damage inflicted from mining and logging, transportation corridors in the form of roads and railways also imposed a negative impact on the Takla Lake First Nation and their ability to use their land (Takla Capacity Initiative Project, 2004). Although dirt roads were constructed as early as the gold rush,

the Takla territory remained fairly isolated and inaccessible to outside influences until the construction of the Alaska Highway in the 1930s (Littlefield *et al.*, 2006). This highway development attracted industry, as well as recreational hunters and fishermen, into the area. Other highway construction such as the Hart highway through McLeod and Summit Lake further increased this traffic. Closer to home, forestry and mining companies began to build roads throughout the mountainsides, which led to erosion and destruction of animal habitat and migration (Littlefield *et al.*, 2006).

Railroads also assisted in increasing traffic into the region. The railway that ran directly through the Takla reserves had many negative impacts on the people and their way of life. The railway brought increased logging activity and the noise and pollution that this entails; ancient rock paintings were destroyed; and there was a reported increase in injuries to Takla band members (West, 2005). Furthermore, there was a rise in pollution, loss of reserve land, and risk to the people during transportation of hazardous goods through the communities.

From my observations, I noted that these developments changed the way the Takla Lake First Nation used the land and altered their sense of place. The Takla Lake Band was extremely knowledgeable in hunting and gathering techniques developed over many generations. Interviewees discussed that they knew what resources were available and they were highly specialized in managing their resource base. Traditional food not only provided nutritional advantages, it was also an integral part of the Takla Lake First Nation's spiritual beliefs and world view. Studies have recounted oral histories that state that, in order to be successful in life, each hunter must secure a relationship from an

animal (Littlefield *et al.*, 2006). This common belief is reflected in the puberty ceremony, when a young man is sent out alone to camp in order to obtain his 'hunting medicine'.

“Every youth, then when he reached the age of puberty, was sent forth alone to see a 'hunting medicine' that he could summon to his aid in after life...He left in early morning, fasting, and wandered all day in the woods, beside a lake, or up the mountain side. He might return in the evening, eat a scanty meal, and go out again the next morning: or he might remain away two or three nights. Some youths were fortunate and gained their medicines in a single day; others sought for three or four weeks. Few failed...” (Littlefield, 2006)

Ceremonies such as this, as well as solitary journeys, vision questing, and fasting on mountain tops to acquire hunting medicine, reinforce the Takla Lake First Nation's connectedness to the land. Yet, these ceremonies have become increasingly threatened by colonial influences such as industrial development.

Through participant observation, it was obvious that hunting, fishing, and trapping are still important activities to the Takla Lake First Nation today. Although many people are now dependent on wage labour for survival, traditional activities are still very much a part of their lives. Historically, people traveled by boat on the rivers, or walked to winter camps. Today, those same trails and river systems are used, but now the members of the Takla Nation also make use of four wheel drive trucks, snowmobiles, and all-terrain vehicles. Many people recall a life that was always on the land, while others talk about changes that made this type of lifestyle difficult to maintain.

“A lot of the traditional food where at one time you used to go out of here say on foot or with horses. But now they tend to go to mountains further away for the groundhog and stuff. That means you've got to have a pick-up and a quad and some kind of a recreational vehicle or a trailer or something.” (TL-03)

Another factor that restricts a traditional lifestyle is the need to keep children in school for ten months of the year. Many elders told me that the only time families now go out to

hunt, fish, and trap is during the summer months. This is considered a crucial time to pass traditional knowledge on to the children. These activities are also important for survival. Most people cannot afford to live off store bought foods that are typically inflated in price because of high transportation costs. However, supplementing traditional foods with store bought foods also has its nutritional benefits. The challenge with this merger in diets is nutritional education, adequate income and availability of good quality foods (Kuhnlein & Receveur, 1996). In order to adopt safe nutritional habits, the caregiver in the home must be educated on the nutritional benefits of certain western foods over others (Duhaime, 2002). They must have the availability of good quality food and know how to use it (Kuhnlein & Receveur, 1996). People must have an adequate income to be able to afford better quality foods, and have access to these foods. This is often not the case on reserve, where the majority of people live in poverty. Another factor to consider in food supply and preparation is who decides what food to eat in the family. This can vary from home to home depending on living conditions, size of household, or stage of life (e.g., elders living alone). Furthermore, quality control in the food supply must be available and accessible. Health promotion through nutrition must take into account the cultural values of the traditional food system in order to successfully merge the two diets (Duhaime, 2002). Overall, the quality and quantity of western foods is not limited to economics alone. Education in quality food preparation, as well as the availability of these foods, is essential in maintaining a healthy diet.

