Building Knowledge and Capacity to Support Healthy Eating and Active Living in the Canadian Arctic

by

Bonnie Fournier

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Abstract

This qualitative single exploratory case study design, informed by Critical Social Theory (CST) (Habermas, 1982) and a participatory approach (Freire, 2000), explored how to build knowledge and capacity to support policy interventions that create conditions for healthy eating and active living in Aklavik, NT. The specific objectives of the study were: 1) to increase understanding of and capacity to support policy adoption and implementation and; 2) to develop and evaluate a culturally relevant policy tool kit that is community- driven and sustainable. Fourteen in-depth face-to-face individual interviews and two Wisdom Circles were conducted with local community decision makers, policy influencers and health practitioners.

The participants identified themselves as innovators in terms of policy to support healthy eating and active living and supported three policy approaches: (1) banning unhealthy foods in public buildings; (2) banning the sale of energy drinks in the community and; (3) providing programs to educate the community about how to make healthy food choices. A policy tool kit was developed in collaboration with local decision makers and policy influencers to support policy adoption and implementation. Adopting and implementing policy to support healthy eating and active living is a complex process especially when worldviews differ (Indigenous and Western). Understanding the local context and how worldviews differed supported a locally and culturally relevant form of policy development.

As a non-Indigenous researcher engaged in research with Indigenous peoples in the Canadian Arctic, a number of tensions arose as I entered the field to begin data collection. These tensions were a result of applying CST. Emancipatory and participatory theoretical and philosophical positions, such as CST, are supposed to expose Eurocentrism and offer possible paths for an ally working alongside Indigenous peoples.

However, seeing my effort in knowledge production from this light has revealed my own potential complicity in colonizing, and thus contributing to the continued suffering of Indigenous peoples. As I began to look for answers within CST, I found limitations in how to engage practically in a decolonizing process of the research study and myself. Therefore, I put forward an argument for a theoretical position known as Anticolonial Theory that recognizes the importance of a locally produced knowledge. If left on its own, CST can perpetuate negative stereotypes through exposing and redressing inequities if the focus does not include a local voice, and in the case of my study, an Indigenous voice.

A food policy story emerged during data collection. A story is a way of knowing that also captures the voice of local participants. Stories are also a way to communicate to policy makers, researchers and practitioners the results, successes, lessons learned and challenges of policy change that engage the reader in recognizing patterns similar to our own experiences. The policy processes of a local school food policy to address unhealthy eating are discussed. Dimensions of the RE-AIM framework are applied to evaluate the policy. A number of key activities facilitated the successful policy implementation process and the building of a critical mass to support healthy eating and active living in the community.

The study has significant potential to inform decision makers, researchers and practitioners of how to build knowledge and capacity to support healthy eating and active living in the Canadian Arctic offered by the community of Aklavik.

Preface

Some of the research conducted for this thesis forms part of a national project called Policy Opportunity Windows: Enhancing Research Uptake in Practice (POWER UP!) led by Dr. Kim Raine. POWER UP was funded by the Canadian Partnership Against Cancer (CPAC) through the Coalitions Linking Action & Science for Prevention (CLASP). The overall goal of POWER UP! was to provide leadership and support to develop, implement and evaluate obesity related policy (including healthy eating and physical activity) for chronic disease prevention. In the NT, various research and evaluation activities have occurred. The government of the NT, Department of Health and Social Services (DHSS) was the partner for the work in the NT and the NT Association of Communities administered and coordinated the activities. The study for my dissertation is a part of the POWER UP! activities but extends the work, focusing on an isolated community with food security challenges. I received a CIHR Training Grant in Population Intervention for Chronic Disease Prevention: A Pan-Canadian Program (Grant # 53893).

I was responsible for the data collection and analysis as well as the manuscript composition. Dr. Kaysi Kushner, Dr. Kim Raine and Dr. Nancy Gibson contributed to manuscript edits. In addition, two co-authors from Aklavik, NT where the study took place, have also contributed to the manuscript composition. Chapter 2 of this thesis has been published by Fournier, B. & Pascal, J. Titled: *Tensions of Utilizing CST with Indigenous peoples: Exploring the Colonizer that Lurks Within.* The paper has been submitted to *Critical Studies in Education*. Chapter 3 of this thesis has been authored by Fournier, B., Kushner, K. & Raine, K. Titled: *Building Knowledge and Capacity to Support Healthy Eating and Active Living Policies in the Canadian Arctic.* The paper has not yet been submitted. Chapter 4 of this thesis has been published by Fournier, B., IIllasiak, V., Kushner, K. & Raine, K. Titled: *Policy Implementation: Applying the RE-AIM Framework to Evaluate a School Based Food Policy in the Canadian Arctic*. The paper has been submitted to *Health Promotion International*.

Dedication

Reflecting on this past year, I feel much outrage that so many wonderful people are not with us anymore. People who were inspirational, caring, loving and healing for so many, not just their immediate families. They were truly making a positive difference in the world. In their memory, I dedicate this thesis to all those loved who have now transitioned.

I dedicate this thesis to my mother Georgina Carol Fournier (August 18, 1946- March 5, 1995) who showed me that it is possible to change your life for the better. Your impact with so many of the children you took in, fostered and helped to heal has inspired me to work with children- even to start a non-profit organization to support vulnerable children in Uganda. The children you cared for are so thankful they had you in their lives.

I dedicate this thesis to my beautiful friend Melanie Laureen McIntosh (March 12, 1965 – December 15, 2016) who was an inspiration and a role model for me. Thank you for helping me to be a better person through how you chose to live your life – with passion and love for your work as a nurse, as a friend, as a wife and as a loving mother. Thank you for being such a bright light and healing energy during your life to so many people. I love you and miss you my funny friend.

I also dedicate this thesis to my father-in-law Vincent Opio Lukone (December 29, 1956 - November 26, 2016) who had such a kind gentle heart and touched everyone deeply who knew him. You are so greatly missed not just by your family but by the entire country of Uganda. Your work ethic and the way you connected with people was a true inspiration. Your grandchildren will know you as a humble and loving man who had great plans to give back to his community. We will do our best to follow in your footsteps.

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I owe a huge debt of gratitude to my supervisors Dr. Kim Raine, Dr. Kaysi Kushner, and Dr. Nancy Gibson. To Kim, your work has inspired me from the very first article I read – Nutrition Education for Social Change: Critical Perspectives. I knew back in 2002 entering my Masters program in Health Promotion that we would be a good match as supervisor and supervisee although it took almost 15 years before that hope was realized. I am so thankful for all the coffee chats we have had over the years and particularly the one where you accepted to supervise me. Thank you, thank you thank you! I learned so many important lessons working with you over the years and know that I cannot list them all in this short acknowledgement section. My greatest lesson from you

has been learning how to work with people, how to work with communities, how to work with students, and how to work with teams. To Kaysi, thank you for your support and guidance during my doctoral studies. You always provided me with direct, clear and very useful guidance to help move me along and to develop my skills as a researcher and scholar. In the future, I know I will be a better graduate supervisor because of the way you were with me. Ever grateful! To Nancy, I will never forget our car rides from Yellowknife to Behchoko. Our chats were always interesting, informative and filled with lots of laughs. Thank you for introducing me to the North, to the community of Behchoko, and for giving me a good wake up call. Sometimes the best lessons are the ones that are the most difficult to deal with in the moment.

Thank you to all my participants, my co-researcher Janeta Pascal, my co-author Velma Illsiak, Senior Administrative Officer Fred Beherens, Mayor Charlie Furlong, Ethel Blake and Dr. Kami Kondola. You all had such big and unique roles to play in my study.

I also want to express a deep thanks to all my fellow graduate students, friends and faculty whom I met along my journey and had an impact on my life. Nina, you gave your ear and your scholarly advice from the beginning of my PhD journey. Helping me to understand poststructuralism and Foucault was a major feat! Your guidance over the years has been very much appreciated.

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Table of Contents

Chapter 1: Introduction- On the Horizon, Our Journey Together 1

Orientation 1

Unpacking My Suitcase 1

Getting Ready to Enter the Field: Epistemology, Ontology, Axiology 4

Compass Direction- North 10

Aground on the Study's Focus 10

Literature Review of Policy Interventions 12

Circumpolar Policy Scan 12

Possible Policy Areas 14

The Study 15

Methodology 18

Trustworthiness and Verification 20

Dissertation Format 23

Paper #1: Tensions of Utilizing CST with Indigenous peoples: Exploring the Colonizer that Lurks Within 24

Paper #2: Building Knowledge and Capacity to Support Healthy Eating and Active Living Policies in the Canadian Arctic 25

Paper #3: Policy Implementation: Applying the RE-AIM Framework to Evaluate a School Based Food Policy in the Canadian Arctic 25

References 27

Chapter 2: Tensions of Utilizing CST with Indigenous peoples: Exploring the Colonizer that Lurks Within 36

Abstract 36

Introduction 37

Eurocentric Research Practices 38

Negative Health and Social Issues 38

Liberation and Guilt 40

Scientific Racism 40

Critical Social Theory In Action 42

Critical Social Theory 42

Applying CST 43

An Anticolonial Approach 46

Anticolonial Underpinnings 47

Walking With: Conversation 1 49

Colonizer-Perpetrator: A Decolonization of Self 51

Walking With: Conversation 2 52

Colonizer- Ally 55

Walking With: Conversation 3 56

Continued Learning 58

Concluding Comments 60

References 62

Chapter 3: Building Knowledge and Capacity to Support Healthy Eating and Active Living Policies in the Canadian Arctic. 68

Abstract 68

Introduction 70

Healthy Eating and Active Living Policy Adoption and Implementation 70

Purpose of the Study 72

Study Methods 73

Design 73

Setting 74

Sample 75

Data Collection Procedures 75

In-depth face-to-face individual interviews 77

Direct Observation 77

Secondary Sources 77

Policy Readiness Tool 77

Wisdom Circles 78

Data Analysis 79

Findings and Discussion 80

Objective I: To increase understanding and support for policy adoption and implementation 80

Assessing Policy Readiness 81

Potential Policies 82

Barriers to policy adoption and implementation 83

Objective II: Collaborative Tool Kit Intervention Development 85

Wisdom Circle Recommendation #1: Educating the Community 86

Wisdom Circle Recommendation #2: Making Healthy Choices Available 88

Strengths and Limitations 92

Conclusion 92

References 94

Chapter 4: Policy Implementation: Applying the RE-AIM Framework to Evaluate a School Based Food Policy in the Canadian Arctic 99

Abstract 99

Introduction 100

Complexities of Policy Implementation 101

RE-AIM Framework 102

Current Study 105

Methods 105

Participants 105

Procedure and Interviews 105

Data Analysis 107

The Policy Story Background 107

Moose Kerr School 109

Results 110

Policy Formulation and Adoption 110

Policy Implementation 112

Sustaining the Policy 116

Working with community partners 116

Working with the neighbourhood store manager 117

Enforcing the policy during evening hours 118

Acquiring a healthy food vending machine 118

Contextual Considerations 119

Current Challenges and Future Opportunities 120

Evaluating School Food Policy Using the Adapted RE-AIM Framework 121

Reach "R" 121

Effectiveness "E" 121

Adoption "A" 123

Implementation "I" 123

Maintenance "M" 125

Discussion 127

Limitations 130

Concluding Thoughts 131

References 132

Chapter 5: Reflections 136

Swapping my Suitcase for a Backpack 136

Policy or Education? 139

Policy as Prevention 141

Critical Social Theory 142

Summary of Findings 144

Strengths and Limitations of the Study 147

Directions for Future Research 149

Concluding Thoughts 150

References 152

Bibliography 154

Appendix A. Information Letter and Consent Form Interviews 175

Appendix B. Information Letter and Consent Form Wisdom Circle 179

Appendix C. Interview Guide Sample Questions 183

Appendix D. Moose Kerr School Junk Food Policy 187

Appendix E. Detailed Methodology 189

Appendix F. Data Management for Interviews and Wisdom Circles 205

Appendix G. Tool Kit 221

List of Tables

Table 1: RE-AIM Dimensions and Key Aspects

Table 2: Research Questions and Corresponding Article

List of Figures

Figure 1: Steps to Policy Action

Chapter 1: On the Horizon, Our Journey Together

Orientation

My purpose in this chapter is to take you on a journey through my development as an emerging social science and health researcher within the context of my PhD study. In particular, I introduce the genesis of a study, unpack my philosophical stance, discuss the literature that has informed my thinking, and describe my methodological orientation. Finally, I reflect on the study's trustworthiness by articulating several strategies I undertook to ensure confidence in the data and overall findings.

Unpacking My Suitcase

"Unpacking my suitcase" is a symbolic reference to unpacking who and how I am as an academic, nurse, friend, wife, and mother. Drawing on memory work around my Baccalaureate Degree in Nursing, my Masters research in Uganda[1] and now my PhD in the Canadian Arctic, I am reminded of what motivates me to action – injustice of any kind, but especially social injustice. Digging through my collection of memories, I found many artifacts. Archaeologist Michael Shanks (1998) holds "that the artifact is itself a multiplicity. Its identity is multiple. It is not just one thing. …we come to an object in relationships with it, through using it, perceiving it, referring to it, talking of it, feeling it as something" (p. 11). Relationally, my artifacts helped me to dig back into the past, capture a moment in time, and relate it to the present, where I currently find myself at the end of a long journey in academic studies.

Reassembling my memories in such a way creates a discourse about my past, continues to influence my view of myself, and has the power to trigger certain

[1] In 2003, I explored the experiences of Ugandan nurses caring for individuals with HIV and AIDS utilizing Participatory Action Research and Photovoice

emotions— namely anger, and at the root sadness; sadness because there is so much unnecessary suffering in the world. However, in this recollection I also have memories of how unselfish people can be in the face of having very little material resources; how resiliency lives within so many people, especially those who have experienced the greatest suffering. So while I reassembled my artifacts and now write about them, I am grateful for all the people who have allowed me to share in their lives during my career as a nurse and the various research projects I have conducted in Uganda and Northwest Territories (NT). My artifacts, each on its own, without the recognition of their collective multiplicity, would not have had the same significance, but by placing them in juxtaposition, I am aware of how they make real the discursive presence of the past, and the power it currently holds within me. This power is not a bad corrupting power. It is a power that does not let me forget my motivation. The feeling of injustice and realizing my privilege as a white academic has motivated me to continue to work with people who have experienced and are experiencing injustices of all kinds.

Before going further on this journey together, I need to make it clear that I have an interest—at once personal, political, and academic— in conducting research. This interest is shaped by experiences I have had while working as a nurse with individuals in Canada—with those who would be considered on the margins of society,[2] and in Uganda with children affected by war and HIV illness and AIDS. These experiences have shaped my interest in addressing health inequities locally and globally. Health inequities are unnecessary, unfair and preventable disparities in health (Whitehead, 1992). In Canadian Indigenous populations, inequities have been linked to colonization manifested as high

[2] Certain individuals are constructed as belonging to the social fabric and others are left on the margins constructed as Other. Other in this light means an exclusionary process (Canales, 2000).

rates of unemployment, low literacy and educational attainment, food insecurity, loss of language and culture, and social exclusion, to name only a few (Adelson, 2005; Shah, 2004; MacMillan, MacMillan, Offord, & Dingle, 1996; Tjepkema, 2002; Young, 2003). Reducing health inequities requires a critical analysis of social injustices such as "the unequal relations of power and opportunity that result in privileges for some and disadvantages for others" (Kirkham & Browne, 2006, p. 330). I am driven to facilitate moving this analysis to advocacy that can motivate political action. However, I am aware that "the practice of speaking for others is often born of a desire for mastery, to privilege oneself as the one who more correctly understands the truth about another's situation" (Alcoff, 1991, p.29). This is an indictment I wish to avoid, although I am also admitting that saying this may not always lead to social-political action.

It is through an awareness of 'who I am' that I may help myself avoid such indictments. As a privileged, white, Western educated nursing scholar I recognize that my range of vision "...includes everything that can be seen from a particular vantage point" (Gadamer, 2000, p. 302) and therefore has limitations, despite my intentions. This limited range of vision is what Gadamer refers to as the 'horizon', ontologically and epistemologically speaking. Reflexively I am aware, on the one hand, that I am constructing knowledge in a particular way and thus it is partial and incomplete. On the other hand, I am open to the 'fusion of horizons' (Gadamer, 2000), so I may move beyond the familiar and bring that which is strange into my horizon, thus creating new perspectives. In this sense, I am open to new experiences and understandings. As I work for change in addressing inequities in Canada and abroad, I recognize that unlearning privilege is an ongoing process that likely cannot ever be completed (Schick, 2000).

Research in the social sciences field is not done as an objective project, something that falls to us from the sky and then decide to do. The research we choose to do mirrors the subjectivity of our being. Being aware that I have an effect on the process and outcome of the research is based on the premise that "knowledge cannot be separated from the knower" (Steedman, 1991, p.53). As I enter into this reflexive space, I am reminded that reflexivity can "signal more than inspection of potential sources of bias. It can point to the fact that the inquirer is part of the setting, context, and social phenomenon he or she seeks to understand" (Schwandt, 2007, p. 260). I include myself, the subject, in this piece.

Following Kincheloe's (2012) argument that "inquiry begins with researchers drawing upon their own experiences" (p.53), I examine "the experiences that have brought me to this study" in different sections of this dissertation (Farren 2000, p. 35). To Farren I add that I also examine the philosophical stance that has evolved from conducting research and examining what I believe about how knowledge is created, my beliefs and my values/ethics. Tremblay and Richard (2011) argue that the first imperative of unpacking complexity is to be reflexive such that they are able to account for the influence of their own history, subjectivity and position on the construction and interpretation of knowledge. In so doing, I am unpacking my 'suitcase' and sharing my philosophical stance. However, the unpacking process is an ongoing process as I re-pack in new ways and unpack again. This process refers to positionality, which is determined by where one stands in relation to the "other", and these positions can shift throughout a study (Banks, 1998). Now that I have unpacked part of my suitcase, we can continue on our walk together.

Getting Ready to Enter the Field: Epistemology, Ontology, Axiology

As I embark on this journey of writing my PhD dissertation, it is important that I reflect on own epistemological, ontological, and axiological perspectives. As a social science and health researcher, I am confronted with choices about how I want to live as a social inquirer. Unpacking my philosophical perspective provides a compass to help guide my research. Epistemology and ontology are branches of philosophy while axiology relates to ethics and values. According to Denzin and Lincoln (2002), epistemological inquiry looks at the relationship between the knower and the knowledge, and asks "how do I know the world?" (p. 183). Ontology is the study of "being" (Crotty, 2007, p. 10), and "raises basic questions about the nature of reality and the nature of the human being in the world" (Denzin & Lincoln, 2002, p. 183). In reference to axiology, Lather (1991) believes that no research is neutral and states that "All researchers construct their objects of inquiry out of the materials their culture provides and values play a central role in this linguistically, ideologically and historically embedded project we call science" (p. 43).

According to Hitchcock and Hughes (1995), ontological assumptions give rise to epistemological assumptions; these in turn give rise to methodological considerations that give rise to methods chosen, issues of instrumentation and data collection. Additionally, Heron and Reason (1997) argue that our values are the guiding reason for our action and articulating our values as a basis for making judgments about the research topic and research approach are a demonstration of axiological skill. Heron and Reason further offer that through understanding and awareness of your own values, and transparently recognizing and articulating these as part of the research process, scholars strengthen their research. As I consider these perspectives about epistemology, ontology and axiology, I find it challenging to locate myself in any one 'camp' or 'paradigm' as I

would say my approach is more eclectic in my academic work. Being educated in a Western knowledge system, I have leaned over to in this direction only to find many times that I was off balance, discovering that my spiritual self is often ignored. As I then leaned over to non-Western knowledge systems (Indigenous) to satisfy some missing pieces of my self, I would again find myself unbalanced, as, after all, I am non-Indigenous.

For academic purposes, I would fit myself within the three paradigms of social constructivism, critical realism, and critical social theory (CST) corresponding to my beliefs around epistemology, ontology and axiology respectively. First, social constructivism is where knowledge is seen as developing through the use of symbols and language, largely unconscious, and made concrete through expressive forms such as music, art, image, or ritual, which is manifested culturally (Merriam, Caffarella, & Baumgartner, 2007; Vygotsky, 1978). A social constructivist lens offers a way to understand how knowledge is constructed (epistemology), gives meaning in relation to the social and cultural aspects of the experience to that individual, and acknowledges that each individual may view the experience differently. Thus the social constructivist view sees that disease can exist as an independent reality and be defined in multiple ways. For example, a disease such as HIV might be thought of as a deadly disease by some at one point in time, but with continued empirical investigation, increased knowledge and changes of attitudes toward it over time it might be seen as being manageable. However, such a change in social construction makes no claims about its ontological status.

Constructing the meaning of the experience differently suggests there is no one reality of an experience (ontology); rather a variety of understandings of what was heard and seen exists (Kanuka & Anderson, 1999) and allows for the “construction of

contextual knowledge or local knowledge" (Willis & Jost, 2007, p. 99). This is my point of departure with social constructivism. I am not advocating for a relativist ontology in which a multiplicity of produced accounts can each claim legitimacy, thus concluding that 1. nothing can ever be known for definite, or that 2. there are multiple realities, none of which has precedence over the other in terms of claims to represent "the" truth about social phenomena. Rather, I take a middle ground, which leads me to critical realism wherein I find a balance between 1. what is reported as being a true and faithful interpretation of the knowable and independent reality and 2. my own construction and interpretation of the findings. An important characteristic of critical realism is that it maintains a strong emphasis on ontology.