Despite forced relocation to reserve lands, industrial development of traditional territories, the destruction of breeding grounds for animals, and pollution of river systems, the Takla Lake Band has remained connected to their land spiritually,

emotionally, and physically, and continue to pass traditional knowledge on to younger generations. Through participant observation, it is evident that the deep historical custom of sharing resources and working together to procure traditional foods has enabled the Takla Lake First Nation to thrive for many generations. Traditional food is provided to the elders by the younger population who are hunting and fishing regularly. Likewise, the youth receive instruction in schools from the elders, elders-in-training, and others who are knowledgeable in traditional ways, to ensure that all children are educated in their own culture and not just in western ways of knowing. Signs of cultural continuity are therefore prevalent in the community, in spite of the incursion of industrialization and colonial practices. For example, interviewees told me of spiritual ceremonies that were formerly banned by provincial and federal government officials are increasingly being reintroduced into the family structure on the reserve.

Intergenerational Discontinuity

Not surprisingly, given that I was speaking with elders in the community, issues of intergenerational discontinuities were dominant. Intergenerational discontinuity can be defined as the broken cycle of cultural learning and behaviour that is not repeated in each generation (Putallaz *et al.*, 1998). Some studies suggest that the grandmother's child-rearing techniques are related to the child-rearing techniques of the parent (Brooke *et al.*, 1998) but, in a First Nations context, this continuity has been broken as a result of colonial influences of residential school, forced relocation, and general cultural changes that have occurred over the years. Furthermore, it has been argued that the parenting that adults received as children may play a large role in the social development of their own children (Putallaz *et al.*, 1998). In a First Nations context, residential schools were

unfortunately very successful in destroying parenting skills and it has taken a considerable amount of time and effort to re-establish those skills.

In Takla Landing, most of the elders attended residential school, have been in the community during the most significant changes seen to their band, and have lived through social and cultural challenges and changes over the years. These experiences have negatively influenced their lives but, like other families, they want their own children and grandchildren to learn from them and to thrive in their life quests. It took many years to reverse the damage done by residential schools but, through the inner strength of the elders, they were able to overcome this trauma and learn to take pride in their culture and way of knowing. For these reasons, many of the elders are very active in their grandchildren's lives, and they have a dominant role in teaching their grandchildren their traditional way of knowing. During every interview, grandchildren were frequently mentioned in accounts of hunting, fishing, or trapping.

“My grandchild, I show him how to do that. He is about 15. I show them to trap in the bush. They like doing it. I tell stories about when my grandfather taught me about it.” (TL-02)

Elders also stated that they hoped their grandchildren do not forget the knowledge they were taught once the elder is gone.

“It's gonna just fade out. Now even if you try to teach your children, your grandchildren, especially your grandchildren they would say 'oh there's lots of meat at the store'. You don't have to go work on it you just buy it. And nobody hardly set net, nowadays the young kids don't know how to set net or don't even know how to set a trap. Yeah, they're not interested in learning.” (TL-13)

It was evident that elders are significant caregivers in many families for varying reasons. First and foremost, the value of teaching the grandchildren the traditional way of

life is essential for the child's education in Takla Landing. This was evident in many of the interviews; people were forced to give up their way of life, as were their children, but now they have the opportunity to relearn their culture and to pass this knowledge on to future generations. Second, due to the limited employment opportunities on reserve, many parents either move away from the community on a temporary basis to seek employment, or are given the opportunity to work shift work in the mines or in logging, which requires extended care for their children. Third, grandparents tend to assume caregiving roles in the instance of substance abuse, or when other social issues in the child's home requires the grandparent to step in and care for the child. Finally, in the case of teenage parents, grandparents undertake the care of the grandchild to allow the parent to continue their education. In many instances, education is sought off-reserve as the local school facilitates children only to the grade 10 level.

Elders that I spoke with are very active in the lives of their grandchildren for varying reasons that include the examples provided above. They take great pride in the accomplishments of the children and instill the importance of learning both traditional and western ways of knowing. It is evident in my discussions with elders that they feel children today get too much exposure to western ideologies without knowing their own culture. They are working diligently to ensure their grandchildren are educated in their own culture first and foremost.

It is interesting to note, however, that the parents of the grandchildren rarely teach their children traditional activities or discuss oral histories with them. When I inquired about this intergenerational discontinuity, I was often told that residential school was the main reason for this discontinuity in traditional knowledge. In order to illustrate

intergeneration discontinuity, I will label the generations as G1, G2, and G3: G1 referring to the grandparents, G2 to the parents and G3 to the grandchildren. I spoke with many elders (G1) who did not attend residential school. Some people were simply not allowed to attend; their parents were adamant about keeping them with the family.

“My parents didn’t want to send us to LeJac, but we wanted to go. We trapped all the time instead.” (TL-05)

However, by the time the G2 generation was of school age, attendance at residential schools was mandatory and the children from the community were sent to LeJac Residential School in Fort St. James. “I went to LeJac in 1976. This changed everything about our food” (personal correspondence with RW, summer 2006). While most of the G2 generation attended throughout their school aged years, some only attended for one to two years before either running away or relocating to a city centre. For many community members, this period of time was the most traumatic time in their lives.