Critical realism is a philosophy of science founded on the stratification of social reality into three domains of the actual (events and actions that are more likely to be observed), the real (underlying powers, tendencies, and structures whether exercised or not that cause events in the actual domain), and the empirical (fallible human perceptions and experiences, including science) (Bhaskar, 1998). As a consequence, the first and foremost tenet of critical realism is that the world (both social and physical) exists independently of what we think about it. However, we can only engage with the reality of the world around us in the way we understand it—which includes the ways our cultures have taught us to make sense of both social and physical reality. Humanity's fallibility of knowledge, guarantees the possibility of getting things wrong. This possibility can be more pronounced when a researcher is from one culture and the participants are from another. For example, the colonial impact on the food system in Canada's Arctic region has affected the availability, accessibility and affordability of healthy food. As someone who did not experience the profound and multidimensional impacts of colonialism, what

I must take as truth is what my participants say to be true for *them at this time*. I have no other choice, not just due to differences in our cultural and worldviews, but also because of the fallibility of human knowledge, in this case, for both me and my participants. Colonialism is a real thing that exists objectively—it happened in the past and has undeniable present and ongoing ramifications. It has the force of a truth about physical reality even though it is and was a truth of social reality. I can believe that colonialism has had an impact on the Canadian Arctic's food system, but because I don't have experiential knowledge of it and its nuances through time including into the future, I can be wrong about it.

My axiological orientation is underpinned by CST (Habermas, 1982; Freire, 2000), for which research is intended to serve the possibility of social and individual emancipation (Denzin & Lincoln, 2000), thus being able to transform oppressive structures through a problem posing dialogue in which the possibility of empowerment occurs and action is possible. Additionally, the foundation of my research study is guided by the tenets of relationality, responsibility, reciprocity, reflexivity, and respect (Wilson, 2008). As I entered into this research, I recognize that I am entering into relationships alongside, rather than in front of or behind, my participants and co-researchers, which corresponds to a deep responsibility to honour and respect each relationship. Wilson and Wilson (1998) assert that "each individual is responsible for his or her own actions, but not in isolation. It is this web of relationships with each individual in the center that stretches out in all directions (p. 157). It is this web that brings together reciprocity and reflexivity. Stewart-Harawira (2005) explains reciprocity in the following way:

> Reciprocity recognizes that nothing occurs without a corresponding action. Reciprocity means deeply acknowledging the gifts of the other and acting on

> this recognition in ways, which deeply honour the other. At its deepest and most fundamental level, reciprocity requires that we acknowledge and honour the 'being' of the other. (p. 156).

Makokis (2001) believes that it is important in research with Indigenous populations to be guided by the 'natural laws': the natural laws of love/kindness, honesty, sharing, and determination/strength. Finally, I also value a participatory stance in which knowing is valuable in so far as it contributes to balancing/reconciling the competing values of autonomy, cooperation and hierarchy in a culture, since each of these ideas, enacted to its extreme, has negative effects on groups as well as individuals (Denzin & Lincoln, 2000). In keeping with CST's axiological stance, I feel the participants' perspectives on policy within the context of supporting healthy eating and active living have accorded me ways of knowing and understanding the complexity around adopting and implementing policy in an Indigenous community.

To the above discussion I must also add my recognition that at the core of my being, underpinning all of my academic philosophical stances, is a belief in a higher power – I call this higher power God. I refer to myself as spiritual as I do not follow a particular religion, but have faith in God. My spiritual being is important to acknowledge in my dissertation, as being in the field and working alongside others I am constantly reminded of a greater purpose. When we connect with another human being from a deeply spiritual place, we see God in the other and within ourselves. When this happens our perspective about the world shifts from an intellectual place to a moral space (Taylor, 1991) where injustice wields us into action. While my PhD can be considered a selfish individual pursuit, the project also occupied a moral and spiritual space which should be reflected in the journey. Embarking on my PhD journey with Indigenous peoples, I am

reminded of Moreton-Robinson and Walter's (2009) stance that Indigenous women's epistemology flows from "a world where one cannot know everything, that everything cannot be known and that there are knowledges beyond human understanding" (p. 6). This quote reminds me to be humble and to admit that my dissertation will always be incomplete, as Lincoln (1995) highlights "any texts are always partial and incomplete; socially, culturally, historically, racially, and sexually located" (p. 280).

Compass Direction- North

My interest in Canada's food system, specifically in Indigenous communities, was catalyzed by a Facebook page called Feeding My Family, which provided individuals a voice to show the world how exorbitant the cost of food was in their communities. Learning about these issues through reading posts and seeing photographs of the price of food lead me to explore food security and food sovereignty as social justice issues. How could individuals in Canada's North eat healthy when food at their local store was so expensive? I learned firsthand how Nutrition North – the Federal Government's system of subsidizing healthy food was not working. Stories were endless and pictures on the Facebook page showed how prices of the same food or staple item varied significantly from one small community to another in Canada's North. Subsidies were reported as not being passed down to the consumer; instead the stores were profiting. An Auditor General investigation in 2015 revealed the same findings and was critical of the government for not injecting monitoring and accountability strategies into the Nutrition North Program. Currently the program is under review by the Liberal government. This bricolage led me to begin to put together pieces of a food insecurity and chronic disease puzzle, thus leading to this dissertation.

Aground on the Study's Focus

Chronic diseases[3] account for the number one cause of death in the world (World Health Organization [WHO], 2013). There are an estimated 35 million deaths from chronic disease that account for 60% of all global deaths annually. Chronic diseases such as cancer, diabetes, obesity and heart disease are major public health issues and are the leading causes of death and disability in Canada (Health Canada, 2011). In Indigenous populations, rates of chronic disease are much higher than among non-Indigenous peoples (Health Canada, 2002; Northwest Territories Department of Health and Social Services, 2002). Obesity is on the rise in Canadian Indigenous populations, and the prevalence is reported to be 10-30% higher than in non-Indigenous populations (Gotay, 2013). Obesity results from a complex interaction of biological, environmental, and behavioural factors and conditions (Swinburn et al, 2011). Focusing on the conditions that promote healthy eating and active living are key upstream strategies in preventing obesity.

My research project was conceived from a current realization that policy and policy interventions can help to address the underlying social and economic drivers of unhealthy eating and physical inactivity that lead to obesity and associated non-communicable diseases (NCDs). However, such interventions do not emerge from policy that is imposed on individuals or communities, but rather from policy that is community driven. Policy approaches have the potential to create physical and social environments that promote healthy eating and active living. Raphael (2013) points out that public policy "is primarily concerned with whether a problem is recognized as being a societal rather than an individual problem" (p.227). Policy change at any level does not always

[3] Chronic diseases are also known as noncommunicable diseases (NCDs), which generally means they are not passed from person to person (WHO, 2013). I will be using these two terms interchangeably.

come about from strong scientific evidence, mobilizing a number of communities, or convincing a few decision makers, but rather results from multiple actions in many domains bringing together scientific evidence and political power (Freudenberg & Tsui, 2014). Even after a policy is developed, policy adoption and implementation remain a challenge for many complex and context specific reasons (Olstad, Downs, Raine, Berry & McCargar, 2011).

Literature Review of Policy Interventions

Circumpolar Policy Scan

Lessons learned from the global context offer important considerations, which may help inform policy interventions within Northern Canada. The state of knowledge regarding policy interventions to support healthy eating and active living in the circumpolar regions (Russia, Norway, Sweden, Finland, USA (Alaska), Greenland and Canada (North of 60) is not well published. Being able to apply lessons learned from these Indigenous regions can also help inform policy within the NT. A scan of the literature found limited peer-reviewed and grey literature publications (e.g. websites, government and organizational reports) regarding policies that either promote healthy eating or active living within Indigenous populations of the circumpolar regions. Several circumpolar countries (Sweden, Norway, Finland, USA) have adopted and implemented policies to prevent obesity, however, the policies are not specifically focused on their Indigenous communities in the Arctic and sub-Arctic regions. Arctic Indigenous populations include: Saami of Finland, Sweden, Norway and Northwest Russia; Inuit and Yupik in Alaska; Inuvialuit and Inuit in Canada; and Inuit in Greenland.

Recently, Russia has been discussing a soda tax in response to sanctions against Russia from foreign governments, rather than as a measure to prevent obesity (RT News,

2014). While the impetus for the tax may not be as critical as the adoption or implementation of such a policy, it is unclear if the tax would include the circumpolar regions of Russia. Finland and Sweden have mandatory child nutrition programs and education programs to learn healthy habits in school (Storcksdieck genannt Bonsmann, 2014). In Norway, imported soft drinks and confectionary are subject to a 7.14% Value Added Tax (VAT) which is not directly related to preventing obesity (to influence eating behaviours), but related to wider environmental and social issues such as promoting domestic food and beverage production (Caraher & Cowburn, 2005). In Alaska, there are several national policies that target healthy eating and active living in schools such as Play Every Day and Healthy Futures (Alaska Department of Health and Social Services [ADHSS], n.d.). However, there are challenges with the implementation of these policies and as noted by The Trust for America's Health (2014) these polices are limited due to resource constraints (human and financial) and a lack of enforcement mechanisms built into the policy design. In addition, Alaska has a food policy council that works to improve food security and ultimately food governance. (ADHSS, n.d). Greenland's national health policy targets the whole population including the majority of Inuit (Bjerregaard & Young, 2008). However, specific recommendations for action are not described (Bjerregaard & Young), which limits policy implementation within their respective jurisdictions.

Possible Policy Areas

Food security in Canada's North is a key policy area. The Government of Nunavut, while working on a poverty reduction strategy, determined through community consultation that a comprehensive food security strategy was needed (Nunavut Food Security Coalition, 2014). One of the strategies focuses on policy and legislation and

specifically protecting and promoting traditional livelihoods. One example of such a policy is the Nunavut Harvester Support Program, which was established in 1993 by the NT Government and the Tungavik Federation of Nunavut to promote wildlife harvesting. The program provides financial assistance to Inuit to acquire equipment (snowmobiles, boasts, all-terrain vehicles) for traditional harvesting activities (Nunavut Tunngavik Inc, 2015). However, there is a paucity of research evaluating the impact at the household level to determine how much of the harvested food people actually consume (Council of Canadian Academes, 2014). Transforming the food system in Canada's North through a policy approach will require a food sovereignty lens.

Policies to support food system transformation are about access and control of the food supply, food security and food sovereignty, which will ultimately help to prevent chronic disease. The difference between food security and food sovereignty lies in control of the food system. Food sovereignty involves a broader vision than food security. When a community enjoys food sovereignty, they control the production, processing, distribution, selection, and consumption of food. Specifically, food sovereignty is asserting communities' power to democratically manage productive food system resources such as land, water and seeds, and to engage in trade on their own terms rather than being subjected to speculation through international commodity markets (Wittman, 2011). Food security, on the other hand, is about availability, accessibility, acceptability, adequacy, and action; additionally, country food harvesting and sharing is also considered important in Indigenous communities (Power, 2008). Food insecurity is a social justice issue. Food security, as defined at the World Food Summit in 1996, exists when "all people, at all times, have physical and economic access to safe and nutritious food, which meets dietary needs and food preferences, in sufficient quantity to sustain an active and

healthy lifestyle" (FAO, 1996, p. 1). Based on this definition, food security is a human rights issue.

Transforming the food system in Canada's North to food sovereignty requires a health equity and social justice strategy to tackle not only the built environment but also poverty. Nurses are in a unique position in the community to understand the health implications of food insecurity. Reutter and Kushner (2010) contend that nurses inherently have a clear mandate to work towards changing the underlying social conditions that produce health inequities and to do so, suggest policy advocacy as a way forward. Muntaner (2012) suggests that nurses can support campaigns and social movements that advocate for progressive taxation, the right to food security and safe affordable housing. However, nurses in the NT are challenged to do so as a result of the legacy of colonialism, which in turn, impacts nurses' ability to facilitate change to reduce poverty. Nurses working in the NT, who often are from the South or are non-Indigenous, require knowledge about colonization in order to work to their full scope of practice, which would include poverty reduction interventions.

The Study

The overall purpose of my study was to build knowledge and capacity to support policy interventions that create conditions for healthy eating and active living in Aklavik, NT. The specific objectives of the study were: 1) to increase understanding of and capacity to support policy adoption and implementation and; 2) to develop and evaluate a culturally relevant policy tool kit that is community driven and sustainable. The research was approached with several questions in mind that were divided into two phases of the research process, which correspond with the two objectives:

Phase I Questions

- What do community leaders see as the role of policy?
- What barriers do community leaders believe exist to policy adoption and implementation?
- What policies do they see have the greatest potential for adoption and implementation in their communities?
- What are the stories from leaders about their experiences in the policy process related to healthy eating and active living?

Phase II Questions

- What are the elements of a community driven tool kit?
- What are the facilitators and barriers to developing a tool kit?
- Did the development of a tool kit aid in policy adoption and implementation and if so, how?

My study was part of a large national project called Policy Opportunity Windows: Enhancing Research Uptake in Practice (POWER UP!). It was funded by the Canadian Partnership Against Cancer (CPAC) through the Coalitions Linking Action & Science for Prevention (CLASP). CLASP works to create supportive community policies and practices so individuals can make the healthier choice, the easier choice (Keen, 2014). The overall goal of POWER UP! was to provide leadership and support to develop, implement and evaluate obesity related policy (including healthy eating and physical activity) for chronic disease prevention. In the NT, various research and evaluation activities have occurred associated with POWER UP. Pre- and post-surveys regarding knowledge, beliefs and attitudes of policies and programs for obesity prevention have been administered with the general public and decision makers in NT. The government of the NT, Department of Health and Social Services (DHSS) was the partner for the work

in the NT and the NT Association of Communities administered and coordinated the activities. Although the study for my dissertation is a part of the POWER UP! activities, it also extends the work by focusing on an isolated community with food security challenges.

In my role as a research assistant for POWER UP! I had the opportunity at the beginning of the project, in June 2014, to travel to Yellowknife for a 2-day meeting to begin to build relationships with the NT team and to discuss the project activities. Since that time, I have been to the NT on several occasions for various reasons. In August 2014, I had the opportunity to travel to Behchoko, a small community, 100 km from Yellowknife, where I spent five days working with a youth group to raise awareness of youth issues through art and media. Additionally, I have been teaching seven day intensive courses on health promotion and community development at Aurora College for the Community Health Representative (CHR) certificate program. The CHRs come from various communities across the NT and are Indigenous leaders who develop and provide health programming in their respective communities. I have been building relationships and learning about various health issues in isolated communities through the CHR's.

The field research for my study began in September 2015 and included three site visits to Aklavik. The first two field visits were five days in duration while the third field visit took place over two days. During the first field visit, I worked with the Mayor and Senior Administrative Officer to recruit a co-researcher. The co-researcher and I then recruited individuals, obtained consent (see Appendix A and B) and conducted interviews for my study using an interview guide (see Appendix C). During the second field visit in November 2015, we also conducted interviews in addition to facilitating a Wisdom Circle with only decision makers to provide guidance on developing a culturally relevant tool

kit. During the third field visit in August 2016, we presented our findings back to decision makers and to the community.

Methodology

A qualitative single exploratory case study design was used, informed by CST (Habermas, 1982) and a participatory approach (Freire, 2000). Case study can draw upon many disciplines (Yin, 1984) and is conducive to a research approach that is pragmatic (see Appendix E for a more detailed methodology). The researcher in a case study becomes a bricoloeur; "inventor in the best sense of the word - taking what works from existing methodologies, incorporating what works and is relevant from worldview practices and protocols, and developing a new paradigm to serve the needs of the people" (Denzin & Lincoln, 2002, p. 1061). Case study research involves the study of an issue explored through one or more cases within a bounded setting (Creswell, 2007) and allows researchers to retain the holistic and meaningful characteristics of real life events (Yin, 2003).

Since policy adoption and implementation to support healthy eating and active living is not well understood in Indigenous communities, a single exploratory case study design was used. The goal of this single exploratory case was to gain an understanding of a phenomenon (policy adoption and implementation) experienced by particular individuals (community decision makers, policy champions and health practitioners) in a particular context (Northern Indigenous community). Therefore, the case is defined as the process of building knowledge and capacity with local decision makers toward policy adoption and implementation of healthy eating and active living policies. According to Willis (2007), single case study research "provides a nuanced, empirically rich, holistic account of specific phenomena" (p. 14). It was within the boundary of the natural setting

(an Indigenous community) that allowed the research team to understand policy adoption and implementation as expressed by community decision makers, policy influencers and health practitioners. As a result, a deeper understanding of the barriers and facilitators of policy adoption and implementation emerged. Additionally, a case study design enabled the exploration of decision makers, policy influencers and health practitioners' perceptions of healthy eating and active living policies in their community. Yin (2014) noted that the case study design is appropriate for exploring a phenomenon (case) within its natural setting; consequently, this design aligned with the purpose of this study. A qualitative methodology facilitated an in-depth understanding of policy adoption and implementation through the data collection and analysis procedures (Merriam, 2009).

CST was initially utilized to inform a methodology that would best guide the study. While CST was useful as a starting point, I remained open to discover other findings and did not try to fit all results into this one conceptual framework. I did not want to become "so focused on what I am looking for that I overlook the things I actually find" (Patchett, 2011, p. 246). As I critically reflected on the emancipatory and liberatory aspects of CST, I began to question if it was the most appropriate lens for a non-Indigenous researcher (Fournier, 2017). Thus, Anticolonial theory emerged as an appropriate lens to include in the study. The applications of Anticolonial theory and the practical underpinnings of liberatory and emancipatory approaches of CST to the analysis of the topic provided an initial understanding to the case.

CST, "motivated by an interest in the emancipation of those who are oppressed is informed by a critique of domination, and is driven by a goal of liberation" (Mullaly, 1997, p. 108), while Anticolonial theory (Dei, 2000) ensures the voice of individuals who are oppressed are at the forefront. Habermas' redefinition of CST as critical knowledge,

conceptualized as knowledge that enabled human beings to emancipate themselves from forms of domination through self-reflection, and Freire's critical approach to freedom through the notion of 'conscientization' or critical consciousness provided the practical approach in the study. According to Freire (2000) conscientization "refers to learning to perceive social, political, and economic contradictions and to take action against the oppressive elements of reality" (preface). The emphasis of CST on the problems associated with colonization, and an Anticolonial focus on the continued colonization of Indigenous peoples combined with Freire's conscientization process are particularly relevant to a study with Indigenous peoples and Indigenous peoples' issues. Utilizing both CST and Anticolonial theory supported a culturally appropriate methodology for a non-Indigenous researcher with Indigenous peoples.

Trustworthiness and Verification

In qualitative research, a key issue is the trustworthiness of the study (Lincoln & Guba, 1985). Trustworthiness refers to the degree of confidence one has in the data and overall findings. Confidence involves not only looking back at the end of the study to assess trustworthiness, but also verification strategies that address incremental and self-correcting processes as the study evolves (Morse, Barrett, Mayan, Olson & Spiers, 2002). I used Lincoln and Guba's model of trustworthiness and Morse et al.'s (2002) verification strategies attending to the research processes and activities in the moment, continuously checking my decisions and self-correcting as necessary to enhance trustworthiness of my study.

Lincoln and Guba's (1985) model describes trustworthiness as the study's transferability, dependability, confirmability, and credibility. Transferability refers to the likelihood that the findings have meaning in other similar situations, dependability refers

to the researcher's responsibility to ensure that the research process is auditable and documented accounting for variability over time, confirmability refers to the extent to which the process of collecting data and coming to conclusions is clear and can be followed by other researchers and credibility refers to the extent to which the findings accurately describe and capture the phenomenon studied (Lincoln & Guba, 1985).

I used multiple strategies to ensure trustworthiness in this study including:

1) Developing a detailed case description of the setting and interactions aimed to provide the readers with enough information for a "vicarious experience", allowing for naturalistic generalizations to be drawn (Stake, 1995). Providing a thick description enhanced the transferability and dependability of the study.

2) Documenting an audit trail throughout the research process involved writing methodological, reflective, and theoretical memos, along with general insights, questions and confusions that arose. These memos served to facilitate the iterative process between the data and findings that included a self-correcting strategy. Stopping to modify what I was doing or thinking by asking questions, remaining open to new insights and a willingness to change what I was doing or thinking also enhanced the trustworthiness. This strategy not only contributed to the confirmability of the research but also to dependability.

3) Member checking involves the activity of seeking the reactions of participants after data analysis to determine whether or not the researcher's interpretations are accurate with their various perceptions (Minkler, Brechwich-Vàsquez, Warner, Steussey, & Facente, 2006). The preliminary findings were forwarded to all participants for review and comment. Within a constructivist paradigm, the goal was not to determine if the research's interpretation was "correct" –which would be challenging because the

interpretation integrates multiple perspectives—but rather to provide an opportunity to explore the tensions and complexities of the proposed interpretations (Charmaz, 2006; Lauckner, 2010). Member checking has a positive effect in reducing the threat of reactivity, and researcher and respondent bias (Padgett, 1998), which enhances the confirmability of the study.

4) I consulted with a member of my dissertation committee and the local co-researcher. Findings were discussed with a member of my dissertation committee in order to deepen first level coding creation and to raise additional questions for consideration. Finally, I engaged in debriefing with my local co-researcher, which was a way to reduce researcher bias and to better understand the findings. These forms of triangulation improved the confirmability of this study.

5) I triangulated data sources to elicit and examine a range of viewpoints from multiple individuals, including decision makers within the various governing agencies in the community, policy influencers and health practitioners. I used the process of data triangulation to seek convergence in the data and to corroborate or refute emerging categories and themes (Creswell & Miller, 2000). By giving voice to multiple perspectives within the study and using a variety of methods the credibility, dependability, and confirmability of this study were strengthened (Lauckner, 2010).

6) I triangulated methodologically, defined as using "multiple methods to confirm the emerging findings" (Merriam, 1998, pg. 204). A variety of data collection methods were used in the study, including individual interviews, Wisdom Circle group discussions, direct observations, and document reviews to enhance the confirmability and credibility of the study.

7) I engaged in researcher reflexivity throughout the conduct of the study. During data collection, I kept a field journal and wrote memos including reactions while on-site with the teams, as well as notes after each day of data collection. In addition, I wrote theoretical and analytical memos during the data analysis phase that captured emerging interpretations. These field notes and memos promoted my own reflexivity and thus added to the credibility of the study and allowed for a process of self-correcting to take place such as with the tensions of utilizing CST as a non-Indigenous researcher working with Indigenous peoples.

Dissertation Format

The dissertation is presented in a paper format, following University of Alberta Faculty of Graduate Studies and Research guidelines. Five 'chapters' are included: this introductory chapter, followed by three papers written and formatted for publication, and a concluding chapter. The first paper is a reflexive piece that explores the tensions utilizing CST as a non-Indigenous researcher conducting research with Indigenous people. The second paper highlights how to build knowledge and capacity to support policy interventions for healthy eating and active living within an Indigenous community, and the third paper articulates a successful policy story to support healthy eating and active living that emerged during data collection. The first paper has been formatted and submitted for review to the journal, *Critical Studies in Education*. The second paper has been formatted and submitted for review to the *Journal Health Promotion International*. The third paper has not yet been submitted for review. The initial draft of each of the three papers included in this dissertation was written entirely and independently by me. After drafting each of the papers, I invited my two co-supervisors, Dr. Kaysi Kushner and Dr. Kim Raine to contribute to any of the publishable papers and become co-authors. I

also invited the local co-researcher from Aklavik, NT to contribute as co-author of the first paper. The second paper is co-authored with Dr. Kaysi Kushner and Dr. Kim Raine. The third paper is co-authored with the principal of the local school in Aklavik, NT along with Dr. Kaysi Kushner and Dr. Kim Raine. The dissertation concludes with my personal reflections, the strengths and limitations of the study and views to future research in supporting healthy eating and active living in Canada's Arctic. As such, the voice of each chapter varies: the introduction and conclusion written in first person as 'I' reflect my sole authorship and the three papers written as 'we' reflect co-authorship.

Paper #1: Tensions of Utilizing CST with Indigenous peoples: Exploring the Colonizer that Lurks Within

In the first paper, I take a critical look at myself as a non-Indigenous researcher working in an Indigenous community. Within this context, I address three purposes in the paper. First, I bring to light the possible tensions created by utilizing CST as a non-Indigenous researcher working in an Indigenous community. Second, I put forward an argument for the potential of a theoretical position known as Anticolonial, where interrogating your own "…positionality as both colonizer-perpetrator and colonizer-ally" is the starting point (Regan, 2010). Third, I highlight a number of conversations that occurred during the field work between the co-researcher and myself, and between a group of community leaders and myself. I begin the discussion by outlining a number of Eurocentric discourses that manifest in social sciences research and construct Indigenous peoples as inferior to non-Indigenous peoples, all the while maintaining multiple forms of power in society. The discussion of selected discourses provides a foundation for the remainder of the paper.

Paper #2: Building Knowledge and Capacity to Support Healthy Eating and Active Living Policies in the Canadian Arctic

In the second paper, I provide an overview of the research process and the major study findings that focused on how to build knowledge and capacity to support policy interventions for healthy eating and active living within an Indigenous community. An exploratory qualitative case study was used along with a participatory approach (Freire, 2000). Fourteen in-depth face-to-face interviews were conducted with decision makers, policy influencers and health practitioners to increase understanding and support for policy adoption and implementation. Assessing policy readiness included exploring policies that have the greatest potential for adoption and implementation and understanding the perceived barriers to policy adoption and implementation of the potential policies. Building on what was learned in the interviews, two Wisdom Circles were conducted with decision makers, policy influencers and health practitioners to develop and evaluate a culturally relevant and community-driven policy tool kit. The purpose of developing the tool kit was to build knowledge and capacity to support policy interventions. The paper demonstrates how reclaiming and reforming 'policy' according to a local Indigenous worldview is empowering.

Paper #3: Policy Implementation: Applying the Adapted RE-AIM Framework to Evaluate a School Based Food Policy in the Canadian Arctic

In the third paper, I articulate a successful policy story from the local K-12 school in Aklavik about the implementation of a food policy. The policy story emerged during the interviews with decision makers as a successful example of a policy that was adopted and implemented within the school setting. The paper specifically answers one of my research questions: What are the stories from leaders about their experiences in the policy

process related supporting healthy eating and active living? In telling the policy story, the adapted RE-AIM framework is utilized to evaluate several aspects of the implementation and maintenance process of the food policy. Through the identification of the school characteristics and contextual factors that influenced the development, adoption, implementation, and maintenance of the food policy, lessons learned are provided and recommendations are suggested for successful policy implementation in other Northern Canadian Indigenous contexts that are facing similar concerns.

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Chapter 2: Tensions of Utilizing Critical Social Theory with Indigenous peoples: Exploring the Colonizer that Lurks Within[4]

Abstract

In this paper, we address three purposes. First, we aim to bring to light the possible tensions created by utilizing Critical Social Theory (CST) as a non-Indigenous researcher working in an Indigenous community. Second, we put forward an argument for a theoretical position known as Anticolonial, where interrogating your own "…positionality as both colonizer-perpetrator and colonizer-ally" is the starting point (Regan, 2010). Third, we highlight a number of conversations that occurred between the local co-researcher (second author), a group of community leaders and myself (first author) during the fieldwork of a research study. The latter will serve to illustrate the practical application of an Anticolonial discursive framework. In this manner, we strive to inspire practical action in terms of scholarly research with Indigenous Peoples, rather than only to carry out a theoretical or exploratory exercise.

Keywords: Critical Social Theory, Anticolonial Theory, Colonizer-Ally, Colonizer-Perpetrator

[4] Authored by: Fournier, B. & Pascal, J.

Introduction

As a non-Indigenous researcher engaged in research with Indigenous peoples in the Canadian Arctic, a number of tensions arose as I (first author) entered the field to begin data collection. These tensions were a result of applying Critical Social Theory (CST). As an orientation to research, CST is "grounded in an activist desire to fight oppression, injustice, and bigotry and create a fairer, more compassionate world" (Brookfield, 2005, p. 10). CST initially seemed appropriate for my study with Indigenous peoples. The research goal was clear: to build knowledge and capacity among community leaders to support policy interventions that create conditions for healthy eating and active living in Indigenous communities located in the Northwest Territories (NT). I saw my research serving a greater good of redressing health inequities, specifically regarding food security and sovereignty in Northern Canada, that Indigenous peoples have experienced through continued colonization. I believed the outcome of my research would serve "a specific emancipatory goal for an oppressed community" (Smith, 1999, p. 2) and I thought I was going to fight oppression and bring to light the continued colonization of Gwich'in and Inuvialuit peoples through the food system. Peeling back some of the many layers of this insight, my positionality as a white, university educated woman with idealist research goals, began to look more and more like Eurocentrism. Yet, I did not want to believe it, as I unconsciously embodied "serving a greater good" (Smith, 1999, p. 2) ideology. Theoretical and philosophical positions, such as CST, that are emancipatory and participatory, are supposed to expose Eurocentrism and offer possible paths for an ally working alongside Indigenous peoples. However, seeing my effort in knowledge production from this light has revealed my own potential complicity in colonizing, and thus contributing to the continued suffering of Indigenous peoples. As I

began to look for answers within CST, I found limitations in how to engage practically in a decolonizing process of the research study and myself.

In this paper, we address three purposes. First, we aim to bring to light the possible tensions created by utilizing CST as a non-Indigenous researcher working in an Indigenous community. Second, we put forward an argument for a theoretical position known as Anticolonial, where interrogating your own "…positionality as both colonizer-perpetrator and colonizer-ally" is the starting point (Regan, 2010). Third, we highlight a number of conversations that occurred during the fieldwork of a research study between the local co-researcher (co-author), a group of community leaders and myself. The latter will serve to illustrate the practical application of an Anticolonial approach to knowledge production. In this manner, we strive to inspire practical action in terms of scholarly research with Indigenous peoples, rather than only to carry out a theoretical or exploratory exercise. We begin the discussion by outlining selected Eurocentric discourses that manifest in social sciences research and construct Indigenous peoples as inferior to non-Indigenous peoples, all the while maintaining multiple forms of power in society. We do not suggest that these particular discourses are definitive, but rather, we are concerned with the implications and outcomes of these discourses regarding health and healing of Indigenous peoples. The discussion of selected discourses provides a foundation for the remainder of the paper.

Eurocentric Research Practices

Negative Health and Social Issues

Eurocentric research was imposed on Indigenous peoples' lives and communities with little regard for Indigenous knowledges and worldviews; Many Indigenous scholars are cautious of research practices based on Eurocentrism (Smith, 1999). Often, research

of this nature emphasizes negative health and social issues, creating stereotypes and supporting an “us versus them” perspective. Such research is often framed within a bio-medical model of risk that focuses on genetics or lifestyle choice, and on health as a commodity that individuals can access through the market or the health system (Scott-Samuel, 1979). This dominant view negates the influence of the social determinants of health and the current colonial legacy of residential schools, assimilation and the dispossession of land that Indigenous peoples have experienced across the globe including Canada. Ignoring such matters illustrates a continuing Eurocentrism and thus colludes to extend the colonist and imperialist projects. Additionally, there are huge gaps in health data, demonstrating the inequity in health research in Indigenous populations compared to non-Indigenous populations (King, Smith & Gracey, 2009). The health data that are available – epidemiological statistics that are typically interpreted to characterize Indigenous peoples as “sick, disorganized” (O’Neil, Reading and Leader 1998, p.231) and dependent, can be used to justify “continued marginalization, paternalism and dependence” (O’Neil, Reading & Leader, p. 231). Said another way, representing Indigenous people as “sick, disorganized” through research is a manifestation of colonial biopower (Foucault, 2003), which supports Foucault’s (1973) claim that statistics are a “technique of power or power/knowledge” (p. 140). Specifically, statistics that are produced are not objective observations about the social world, but social interventions that facilitate and legitimate the disciplining of both the “civilized” citizen and the Indigenous “barbarian” (Foucault 2003, p. 195). The obesity discourse in Indigenous populations is an example of biopower, where “how to eat and how to move – essentially how to live “— dominates (Raile & Lafrance 2009, p. 76). Ultimately, Indigenous peoples are seen as causing themselves ill health, indicating that they are in need of

expert and specifically external control. Discourses from this perspective paint a picture of an entire population solely responsible for their health or their ill health, without consideration of structural influences such as racism, colonialism or assimilation. Portrayals of Indigenous sickness also act as instruments for the social construction of Indigenous identity (O'Neil, Reading & Leader 1998), which contribute to racism and the ongoing colonial processes. The continued colonial processes manifest as inadequate funding to equip reserves with health care professionals, supplies, services and medicines (Makokis, 2016).

Liberation and Guilt

Within the Eurocentric research agenda, Indigenous peoples are also constructed as a group that needs saving or liberation. This construction can be found in Kipling's 1899 poem "White Man's Burden", which included the duty of the superior race to take responsibility for "new-caught, sullen peoples, half-devil and half-child" with the submissions that it was the superior race's mission to uplift or improve the natives (p. 12). White Man's Burden goes hand in hand with atoning for "White Man's Guilt", a phenomenon that is characterized by discomforting feelings that white people can have when they look at and evaluate their perceived inaction (Baldwin, 1965) with respect to discrimination and inequality. This guilt manifests as a desire to "liberate" the Other out of guilt for the atrocities that have occurred (Crosby, 2004; Iyer, Leach & Crosby, 2003). Steele (2006) posits that white guilt is:

> The vacuum of moral authority that comes from simply knowing that one's race is associated with racism. Whites must acknowledge historical racism to show themselves redeemed of it (p. 24).

Scientific Racism

Scientific racism emerged with the ideas of Enlightenment and was influenced by Darwin's theory of evolution (McCaskell, 2005). The scientific classification system of animals was applied to humans, creating notions of white racial superiority. Thus, scientific racism classified human populations into physically discrete human races that were asserted to be superior or inferior (Dalal, 2002). Position in the hierarchy related to particular desirable qualities such as intelligence or physical strength, or undesirable qualities such as non-white skin colour or a lack of monotheistic belief, which were eventually advanced through scientific scholarship. With respect to Indigenous peoples, the imperialists established themselves as the superior race and the 'natives' as inferior, allowing many Europeans to understand difference in narcissistic ways (Farr, 2009). The legacy of scientific racism continues to dominate our daily lives and can be seen in the biomedical health discourse, where individuals check off a box when they enter the health care system to identify their "race". Checking off a racial box can also be found in many job applications, often cloaked in the language of affirmative action, revealing that the notion of racial groups has been mainstreamed as social categories. Scientific racism based in biology is not only used to prove the existence of race, but also to maintain social order (Castagna & Dei, 2000). The social order is based in a hierarchy that systematically orders racial groups with European cultures over other cultures. In this hierarchy, Indigenous peoples are framed as inferior, and research conducted in this light reinforces dominant white-framed beliefs. Research outcomes often pass as "universal", "objective", and therefore present a "race neutral" exposition. Constructing knowledge from these various discourses has had negative consequences for Indigenous peoples. Redressing inequities that occur as a result of the prevalence of these particular discourses in research is needed.

Critical Social Theory In Action

The impetus for this paper came from a number of tensions I experienced as a non-Indigenous researcher utilizing CST as I conducted my fieldwork. I first briefly review the roots of CST and how it has been taken up in social sciences research within a liberatory discourse. Second, I explore the tensions, that arose during fieldwork for my study, related to mindfully maintaining a full awareness of worldview and its place in planning and conducting collaborative and participatory research, and to ensuring Indigenous worldviews are indeed relied upon to express the truths of their circumstances and preferred ways forward.

Critical Social Theory

In the Social Sciences, much of the work on CST is derived from readings of Habermas (Mill, Allen & Morrow, 2000) and Freire (1970). Habermas redefined CST as knowledge that is critical, conceptualized as knowledge that allows people to emancipate themselves from forms of domination through self-reflection (Thomas, 2009). Paulo Freire introduced a practical and critical approach to liberation through a process of ‘conscientization’. Freire (1970) referred to conscientization as “learning to perceive social, political, and economic contradictions, and to take action against the oppressive elements of reality” (p. 16). In so doing, the practical goal is to make individuals conscious of the conditions that limit their freedom. It then follows that with awareness there is the potential for societal change.

CST is useful to explain the shortcomings of a current reality with respect to the worldviews of those oppressed in that reality and of the analyzers themselves, “identify the actors to change it, and provide both clear norms for criticism and achievable practical goals for social transformation” (Horkheimer, 1995, p.21). In other words, CST

is not only a critical but also an emancipatory methodological approach, or a solution-orientated approach. Guba and Lincoln (2000) state that the ontological stance of Critical Social Theory is "historical realism in which reality is shaped by the social, political, cultural, economic, ethnic, and gender values crystallized over time, and therefore there is no one objective reality" (p.110). The epistemological view of CST is that knowledge is generated and interpreted through structural and historical insights (Guba & Lincoln, 2000). CST encourages a critique that is both critically reflective of people's everyday lives and practices, and historically grounded in how those practices have been developed and supported within social systems (Leonardo, 2004). Consequently, critique becomes emancipatory when it includes the ability to explore without restrictions (Dant, 2003).

Applying CST

As a non-Indigenous researcher engaged in research with Indigenous peoples, I found that applying CST posed particular tensions as I entered the field to begin data collection. In this section I outline two key tensions that emerged during my fieldwork, and suggest Anticolonial theory as a buttress when the researcher is non-Indigenous.

These tensions began to crystalize for me through several conversations with Janeta (co-author), the co-researcher from the community that is the setting for the study. Janeta, who comes from a mix of Gwich'in and Inuvialuit blood lines, has grown up in this isolated community of 600 people. At 24 years, Janeta works part time for a program in the community that supports youth offenders not to re-offend, and that is engaged in planning crime prevention strategies for youth. She was recruited through the Senior Administrative Officer from the community and was highly recommended. Janeta agreed to be part of the research as a co-researcher, conducting interviews, analyzing the data, co-facilitating and leading decision maker discussion meetings, and adding her voice to

this paper. She was paid for her time during data collection by the first author and money flowed through her employer. During my field visits, Janeta and I would debrief after every interview, sharing our thoughts and impressions of what was said and not said. I began to wonder what it means to have emancipatory and liberatory goals as a non-Indigenous researcher as Janeta and I engaged in continued conversations.

Tension 1- Emancipation and Liberation Goals

Utilizing CST with emancipatory and liberatory goals began to feel uneasy as I realized the potential for yet another Eurocentric project about Indigenous peoples. Reflecting on this tension, a number of questions arise that draw attention to the potential Eurocentric ideology embedded within. What does it mean to Indigenous peoples to have a non-Indigenous researcher come with emancipation and liberation ideas? Do I become complicit in recolonizing Indigenous peoples? Am I, in fact, subconsciously requiring Indigenous people to adopt the very culture that created their oppression? Emancipation on whose terms, and according to whose values? Can CST create conditions for liberation? Or can a non-Indigenous researcher help to create conditions for liberation? To these last two questions, in particular, my answer, after much confusion and reflection, is affirmative. Through grass-roots practices, applying political pressure, encouraging economic development and continued social development, liberation can emerge. However, reflecting on these questions, I turn to a quote by Smith (1999), "…But belief in the ideal that benefiting mankind is indeed a primary outcome of scientific research is as much a reflection of ideology as it is of academic training…" (p.2) and I find I am much more cautious of such aims.

Emancipation and liberation, in Habermasian terms consciousness raising. But what exactly is the epistemology of consciousness raising? It is thought that through

consciousness raising, the development of self-awareness and knowledge facilitates the examination of episteme, that is, the way in which one comes to know and who produces knowledge (Habermas, 1972). While a useful strategy, consciousness raising facilitated by a non-Indigenous researcher with Indigenous peoples can become oppressive to Indigenous peoples as worldviews, definitions of knowledges, truths, realities, and being are disparate. During one conversation between Janeta and myself, I asked her what she thought about having a white person, a non-Indigenous person, come to her community to conduct research. Janeta's response surprised me. She was uncomfortable with me using the label "white person". In her mind it was derogatory and said it would be just like if someone called her an Eskimo[5]. I realized in that moment how academic language (in this case, the label "white people" and its intent to divide humanity by race or color) can be oppressive if used in circles that do not subscribe to such ideas. It occurred to me that consciousness raising for emancipatory and liberatory aims was not needed. Instead, a decolonization of myself was required.

Tension 2- Silence

As I began to think about where to start regarding my own decolonization, I looked for answers within CST but found only silence. Habermas has been charged with being silent on imperialism and post/Anticolonial theory (Allen, 2016). Said (1978) charged CST with being "stunningly silent on racist theory, anti-imperialist resistance, and oppositional practice" (p.278). Allen (2016) questions "how can critical theory be truly critical if it remains committed to an imperialist metanarrative, that is, if it has not yet been decolonized?" Allen argues for a decolonization of critical theory if it is to be

[5] It is believed that the name Eskimo was given by European explorers and was said to mean "eater of raw meat" (Skinner & Masuda, 2016). Eskimo can be considered derogatory by Indigenous peoples and they prefer to be identified by the language they speak such as Inuvialuit or Gwich'in.

transformed. To remedy this tension on silence, I suggest that CST, when applied with Indigenous peoples in research, needs to be buttressed with an Anticolonial approach that recognizes the importance of a locally produced knowledge. If left on its own, CST can perpetuate negative stereotypes through exposing and redressing inequities if the focus does not include a local voice, and in the case of my study, an Indigenous voice - as was articulated earlier in the paper, through Eurocentric discourses.

An Anticolonial Approach

An Anticolonial approach recognizes the importance of locally produced knowledge emanating from cultural history and daily human experiences and social interactions (Dei, 2000). The approach focuses attention on the continued colonization of Indigenous peoples, and the subtle meanings accorded to the very words 'emancipation' and 'liberation'. Underpinning an Anticolonial approach is an Anticolonial discursive framework that is anchored in an epistemology of the colonized and in the Indigenous sense of collective and common colonial consciousness (Dei, 2000). Applying an Anticolonial discursive framework can act as a counter-resistance to the ever present and unconscious Eurocentric ways of a non-Indigenous researcher. Questioning my own "…positionality as both colonizer-perpetrator and colonizer-ally" is the starting point (Regan, 2010, p. 10) for this section. I argue for the application of an Anticolonial approach to strengthen research conducted with Indigenous peoples, in my case about Indigenous health. We highlight a number of conversations between myself and Janeta to provide insight into the ways we interacted and the learning that took place between ourselves. These conversations start with "walking with" as most of our conversations took place as we walked together from one building to the next or from one interview to the next.

My contention is that insights provided by using an Anticolonial approach can be brought into dialogue with CST. Embracing this view suggests a working to complement each theoretical perspective by "furnishing the colonized psyche with the potential to defy, weaken and oppose colonial hegemonic dogma as local, imposed, oppressive with Eurocentric motives" (Kincheloe & Steinberg, 2008, p.136). In this way, I seek to ensure not only that my analysis is comprehensive, but also that the research with Indigenous peoples redresses the ever present health inequities.

I begin by providing a background to an Anticolonial discursive framework by outlining the theoretical underpinnings and consider the implications of conducting research informed by an Anticolonial theory. In particular, I argue that Anticolonial theory, created and expressed by Indigenous scholars, offers a worldview that provides an understanding of the colonizing potential of research. We integrate a number of accounts of critical moments in the field research to expose the Eurocentrism that was embedded in the current research study. The voice shifts from first author to co-author and from co-author to first author. Examining my own positionality as colonizer-perpetrator and colonizer-ally facilitates a decolonization process of myself. I utilize the notion of "speaking from" to acknowledge that we all speak from a social location (Pettman, 1992) and that I consider my own socio-historical and professional locations through a decolonization process (Browne, Syme & Varcoe, 2005). I continue to integrate Anticolonial theory in examining my own positionality through a decolonization process.