“I only went to LeJac for one year but that was enough trauma to last me my life!” (TL-06)

One story told time and again was about the food available to them. Some people talked about the “dog biscuits” (vitamin cookies) they were given every morning while others talked about a diet of mush for breakfast, rice and potatoes as a staple, and chicken or meat once a month as a treat.

Once many of the G2 generation completed the requirements at the residential school or ran away from the school, some returned back to the community but with limited skills in their traditional ways of knowing. The bond between parent and child was often broken and it was easier for this generation either to slip into the western ways they were taught at school, or to turn to substance abuse as a buffer against the pain of

isolation from family. This was especially traumatic to the G1 generation. As stated in

The Royal Commission on Aboriginal Peoples:

‘According to tradition, children are gifts from the spirit world and have to be treated very gently lest they become disillusioned with this world and return to a more congenial place. They must be protected from harm because there are spirits that would wish to entice them back to that other realm. They bring a purity of vision to the world that can teach their elders. They carry within them the gifts that manifest themselves as they become teachers, mothers, hunters, councilors, artisans and visionaries. They renew the strength of the family, clan and village and make the elders young again with their joyful presence’ (RCAP, 1996:3:23).

The grief felt by the G1 generation to have their children taken from them, feelings of inadequacy in not being able to stop the authorities, and their natural feelings of responsibility to their children were often unbearable. It is evident through participant observation and by interviewing elders that attendance in residential school impacted extended generations in the Takla Lake First Nation. Extended family structure, the intergenerational education of children in cultural norms, and being able to watch children grow to be successful are the normative expectations of First Nations families, but these were denied to First Nations because of residential schooling. In fact, residential schooling ensured that family dynamics were severed and that longstanding cultural norms were deemed unacceptable.

Apart from elders caring for their grandchildren on an informal level, there are also a large number of elders who are the main caregiver to their grandchildren.

Qualitative studies have shown that higher rates of grandparent caregiving are more prominent in First Nations families than in the general population (Fuller-Thomson & Minkler, 2005). Historically, elders have always been revered as being wise in their traditional knowledge and being ‘keepers of the cultural legacy’ (Fuller-Thomson &

Minkler, 2005, p: 333), which contributes to their elevated status within the community. Anthropological studies have indicated that the grandparent/grandchildren role in families was a part of the social context of many communities. Care provision by grandparents allowed mothers to provide for the family, while grandchildren also provided assistance to grandparents. Furthermore, it has been suggested that grandparents actively solicit the caregiving role of their grandchildren to enhance the child's exposure to traditional ways of knowing, as well as to assist during family crises (Fuller-Thomson & Minkler, 2005).

One story told to me was from an elder speaking about how important his grandfather was to him. RB was sent to Lejac residential school at a young age, but when his grandfather, JB, became ill, it was decided that his Indian name was to be given to his grandchild, RB. JB went to Lejac and removed RB to teach him his traditional knowledge before he passed away. Even though the child was gone from the community for three years, upon his return he went right back to eating traditional food and fondly remembers "not having to eat white man's food anymore." JB taught RB how to live off the land, where his Indian name came from, and the respect he must show to others. When JB passed away, RB started to drink heavily. It took him five years to get his life back in order and he is currently an avid trapper and hunter still living in the community and passing his knowledge along to his grandchildren. He believes that his grandfather was watching over him and helped him to get back to his roots and honour his culture. This story is a typical example of the bond between grandparent and grandchild that I heard so often during my fieldwork.

Aside from this story, it was obvious that the elders I spoke with during my research play a dominant role in the lives of their grandchildren. They teach them their traditional way of knowing: how to hunt, fish, trap, and gather; how to identify plants used for medicinal purposes; how to dry food for the winter months; and tell stories of days long past. They cook with the children and tell them how they used to prepare food “before the white man”, and show them how to survive on resources provided by the land alone. These skills are invaluable and this education is not one that can be learned within the four walls of a classroom. Along with the benefits the grandchildren gain from their elders, the relationship is also reciprocal. Children can help with chores around the household and run errands for the elders assisting in the general maintenance of the home. This relationship often forms a bond that lasts well into adulthood.

Elders in the community of Takla Landing are the core supporters of their rich culture. They have been keepers of the land for generations, have witnessed an incredible amount of change to their land and their way of life, and have lived experiences that no other generation will have to bear. For these reasons, it is essential to speak to these elders now, before they are gone, in order to hear their stories and to learn from them how to heal the family structure through culture and tradition. These elders have lived through considerable hardship and have proven their strength by reincorporating their traditional way of knowing in their grandchildren.

Intergenerational discontinuity in the community of Takla Landing is a result of colonial influences. However, elders often discussed the strength of the Takla Lake Band which is evident through the education the elders and community leaders provide their youth and the support systems they have in place for family structure. Incorporating

traditional knowledge with western education provides youth with a strong background in their own culture that they can pass on to future generations. Although this way of knowing was absent in the grandparents' youth, traditional knowledge education is invaluable to First Nations children, who are able to take pride in their culture and not feel inhibited by mainstream society.