Anticolonial Underpinnings

An Anticolonial discursive framework puts forward issues, concerns and social practices emerging from colonial organization, structures and relations and their impacts (Dei, 2000). Anticolonialism uses Indigenous knowledges as a starting place and

“requires that the knowledge producer be aware of the historical and institutional structures and contexts and the implications of how knowledge is produced” (Dei, 2000 p. 117). Dei, Hall and Rosenberg (2000) suggest that power and discourse are not managed merely by the ‘colonizer’.

> Discursive agency and power of resistance reside in and among colonized and marginalized groups…Anti-colonial theorizing arises out of alternative, oppositional paradigms, which are in turn based on Indigenous concepts and analytical systems and cultural frames of reference (p. 7).

Dei and Kempf (2006) argue:

> Within colonial relations there lies the individual and collective agency to resist subordination and domination. Agency emerges from the power of knowing and knowledge, and it is this that gives meaning to social and political action. Through the power and politics of resistance, the colonized are able to understand their social reality and work to change their condition. (p.15).

Resistance can take on many forms. An Anticolonial discursive framework shifts the focus away from the traditional emphasis of centering Anticolonial struggle on violent resistance and instead introduces other forms of resistance such as dialogue and knowledge production by Indigenous people. Additionally, an Anticolonial discursive framework can be utilized as a point of resistance for Indigenous knowledge in spaces where western knowledge is privileged, particularly/including social science research.

Drawing on Frantz Fanon’s work (1952), Anticolonial theory for Indigenous peoples proposes that through struggle and conflict the colonized come to be rid of the "arsenal of complexes" driven into the core of their being through the colonial process (Coulthard, 2014, p.15). Conflict and struggle must pose a foundational challenge to

colonial power, otherwise the outcome at best will be "white liberty and white justice; that is, values secreted by [their] masters" (Fanon, 1952, p.25). Resistance comes from "our own on-the-ground strategies of freedom" which involves "some form of critical individual and collective self-recognition on the part of Indigenous peoples" (Coulthard, 2014, p. 15).

Fanon's work applied to the current study suggests that addressing health inequities related to food insecurity faced by Indigenous peoples in Northern Canada can be pursued through food sovereignty. Food sovereignty is "the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems" (Via Campensina, 2015, para. 3). Colonization had a great impact on Indigenous peoples' diets and changed what they ate. This realization became clearer to me on the walk with Janeta from the Hamlet office to her home to meet her Dad.

Walking With: Conversation 1

Janeta: When children were forced to go to residential schools, parents were left at home alone and lost the need to go to the land to hunt and fish. They started going to the store to buy their food. Their diets changed. Also children who went to residential schools were also fed diets that were not what they were used to back home. Their diets changed too.

Bonnie: I had not thought about that. But it makes total sense. The impact of residential school also affected not only the children's diet but also their families.

Janeta: Residential school had a huge impact on the entire community. My dad has told me other stories about the impact of residential school. Because of the permafrost where it is minus zero degrees Celsius it is difficult to grow vegetables. So we are trying raised

bed gardening and greenhouses to grow vegetables in our community. We tried it last year but the weather was not great and our vegetables did not grow so well. My dad said that the elders in the community used to garden. There was lots of gardening back in the days when the nuns were living in our community. He said if you were not good in school you would go to the garden and work. This may be one of the reasons why the elders in our community are not interested in gardening now. It is a reminder and likely a trauma they do not want to re-live.

Bonnie: The impact of colonization seems to be in every aspect of life. I never really thought about gardening in the North as a potentially traumatizing activity but it makes sense now given the history. I had heard that gardening was something that the people of Northern Canada had done in the years when the nuns were around but had not thought about the impact.

While reclaiming food sovereignty seems to makes sense to me for Indigenous peoples by controlling their own food and agricultural systems, the impact of colonization makes implementation much more complex. As Coulthard (2014) suggests, transforming the socioeconomic structures of the objective realm along with assessing and addressing the subjective realm of colonialism is key for resistance. The colonized "must wage war on both levels", in Fanon's view, “as attacking colonial power on one front does not guarantee the subversion of its effects on the other” (Coulthard, 2014, p.34). Walking with Janeta provided a space where walking and listening, talking and doing, could take place, and the subjective realm was decolonized significantly.

As a non-Indigenous researcher reflecting on Fanon’s work and Coulthard’s analysis, I am once again brought back to the thought of Imperialism and a Eurocentric

agenda. I wonder who initiated the idea of gardening and using a greenhouse in this particular community?

Colonizer-Perpetrator: A Decolonization of Self

Razack in her book *Looking White People in the Eye* (1998), argues that our complicity in oppression is how we theorize ourselves and how we act in the world. Razak believes that we tend to mobilize narratives that construct our selves as innocent of complicity. Constructing the "Other" in our minds is done through seeing others as different, subordinate, and primitive as compared to ourselves (Razack, 1998). In this construction, then, we see ourselves as 'helpers', generous and giving, or as 'saviors', virtuous and charitable (Smith, 1999). Through a constant focus on the "Other" we avoid confronting the complicity afforded to us by our privilege.

Understanding colonization from the position of the colonizer is an act that is based entirely upon our privileges as white people (Schmid, 2010). Schmid states, "I continue to struggle with how one signals one's willingness to step out of the position of privilege/dominance as far as one is able. I believe that the choice to do so itself is an act of privilege" (p. 176). My ability to "step out" to critically reflect on colonization requires the acknowledgement that I have the privilege to do so. I acknowledge I am in a very privileged position to be able to do this type of work, and this is a large tension for me as a researcher, student, nurse, family member and friend. Now that I have begun the work of decolonization, coming to see myself as privileged feels "dirty" and my reflex is to clean myself of this position but at the same time I know the dirt will not come off.

Interrogating my own positionality implies a self-reflexive analysis and a decolonizing process as it relates to Indigenous peoples. I position myself within discourses of whiteness and privilege, white guilt, savior complex, imperialism and

colonialism. Gorski (2008) wrote, that "[p]racticing decolonization" requires that "I speak truth to power, challenging hegemony and hierarchy. I cannot undertake these challenges authentically without being disliked by many individuals and most institutions" (p. 523). Coming to know how a Eurocentric agenda influences our psyches as non-Indigenous researchers is an important first step in any study with Indigenous people. While this position may not be new to the scholarly debates, I offer a personal account of the ways in which I am complicit in the ongoing colonization of Indigenous peoples (Razack, 1998) as a colonizer-perpetrator.

My current privileged position in the presence of the 'Other' becomes vulnerable and potentially transformative when I interrogate my position as colonizer-perpetrator. As we engaged in conversation, Janeta and I blended our unique ways of understanding the world and new understandings emerged.

As we walked together from one building to another in minus 25 degrees during one of my field visits, Janeta and I engaged in co-creating meaning. I believe that meanings can be transformed through dialogue, whereby, in this case, a decolonizing process occurs between two disparate worldviews, resulting in a new understanding in the colonizer. On one particular walk, I began to discuss some of my observations with Janeta.

Walking With: Conversation 2

Bonnie: I find it interesting that many of the individuals we interviewed did not see that obesity is an issue, but at the health centre the nurses identified that diabetes and obesity are the two biggest health concerns. Why is that?

Janeta: Well if you use that scale that they use to measure obesity …

Bonnie: You mean the BMI scale?

Janeta: Yes, that one. If you use that scale then yes, we have a lot of obese people in the community. Even I would be considered slightly obese with that scale. But look at me – I am not obese. It's perception and using those tools that the nurses bring with them does not work here. How an Aboriginal person looks at it versus the health center staff is very different.

Bonnie: Oh I see, yes, that makes sense. We have these scales we use that were not likely ever created within the context of different cultures. But we use it so universally as if it fits for everyone.

Although very brief, the conversation was a profound learning opportunity about my position as a nurse. We use tools and scales and apply them universally. This realization is unsettling and I am starting to see how I am complicit in the ongoing colonization project. I have used these tools in my professional work and my teaching. There is no space as a nurse to question these tools, to observe that they are a white-washing tool—quite literally, that cannot work together with the respect for peoples demanded in Nursing. As a form of biopower (Foucault, 1973) the BMI is used to blame particular social and cultural groups for their failure to live up to one group's social standards of health, thus encouraging moral ideas of individual responsibility for one's health.

Anticolonial theory suggests a way forward through a decolonization process. Dei (2003) believes that Anticolonial thought consists of the decolonization of the mind. For Indigenous peoples, it is about resistance to the colonial domination of the past, the contamination of the present, and the stealing of the colonized people's future. Decolonization is a complex process, which requires constant reflexivity and a learning about 'the colonizer who lurks within' (Regan, 2010). Regan goes on to say that "at the

same time, we must also work in respectful and humble partnerships with Indigenous people to generate critical hope—a vision that is neither cynical nor utopian, but rooted in truth as an ethical quality in the struggle for human dignity and freedom" (p. 137). However, the decolonization process begs the question: what can non-Indigenous people, who understand the damage colonization causes, and who do not want to be complicit in perpetuating unjust and unequal colonial relations, do? According to Biermann (2011), the answer to this type of question is tied up with recognition and dismantling of privilege, as well as access to and willingness to honestly consider other philosophical positions. Awareness and understanding of the intricacies of Indigenous worldviews and knowledges lessens the monopoly that dominant knowledge has on the minds and modes of engagement of researchers. Biermann (2011) goes on to say that there are three key challenges to which non-Indigenous academics need to respond. These are deconstructing colonial privilege, engaging with Indigenous and majority world theories and practices, and in conversation with Indigenous scholars and thinkers, developing models that facilitate "epistemological equity" (Dei, 2000) both inside and outside the academy.

Engaging in my own decolonization process, I have learned that despite my best intentions, good will, and motivation, it is not possible to erase my Eurocentric self, a worldview handed down to me. I realize it is my self-centred "I" thinking—Western individualism—that alerts me I am on the path of Eurocentrism. It is a constant awareness to stay attuned to my ways of thinking and to bring forward a different worldview, one where I am part of the collective, rather than only an individual who feels righteous at times. I know that I cannot ever decolonize myself; it is not a process that has an end point where I can say "I am now decolonized". Creating and sustaining respectful and honest relationships with Indigenous peoples facilitates the decolonization process, and

allowing experiential learning, remaining reflexive, sustains it. My most critical learning moments about myself have come through situations where my Eurocentric self has emerged and I have become aware of it, often at a later point, a day or two later. Seeing the colonizer-perpetrator in myself is profoundly unsettling, to say the least. However, my decolonization is a life-long endeavor, and given my awakening now, it shall be a personal and scholarly commitment.

Colonizer- Ally

How do non-Indigenous researchers become an ally to Indigenous peoples? It is when we focus our gaze upon ourselves that a space is created for the possibility of becoming an ally. Becoming an ally is a process of unpacking personal privilege, including white privilege, and entering into relationships with Indigenous peoples as learning from rather than about the "Other". Max (2005) asserts, "as we reflect critically on our own positions of privilege, we become better able to work collaboratively and respectfully" (p. 79). As allies it is not enough to only critique our own privilege; a working together with Indigenous peoples is also required. Being an ally means living with the ambiguity of not knowing and the fear of making mistakes (Max 2002, p. 62). Cannon (2012), an Indigenous scholar, argues that there is much that a non-Indigenous scholar can do. Cannon suggests that Indigenous scholars can "urge them [non-Indigenous scholars] to think about matters of restitution, their own decolonization, and transforming their complicity in ongoing dispossession" (p. 22). As I begin to unpack my own privilege and reflexively understand my complicity in the ongoing colonization of Indigenous peoples, I continue the decolonization of my mind. Another avenue for becoming an ally in conducting research with Indigenous peoples is to ensure that ethical codes according to Indigenous peoples are being followed. For instance, drafting and

signing a data sharing agreement acknowledges that "the gathering of information and its subsequent uses are inherently political" (Royal Commission on Aboriginal Peoples as cited in Schnarch, 2004). A data sharing agreement is a protocol that outlines the use and sharing of data and information, acknowledging that the Indigenous partner already has ownership, control and possession of a data set (Martin-Hill & Soucy, 2005). Formalizing expectations in writing may help to avoid misconduct by researchers and facilitates working as an ally. Another conversation we had is highlighted below. In response to Bonnie's question about questions left unanswered, Janeta comments.

Walking With: Conversation 3

Janeta: I am left wondering how you view our healthy lifestyle and how it is different than a non-Indigenous persons' lifestyle.

Bonnie: I think it has a lot to do with where your community is located. In Northern Canada it is isolated so your lifestyle is different because of your geography—where you live and as a result food prices are higher so it is harder to eat healthy. Is that what you mean?

Janeta: Any other ways? We talked earlier about how we rely on our traditional foods.

Bonnie: That is one big difference. You eat traditional foods and I can't say in Toronto we have traditional foods but I'm more likely to say we eat traditional dishes. If you are Italian you would eat food from Italy or from your cultural heritage. But when it comes to physical activity I am not sure how much culture plays a part. For Indigenous people going out on the land, as you said, is the best exercise you can get so you don't need to go to the gym. Our lifestyle in the South is structured around physical activity like going to the gym or going for a run or participating in organized sports. We talk about our neighborhoods in terms of having sidewalks for walking and making sure we have good

lighting so that people feel safe if they want to go for a walk in the evening. I was surprised to learn that the biggest challenge to go for a walk up North is bears; that is very different than down South in the cities. It is such a stark contrast to our reality. You don't need to think about bears but perhaps someone attacking you. So you have physical activity issues related to your physical geography. Whereas our issues related to physical geography and physical activity are about what our neighborhoods look like and how they are built – are there roads, are there bike lanes, are there safe routes for walking…

Janeta: Yes, definitely, actually I never thought about it like that. Now that I hear it from you, it's like "oh yeah that's right".

Bonnie: You had never thought about what - the difference between the two?

Janeta: Yeah, I never thought about it in that way. I thought about it differently like just healthy eating, how we don't have much access and how we get our food and physical activity from our land. But I never really thought about a non-Indigenous lifestyle that you need to watch out for people mugging you while we are watching for bears attacking us. That is so interesting; I just jotted that down as I never thought about it.

Bonnie: Yeah, and in the South people carry bear spray for muggers.

Our conversation, while brief, was eye opening for me. As I reflect on this conversation now I notice many differences in our cultures. These differences affect our lives in so many ways - every little thing, right down to our diet. It is an example of how An Anticolonial discursive framework can facilitate deeper understandings of each other when we come from very different worldviews.

Continued Learning

In a meeting with community leaders, I initiated a conversation about how health policy could impact the food availability in the community, especially at the recreation

centre. As the community leaders, myself and Janeta talked about the potential of a policy tool kit for the municipality to use as a model for various resolutions (i.e. banning the sale of energy drinks from the recreation centre), the discussion turned to the responsibility of families and individuals not to purchase energy drinks. Some of the leaders suggested that the best place to start in the community is educating families about what is healthy food.

As I sat in the meeting listening to the discussion about what I deemed as "individual responsibility" discourse my internal processing was telling me that I was witnessing "resistance" to the idea of health policy from the community leaders. I suspected that policy in Indigenous communities comes with a long history of colonialism. Policy equates with government that took away their rights, their land, their way of life. There were oppressive policies of the Indian Act, the residential schools, and centuries of devastating colonial practices that still exist today. Now here I was trying to talk policy – albeit health policy but policy nonetheless. I tried to use other terms to avoid using the language of a policy tool kit. I used guideline, activity, and resolution hoping that one of these words would resonate. As I reflected on this in the moment I realized that I needed to start where the community was at. The community seemed not ready yet to support policy options for healthy eating. As I came to this conclusion in the meeting, my thoughts settled and I listened deeply to what they were requesting. They wanted to mobilize the community through teaching them about healthy eating first before they could imagine developing a policy.

My Eurocentric thinking wanted to justify their reaction to my ideas in terms of community readiness, which assumes in many of the community readiness models that at some point the community may or may not be ready (Oetting, Donnermeyer, Plested,

Edwards, Kelly & Beauvais, 1995). Many tools have been developed to quantify community and policy readiness. These tools are often underpinned by various behaviour change models. For example, the Policy Readiness Tool (Nykiforuk, Atkey, Nieuwendy, Raine, Reed & Kyle, 2012) is underpinned by the Diffusion of Innovations Theory by Rogers (2003). But who defines readiness? Is the idea of readiness in an Indigenous community a Eurocentric idea? Reflecting on these questions now, I realize these are issues of epistemological differences—not only the definition of readiness, but declaring when a group is ready, from its own perspectives. How do people work together when the epistemology of one group negates another group (Fridkin, 2012)?

Talking to my co-researcher, Janeta, reading the work of Indigenous scholars and beginning a self-decolonization process, I began to look beyond my Eurocentric ways of thinking to include an Anticolonial perspective (Smith 1999). I began to see how I was complicit in the ongoing colonizing project that Indigenous people experience on a daily basis. This moment became a critical incident, an "ah ha" moment of understanding: to my repulsion, I realized that I, albeit unwittingly, embodied Eurocentrism. This shift in thinking from Eurocentrism to a personal decolonization began to resonate throughout my fieldwork. I began to question the emancipatory and liberatory aims of CST, and wondered if CST could also become a Eurocentric project.

As I worked closely with my co-researcher and learned from the community leaders, I realized that addressing health inequities such as the high price of food in their community did not need an emancipatory or liberatory solution. If there is a solution, it goes beyond community readiness and requires a deep acknowledgement of the impact of colonization on their community and psyche. The solution would require that I critique my construction of Indigenous peoples as the "Other", that places my epistemology at the

centre of a Western hierarchy and sees other knowledges as inferior. I am troubled that I have come to understand that I view the world through a Eurocentric lens. Will my Eurocentric lens ever be replaced with another less colonizing lens, or a corrective lens to see the world through the eyes of Indigenous peoples? Is this possible? If decolonization is a life-long commitment and process, then it would seem that my Eurocentric self may become less prominent over time.

Concluding Comments

The ideas explored in this paper were catalyzed by the tensions that surfaced during my fieldwork regarding utilizing CST as a non-Indigenous researcher undertaking research in an Indigenous community. As outlined here, I am concerned about the ways in which researchers enact liberatory and emancipatory goals of CST, and as a consequence, reproduce Imperial ways of knowing and being by further subordinating other epistemologies. Inspired by Anticolonial theorizing, I describe a number of critical moments to highlight my own decolonization, and to ensure that the voice of Janeta, the Indigenous co-researcher is pivotal in this paper. To address the liberatory and emancipatory goals of CST, I suggest using Anticolonial theory to complement CST, thereby utilizing the strengths of each theory, and thereby privileging the voice of Indigenous peoples and their worldview. In addition, if CST is to be useful, a decolonization process is also required, which includes a self-reflexive exploration of a Eurocentric worldview. Ultimately, if a non-Indigenous researcher is to work alongside Indigenous peoples respectfully and in a participatory way as a colonizer- ally, excavating the “colonizer that lurks within” (Regan, 2010) is a necessary step on the path to redressing health inequities within Indigenous populations.

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Chapter 3: Building Knowledge and Capacity to Support Healthy Eating and Active Living Policies in the Canadian Arctic[6].

ABSTRACT

There is a vast body of behavioural intervention research on healthy eating and active living, but little that acknowledges the role of policy. Policy actions to support healthy eating and active living in Northern Canada are in their infancy. Knowing where and how to facilitate policy action can support decision makers' ability to implement policy effectively. The purpose of this study was to build knowledge and capacity to support healthy eating and active living policy interventions in an Indigenous community located in the Canadian Arctic. The specific objectives were: to increase understanding of how to support decision makers in policy adoption and implementation; and to develop a culturally relevant policy tool kit as part of this support. A qualitative single exploratory case study design was used. Fourteen in-depth face-to-face individual interviews and two Wisdom Circles were conducted with local community decision makers, policy influencers and health practitioners. The participants identified themselves as innovators in terms of policy to support healthy eating and active living and supported three policy approaches: (1) banning unhealthy foods in public buildings; (2) banning the sale of energy drinks in the community and; (3) providing programs to educate the community about how to make healthy food choices. A policy tool kit was developed in collaboration with local decision makers and policy influencers to support policy adoption and implementation. Adopting and implementing policy to support healthy eating and active living is a complex process especially when worldviews differ (Indigenous and Western).

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[6] Authored by: Fournier, B., Kushner, K. & Raine, K.

Understanding the local context and how worldviews differed supported a locally and culturally relevant form of policy development.

Keywords: Policy adoption, Healthy eating, Active living, Indigenous, Capacity building

INTRODUCTION

Improving population health requires interventions that impact the entire population. Healthy eating and active living policies are population health interventions that, once fully adopted and implemented, can support communities to promote health and help to prevent non-communicable diseases (NCDs). An intervention is defined as "a set of actions with a coherent objective to bring about change or produce identifiable outcomes…" (Rychetnik, Frommer, Hawe & Shiell, 2002, p.120). Population-wide policy interventions need to be developed with the consideration that not all lifestyle and behavioural risk factors are shaped by conditions under an individual's control. Policy interventions can help to address the underlying social and economic drivers of unhealthy eating and physical inactivity that lead to NCDs. These drivers may hinder accessibility, availability and affordability of healthy foods and physical activity. In this paper, we define policy as a plan of action agreed to by a group of people with the power to carry it out and enforce it (Dodd & Boyd, 2001). Policy aimed at the entire population is generally known as public policy and is influenced by and reflective of the values and beliefs of the group who created it (Gagnon, Turgeon & Dallaire, 2007). The policy-making process is complex and working as a non-Indigenous researcher in an Indigenous community where worldviews differ also adds further complexity to understanding the policy process. An individual, group or society's worldview is rooted in the culture - that is, in the shared philosophy, values and customs and includes beliefs about knowledge, connectedness and science (Saul, 2014).