Colonial Influences

Although the earliest recorded mining activity in the region was in 1925, there was limited impact on the lives of the Takla Lake Band until the construction of the British Columbia Railway line in the early 1960s. This transportation route opened up the interior of the territory, allowing mining and logging industries to excavate at increased rates from previous years. Elders recall the impact of the logging roads on their lives as a more immediate rather than gradual change.

“I think our diet changed about that time that the logging road come in. Cause people just start going back and forth- they don't care what they eat.” (TL-09)

Forestry and mining are now industries that are prominent throughout the territory, resulting in a permanent change to the lifestyle of the Takla Lake First Nation. Once industry came to the area, there was a considerable shift from a subsistence lifestyle to one that had been introduced to western ideologies. People began to participate in wage labour while traditional activities such as hunting, fishing, and trapping were relegated to days off work or during summer months. Band demographics also shifted; once a youthful population, many of the youth and young adults now move to Fort St. James or Prince George for education or employment opportunities.

For the elders I spoke with, diet and cultural change are synonymous with the encroachment of industry since the 1960s. When asked if their diet had changed over the past 40 years, they answered that, once industry came into their territory, they were exposed to a western diet and way of life. Elders in their late 70s and early 80s did not hesitate to discuss the impact on their diet from the opening of the Hudson's Bay Trading Post in their community. They gave examples of trading furs for western foods that were foreign to them:

“The Cornflakes Indians don't know (what that is), at first. In Babine, they were the first guys to eat the Cornflakes. At suppertime I guess, they come in, they put it (Cornflakes) all around their plate at suppertime then we just eat that with sugar, you know. They don't know they just put sugar in there and just dry!” (TL-12)

Elders in their mid 60s and early 70s were more likely to focus on the construction of roads, which brought in people with western ideologies, including alcohol, drugs and fried foods.

“We eat white man's food. Too much fries and onion rings! Drinking. My sons drink and when they act up, it bothers me.” (TL-01)

The younger generation, people in their 40s and 50s, who were often present during the interviews, often told me they noticed a significant change in their diet once they attended residential school.

“I went to LeJac in 1976 and that's when my food changed. I only ate traditional food until then. My parents brought me dried food but only about once a year – it was too far to travel.” (personal correspondence with RW)

Overall, there was not one single influence that was more often cited as being most responsible for a loss of traditional diet; the particular influence or factor emphasized was largely dependent on the elder's age and the colonial experiences that most affected them.

Although the elders were initially exposed to western influences, they still maintained their traditional diet the majority of the time and tried to educate their children on the importance of maintaining this diet. However, once their children went to residential school, the parents no longer had any input in how their children should be raised. The elders told me that although many of the children returned to their homes after the school season, they were already losing their ability to hunt, fish, and trap, and were accustomed to consuming a western diet that was poor in nutritional value.

It would have been insightful to interview the youth in the community to determine any changes they have noticed to their diet, to ascertain what they eat on a daily basis and to ask if they prefer traditional or western foods. Time and funding constraints, however, prevented me from doing this. Nevertheless, the elders I spoke with provided a considerable amount of information on their own views of the diet youth consumed. Elders often discussed how they were trying to teach the children their traditional ways, but the younger children especially were regarded as easily influenced by television and media.

“That’s what I’m afraid of. I try to teach them. They watch TV too much. McDonalds! Every time we go to town the kids want it.” (TL-07)

Many people raised concerns that their children would not retain knowledge about their own culture once the elders were gone and would continue to hunt, fish, and trap. Some elders I spoke with hoped that even one child in the family would keep their

traditional knowledge alive while being aware that movement to an urban centre for wage employment was often an obstacle to maintaining a traditional diet.

“I don’t know what’s gonna happen there ‘cause they don’t do like I do, they’re looking at me to do all that and they eat it. My youngest daughter, she might but she lives in Prince, she loves Indian food. When I’m not around maybe she’ll do things. She might feed her sisters!” (TL-14)

It was apparent from the elders that I interviewed that traditional foods are still a very significant part of their diet and lifestyle, despite the influences from both residential school and industrial development.

“I want to ... do my own things like go fishing, set net that’s how we live long time ago, we’re still the same, we never changed.” (TL-11)

Elders often referred to the amount of traditional food they consumed in percentage terms and said that their diet consisted of 50-75% of traditional foods while the remainder was western food. Although they are merging a western and traditional diet, this merger is more significant in the younger generations. The elders stated that their children consume traditional food when it is available or when they have time to hunt, fish, and trap, but their grandchildren are the ones that prefer a western diet that tends to be high in saturated fats and low in nutritional value.

Participant observation enabled me to see that there are particular measures being taken in Takla Landing to ensure that traditional ways of knowing in general, and traditional diet in particular, are passed on to future generations. Programs at the local school are initiated where the children learn how to set nets and traps from the elders. Community members knowledgeable in traditional activities are invited to speak to the children on an ongoing basis in order to pass this information along to the youth. They

have made significant progress in their efforts and some of the children who I spoke with at the school are very knowledgeable about traditions, such as the proper type of wood needed to smoke meat, the best time of year to set net for char, and the different types of wildlife that are available to them in their region. The way of life they are learning is crucial to ensuring that their culture lives on. Although the children may not be actively pursuing traditional activities on a regular basis, they are aware of the techniques and welcome the opportunity to go out on the land when time permits. These children are also aware of the importance of these activities to the elders and how the Takla Lake Band has survived off this knowledge since time immemorial.

The introduction of roads, a wage economy, and electronic communications therefore represents ongoing colonial influences at work that, from the point of view of the elders I spoke with, are central to changes in diet. Although white settlers first encroached on the Takla territory in the late 1800s, the Takla Lake Band was minimally impacted until transportation routes opened up to mine and log the region. As a result of easy access, industry increased and job opportunities arose for the Takla Lake Band members, providing an opportunity to participate in a wage economy. Despite the opportunities it provided on the surface, it soon became apparent that employment was only seasonal at best for untrained, low paying positions. At the same time, increased industrial activity played havoc with the migration patterns of wildlife and smaller animals were not reproducing at expected rates. The whole social structure of the Takla Lake First Nation was becoming strained due to rapid changes in their lifestyle.

Diet was very much a part of the rapid changes that occurred after the increase in industry. Prior to development, this region was isolated and contact was maintained on a

seasonal basis. People typically traveled on the trails and through the river systems to get supplies twice a year. Stories recount the month of April being a particularly busy time in Bulkley House, as many people traveled from Fort Connelly to Takla Landing to get spring/summer supplies from the Hudson's Bay Trading Post. Even though most of the foods acquired for furs were staples of flour, sugar, and tea, some foods obtained were unfamiliar to the trappers and hunters, thus beginning the introduction of western foods.

This research project identified a number of interesting social and cultural experiences of food security which enabled me to answer my research questions. In addition, I demonstrate the link between colonial influences and health outcomes and explain why this relationship is important. All respondents felt they had been negatively impacted by colonial influences that changed their diet from a healthy traditional diet to a western diet that resulted in poor health outcomes. Although most respondents still maintain a significant traditional diet, their access to traditional foods has decreased since the 1960s. During this time period, the BC Railway extended their rail line in the territory, transportation corridors opened up due to the logging and mining industry, and participation in a wage economy became the norm. Furthermore, the elders I spoke with are greatly concerned with future generations who are more likely to depend on a western diet. Factors that influence this choice are the power of media, relocation to complete a high school education, socio-economic conditions, and participation in a wage economy that restricts the time spent on the land.

In summary, sense of place, intergenerational discontinuity, and colonial influences are intertwined in the lives of the Takla Lake First Nation. The introduction of a wage economy and industrial development disrupted traditional food systems. Once

transportation corridors opened the interior, it became much easier to travel to and from neighbouring towns and cities. As a result, community members were exposed to a different way of life. Foods from the dominant society were introduced as far back as the opening of the Hudson's Bay Company in the 1950s, but a significant change was not seen until the B.C. Rail line was extended and mining and logging became more prominent. As a result, outsiders brought ways of knowing that were very different from the traditional lifestyle people in the territory were accustomed to. This colonial process is evident still today with new industrial development and influences of media on youth.

Residential school was another colonial process that impacted multiple generations of people in Takla Landing. The elders remember when they subsisted off the land alone and did not need to depend on foreign foods. Attendance in residential school altered that way of knowing and weakened their belief in their food system. It has taken many years to regain their traditional knowledge and, for this reason, it is important for the elders to ensure this knowledge is passed on to the younger generations to ensure their culture stays alive for future generations.

Finally, the Takla Lake Band's sense of place is one belief system that colonial processes thus far have not destroyed. The community members have a strong emotional bond to their territory and a deep connection to their land that is difficult for the western world to understand. The band is secure in the belief that their future health and survival is deeply tied to the health of the land and the traditional food that they procure from it.

~ CONCLUSION ~

Food security is a growing concern in Canada's First Nations population. However, the factors that contribute to food insecurity have largely been ignored by policy development (Riches, 2002). Poverty, access to healthy food choices, isolation, and industrial development of traditional territories are barriers to food security that First Nations people regularly face. This thesis demonstrated the need to hear from First Nations about their experiences of food security, including what members of the community perceive to be the foundations of food security and what they see to be the main reasons for these foundations being undermined.

In this concluding chapter, I will summarize the key findings of my research and draw connections to the general literature on food security. In addition, I will discuss the relevance of my research to the Takla Lake First Nation and how to better inform public health policy in the province of British Columbia. I will then identify gaps in public health policy and how these gaps can be addressed by drawing on knowledge translation and past history to assist in strengthening policy development. Finally, I will conclude with a short discussion of future research possibilities.