Healthy Eating and Active Living Policy Adoption and Implementation

The policy process is not an entirely rational, incremental or stage sequential process, as is widely reported in Western academic policy literature (Jann & Wegrich,

2007; Knill & Tosun, 2008; Porsche, 2012). A consequence of the inherent complexities in policy processes is that stakeholders often have difficulty determining where and how to engage in the process of supporting policy adoption and implementation (Olstad, Downs, Raine, Berry & McCargar, 2011). Policy adoption is understood to be the decision to use a policy (Rogers, 2010) and policy implementation refers to the set of decisions and activities involved in putting policy into action or practice (Fixsen, Naoom, Blase & Friedman, 2005). Based on a systematic review by Phulkerd, Lawrence, Vandevijvere, Sacks, Worsley & Tangcharoensathien (2016) of the methods and tools used for assessing the implementation of government policies to create healthy food environments, there is a need to effectively support stakeholders in engaging with the policy process.

Two studies from Canada have examined factors that influence adoption and implementation related to healthy eating and active living policies. The results of both provide insights about some of the complexity in the policy process. The first study found that although the non-mandated Alberta Nutrition Guidelines for Children and Youth (ANGCY) in recreational facilities were carefully developed on the basis of scientific evidence, stakeholder engagement, and government investment, there were challenges in the adoption and implementation processes (Olstad, Downs, Raine, Berry & McCargar, 2011). These challenges were identified as limited nutrition-related background knowledge, beliefs (that people want to eat unhealthy food[7]), and negative perceptions of managers at the recreation facility (Olstad, Downs, Raine, Berry & McCargar, 2011). A second study found that the mandated Daily Physical Activity (DPA) policy for Alberta

[7] For the purpose of this paper, unhealthy food is defined as any food or drink high in calories, fat, sugar or salt (Health Canada, 2007).

Schools, even after adoption, was not implemented in many schools due to a lack of time, resources or commitment to monitor policy implementation (Olstad, Campbell, Raine & Nykiforuk, 2015). Although not mentioned in Olstad's studies (2011, 2015) it is noteworthy that delays in the policy process seem to be reasons for policy failure. Many of these factors that influence policy failure relate to the human element in the policy process.

Perhaps working with stakeholders to build knowledge and capacity for policy adoption and implementation can help to identify facilitators and barriers in the policy adoption and implementation phases of the policy process. Once identified, the facilitators and barriers can be explored further with decision makers to find ways to capitalize on the facilitators and remove or limit the barriers. Might this process enable policy success? While there is research that looks at this issue from a Western perspective at municipal and provincial levels, there is little existing research that examines the complexity and process of policy adoption and implementation regarding healthy eating and active living in Indigenous communities.

Purpose of the Study

As a result of few published studies, there is minimal evidence to draw upon regarding barriers and facilitators of policy adoption and implementation in order to guide policy development and support policy interventions. Therefore, the purpose of the current study was to build knowledge and capacity to support policy interventions that create conditions for healthy eating and active living in an Indigenous community located in the Canadian Arctic. The specific objectives of the research were: (a) to increase understanding of and capacity to support policy adoption and implementation; and (b) to develop and evaluate a culturally relevant policy tool kit that is community-driven and

sustainable. Within the context of this study, a tool kit refers to a collected set of strategies such as model resolutions, educational materials, and policy drafts that can be accessed by others.

STUDY METHODS

Data were collected over a 10-month period between November 2015 and August 2016, which included three field visits to the community setting. The first two field visits were for data collection and the third visit included knowledge translation activities. The study was conducted according to the Tri-Council Policy Statement: Ethical Conduct of Research Involving Humans (TCPS): Research Involving Aboriginal Peoples and the Ownership, Control, Access, Possession (OCAP) principles. Ethical approval for the study was obtained through the University of Alberta and the Aurora Research Institute in Northwest Territories (NT).

Design

A qualitative single exploratory case study design was used, informed by Critical Social Theory (Habermas, 1982) and a participatory approach (Freire, 2000). The specific 'case' is defined as the process of building knowledge and capacity with local decision makers to policy adoption and implementation of healthy eating and active living policies. The case study design enabled the exploration of stakeholders' perceptions of healthy eating and active living policies in their community and the participatory design allowed for a locally driven policy process to emerge that supported healthy eating and active living in the community. Utilizing a case study protocol as a descriptive road map enhanced the rigour of the study (Yin, 2009). The protocol included the purpose, questions, procedures and general rules to collect data in the field as well as the analysis of the data (Merriam, 2009; Yin, 2009).

CST offers a perspective that may help to uncover the nature of enabling or restrictive social structures and thereby create a space for potential change and ultimately emancipation. Utilizing CST in the study, we were attuned to oppression and domination through a history of colonialism. As researchers with a CST orientation, it becomes imperative to expose hidden agendas and taken for granted social conditions through a process of critically engaging with participants. Critical Social Theory (Habermas, 1984) aims to restore to individuals an awareness of their position as active, yet historically limited subjects, which can be done through a process of dialogue whereby individuals come to know. It was through a participatory approach (Freire, 2000) where engaging with participants occurred through a problem posing and strengths based dialogue. According to Freire (2000), this type of process empowers participants through analyzing their experience, formulating their own conclusions, making decisions, and, as a result of this empowerment, they are liberated through taking action.

Setting

The research project took place in the hamlet of Aklavik, Northwest Territories, where ~600 people live in Arctic Canada. The ethnic distribution is ~55% Inuvialuit (Western Canadian Inuit), ~35% Gwich'in Dene (Athabaskan First Nations), ~2% other Aboriginal and ~8% non-Aboriginal Euro-Canadian (Statistics Canada, 2011). Aklavik is located in the Mackenzie River delta, ~100 km south of the Arctic coast, 60 km east of the Yukon border. Aklavik is considered an isolated community, defined by Health Canada as a "community without regularly scheduled flights, good telephone and radio services, and road access in winter only" (Government of Canada, n.d., para 2). In the winter there are no scheduled airline flights; access is only on the frozen waterways that surround the hamlet. The hamlet is governed by a mayor, council and senior

administrative officer (SAO), the band office (Gwich'in) and the Aklavik community corporation (Inuvialuit). There are two grocery stores in the community, one owned by a local company. There is a 3 km walking trail that was built several years ago, however utility is limited and access discouraged due to the number of bear sightings in the community. Moose Kerr school is located in the community and provides kindergarten to grade 12 education. The health centre is staffed with nurses and nurse practitioners, a community counsellor and a community health representative. There is a community building with cardio and weight training equipment, a swimming pool, a recreation centre where many sporting events take place including facilities such as a hockey rink, a curling rink, a baseball diamond, and a playground for children.

Sample

The study sample included decision makers, policy influencers and health practitioners from the community. Participants were selected with consideration to the principle of obtaining various functional perspectives about healthy eating and active living policy adoption and implementation. Participant selection was based on the following criteria: the person is in a position to influence the policy environment (formally or socially), and/or has been employed as a senior administrator (policy advisor, decision maker, manager) in the community for a minimum of one year.

Data Collection Procedures

Data were collected through in-depth face-to-face individual interviews, direct observation, secondary sources (documents), the Policy Readiness Tool (Nykiforuk, Atkey, Nieuwendyk, Raine, Reed & Kyle, 2011) and Wisdom Circle discussions. An interview guide was developed for the in-depth face-to-face interviews and Wisdom Circle discussions. An initial field visit by the first author included meeting the Senior

Administrative Officer (SAO) and the Mayor, and recruiting a co-researcher from the community, which occurred through the SAO who contacted potential individuals.

The co-researcher and first author drafted a list of potential participants based on the inclusion criteria. The interview with the first participant in the study was conducted by the first author while the co-researcher observed. A debriefing between the first author and the co-researcher occurred immediately after the interview, to discuss not only the content of the interview but also the procedures - explaining the research, making sure consent was understood by potential participants, obtaining written consent and discussing the flow of questions. The second interview was co-facilitated by the first author and the co-researcher, with the latter taking the lead in asking questions. Again, debriefing took place. Subsequent interviews were conducted by the co-researcher with the first author present taking field notes.

The co-researcher was a "cultural guide" (Roe, Minkler & Saunders, 1995) who advised on the best approach to contact individuals in leadership positions in accordance with local cultural practices. Having the co-researcher also conduct the interviews assisted in building trust with those individuals not comfortable talking to a non-Indigenous researcher. The involvement of the co-researcher facilitated eliciting participants' experiences and perspectives, and provided a conversational context and process. She became an invested partner in the study, not only assisting with participant recruitment and conducting interviews, but also learning about the research process through discussions with the first author, reading transcripts, analyzing data, and co-authoring a paper for possible publication. On-going data collection occurred by the co-researcher while the first author was away from the community. The co-research and first author stayed in contact through email and frequent phone calls.

In-depth face-to-face interviews. Fourteen in-depth face-to-face individual interviews took place. Interviews lasted between 20 and 60 minutes, and were audio-recorded and transcribed verbatim. The scholarly definitions of policy adoption and implementation were an overt part of the interview's introduction, so as to focus the discussion. In addition, the participants' working definition of policy was elicited to provide an understanding of how policy is viewed.

Direct observation. We used observation on two different occasions in the local store to discern and record what children were purchasing.

Secondary sources. Secondary sources included the materials produced during the Wisdom Circles, comprising transcriptions, agendas, co-researcher field notes and reflections. The local school's food policy, food security literature and policy examples from other jurisdictions were reviewed. Field notes from the direct observation event were also included in the study.

Policy readiness tool (PRT). During the first field visit, the Policy Readiness Tool (PRT)[8] was administered with the SAO and Mayor. The PRT has been adapted from the Diffusion of Innovations Theory (Rogers, 1962) and has been used to assess a community, organization or municipality's level of readiness for policy change. The tool describes policy readiness as a set of behavioural categories: innovator, majority, and late adopter. These categories collapse Rogers' (1962) five adopter categories for ease and applicability (Nykiforuk, Atkey, Nieuwendyk, Raine, Reed & Kyle, 2011). Readiness is based on the notion of what it means to be an innovator, majority or late adopter. The PRT describes innovator communities as adventurous and often serving as role models

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[8] Policy Readiness Tool is the name of the tool given by Nykiforuk, Atkey, Nieuwendyk, Raine, Reed & Kyle, 2011. Readiness in this context does not imply racist or colonial perceptions of Indigenous peoples.

for other places. Majority communities are described as deliberate because they require time to determine whether to adopt a new initiative. Late Adopter communities are described as traditional, skeptical of new ideas and eager to maintain the *status quo*.

Wisdom circle. A Wisdom Circle is a small group designed to encourage people to listen and speak from the heart in a spirit of inquiry (The National Coalition for Dialogue & Deliberation [NCDD], 2010) and is aligned with Indigenous worldviews (Wilson, 2008). Two Wisdom Circles occurred and did not include health practitioners. The first was conducted during the second field visit and included five decision makers and policy influencers from the community who met for approximately 120 minutes and was co-facilitated by the first author and the co-researcher. The second Wisdom Circle was held three months later, included ten decision makers, lasted 15 minutes and was facilitated by the local co-researcher only.

We opened the Circle with a prayer that was led by one of the Wisdom Circle members and closed the Circle with thanking everyone for their ideas. The first Wisdom Circle engaged participants in a dialogue about health, food security, and active living issues in their community. Sample policy options from non-Indigenous Canadian municipalities were presented to stimulate further discussion. Additionally, information from the literature review and preliminary results from the individual interviews were discussed. Ideas for a tool kit centered around the development of model resolutions for community governance.

The second Wisdom Circle occurred while the first author was away from the community and the local co-researcher facilitated the discussion. The purpose was to obtain feedback regarding the contents of the tool kit that was created by the research team following the first Wisdom Circle. Ten decision makers reviewed four model

resolutions that were recommended by participants in the in-depth face-to-face individual interviews and the first Wisdom Circle. The four resolutions included in the tool kit were: (a) banning the sale of energy drinks in public buildings; (b) ensuring access to free drinking water in public buildings; (c) providing healthy catering including country foods[9] at events and for meetings; and (d) banning the consumption and sale of sugar sweetened beverages from public buildings. Banning sports sponsorship of food and beverage companies that provide unhealthy foods was a fifth resolution that was later developed based on a discussion that occurred during one of the knowledge translation activities on the third field visit. The tool kit was presented at the meeting to obtain feedback and to decide if any of the policy tools could be adopted and implemented.

DATA ANALYSIS

Data analysis was an iterative process guided by Critical Social Theory and flowed from two analytical processes: data reduction, and conclusion drawing and verification (Miles & Huberman, 1994). Data reduction, a process to focus and simplify the data, occurred through written summaries of meetings between the first author and co-researcher and personal journaling, and through coding processes iteratively constructed from the raw data from the interviews and Wisdom Circle discussion. During data reduction, we used qualitative data analysis software, NVivo10 (QSR International, Burlington, MA), as a data management strategy and to code transcripts from the study. Within the software program words and phrases were first coded in vivo and as the second iteration of coding took place in vivo codes were then labeled that seemed to be forming into clusters of similar categories such as “policy perceptions” and descriptive

[9] Country food is defined as mammals, fish, plants, berries, and waterfowl or seabirds that are harvested from the local environment for consumption (Van Oostdam et al., 2005).

codes such as “education”. Memos were used within the software program were also used, like sticky notes, to keep a running log of thoughts and interpretations to make connections with what was being read. Conclusion drawing and verification, the second analytical process, occurred throughout the analysis. We looked at the big picture and asked questions such as “what is happening here?” and “what are we learning about this?” Issues related to power were given special attention. Additionally, various available documents and data from direct observation were drawn upon to provide a thorough description of the different pieces of information used to inform the development of the tool kit.

FINDINGS AND DISCUSSION

The findings and discussion have been integrated in this paper with participant quotes used throughout to illuminate the issues raised. The two study objectives provide an organizing framework; to increase understanding and support for policy adoption and implementation and the second to develop and evaluate a culturally relevant and community driven policy tool kit. Categories are presented that correspond to each study objective: (a) assessing policy readiness; (b) potential policies; (c) barriers to policy adoption and implementation; (d) Wisdom Circle recommendation #1: educating the community (e) Wisdom Circle recommendation #2: making healthy choices available; and (f) power.

Objective I: To increase understanding and support for policy adoption and implementation

The first step in the process of increasing understanding was to assess the policy readiness of decision makers, policy influencers and health practitioners. The second step was to explore which policies have the greatest potential for adoption and

implementation. The third step was to understand the perceived barriers to policy adoption and implementation of the potential policies.

Assessing policy readiness. As a starting point for engaging in the policy process, the Policy Readiness Tool (Nykiforuk, Atkey, Nieuwendyk, Raine, Reed & Kyle, 2011) was used. As a team, the SAO and Mayor were asked to respond, using a rating scale, to the various questions from the tool. The SAO and Mayor, after answering the questions, agreed that the hamlet of Aklavik was an innovator as it relates to implementing policy for healthy eating and active living.

This assessment, however, was not evident in interactions with the community leaders until the third field visit. The idea of banning the sale of energy drinks from public buildings (i.e., the recreation centre) in their community had been originally discussed with the first Wisdom Circle group; however, at that time, the participants agreed that educating the community was needed before such a policy could be implemented. On the third field visit, the energy drink ban was framed by the research team as a prevention strategy and as a strategy that would not require removing energy drinks from the recreation centre. Since the recreation centre did not sell energy drinks, the group decided it was a policy that could be implemented relatively easily.

Issue framing is a way of representing a policy issue or problem in broad understandable terms and is a key skill in working with stakeholders around policy interventions (Pal, 2001, p.26). Understanding the local context – i.e. understanding that taking something away (even if it was unhealthy) was viewed negatively for cultural reasons, was a key consideration for the research team when it came to framing the policy differently during the third field visit. Additionally, framing the policy as a prevention strategy also encouraged the Wisdom Circle group to see that they were protecting their

community's future. At the next hamlet meeting, the resolution was passed, making the hamlet the first community in NT to ban the sale of energy drinks from public buildings, thus confirming their status as policy innovators.

Potential policies. Further exploration of policy readiness was conducted during the individual interviews, which provided insight into various policies that have the greatest potential for adoption and implementation in the community. Interviewees were asked if they strongly supported, supported, or did not support various healthy eating and active living policy approaches. The policy options explored in the interviews were adapted for the local context from a previously validated decision maker survey (Raine, et al., 2014). Three policy approaches to healthy eating and active living were supported most often by participants. The first was banning unhealthy food in public buildings:

> I think it would be a good idea. Something I would support. If done in small steps like starting off with education. I wouldn't support something like you just wanted to implement and make it kind of like forced…you offend people, you infringe on people's feelings of rights.

The second policy was banning the sale of energy drinks in the community. One participant stated "I think it would be possible. They [the store] would do that because the best seller is pop. Pepsi and Coke and stuff like that". This response demonstrated that the responsibility for banning energy drinks in the community rested with the local store managers' motivation and support. The third approach was providing programs to educate the members of the community about how to make healthy food choices. Several participants cited programs they already had in the community that supported healthy eating and active living such as Canadian Prenatal Program (CPNP) and Elders in Motion. Many participants thought that education was needed to prevent individuals from

unhealthy eating. For example, when specifically asked about what they thought of limiting the sale of unhealthy food in the community one participant commented:

> It'll be a hard thing to do because I think people are too used to it [junk food]. I think more education and information on it... You can eat junk food moderately but it's a matter of providing more information and educating them. There's no law against it - the availability.

Another participant identified ways to educate the community: "We need to make community members more aware of the health effects of unhealthy eating through posters, radio station, flyers or newsletters". These examples showcase how education was viewed as a strategy to support healthy eating and active living and was a key category in the interviews. As an intervention in the community, it is possible that education can heighten awareness regarding healthy eating and active living. Could education then engender support for policy? While the three policy approaches were supported most often during the interviews, when asked about their perspective regarding policy in their community, participants identified a potential barrier that would impede adopting any of the supported potential policies.

Barriers to policy adoption and implementation. An important finding that emerged related to a potential barrier to policy adoption and implementation centered around the word and concept "policy". The majority of participants did not see a role for policy to support healthy eating and active living in their community (n=11, 79%) because it was not how their community preferred to be governed:

> I am not a big policy person. I'd rather – well when there's something written on paper that you have to follow, if they're entrenched as a must, people don't like

being told you have to do this. I still like to have that bit of leeway so we can make up our own mind but some governments are just stuck on policies.

This response revealed two important notions about policy. First, for this community, the word "policy", was understood differently than it is in Western scholarly circles. For example, a Western worldview of policy privileges the written word as legitimate and a formally acceptable social and legal force, where the spoken word has less force especially when it comes to creating a society's future (Gaudry, 2013). Secondly, and more importantly, the word "policy" has a profound emotional and psychological resonance that is fully a result of the history of colonization and its multitude of continuing social effects— policy was repeatedly and ruthlessly imposed on Indigenous peoples rather than created by them (McNab, 1983). Another participant clearly and bluntly illustrated how "policy" is understood: "To me, policy is government". And of course "government" is interpreted, due to its past imperial and colonial actions, as a tyrannical enforcer (McNab, 1983).

Understanding the legacy of government policies on the lives of Indigenous peoples in Canada can provide some insight into participant perspectives. Some policies, while not explicitly and directly related to health, certainly impacted it and explain many of the current health concerns that prevail in Indigenous communities today. The history of Indigenous peoples has been widely described by Indigenous scholars (Haig-Brown, 1988; Manuel & Derrickson, 2015; Smith, 1999). While not essentializing all Indigenous peoples with the same history, as there is much diversity within these histories, there are similar experiences that most Indigenous groups have encountered. Indigenous peoples were sovereign independent nations before contact with the European explorers (Haig-Brown, 1988). Upon contact with Europeans, Indigenous peoples lost their independence

through enforced legislation, such as the Canadian Indian Act, which set out regulations that affected virtually all aspects of their lives (Laroque, 1997). As a result, serious negative consequences for Indigenous peoples occurred (Cornet, 2001). Colonization was aimed at the "displacement and elimination of Indigenous culture: genocide…the elimination of language has always been a primary stage in a process of cultural genocide. This was the primary function of the residential school" (Haig-Brown, 1988 p. 15). In residential schools, "expressions of aboriginal culture and individuality were harshly punished" (Fournier & Crey, 1997, p. 57). Outside researchers from various government departments were directed to come up with solutions to deal with "the Indian problem," (Haig-Brown, p.15). Under the colonial power the four policies developed to solve "the Indian problem" were extermination, slavery, insulation (reserves) and assimilation (McNab, 1983). Evidently, these policies were not concerned with maintaining the wellbeing of a group of people whose very existence was a 'problem' to be solved. However, these policies served as the foundational framework for the Canadian Indian policy after 1867 (McNab, 1983), guiding all policy concerns pertaining to Indigenous peoples.

This legacy can help to explain why, when discussing healthy eating and active living policies in the current study, participants clearly equated policy with government and its oppressive intentions, and individuals did not want to be told what to do, what to eat or what is allowed. While the idea of policy seemed at first a barrier, later the process of discussing policy options became an empowering process as decision makers created their own policy approach relevant for their community, as will be seen in the next section of the paper.

Objective II: Collaborative Tool Kit Intervention Development

Building on what was learned during the interviews regarding policy readiness, potential policies and barriers to policy adoption and implementation, a tool kit was developed with Wisdom Circle participants. The purpose of developing the tool kit was to support decision makers in building knowledge and capacity to support policy interventions. As a capacity building process, discussing the content of a policy tool kit provided an opportunity for participants to reflect on the health effects of consuming unhealthy food and beverages. This reflection could be considered, in light of Freire's (2000) work, a conscientization process that spiralled into taking action to support healthy food options in the community. Given the participants' views during the in-depth face-to-face individual interviews around the concept of policy, various other names were given to describe policy such as an activity, guideline or resolution. During the first Wisdom Circle in discussing solutions around encouraging healthy eating and active living in their community, participants made recommendations on what needed to be included in a tool kit. These recommendations fell into two categories: (a) information and education and (b) actions to improve the availability of healthy options at the recreation centre. Additionally, once the policy tool kit was developed, it was formally presented at the second Wisdom Circle group for discussion and possible adoption of several resolutions.