Summary of key findings

The three main themes prominent throughout my research are sense of place, intergeneration discontinuity, and colonial influences. The Takla Lake Band has a strong sense of place that colonization was unable to destroy. Development of the reserve system, attendance in residential school, and industrial development aimed at extinguishing the traditional way of life could not break the Takla Lake First Nation's spiritual connection to the land. Sense of place is not something that is instilled in the

minds of the elders alone but is seen throughout the many generations in the community. People of all ages take great pride in their community and their accomplishments. Band members speak fondly of the nature surrounding Takla Landing and how the environment provides for them. There is an abundance of wildlife, berries, and fish that have historically provided sustenance for the community and continue to do so today. Some people also plant gardens and have an assortment of root vegetables, while others have modern day caches that provide food for their family throughout the winter months. The use of land goes beyond basic survival. It is the connection to the land that actually sustains them. Use of the land provides an atmosphere to teach the children traditional knowledge, it is a safe place away from colonial influences to reconnect with the land, and it is also a place where many rites of passage take place.

Despite these many layers of place meaning and significance, members of the Takla Nation are strongly aware of outside influences that are attempting to reshape their landscape and way of living. Community elders and leaders are desperately trying to hold on to their belief systems in order to pass this knowledge onto their grandchildren. The elders in particular stress that the Takla people have lived in this territory since time immemorial and take pride in being the stewards of the land. The community has faced many obstacles to cultural continuity since contact and these obstacles have intensified since the 1960's when resource extraction and other industrial activities increased.

One of the major disruptions in the lives of the Takla Lake First Nation was mandatory attendance in residential school, forced relocation, and general cultural changes that resulted in intergenerational discontinuity. A large number of elders and their children from the Takla Lake Band attended residential school and the impacts of

dispossession, disempowerment, and a sense of being lost between two worlds resonate in the community today. This break in culture has impacted food security and the health of this population, and is one key consideration for public health policy.

The grandparents in Takla Landing have a very close bond to their grandchildren and are often their main caregivers and educators. Many of the grandparents attended residential school but, at that time, efforts to undermine First Nations culture were in their infancy. It was the next generation who were forced into the European school system by government policy. This generation is now considered to be the lost generation as they have struggled with the absence of their traditional knowledge, coupled with substance abuse, poverty, and other social issues that exacerbate their problems. Generational continuity is a very powerful means of passing along tradition, morals, and belief systems, but this was severely impeded as a result of the government's official policies of assimilation. More particularly, attendance in residential school was successful in severing generational ties, which had a dramatic impact on the social cohesion of families. Methods of food collection, preparation, and storage were no longer practiced, and activities such as hunting, trapping, and fishing were strongly discouraged by the colonial educators. Despite these colonial policies, the Takla Lake Band has remained strong and determined in their goal of translating traditional knowledge to the youth in the community while ensuring children are also competent in the western way of knowing. The merging of the two worlds is inevitable in today's society, but an emphasis on maintaining tradition through the education of children remains a high priority for elders and community leaders.

Sense of place and intergenerational discontinuity has left their mark on the traditional territory of the Takla Lake First Nation, but other colonial influences also continue to impact negatively on this territory and its people. Industrial development first began in this region in the early 1900s. It was not until the extension of the B.C. Rail line through the interior of the territory in the 1960s that the community of Takla Landing was significantly impacted. Transportation corridors were developed and outside influences introduced different types of foods, drugs, and alcohol that resulted in poor health outcomes. Participation in a wage economy became the norm as did the switch to store bought foods. Once outsiders began to work in the territory, local shops opened to service these workers and the Hudson's Bay Company established a Trading Post that also provided market foods. Furthermore, maintaining a traditional diet became more difficult due to time constraints. Once people became employed in the wage economy, their schedules did not allow flexible work hours to accommodate hunting and fishing trips at peak times of the year. People had to work while work was available resulting in traditional activities being postponed indefinitely. These negative impacts of industrial development continue today, however, community members are now organizing themselves through the consultation and accommodation process in order to protect the environment and to have their cultural beliefs recognized within the dominant society. Unlike large corporations, First Nations are not thinking for today alone, but are concerned for what will be left behind for future generations.

Sense of place, intergenerational discontinuity, and colonial influences are themes that were repeated time and again in the interviews I conducted with elders in Takla Landing. These themes are a good measure of the experiences of elders and are a part of

the colonial history of British Columbia. Initially, I presented my research proposal to the Chief and council, received their approval, and following the cultural norms of the community, spoke with the elders. In addition to being culturally appropriate to speak to the elders of the community first, it was clear that the elders were in the best position to share experiences that directly addressed my research questions. This research in no way represents the final word on the particular experiences of food security in Takla Landing. The next step would be to speak to adults and youth, those I termed the G2 and G3 generation, to learn about their experiences of changes in diet and their perceptions of what is causing these changes. An assessment of cross generational food security experiences would provide a better basis for working to improve diet in ways that are acceptable to the community.

Policy Implications

Food security typically falls within the purview of public health policy and practice (Lemchuk-Favel & Jock, 2004; Syme & Browne, 2002). Public health can be described as ‘the science and art of promoting health, preventing disease, prolonging life and improving quality of life through the organized efforts of society’ (BC First Nations Leadership Council, 2005). It has also been suggested that the public health system tends to ‘operate in the background’ (BC First Nations Leadership Council, 2005, p: 1) unless an emergency such as an outbreak of a virus pushes it to the forefront. However, public health plays many essential roles in everyday life such as access to safe foods, safe drinking water, and proper sanitation.

The practice of public health usually involves health care professionals working on a one-to-one basis to address acute health care problems on reserve while ignoring

broader determinants of health and the lingering effects of colonialism. As long as these issues remain unaddressed, 'all efforts in the areas of health promotion, health protection, and disease prevention are destined to fail.' (BC First Nations Leadership Council, 2005)

In order to implement successful food security policy, options must be created that respect the principles of self governance and that allow individual communities flexibility in the provision of public health services. In other words, in order for a public health strategy to be successful, First Nations must be consulted in the process of policy development and consideration must be given to the specific needs of each community and each region. Programs must be tailored for First Nations that engage the community and work with their principles first and foremost. Programs that focus on nutrition education require participation from the elders and the incorporation of their knowledge in program development and implementation. It is apparent that reliance on health care planners and providers who develop policy with a blanket approach has been ineffective, mainly due to differences between First Nations' beliefs and desires, and those of the dominant society.

For specific programs to be successful, the root problems of First Nations health must be considered. This cannot be achieved without the input from the people themselves. In this study, elders stated that the root problems of food security were from ongoing colonization and intergenerational discontinuity that were alienating younger generations from traditional diets. Elders believe that a positive change will occur when traditional principles are rebuilt.

The Assembly of First Nations suggest that, to be successful, health care delivery in First Nations' settings must adopt a collective approach to decision making,

intersectoral partnerships, and the incorporation of a determinants of health approach (BC First Nations Leadership Council, 2005). That is, each level of government must collaborate if First Nations are to receive public health programs that meet their particular health needs. Further, public health initiatives need to be expanded to include issues that impact health, such as the environment, housing, access to food, and poverty.

The First Nations population is the most disadvantaged group in Canada and their history of dispossession and disempowerment is still felt today. There are two factors that contribute to this problem. One is a continued lack of understanding of Aboriginal culture and, as a result, a lack of integration of public health policy into their communities. The second factor revolves around access to health services and lack of awareness about services that are either available or accessible (Wardman *et al.*, 2005). Like many First Nations communities, the Takla Lake First Nation is considered to be an isolated population and is impacted by limited access, not only to health services, but to all services in general.

There is a positive role for public health practice in the findings of this research. Effective interventions are required to improve the health of First Nations (Cass, 2004) and further research is needed prior to facilitating programs appropriate to First Nations populations (Ivers, 2004). Meaningful contribution to policy development would empower the people to develop a strategy to manage their specific health issues. Colonial history needs to be recognized as the basis of the problems that the Aboriginal population faces today. However, the danger of implementing food security programs developed by public health may be seen as yet another instance of colonialism. Without taking a

holistic approach to improving health outcomes and incorporating traditional knowledge in policy development, moving forward in public health will be an impossible task.

It is evident that the aim of residential schools was to ensure that First Nations were acculturated into mainstream society and traditional knowledge was eliminated from their way of life. Despite this history, the Takla Lake Band has made an incredible amount of progress reincorporating traditional knowledge into the lives of their children, but there is still a lot of work to be done to improve food security in general. These efforts will be successful based on the inner strength of the Takla Lake First Nation, who have persevered despite their colonial history. Throughout my many conversations with the elders in Takla Landing, never once did they suggest that an outsider should come into their community to assist in promoting health or nutrition. Those involved in planning and development of community health and nutrition programs need to be aware of this point of view. There is no attempt made to dissuade outsiders from educating the community on health and nutrition, but the education must begin with the service provider. These providers must consult with elders to establish specific needs in the community and how to engage appropriately with the community. The elders of Takla Landing believe that, in order for a project to be successful, it is necessary to draw from the resources that are available to them without outside influence.

Public health practice and nutrition education should be tailored to the social and cultural experiences of particular communities. Food security must be understood in a cultural and intergenerational context, and programs should seek involvement of elders and youth in the integration of western and traditional diet. The culture of the Takla Lake First Nation and the food choices of its members will continue to adapt, with or without

the involvement of health care professionals. An opportunity exists now to engage elders in the community to integrate food security initiatives in culturally meaningful and appropriate ways.

Incorporation of western and traditional ways of knowing is inevitable, and recognition of this is evident in the elder's teachings. Recipes now include a combination of western and traditional ingredients; fishing techniques are altered only by modernization of nets and government regulation against fishing weirs; and snares for trapping are still hand made but with store bought twine instead of moose sinew. Furthermore, the availability of freezers has made food preservation easier while smoke houses are still used to keep fish and meat flavourful. These examples are prime indicators that the elders have been able to maintain tradition while their culture evolves. This merging of the two worlds will make life for the grandchildren more fulfilling as they now have the opportunity to appreciate their cultural roots without fear of criticism.