Wisdom Circle Recommendation #1: Educating the Community

Similarly, as the participants from the individual interviews emphasized, Wisdom Circle participants discussed the need for community education to encourage healthy eating. At the initial Wisdom Circle participants discussed their preference for educating the community in making healthy choices and encouraging them to choose healthier

options over formally adopting and implementing a policy that enforced a ban. Many of the Wisdom Circle participants were on the hamlet Council. One council member stated:

> We need to give people the option. The odd time I like to have a pop. But to start to make it a policy – this is not allowed, and this is not allowed…the better trail is to provide the healthy option and education is a big part of healthy eating. That is the option we should take [rather than] then implement a bunch of policies then sit back and say – hey look at what we did.

This response reflects issues around power related to adopting and implementing policy. The council member equated policy with restricting an individuals' ability to choose and indicated that education was the preferred approach. Several council members agreed and one stated: "At a [Territorial] sharing circle the chief medical officer for the NT said the same thing – people make a personal choice in what they are doing". The same councillor agreed that having healthier options available for sale in public buildings such as the recreation facility would be a better strategy as individual choice is respected.

The Wisdom Circle participants agreed that education could be part of the tool kit:

> But if you try to drop it [policy] right on the community it is hard to digest so in the tool kit we need to start educating the individual and family to start practicing healthy eating just to start talking among themselves, "Maybe we are eating too much pizza weekly" and cut down from 10 to 4 or cut down the amount of chips.

Another Wisdom Circle participant stated:

> To try to tell the community to do this will not work. The onus should be on the individual and family and when we get a list of food that is good for you and bad for you it may help some families and get them to cut down. Family education.

The Wisdom Circle discussion identified education as a first and necessary step before policy could be adopted. In the policy literature, there is recognition that raising awareness among community members can foster a bottom up participatory approach to policy development (Carmosino, 2013). A bottom up participatory process involves those individuals most affected by and most interested in the issue at hand whereby they become agents of change and decision making (Freire, 1970). Meaningful involvement in finding solutions and building on strengths can become an empowering process for individuals and the community (Freire, 1970). A bottom up approach can also help build momentum over time whereby community issues such as obesity and diabetes related to unhealthy eating become priority issues. In turn, this may lead to supporting policy development rooted in local ways of knowing. Focusing on the process of policy making rather than the outcome (i.e. a policy) supports a locally driven and empowering process.

Wisdom Circle Recommendation #2: Making Healthy Choices Available

Wisdom Circle group members also recommended making healthier choices available (such as water and fruit), but not eliminating unhealthy choices (such as the sale of sports drinks or pop at the local recreation centre). Making water freely available at the recreation centre so that community members would have a choice over the only options currently available – sports drinks and pop - was also discussed as an option. One participant noted: "Maybe we should invest in providing free water. It would be interesting to see if they take the free water over the Pepsi. It would be an interesting experiment". This response suggested that participants in the Wisdom Circle were actively creating a culturally grounded form of policy that privileges speaking, listening and communal action to educate over the primacy of the written word and adopting it as Truth to be enforced. In a sense, they were reforming the policy option of banning

unhealthy food from the recreation centre (in accordance with their values around choice) and in doing so showed the research team how they “do” policy making. One participant said:

> It has to be gradual and you give them healthy options... I was thinking if we stop selling pop, chips and chocolate, yesterday, what are we going to sell? What keeps long are apples and oranges. That's a healthy choice you can have... I'm thinking about trying it out this Christmas at the recreation centre for our events. We sell an apple or orange for a dollar just to see. You give them that choice.

Additionally, during the discussion regarding healthy options, Wisdom Circle participants spoke about the health effects of the overabundance of sugar found in various beverages served in the recreation centre; this sparked a call for action. While banning these unhealthy beverages was not considered acceptable, as it was out of keeping with the values related to honouring the truth of individual experience and having the ability to choose, serving free water was deemed a healthy option. Not only was the idea of offering free water at all sports and cultural events discussed, it also was acted upon by the hamlet. Water was donated by the local store and they began offering it at the recreation centre. During the third field visit, participants reported that free water was so popular that they were constantly running out and needing to refill their 10-liter jug. It was reported by Wisdom Circle participants that the hamlet decided to continue to serve free water on an ongoing basis.

Power. A contextual factor that may have influenced the Wisdom Circle recommendations is the “healthy choices” discourse within the health care system. Health care systems are “powerful colonial forces” for Indigenous peoples where the structural development of health services is an outgrowth of the dominant society and remains

outside the realms of community control (O'Neil, 1988, p.34). All communities in the Northwest Territories, regardless of self-government, remain under the control of the Territorial Department of Health and Social Services.

To explain, the experiences and perspectives revealed from study participants are influenced by the control of the Territorial Department of Health and Social Services. Many health care systems promote self-care and self-responsibility as a form of social control that helps the State to govern at a distance, often under the cloak of healthy choice messaging that encourages consumers to avoid risky behaviours and engage in healthy practices (Gould and Semaan, 2014). Relevant to the context of the current study, in the Northwest Territories, this type of messaging appears in all recent governmental reports and website pages related to health. In their most recent strategic planning framework (August, 2014) the Department of Health and Social Service mission states that it is "Working in partnership to provide the highest quality care and services and encourage our people to make healthy choices to keep individuals, families and communities healthy and strong" (Northwest Territories Health and Social Services, 2014, p.6). The Government of the Northwest Territories (GNT) health care system operates under a primary care philosophy, which means, "that we try to organize our services to respond to the needs of the individual or family" (p.9). The Healthy Choices campaign of the NT Department of Health and Social Services is an example of healthy choice messaging where self-care and self responsibility are emphasized and can result in 'blaming the victim' rather than examining the political, social, cultural and economic factors that influence the health of individuals. Victim blaming allows us to believe that we are in control of our destinies by reinforcing the notion of personal responsibility. Through the promotion of rationality, self-sufficiency, autonomy and individualism, many

governments initiate programs that focus on helping individuals adapt to the system by providing either information or skills. Given the history of Indigenous peoples in Canada and the data collected in this study regarding decision makers, policy influencers and health practitioners' perspectives about policy, it would seem logical that bureaucrats would want to avoid telling Indigenous people what to do (i.e. in the form of following policies around healthy eating and active living). It is possible that in the context of Indigenous communities, the individual lifestyle perspective may have become a strategy of governments to avoid the potential of re-colonization. This argument is counter-intuitive to the argument that governments may support individual lifestyle approaches as a way to shift responsibility for well-being and protection of the population to the individual. Both arguments can be seen as forms of power and control. Reflecting on the current study from a critical perspective, it appears that the GNT's Healthy Choices campaign has also had an impact on participants, where policy from their perspective was seen as infringing on people's rights, and adding healthy options for people to make a choice was the most popular avenue to support healthy eating and active living. Implementing a population health intervention is challenging given this complex social, cultural and historical context. When working with individuals with a different worldview, being informed of contextual factors, being humble, open and willing to engage is vital, as opposed to just observing context, rationalizing it, and responding to it.

A key learning from the study is that when different worldviews, specifically Indigenous and Western worldviews, come together in research, co-constructing knowledge and meaningfully engaging in a new way goes beyond supporting participants into entering an empowering process. Through reclaiming and reforming the meaning of policy in accordance with participants' own worldview, expressing and using it

accordingly was a profound outcome of the study.

Strengths and Limitations

Our research is among the first to explore how to build capacity for policy adoption and implementation to support healthy eating and active living in the Canadian Arctic. The selection of a qualitative single exploratory case study design provides a detailed description of the context, which enhances the transferability of findings to other settings (Yin, 2012). The local co-researcher did not participate in much of the systematic data analysis as she moved away from the community. As a result, the findings reported in this paper are limited to the analysis (both conscious and subconscious meaning making strategies) of non-Indigenous researchers. Cultural nuances may have been overlooked. Utilizing the Policy Readiness Tool may have also limited the findings given that the definition of readiness falls within a Western academic worldview. A lack of intimate cultural knowing also limits the findings. To address this limitation, the findings were discussed with the Wisdom Circle group to seek guidance and understanding about what was being shared by the interviewees. Additionally, the local co-researcher provided insight into many issues raised by the participants during regular research debriefing meetings.

CONCLUSION

Addressing personal lifestyle factors through education and social, economic and political drivers of unhealthy eating and physical inactivity through policy are both needed. While a policy tool kit was created, it was the process and discussion around the contents of the tool kit that facilitated a conscientization process, which facilitated a local solution. Reclaiming and reforming ‘policy’ according to a local Indigenous worldview is empowering. Policy interventions in Canadian Indigenous communities are in an

embryonic stage of development. In order for this development to continue to grow, researchers will need to build relationships, gain intimate knowledge of the local context, and understand the social, economic, political and historical factors that shape individual health in each particular community. Appreciating and supporting a vision of policy and policy making rooted in an Indigenous worldview is also required of researchers wanting to build knowledge and capacity for policy interventions. Including Indigenous researchers and community members throughout the research process strengthens the potential for realistic policies and appropriate implementation.

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Chapter 4: Policy Implementation: Applying the Adapted RE-AIM Framework to Evaluate a School Based Food Policy in the Canadian Arctic[10]

Abstract

Background: With increasing childhood obesity rates and type 2 diabetes developing in younger age groups, many schools have initiated policies to support healthy eating and active living. School environments providing the context for behaviour and improving the school food environment through policy intervention can influence not only health behaviours in students but also ripple out well beyond the school walls.

Purpose: We articulate a policy story that emerged during the data collection phase of a study focused on building knowledge and capacity to support policy options related to healthy eating and active living in the Canadian Arctic. Specifically, the policy processes of a local school food policy to address unhealthy eating are discussed. We retrospectively apply dimensions of the adapted RE-AIM framework to evaluate the policy.

Methods: Through 14 interviews, decision makers, policy influencers and health practitioners described a policy process including facilitators and barriers to adopting and implementing policy.

Results: A number of key activities facilitated the successful policy implementation process and the building of a critical mass to support healthy eating and active living in the community. A key contextual factor in school food policies in the Arctic is the influence of traditional (country) foods.

Conclusions: This study is the first to provide an in-depth examination of the implementation of a food policy in a Canadian Arctic school. Recommendations are offered to inform intervention research and guide a food policy implementation process in a school environment facing similar issues.

Key Words: Food Policy, Unhealthy Eating, Implementation, RE-AIM, Arctic

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[10] Authored by: Fournier, B., Illasiak, V., Kushner, K. & Raine, K

Introduction

Organizational policies such as school based policies can promote healthy learning environments for children. Schools are an ideal setting to influence students' behavior, well-being, and academic performance, due to the number of hours students spend there (Florence, Asbridge & Veugelers, 2008; Holland, Green & Alexander, 2016). Specifically, impacting conditions for learning through policy has the potential to improve children's health and well-being. In Canada, a burgeoning area of school health policy is the prohibition of unhealthy food, which is often thought to play a role in reducing the burden of obesity-related diseases by reducing unhealthy food intake during school hours (Cargo, Salsberg, Delormier, Desrosiers & Macaulay, 2006). For the purpose of this paper, unhealthy food is defined as any food or drink high in calories, fat, sugar or salt (Health Canada, 2007).

Many schools have implemented food policies, often as part of a broader policy strategy for school food, nutrition, wellness or a comprehensive school health initiative (Schwartz, Karunamuni & Veugelers, 2010; Shackleton, Jamal, Viner, Dickson, Patton & Bonell, 2016). With increasing childhood obesity rates and type 2 diabetes developing in younger age groups, many schools have initiated these policies to support healthy eating and active living. It is not only the policy itself that positively influences student well-being; the very implementation of the policy is a concerted act of change that ripples out into multiple spheres. Policy implementation facilitates the conscious creation of a complex supportive environment and influences behaviour that goes well beyond the school walls.

Notably, however, the implementation and maintenance processes of food policies in school settings are rarely reported in the literature. The studies that do report on the

processes often do not include criteria to evaluate the implementation or maintenance of the policy. Most troubling is that there have been no reports on this topic from the Canadian Arctic, despite the fact that it is well known that significant health, social and economic disparities exist between the Canadian North and the rest of the country.

Complexities of Policy Implementation

Unpacking the 'black box' of policy implementation and maintenance reveals the complexities of policy processes, including why a policy originated, who is involved (both in terms of the creators and recipients that will benefit), who holds authority, and how policy is delivered, enforced and sustained over time. Miljan (2012) defines policy implementation as "the process of transforming the goals associated with a policy into results" (p.29). Implementation describes the set of decisions and activities involved in putting policy into action or practice (Fixen, Naoom, Blasé & Friedman, 2005). Implementation actions include applying the policy as intended, and engaging in an ongoing process of enforcement and compliance monitoring (Jilcott, Ammerman, Sommers & Glasgow, 2007). Maintenance actions include compliance with the policy and resulting individual behaviour changes and health outcomes over time (Jilcott, Ammerman, Sommers & Glasgow, 2007.). Variations in the policy and re-inventions are also important considerations in policy maintenance.

Individuals and their perceptions play a key role in the implementation and maintenance of policy. When policies are implemented they are interpreted, acted upon, negotiated, accepted through conformity, and/or challenged through acts of resistance. Policy implementation and maintenance is a process that is vulnerable to various policy actors. Policy actors hold varying degrees of influence on the policy process, and not all actors have equal authority in the development and implementation processes (Maguire,

Braun & Ball, 2015). As it is people who implement and shape the policy process, policy texts are influenced by their personal values and beliefs. In response to an individual's relationship to policy implementation, Deumer and Mendez-Morse (2002) ask, "How do people negotiate or reinterpret the policy so as to accommodate their own interests?" (p. 5). This question reflects recognition that policies must be acted upon by individuals and those individuals may have their own agenda and interests. Utilizing a theoretical framework when initiating a policy intervention can help stakeholders to strategically plan for potential challenges, external influences, needed resources, and activities to implement and enforce the policy. In this paper we present a policy story and use the RE-AIM framework to evaluate the policy process. A story is a way of knowing capturing the nuances and richness of human experience not captured through numbers (Shkedi, 2005). Stories are also a way to communicate to policy makers, researchers and practitioners the results, successes, lessons learned and challenges of policy change that engage the reader in recognizing patterns similar to our own experiences. As a result, stories can move, motivate and inspire.

RE-AIM Framework

The Reach, Effectiveness, Adoption, Implementation, Maintenance (RE-AIM) Framework is often used to plan and evaluate health behaviour interventions (Glasgow, Vogt & Boles, 1999). RE-AIM has also been adapted to assess public health policies and to identify effective policy approaches (Jilcott, Ammerman, Sommers & Glasgow, 2007). The RE-AIM framework was inspired by the Diffusion of Innovations Theory (Rogers, 2003) and by the PRECEDE-PROCEED model for health promotion planning (Green, Kreuter, Deeds, Partridge & Bartlett, 1980). RE-AIM was developed to move from an efficacy-focused research paradigm to an effectiveness-focused paradigm that can better

inform public health and healthcare practice (Glasgow, Vogt & Boles). The original RE-AIM framework includes the assessment of: Reach ("R" i.e., number, percentage and representativeness of those affected by the policy), Effectiveness ("E" i.e., intervention impact), Adoption ("A" i.e., representativeness of settings and delivery agents), Implementation ("I" i.e., intervention fidelity), and Maintenance ("M" i.e., program long term impact and sustainability) (Glasgow, Vogt & Boles, 1999). The Reach and Effectiveness dimensions measure individual-level outcomes, while the Adoption and Implementation dimensions measure organization-level outcomes. The Maintenance dimension measures both individual- and organization-level outcomes.

The adapted RE-AIM framework for policy (Jilcott, Ammerman, Sommers & Glasgow, 2007) re-defines several aspects of the RE-AIM dimensions. Table 1 presents the dimensions of RE-AIM and key aspects as applied to public health.

Table 1

RE-AIM Dimensions and Key Aspects

Reach
Absolute number, percent and representativeness of those affected by a policy.
How many people are impacted and are they representative? It is the extent that populations most exposed to environmental risks are reached. Factors determining reach are the size and characteristics of the potential audience.

Effectiveness
Change in the temporally appropriate outcomes
Impact/risk reduction results- How robust or consistent are the outcomes?
Robustness and impact on quality of life
Unintended consequences – Impact on other prevention activities or environmental risks

Adoption
How many (absolute number, percent, and representativeness) of target settings that passes a policy- especially if voluntary
How many and which schools will adopt a school food policy?

Implementation
Is policy applied as planned and adequately enforced?
Is there ongoing and consistent compliance with core policy components.

Cost and economic implications of adherence and compliance
Level of enforcement variability (includes adherence over time). Are some parts of a policy implemented and enforced more consistently than others?
Implementation characteristics (extent of/variation in implementation, timing of Implementation)

Maintenance
Individual level: Compliance with policy over time; individual behaviour change and shifts in health outcomes over time.
Setting level: Is there ongoing enforcement and compliance with the policy over time? Are their shifts in social norms?
Cost and economic implications of enforcement

We articulated all aspects of the RE-AIM framework in our evaluation, however, we provide an in-depth examination of Implementation and Maintenance dimensions in this paper. Within the adapted RE-AIM framework for policy (Jilcott, Ammerman, Sommers & Glasgow, 2007), implementation refers to the extent to which a policy is applied as intended or implemented with fidelity. Maintenance refers to "the extent to which a program or policy becomes institutionalized or part of the routine organizational practices and policies," (Jilcott, Ammerman, Sommers & Glasgow, 2007. p. 106).

To date, there has been no in-depth examination of how local school level policies addressing food environments are being implemented or maintained within the context of Indigenous communities. In this paper, we highlight a school food policy story based on a qualitative study from a kindergarten to grade 12 public school located in the Canadian Arctic. We articulate the processes of implementing and maintaining the school food policy and use the adapted RE-AIM framework to facilitate understanding of the policy process. We outline a number of recommendations for successful policy implementation in other Indigenous contexts that are facing similar concerns and may benefit from a similar policy. The local school food policy was named a “Junk Food Policy” which represents the way in which community members viewed and discussed unhealthy food

products.

Current Study

Methods

The policy story is drawn from an exploratory case study that was conducted during November 2015 to August 2016 in Aklavik, Northwest Territories (NT), an isolated community of approximately 600 people in the Canadian Arctic. Ethical approval was obtained through the University of Alberta and the Aurora Research Institute of NT. The overall purpose of the study was to build knowledge and capacity to support policy interventions related to healthy eating and active living. The research question that guided the development of the policy story was: What are the stories from decision makers, policy influencers and health practitioners in Aklavik about their experiences in the policy process related to healthy eating and active living? The primary focus of this case study is to articulate the actions taken that facilitate the successful implementation and maintenance of the school food policy.

Participants

Decision makers, policy influencers and practitioners were recruited through purposeful sampling based on the principle of obtaining different functional perspectives on the subject of healthy eating and active living policy adoption and implementation. Inclusion criteria for our study were persons in a position to influence the policy environment, and/or who have been employed as a senior administrator (policy advisor, decision maker, manager) in the community for a minimum of one year. There were fourteen participants and of those four participants were decision makers or policy influencers, from the community, who contributed to the policy story in this paper.

Procedure and Interviews

A list of potential participants was generated based on criteria developed with the local co-researcher. The co-researcher was a “cultural guide” (Roe, Minkler & Saunders, 1995) who advised on the best approach to contact individuals in leadership positions in a respectful way and in accordance with local cultural practices. Individuals were invited to participate in a single in-depth face-to-face 30-60-minute face to face interview.

Individual in-depth face-to-face interviews were conducted. In-depth face-to-face interviews are important sources of evidence in a case study design (Yin, 2012). The interviews focused on understanding policy adoption and implementation in the community. Questions focused on assessing policy readiness by asking if they supported or did not support various healthy eating and active living policies. Questions also centered on describing a policy process, including facilitators and barriers in adopting and implementing the defined policy which is where the policy story was derived. During data collection, a policy story emerged from many of the interviewees focusing on how the local school had implemented a school food policy that they described as a “junk food policy”. As the policy story developed through the interviews, the research team contacted the school principal to provide further details regarding the implementation of the policy. As Moose Kerr School (in Aklavik) was the first school in the Beaufort Delta School District with such a policy and it has remained in effect for almost 15 years, we were interested in learning about the process of implementing and maintaining a school food policy as the case study.

The school principal is the only person holding the institutional history of the food policy process since its inception. As someone who grew up in the community, the principal also worked in the school as a school counsellor before she furthered her education to become a teacher and then the principal of the school. Therefore, the

principal's retrospective account of the implementation and maintenance of the food policy was key in developing the policy story. However, the policy story was also influenced by the interviewees in the study. For the purposes of anonymity and to uphold confidentiality among participants in this small community, neither individuals nor their roles are identified in the citations that offer evidence for the policy story.

Data Analysis

Data were analyzed using matrix methodology described by Miles and Huberman (1994). Data analysis flowed from two analytical processes: data reduction, and conclusion drawing and verification (Miles & Huberman). Data reduction, a process to focus and simplify the data, occurred through written summaries of meetings between the two field researchers as well as field notes, and through a coding process iteratively constructed from the raw data of the interviews. This iterative process initially included the local co-researcher; however, after reviewing a few interviews it was mutually agreed that the first author would analyze the remaining interviews for convenience. Conclusion drawing and verification, the second analytical process, occurred throughout the analysis. Following this process, we began to focus on the policy story that was emerging regarding the "Junk Food Policy" at the local school. This third phase of the analytical process included utilizing constructs of the RE-AIM framework to provide an understanding of the case. Specifically, interview data were compared with the dimensions of the RE-AIM framework.

The Policy Story Background

Between the months of November and April each year, residents of Aklavik and companies operating in the North rely on winter roads to truck in food. In the warmer months between May and October the only options for food delivery are by air or

shipping container via the Arctic waterways. Geography therefore dictates accessibility to, and availability of, food and as a result food affordability. Distance of travel, seasonal availability and quantity of species (Simoneau & Receveur, 2000), lack of time for hunting due to increased involvement in the wage economy, high cost of hunting equipment, ammunition and fuel, a decline in communal food sharing networks (Sharma, 2010), and colonization (Power, 1990) have all been reported as factors that have led to a decrease in the consumption of traditional foods in the Arctic communities. As a result, there is now more of a dependency on commercial foods sold in local community stores (Gracey & King, 2009). These foods tend to consist of non-perishable or energy dense, and nutrient poor food (potato chips, biscuits, cakes, chocolate, cookies) and sugar-sweetened beverages (sweetened juices with added sugar, energy drinks, sports drinks, pop, "slushies") (Sheehy, Roache & Sharma, 2013), which tend to be "inexpensive, good tasting and convenient" (Drewnoswksi & Darmon, 2005, p. 266S). As a consequence, prior to the implementation of the school food policy children in Aklavik had had readily available unhealthy food which could be easily purchased before school or during breaks at the local store located across the street from the school. Some students also purchased their lunch at the local store, which often placed hardship on families' financial resources. Additionally, consuming unhealthy food over time and in the absence of a dentist in the community had a negative impact on children's dental health.

Interviewees in the study, reflecting on the previous 15 years, recalled that teachers observed behaviour differences between the students who did and did not consume unhealthy food. Interviewees recounted teachers stating that children were not able to focus, and had mood swings, jitteriness, and poor academic performance. As reported by one interviewee, "the teachers connected these behaviours to sugar as they

observed students on a daily basis, while on the school grounds, consuming large amounts of sugar sweetened beverages in the form of "slushies" and Gatorade and eating large amounts of candy". Similarly, another interviewee reflecting on student behaviour stated:

> The students who did not consume these food products did not have the same behavioural or performance issues. Prior to the implementation of the policy students were bringing in bags of chips and pop into the classroom and consuming them at their desks when they should have been focused on learning. This in itself was a distractor for learning.

Moose Kerr School

Moose Kerr School is a Kindergarten to grade12 school, with a student population of 161 pupils and a teaching complement of seven local Indigenous staff and seven Southern[11] staff. In 2002 when the "junk food policy" was implemented, the school had a student population of 225 pupils and a staff of 15 teachers, four support staff and two local Indigenous language instructors comprising 50% Indigenous teaching staff and support staff and 50% Southern teaching staff Indigenous. Teachers from the South work on two to five year contracts and leave during the summer vacation while the Indigenous staff members are from the local community. Historically, the school principal came from the South on a two-year contract. However, this practice changed in 1999 when the current principal took on the role. The school participates in a breakfast and snack program that includes healthy food through Food First Foundation a nationally registered charity focusing on supporting nutrition education programs in the Canadian Arctic

[11] South or Southern refers to anyone south of Yellowknife, NT, usually indicating a non-Indigenous person.

region. They also have a very active after school program that includes physical activity games such as basketball and volleyball.

Results

Policy Formulation and Adoption

In 2002, Moose Kerr School implemented a comprehensive ban on unhealthy food. Upon witnessing students consuming unhealthy food and beverages and connecting behavioural and performance issues in the classroom, the teaching staff brought forward their concerns to the principal at a staff meeting and worked as a collective to address these issues. One interviewee articulated the impetus for the policy:

> Staff over several staff meetings brought up the concern of student's inattentiveness, and unfocused attention after the recess break or shortly after lunch hour when consuming sugary foods or junk food. The staff saw a direct co-relation to when students consumed and didn't consume sugary food or junk food.

Teachers' concerns not only centered on the educational impact but also the social and economic impact that consuming unhealthy products had on children in school. The teachers and staff continued to meet over several weeks to discuss how best to address the consumption of unhealthy food. Concerned, staff decided that they would address the issue with a "Junk Food Policy".

> A lot of thought went into finding out information about healthy and unhealthy food and then everybody coming together as a staff and determining what the guideline would look like. We wanted a healthy learning environment for students, so we knew we had to remove anything with a lot of sugar content from our school environment and replace it with what we decided is allowable or acceptable in terms of healthy food choices.

During the time of policy consideration, the school staff reviewed the evidence on nutrition for children and the health issues associated with the intake of high amounts of sugar. Other school food policies in the Territories did not exist, the literature was sparse with information, so staff entered new ground to devise the best options for their particular school.

Once the connection between the consumption of sugar and the behavioural and performance issues was identified at the school level, the principal took the concerns of the teachers to the local District Education Authority (DEA) for consideration. A number of presentations were conducted for the local DEA about the proposed policy option. Raising awareness among the local DEA board members about the health and learning issues was a key activity that helped push the policy idea into adoption. The local DEA supported the adoption of the policy at Moose Kerr School, which lead to the diffusion of the policy to other schools in the Beaufort Delta Region. The policy that was adopted in 2002 included a list of permitted and prohibited food and beverages. The steps to policy adoption have been articulated in Figure 1.

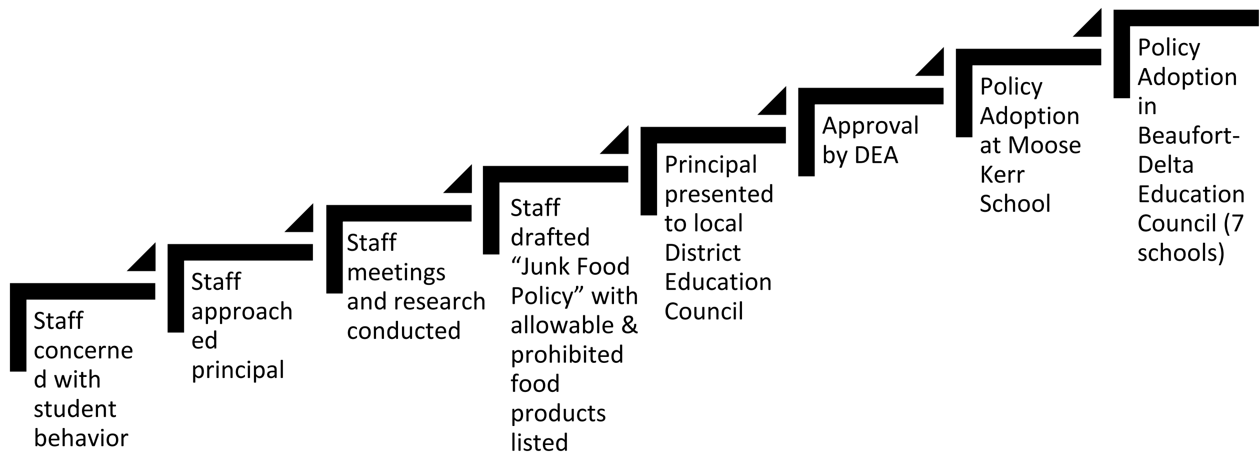

Figure 1. Steps to policy adoption. This figure illustrates the process taken to formally adopt the food policy at Moose Kerr School.

Policy Implementation

While the teachers were engaged in creating the “Junk Food Policy”, they also were key actors in the implementation process of the policy. As the policy was being implemented, regular staff meetings occurred to discuss emerging issues and find ways to address them. Following implementation, the meetings also served as a place to discuss how the policy was being enforced and to resolve issues with compliance. According to Smit (2005) “how policy is viewed, understood, and experienced only becomes real when teachers attempt to implement policy" (p. 298).

Once the policy was formally adopted, teachers realized the students would need time to adjust socially and psychologically to the change before pushing the policy into full effect. At a staff meeting, teachers decided a 4-month transition period was needed in

which parameters were placed around the policy. First, staff agreed it would be best to start with a policy that would not directly say "junk food was banned". While the list of acceptable and prohibited food and beverages was included in the policy, teachers believed that allowing some unhealthy food at events or activities would support the policy implementation process.

> We put some parameters around what events or activities would be unacceptable and acceptable. For example, although junk food was banned from the classroom, it would be allowed if there was a classroom party.

In some way, the result of modifying the policy during the 4-month transition time was a harm reduction approach that did not rigidly prohibit unhealthy food but allowed for some instances when it would be allowed. As well, alternative food choices that are still considered unhealthy but with less sugar (e.g. granola bar) were also allowed during the transition time. Additionally, during the transition time, enforcement strategies were less severe compared to when the policy was fully implemented. One interview stated:

> We provided student warnings and would hold junk food until students were dismissed and the junk food returned. Parents were called if there was a concern with their child regarding breaching the junk food policy. After four months, students were made aware that the junk food would be confiscated and thrown out.

However, there was still push back from junior and senior high students during the transition time. "The older students were buying slushies and pop because they wanted something outside of water to drink. So it was agreed to allow some approved drinks even though they might be high in sugar at the outset".

During the implementation process a concerted effort was made to ensure students

and families were aware of the policy. Presentations by the principal and the DEA secretary occurred in each classroom to discuss the new policy and provide time for questions. Analogy was used to help the students understand the reasons for the policy.

> I reference community signs like a stop sign and their meaning to help students understand that school rules are similar to a stop sign that they exist for safety and protection. I would say "We need you to be here as a good learner. And too much sugar is not being a good learner. The junk food policy is to help us be more focused /concentrated on the important things about school like learning and paying attention daily.

The analogy worked for the younger children in elementary school.

However, at the secondary level a different approach was needed. While presentations still continued in junior and senior high, the policy needed to be modified to support student buy-in. "The first step with the high school students was to allow some "approved" beverages even though they might have been high in sugar". In conjunction with classroom presentations, communication to families and the broader community occurred through newsletters distributed over several months prior to and during the implementation of the policy. These newsletters provided background information about why the policy was being implemented and what would change as a result. "Surprisingly a lot of support came from parents especially those in Kindergarten to grade five as they felt it was a positive message to give our students in terms of living a healthier lifestyle". However, as many community members spoke their local language, opportunities to discuss the new policy with parents face to face were also given for those who could not read English or their local language. Parents were given the opportunity to ask questions and to express

their perspective about the policy. Support from parents with children in the higher grades evolved over time and now that the policy has been implemented for more than a decade.

> Our parents/guardians now understand that when it comes to our annual classroom parties, parents are providing healthier varieties of food. This indicates to us a solid buy in from parents and shows respect to the school for the effort to make their child/children's lives a bit healthier in terms of what is acceptable food at these types of events.

Once the policy was in full effect (post 4-month transition), the push back from the older students continued. "They would be defiant in terms of making efforts to bring in junk food into the school/class. They would also stay outdoors and be purposely late to class because they wanted to finish their junk food before entering through the school doors". However, enforcement was consistent with issuing reminders, confiscating the unhealthy food or beverages and calling parents when students violated the policy. "For the most part parents were understanding and put the responsibility back on their child". Partnerships with local stakeholders were key in countering the push back from students.

> The number of students engaged in the consumption or breaking the junk food policy has decreased over time due to a number of partnerships. The Community Health Representative, school counsellor and teachers along with our school wide support with March Nutrition month, November Diabetes month and the annual Drop the Pop campaign have provided students with health information from a variety of stakeholders.

Changes to the policy have become a necessity as new evidence regarding sugar has surfaced and been discussed during staff meetings. For example, at one of their

regular staff meetings the prohibited food list was reviewed and "teachers identified high sugar content in juice so decided to switch to milk". The essence of the policy has remained constant over time, and yet adaptable and responsive to new knowledge about unhealthy foods.

Sustaining the Policy

Sustaining the food policy for more than a decade has come about through the process of building a critical mass. A critical mass is developed when a majority of people believe in a new idea, innovation, or change, make the change or adopt the new idea and influence others to make the change (Rogers, 2003). As the critical mass is established, a new norm is created and in this sense we observe, experience and eventually can measure social change (Rogers, 2003). However, in order to create a critical mass, actions taken at the school level alone are not enough to sustain the food policy. Increasing the sphere of influence of the policy is required, so that a new norm of healthy eating beyond the school walls to the broader community is created. Multiple actions taken concurrently with a variety of stakeholder groups between Moose Kerr School and the community have facilitated the building of the critical mass. Key actions have included working with community partners, working with the neighbourhood store manager, enforcing the policy after hours with community groups, and acquiring a healthy food vending machine containing food such as granola bars, crackers, pretzels, Sun Chips (depending on availability at the local store).

Working with community partners. The partnership between the school, the community health representative (CHR) and the NT's Department of Health and Social Services facilitated the maintenance of the food policy through support and encouragement for healthy lifestyles.

> We've got good partnerships with the CHR. She comes to the school often and teaches the students about diabetes so that's right in their face about health. It opens their eyes to their own self care. Also participating in the NT's yearly 'Drop the Pop' campaign works together to support the no junk food policy and reinforces the importance of the policy.

The community partnerships have supported the efforts of the school by getting the same message out to students, parents and the community, reinforcing the value of making healthier choices in all areas of their lives and benefiting everyone collectively. "My daughter came home one day from school and told me I needed to stop drinking pop, that it was bad for my health. I participated in not drinking pop for one month. Since then I have decreased the amount of pop I drink since that time".

Working with the neighbourhood store manager. Across the street from the school stands one of two local stores. During the initial implementation of the junk food policy the store manager was asked not to sell extra large sized drinks ("slushies"), energy drinks and anything else on the "junk food" policy list. The initial reaction from the manager reinforced the store's place as a profit-making business. However, when the manager learned how the high amounts of sugar influenced student behaviour and lowered learning capacity there was more willingness to become a partner. The manager at the time agreed and supported student learning in a positive light. He understood that there would still be profit but over a more controlled time span for the benefit of the students, that is, the policy would only apply during school hours and students could resort to buying the same unhealthy products after school. There was also a lot of push back from families who believed that the store should not limit what was sold to their daughter or son. As a result, the store manager directed store staff to inform students

about the restriction applied during school hours. If students appeared in the store and attempt to purchase anything on the no junk food list (see Appendix D), the store clerks tell the children that during school hours they cannot buy junk food.

> There have been changes in managers over the years but they still support the initiative and don't sell junk food during school hours. This is a long term relationship with the store and it is getting the manager on side as they change over. I have the deepest appreciation for this partnership's support to help make the junk food policy a success in Aklavik.

Reflected in this quote is the significant impact of the store managers' behaviour - it may also have to change to help support the well-established junk food policy at the school.

Enforcing the policy during evening hours. As a result of implementing the no junk food policy in the school, community members or organizations using the gymnasium in the evening also were required to support the "Junk Food Policy". An agreement must be signed that commits users to follow the policy.

> The junk food policy has to be followed. So we're even trying to impress that message on the community members as well, not just our students but everybody. For the most part the community does do their part and it makes us feel good as a school to get their support.

Having the policy implemented after hours not only has supported the policy generally but also indirectly has raised awareness in the community about unhealthy food. "It sends a very strong message about junk food acceptance."

Acquiring a healthy food vending machine. Having a vending machine that is stocked with healthy food choices on site has not only eased staffing logistics required when the school had a canteen but also has provided better accessibility to the student

body, the staff and the public at large who use the gym during evening hours.

> The implementation of a vending machine was on the fence for quite some time, but when the decision was made to go ahead the food choices were healthy ones. The students overall have been very receptive to this. So it is better to see our students eating a bag of pretzels versus a bag of potato chips.

Contextual Considerations

While there were a number of actions that facilitated the implementation of the policy and rippled out into the community, an important contextual factor in the policy story is the influence of country foods[12] in the school. Country food is defined as mammals, fish, plants, berries, and waterfowl or seabirds that are harvested from the local environment for consumption (Van Oostdam, et al., 2005). Country food is more nutritious and nutrient-dense than market food, and remains important to the quality of the diets of many Indigenous people (Earle, 2011). While not officially part of the policy, the students learn about country foods by going on the land to hunt, trap, fish and harvest. Students learn how to skin, dry, preserve and cook their harvest. The children also assist in preparing and eating what they harvest. Creating and supporting opportunities for country food knowledge sharing and protection (hunting, harvesting, cooking) among school children are necessary cultural activities.

> You put a granola bar and traditional food in front of them and they'll take the traditional food. So we try to have a little bit of a mixture of everything where we can and that's pretty good. Like when we came back in September, fish sticks [dried fish that has been cut into long sticks] are a popular thing. It's nice to have

[12] Inuit often use the term country food while for example Dene use the term traditional food. For consistency, we use the term country food.

> that and the kids thoroughly enjoy eating them and it's nice to see them eat it with enthusiasm for this country food. You know you're on the right track when kids start to gobble that kind of stuff up.

Transferring traditional knowledge to younger generations about country food harvesting and cooking as part of the learning environment encourages a lifelong habit of healthy eating and active living.

Current Challenges and Future Opportunities

One of the current challenges facing school administration in supporting the school food policy relates to funding country food harvesting, hunting and trapping. Moose Kerr School has a strong *On the Land* program that has been in place for many years. However, expanding the program within the curriculum requires sustainable financial resources, as the funding comes from the NT's government for limited periods.

> We want to focus on bridging cultural learning with our school by having our own cultural site on the school grounds. This way students can be exposed to the cultural teachings through hands on experience. There would be tangible opportunities for them to retain the harvest, give it away or use it for school luncheons later in the year. This is one initiative that is still in planning stages and would require community support, input as we don't have financial resources to bring this to fruition immediately.

Reflected in this quote is a desire for the school to become self-sufficient so that students can engage in activities such as going down to the local river system, setting a fish net and harvesting their own fish. In this process, students would learn how to make their own cultural food products such as dried fish, fish sticks or smoked fish. Becoming self-sufficient is a future opportunity, that with sustained funding, is possible. Building

partnerships with *On the Land* programs can also facilitate building a critical mass.

Evaluating School Food Policy Using the Adapted RE-AIM

Jilcott, Ammerman, Sommers & Glasgow (2007) note that the five dimensions of the adapted RE-AIM framework are interdependent and therefore evaluating them in isolation should be avoided. We acknowledge that there is much overlap between the dimensions and have attempted to articulate each dimension distinctively, to serve our purposes in this paper. We now turn to applying the RE-AIM framework to evaluate the school food policy.

Reach "R"

Since the policy was school-wide, the intended reach was the entire school population at Moose Kerr. However, as policy can influence entire populations, the reach also extended to the community population in Aklavik. This extension helped to build a critical mass. In terms of representatives, the school food policy affected community members who had children in the school and those who utilized the school for events.

Effectiveness "E"

As the policy was developed to address specific issues with students (behavioural and performance related) and was not implemented with evaluation in mind, assessing effectiveness retrospectively is challenging. The policy has had significant positive impacts. Teachers appreciate the difference it makes in the learning environment and more importantly the students' daily learning efforts. According to the principal, teachers report there is a definite difference.

> Students for part of their day are more focused and less distracted because high levels of sugary foods are not in their bodies. Another positive impact is that healthier choices are being made at school parties and graduation. At end of

school year, during class celebration parties in each grade level, healthy food such as vegetables and fruit trays are being brought by parents. As compared to previous graduations where chips, Cheezies and soft drinks were the staple.

There has been a shift in social norms at the school. As more and more students have begun to eat healthier food, their peer groups have been influenced to avoid eating and drinking anything unhealthy. Over recent years, students now bring water and healthy snacks during school field trips. Another strong indication of making healthy choices in the school is that there has been a change in the intake of water as compared to sugar sweetened beverages. Many high school students bring infusion water bottles with lemon or other fruit and "junior high girls are paying attention" to these older role models. Water has become "cool" to drink among the older students. The policy has not only impacted the students – "the shift in staff has been noticeable as well with their selection of water bottles over a cup of coffee and staff now bring healthy choices for lunch and snacks".

Jilcott, Ammerman, Sommers & Glasgow (2007) suggest that policy effectiveness also includes negative, unintended consequences and quality of life. A potential negative consequence of the school food policy is the financial cost to students and their families related to consuming healthier food. The higher costs related to eating healthy food can have a negative consequence for families with limited incomes (Darmon & Drewnowski, 2008). While there was no evidence of this occurring within the community as a result of implementing the policy, it is a potential outcome to consider in future policy work in similar communities.

Adoption "A"

Given that the policy was adopted 15 years ago, prior to any other such policies existing within the school district or in the Territory, the policy is a testament to the vision and strength of the leadership at the school. Moreover, with respect to supporting healthy school food environments, the creation and implementation of the policy places Moose Kerr School as an innovator in terms of Roger's Theory of Diffusion (2003). This theory explains how innovations, are taken up within a population and characterizes five adopter types: (1) Innovators who have high tolerance for risk and uncertainty; (2) Early Adaptors who try new ideas in careful ways; (3) Early Majority who weigh out pros and cons, may be influenced by early adoptors and seldom lead); (4) Late Majority who adopt out of necessity once an innovation has become majority practice (not by choice) and; (5) Laggards who wait until forced to adopt or may be persistent resistors (Rogers, 2003). The policy to address unhealthy eating is considered an innovation and the school its innovator. At the time of policy adoption, fifteen years ago, a program to educate students about unhealthy eating would have been the response to unhealthy eating with the assumption that if people know what to do they will act appropriately (i.e. to eat healthy). The focus on policy action at the time reflects an innovative approach in and of itself.

Policy can create environments in which the healthier choice becomes the easier choice. The adoption of the school food policy at a time when evidence was only emerging about the negative health effects of sugar on the health of children reflects a deep commitment by the school administration to promote student health and wellbeing. While many school districts within the Northwest Territories have since adopted similar policies (early adoptors), the policy has not become a territory wide policy within the Government Department of Education, Culture and Employment. Participants reported that policy diffusion has been limited to the local levels.

Implementation "I"

The RE-AIM framework highlights how certain features of the implementation process influence the success or degree of implementation. Providing a four-month period as a transition time before pushing the policy into full effect was a key feature that influenced the success of implementation. During the transition time, temporary modifications occurred to the policy that mitigated student push back and facilitated student buy-in. Raising awareness within the student population through class presentations and implementing less severe enforcement strategies such as providing students with warnings, calling parents, and confiscating students' junk food during school hours only contributed to increased awareness. Careful consideration of enforcement and compliance measures also aided in the successful implementation of the policy.