Future Research Possibilities

Food security is of the utmost importance for the health of the Takla Lake First Nation. Barriers such as isolation, access to healthy foods, poverty, and media influences have aided in poor food choices, which in turn are reflected in poorer health outcomes.

Education is the most important tool to highlight this concern and, to this end, I believe that a nutrition program developed for the school in Takla Landing that includes teachings by the elders and adults, cooking classes of traditional foods, and general education on healthy food choices, would be of great benefit to the community as a whole. As I have stated previously, now is the time to incorporate the knowledge of the elders into the discussions today regarding the health of First Nations communities. It has

been argued that further study on the health of First Nations is not needed; now it is the time to act (Postl, 1997). The elders in Takla Landing today have witnessed significant changes in their lifetime but they will not be around forever. The elders to follow this group have lost a considerable amount of their traditional knowledge through attendance in residential school. Many have reincorporated this knowledge into their day to day lives, but it is the current group of elders who have lived traditionally, were forced to change to western ways of knowing, and have gone back to the traditional, healthy way of life. This group of people is essential in understanding the fundamentals of the community. In order for community health programs to meaningfully engage Aboriginal health concerns, dialogue must begin with the elders.

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Appendix A



#345-1460 6th Avenue, Prince George, B.C. V2L 3N2
Tel: (250) 564-9321, Fax: 250-564-9521

February 27, 2006

UNBC
3333 University Way
Prince George, B.C.
V2N 5z9

Re: Letter of Support

To Whom It May Concern:

Please be advised that Chief and Council of the Takla Lake First Nation are in support of Pamela Prior's M.A. Interdisciplinary thesis titled *Social and Cultural Experiences of Food Security in the Takla Nation: Informing Public Health*. She has reviewed her initial proposal with me and has advised that she will inform me of any relevant changes throughout her studies.

If you have any questions regarding this matter, please do not hesitate to contact me at 564-9321.

Sincerely,

A handwritten signature in black ink, appearing to read 'John Allan French'.

Chief John Allan French

Appendix C

UNIVERSITY OF NORTHERN BRITISH COLUMBIA

RESEARCH ETHICS BOARD

MEMORANDUM

To: Pamela Prior
CC: Neil Hanlon

From: Henry Harder, Chair
Research Ethics Board

Date: March 30, 2006

Re: E2006.0324.043
Social and Cultural Experiences of Food Security in the Takla Nation:
Informing Public Health

Thank you for submitting the above-noted research proposal to the Research Ethics Board. Your proposal has been approved.

Good luck with your research.

Sincerely,

Henry Harder

Appendix D

**Social and Cultural Experiences of Food Security in the Takla Nation: Informing
Public Health**

Interview Guide

Section A: Traditional food collection questions

In this section, I am going to ask you questions about collecting traditional foods

- A1. What would you consider to be a traditional diet?
- A2. What types of traditional food do you eat?
- A3. Where do you get your traditional foods?
Prompts: Keyoh/trapline
All over
- A4. During the past year, how many people in your household did the following:
- Hunt
 - Fish
 - Trap
 - Gather berries or plants
- A5. Did you personally:
- Hunt
 - Fish
 - Trap
 - Gather berries or plants
- A6. How often do you hunt, fish, trap, and/or gather berries or plants?
- A7. Have you noticed any change in the availability of traditional foods over the years?
- If yes,
- What type of change occurred?
- When did you first notice this change?

A8. If you are unable to get traditional food, can you tell me why?

Prompts: Transportation limitation

No hunter/fisherman in the household

Too expensive

No supplies

Section B: Traditional diet consumption

In this section, I am going to ask you questions about eating a traditional diet

B1. Which traditional foods do you think are good for your health?

B2. Which traditional foods do you think are not good for your health?

B3. Has your own traditional diet changed in the past 40 years?

B4. How do you think it has changed?

Prompts: Decrease in traditional diet

Increase in traditional diet

Consuming different species

B5. What do you think is going to happen to traditional foods in the future?

Prompts: Changes will continue

Changes will level off

Section C: Market Food Consumption

In this section, I am going to ask you questions about foods you buy

C1. Where do you buy most of your food?

Prompts: On reserve

Neighbouring town

C2. How often do you shop for groceries?

C3. What determines when you shop for groceries?

Prompts: Need

Income availability

When fresh food is available

C4. How do you find the variety of food available in the grocery store where you shop?

Section D: Background Questions

In this section, I am going to ask you questions about yourself

D1. Name: _____

D2. Age: _____

D3. Male ___ Female ___ (Check)

D4. How long have you lived in Takla Landing?

D5. Have you ever lived anywhere else?

If yes, where and for how long?

D6. How many people, including yourself, live in your household, including children and adults?

How many are 18 years or older?

How many are less than 18 years old?

D7. How many people living in your household are employed?

Full time

Part time or seasonal

Section E: Concluding Questions

E.1 Is there anything you would like to add that we haven't already touched on?