Evaluating enforcement requires determining how consistently a policy is enforced generally or if only certain aspects of the policy are enforced and other aspects are not, and if the policy is enforced differently with different groups. The "Junk Food Policy" has been enforced in different ways within the school. Differences occurred across the various grade levels as there was more push back from the older students requiring the policy to be modified for high school students. Additionally, the K-6 grades are given warnings, and junk food is kept until the school day is over, then returned to students and they are warned not to repeat the incident. Students in Junior and Senior high receive similar warnings - the first time junk food is returned to them. However, any repeated efforts result in the junk food being thrown away immediately. This is followed by a phone call to the parents to make them aware. Repeated attempts by the high school students result in other consequences in accordance with the school handbook. Timing is

also an important factor of enforcement and refers to continual review and approval of items on the unhealthy food list, and includes continual compliance assessment over time. Examples during policy implementation included allowing some approved beverages even though they were high in sugar.

The implementation process at Moose Kerr School also included multiple actions that occurred simultaneously with a variety of stakeholder groups that have supported the success and facilitated sustaining the policy since 2002. The school and the community have a dynamic interconnection. Something that happens in the school influences the community and vice versa. As a result, momentum has built within the community to recognize the value of healthy food, including country food, and consequently changing the norm of consuming unhealthy food. For example, as a result of students bringing home the school handbook where the policy is provided for parents to read, discussing what they are learning in school regarding unhealthy food, the link to disease, and having access to information in the newsletters have the potential to change the behaviour of their parents. Additionally, community groups agreeing not to bring unhealthy food while using the school gym, and having a healthy food vending machine that is accessible during and after school hours, also collectively, have the potential to change the behaviour of the community at large. As more people begin to discuss what is happening at the school around healthy food and more people become aware of the negative effects of unhealthy food, change can happen. It was reported by one participant that healthier and country foods are being provided at local community events.

Maintenance "M"

The RE-AIM dimension of Maintenance refers to the ongoing work of enforcement, compliance and variations in the policy interpretation and impact.

Maintaining the policy over time has required adjustments to be made to the policy as staff learn new information about the impact of unhealthy food and beverages on students' health and well-being. An example is the decision to revise the prohibited list of food that once included sugar sweetened juice to replacing it with milk as an approved beverage. This change occurred as a result of continued staff meetings to discuss the policy implementation process and to review the policy on an annual basis. Staff are encouraged to bring any new research evidence to staff meetings for discussion. Reinforcement of the policy by the principal and the DEA chair or designate who visits every classroom occurs at the beginning of every school year.

> All the students make a good effort and minor incidents [occur] over each school year. With our junior senior high, we emphasize the message a lot stronger, in a sense, because the rules have not changed since they were in kindergarten. Since then, it has been the consistency with our messaging and yearly implementing and enforcement. The norm or the standard is set in every student. But it does show the need and importance of continually keeping the information/purpose of the junk food policy in the forefront.

The students also know that there are consequences if they continue to bring junk food, indicating the importance of continued enforcement.

> We just keep collecting it [junk food] and reiterate the acceptable food choices for the school. Eventually, not more than one day after the start of the school year, they know what the policy supports and eventually it subsides. Enforcement is key. Teachers actively monitor what students bring to class and remove any food items from the students on the prohibited list.

Over time, compliance with the policy among the student body has strengthened due to two factors. First, role models in the school who adopted healthier choices sooner than others have played a role in compliance. The high school students have become role models for the junior high students in making water "cool". Role modeling is viewed by Gwich'in and Inuvuialit peoples as a powerful means for shaping children's lives. Much of their traditional teaching practices is about demonstrating or showing a process/method to their child/ren. However, the influence of European products and practices has impacted this effort. It is most evident in the attitude of the youth who engage in making their own personal food choices. It is possible that the next generation of students will be more inclined to make better choices because they are supported proactively with a healthy school food environment that is becoming the acceptable norm.

Second, compliance has also been supported by the long-term employment of current administration and teaching staff. The principal and teachers have continued to build strong relationships with students. The level of trust has grown among them and students see the policy less as punitive and more as a practice that supports their health and well-being. However, compliance can be tested. For example, it was reported by one of the interviewees, "when a new teacher arrives, there is the occasional attempt by a student to break the food policy to test the new teacher's understanding of the policy".

Discussion

The implementation of school food policies is a promising intervention that helps to create a supportive environment to promote the health of students and, with multiple actions taken simultaneously with many stakeholders, builds a critical mass in the broader community. In our case study, through the policy story, we have demonstrated how a local school food policy to support healthy eating was implemented and maintained

during the last 15 years. Our study contributes to understanding the process of implementation and maintenance through sharing the policy story and is one of the first to be articulated from within an Indigenous school. The transferability of policy initiatives such as this is often difficult given the context of local conditions. However, there are several lessons that we learned in this policy story that are transferrable. We make four recommendations that can be used to develop a practical policy tool kit for healthy school food policy interventions in other Northern Canadian Indigenous contexts with similar concerns.

First, building human resource capacity within Northern Canadian communities to provide local teaching staff is needed to ensure continuity, sustainability and cultural relevance of policies that support student learning and enhance student health. As can be seen from the policy story, leadership was key in the sustainability of the "Junk Food Policy" at Moose Kerr School. In many Canadian Arctic settings, it is common to hire staff from the South to work on a contract basis. However, temporary contract-based work can lead to new policies being implemented or existing policies being eliminated as new staff bring their own agendas, do not know the history of initiatives or practices and have not developed relationships within the community. Building trust within and outside the school walls is needed when implementing policy especially when it changes a deeply rooted and long term practice such as consuming unhealthy food and beverages. The ripples of change go beyond the students to families and to the community at large.

Second, communication through multiple channels is needed to build a critical mass. Students, their families and staff all became aware of the change through classroom presentations, newsletters and frequent meetings. Additionally, the community members wishing to use the school after hours also became aware of the change when they were

asked to sign a contract and agree to the school policy in order to use the facilities. Multiple communication strategies targeting multiple stakeholders implemented throughout the change period help build the necessary critical mass. Additionally, continual communication is required to keep the purpose and information of the policy at the forefront of student, parents and teacher's minds.

Third, developing multi-sectoral partnerships are important to support the school food policy in various ways. Engaging health practitioners to provide information and raise the awareness of the health effects of unhealthy eating and the subsequent diseases can provide the students with sound knowledge to make healthier choices in their lives. Engaging local businesses such as the neighbourhood store is also recommended. Gaining the buy-in of the manager at the store is a key activity that supports the policy and requires an ongoing relationship building process. Having the store implement parameters around the sale of unhealthy food and beverages sends an important message to students that consuming these products does not support their learning during school hours and sends a strong message home to parents about unhealthy food.

Fourth, providing a transition period is valuable to gain expanding support for the initiative and to address issues as these emerge with policy implementation. One of the successful strategies from the policy story was using a phased in approach to policy implementation that provided a four-month transition period before pushing the policy into full effect. The transition period provided time to raise awareness of the policy change within the student population and their families through enforcement strategies such as warnings. It also provided time to make changes to the policy content, to help the administration decide how it would implement it for the various grade levels, and for student issues to surface and be addressed.

Future research is needed to understand the impact of incorporating country foods into the school setting through on the land programs on student learning, healthy behaviours and physical activity levels. This type of research would provide evidence to formalize policy confidently. On the land programs encourage students to return to their cultural roots, learning the values, beliefs, traditional ways of their Elders and shaping for themselves modern Indigenous ways. However, extensive funding is required to support on the land programs, as expenses related to hunting and equipment for fishing and hunting are now cost prohibitive for schools. It is well documented that dietary behaviours established in childhood generally continue into adulthood (Centre for Disease Control and Prevention, 1996), so exposing children early on to country foods and encouraging them to adopt healthy eating patterns may contribute to healthier dietary choices in the future. Future research could also include the impact of the school food policy on the behaviour of community members regarding consuming healthy food.

Limitations

This study took place in one community in the Northwest Territories, thus limiting the data sample to a specific community. Consequently, the findings reflect the perspectives of a group of decision makers and policy influencers in one municipality. Participants were purposely sampled based on their backgrounds and ability to provide information on the topic area and not on the basis of how they represented the general population. These limitations do not allow for generalizable conclusions about how decision makers and policy influencers from other municipalities in NT feel about policy and policy interventions to support healthy eating and active living. However, study findings can inform reflection and examination in other jurisdictions. Decision makers in

their own settings can draw upon the lessons learned to determine what they can do in their local schools and community related to food policy.

Another limitation is that interviews were retrospective, and recall about the implementation of the food policy processes may not be as accurate as recall about more recent changes to the policy. This limitation highlights the need for future prospective research about policy development and implementation processes.

Concluding Thoughts

The policy story of implementing a “Junk Food Policy” at Moose Kerr School identified key factors that facilitated action to make changes to the school food environment. Using a phased-in approach to policy implementation, which included enforcement, helped to minimize barriers to effective policy implementation. Implementing the food policy changed the products available at the school store canteen, eliminated unhealthy foods from entering the school, created a list of prohibited food and beverages, and created an opportunity to obtain a vending machine that contained only healthy food. Policy sustainability has been supported over time by students taking responsibility for policy adherence and compliance. Policy sustainability, however, also may be threatened over time; it may be rescinded for various reasons, and need updating as new scientific evidence emerges (Jilcott, Ammerman, Sommers & Glasgow, 2007).

Overall, the sustained effort of policy maintenance has resulted in a more supportive learning environment for students. The longevity of the policy has created a student population that knows why they are not allowed to bring junk food to school. Not only has academic performance and behaviour improved in the classroom, but dietary behaviour has also changed. The cultural learning around hunting, fishing, trapping, and harvesting country food has supported the policy by encouraging snacking on these foods

during school hours. The impact of the food policy has been far reaching; educating a generation of children in health and healthy living, building a critical mass in the community to support healthy eating and changing social norms.

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Chapter 5: Reflections- Swapping my Suitcase for a Backpack

At the beginning of my dissertation, the metaphor of unpacking my suitcase symbolized the process of being reflexive— accounting for the influence of my history, subjectivity and position on the construction and interpretation of knowledge. At the end of my dissertation, I am swapping my suitcase for a backpack. Transforming what I carry is symbolic of the transformation I have undergone both personally and as a researcher during my PhD journey. I take with me a new understanding of myself within a colonizer-perpetrator and colonizer-ally perspective. I am now packing a new appreciation for the challenges of living in an isolated Canadian Arctic community and being somewhat reliant on food shipped in via cargo boat in the spring or flown in during the winter season. The limited availability of fruits and vegetables, combined with their high price and poor accessibility due to geographic transportation barriers, leaves many Indigenous people with few options for healthy eating if they need to rely solely on store bought food. As a nurse, educator and researcher, I have gained valuable insight about the impact on Indigenous peoples of forced government policy such as residential schools and the subsequent inter-generational legacy. I will take these lessons into the classroom to help students understand the impacts of colonization and into my future research with Indigenous and non-Indigenous peoples.

The health inequities that have resulted from government policy in Indigenous communities are not only a social injustice issue but if allowed to continue, waiver on genocide. While not many individuals would want to admit that genocide is possible and may say that this is too extreme a description or perhaps many may even quickly retort affirmatively that there is action being taken on health inequities in Indigenous communities. However, if true, why is the health of Indigenous populations in Canada

getting worse instead of better when compared to the rest of the Canadian population? (Young, Chatwood, & Marchildon, 2016). This question brings me back to my decision to pursue academic studies seven years after completing my Master's Degree in Health Promotion. Since my decision was focused on tackling issues of social injustice, I wanted to find tools within academia that would equip me with the ability to address social injustice in any context or setting. I came to believe that addressing certain kinds of social injustice such as health inequities would be best approached through policy or policy interventions. I entered into my doctoral inquiry assuming that the social environment is shaped to a substantial degree by public and institutional policies, and that policies can enhance the development of healthier communities, such as those designed specifically for this study on healthy eating and active living. These two areas- healthy food and active living are essential for the health of individuals, and as such, illness and potentially death occur as a result of not being able to eat well and be active.

Learning about food insecurity in Canada's North via social media led me to understand the importance of food sovereignty. I wondered - how could healthy eating be possible when the affordability of store bought food is beyond the means of so many community members living in Northern Canada? But as I engaged in my study and subsequently unraveled my Eurocentric self that assumed store bought food was the main source of energy, I learned that food from the land and acquiring that food provided all the nutrients and physical activity needed for a healthy life. However, I also learned from the participants in the study that going out on the land is not so simple anymore. Many challenges exist, including the (in)availability of equipment and expertise, as well as the cost. And thus these new social injustice issues arose: Why has the knowledge of how to trap or hunt eroded? Why should it cost so much for gasoline to fill up an all-terrain

vehicle to go onto the land to hunt? As I was asking these bigger questions, I kept coming back to my study, also asking: what could I possibly accomplish when these bigger questions seemed much more pressing to address? I wondered how my study could have an impact on creating opportunities so that healthy eating and active living would be possible and even easier. Eventually, as I believe many PhD students realize, I needed to take 'baby steps'. The big picture was overwhelming to think about at this stage in my career and for this particular study. So, I focused on the objectives of the study, keeping in mind that I was building momentum through understanding the perspectives of decision makers, policy influencers, and health practitioners for future research studies. These studies could progressively address some of these bigger challenges centering on issues of social injustice, and in fact, issues of human rights in terms of food security.

As I reflect on the research questions posed in the study, I believe that they have been answered within the paper based dissertation (see Table 2).

Table 2

Research Questions and Corresponding Article

Phase I Questions	**Article**
What do community leaders see as the role of policy?	Fournier, B., Kushner, K. & Raine, K. *Building Knowledge and Capacity to Support Healthy Eating and Active Living Policies in the Canadian Arctic.*
What barriers do community leaders believe exist to policy adoption and implementation?	Fournier, B., Kushner, K. & Raine, K. *Building Knowledge and Capacity to Support Healthy Eating and Active Living Policies in the Canadian Arctic.*
What policies do they see have the greatest potential for adoption and implementation in their communities?	Fournier, B., Kushner, K. & Raine, K. *Building Knowledge and Capacity to Support Healthy Eating and Active Living Policies in the Canadian Arctic.*
What are the stories from leaders about their experiences in the policy process related to healthy eating and active living?	Fournier, B., IIllasiak, V., Kushner, K. & Raine, K.. *Policy Implementation: Applying the RE-AIM Framework to*

	Evaluate a School Based Food Policy in the Canadian Arctic.
Phase II Questions	**Article**
What are the elements of the community driven tool kit?	Fournier, B., Kushner, K. & Raine, K. *Building Knowledge and Capacity to Support Healthy Eating and Active Living Policies in the Canadian Arctic.*
What are the facilitators and barriers to developing a tool kit?	Fournier, B., Kushner, K. & Raine, K. *Building Knowledge and Capacity to Support Healthy Eating and Active Living Policies in the Canadian Arctic.*
Did the tool kit development aid in policy adoption and implementation and if so how?	Fournier, B., Kushner, K. & Raine, K. *Building Knowledge and Capacity to Support Healthy Eating and Active Living Policies in the Canadian Arctic.*

The paper entitled: *Tensions of utilizing CST with Indigenous peoples: Exploring the colonizer that lurks within,* was directly related to the methodology utilized in the study and therefore does not correspond to any research questions directly. Additionally, several accompanying findings that could not be elaborated on in the paper-based dissertation are also relevant and worthy of mention. I now reflect on these findings and conclude this section with a summary of the overall findings.

Policy or Education?

In the public health field there exists a rift between two central views of how population health may be improved. On one side, there is a focus on individual behaviour change, or what is often championed as changing ‘risky’ behaviour. On the other side, there is a focus on the underlying changing the social and economic factors that shape the health of individuals and populations.

Individual-level behaviour change approaches emphasize strategies to educate individuals to stop or reduce consumption of unhealthy food and sugar sweetened beverages or to comply with physical activity recommendations. These strategies also are

framed as lifestyle issues emphasizing individual responsibility: 'you just need to change your behaviour to improve your health'. However, research has demonstrated that if we only change knowledge, attitudes and perceptions (e.g., through educational and skill-building efforts), the positive outcomes are temporary at best, because people continue to be exposed to complex environments that encourage unhealthy eating and inactivity. Alternatively, if lifestyles are viewed as individual responses to environmental influences, then the focus shifts from exclusively individual responsibility for lifestyle choices to addressing the environmental factors (i.e., social, economic, political, historical) that influence individual behaviours. For the past two decades, there has been a growing recognition that many factors outside the health care system affect the health of individuals. If sustainable change is to occur, altering environments may be an effective driver of behavior change. Implementing policy can create supportive environments for healthy eating and active living (Beaglehole et al., 2011).

The focus on individual behaviour and choice was reflected in many of the answers given by this study's participants when they were asked about their perspectives on policy. At times, I found it challenging to hear participant's individual lifestyle explanations. As a nurse, I have seen the failure in teaching patients to change their behaviour based on a simplified belief about the cause of the behaviour. For example, if obesity is simply seen as a problem of eating too much or eating unhealthy food then teaching individuals not to do this and to eat healthy food seems reasonable. But how can an individual make such healthy choices when the cost of healthy food is far beyond their means? Addressing the environmental factors also plays a role in making the healthy choice the possible and even easier choice. Implementing policy to support healthy eating and active living that addresses accessibility, affordability and availability of healthy food

and physical activity makes sense as this could affect the entire population and support healthy eating.

However, the issue at hand during the study was the whole concept of policy, not just a policy related to healthy eating or active living. Some study participants associated policy with the trauma caused by government policy and policy that took away the rights of Indigenous peoples. Coming to this realization early on in my study was very unsettling for me, considering that the study focus was to build knowledge and capacity to support policy interventions that create conditions for healthy eating and active living. I was cautious when approaching the idea and using the word "policy" when interviewing participants. And then, something interesting occurred in the study. Some participants said 'yes' to policy and 'no' to policy when asked two different questions about policy. On one hand, participants responded, "Yes, I would support banning junk food", and on the other hand in the same interview, the participant would say "[No], policy would not work here; we need to focus on educating our community". I was uncertain what to do with this apparent contradiction, so I attuned myself to how I was interpreting what I was hearing, specifically that both education and policy are needed. When individuals do not have the basic facts or information about the food they are eating and how it affects their health, then education is a strategy that can increase awareness. However, there also was recognition that education alone is not enough. Multiple interventions are required at individual, community and government levels. Policy is another intervention that can support healthy eating and active living.

Policy as Prevention

Near the end of my fieldwork, I learned that implementing policy can be considered or framed as a prevention strategy. In learning about the community and

understanding that decision makers, policy influencers and health practitioners were cautious about policy, I appreciated that taking anything away that is already in place (i.e. taking away pop or candy from the recreation centre), was not an acceptable option to the community. However, preventing another type of unhealthy food or beverage from entering the canteen at the recreation centre would be a more viable option from the perspective of decision makers. Given the history of colonization within this community, taking away something already present in the community could, in the perception of the community members, carry the echo of children being forcibly and unilaterally removed from their families to go to residential schools. With this understanding in hand, framing a ban of the sale of energy drinks as a prevention strategy made sense. Preventing disease and avoiding the entire burden of chronic disease associated with drinking energy drinks was, in principle, implementing policy as a prevention strategy and more specifically a health promotion strategy. It was health promotion in action. The action areas of the Ottawa Charter for Health Promotion (World Health Organization, 1986) (i.e., building healthy public policy, creating supportive environments, strengthening community action, developing personal skills and re-orienting the health care services) were being realized in the unfolding of the study processes.

Critical Social Theory

Additionally, early on in the study process I began to wonder if utilizing Critical Social Theory was an appropriate theoretical position from which to conduct research with Indigenous people as a non-Indigenous researcher. I did not want the research I conducted repeating colonization activities of the past. Reflecting deeply on this potential throughout the study, I was able to pull apart my actions and ways of thinking to critically examine my Eurocentric worldview, one I did not want to admit I had. My conversations

with Janeta were pivotal in helping me to see the world in a new way by questioning my own "…positionality as both colonizer-perpetrator and colonizer-ally" (Regan, 2010). As we often walked and talked going from one interview to another, we openly shared our ideas, thoughts and musings about many issues. I realized the importance of having a local co-researcher, as we were co-constructing knowledge about the study, while discussing the various interviews. In my previous experiences, researchers hire research assistants to provide technical assistance during a study without much, if any, consideration of the epistemological consequences of that choice. Research assistants often collect the data for the study, and may or may not be involved in the data analysis process. As technicians with skills, research assistants are often acknowledged at the end of a study in an academic paper, however, their epistemological contribution is much more integral to the study's findings. Research assistants' knowledge must be seen as legitimate knowledge, and thus part of the study (Fournier, Bridge, Mill, Alibhi, Kenndy Pritchard & Konde Lulu, 2014); otherwise quality is jeopardized. In the current study, the decision was made to include a local co-researcher, not only to acknowledge the impact of colonization, but also to ensure that the co-researchers' knowledge is considered legitimate knowledge epistemologically speaking, by both the community members and those outside it who will form the audiences of the study in the future. For this to happen Janeta and I debriefed after every interview and I asked lots of questions and she shared her perspective. There were also debriefings that Janeta initiated where she shared freely her perspective on an interview or some other experience as it related to our work together. I became acutely aware that as an academic researcher, I have been 'schooled' to think in a certain way and hearing Janeta's explanation of issues in her community brought new light to my academic awareness. I began a decolonization process through

working alongside Janeta. I realized that I needed to enhance my theoretical position. Adding the lens of Anticolonial Theory allowed the research to go beyond liberatory and emancipatory goals, into genuinely new collaborative terrain, with the central goal of dismantling the continuing effects of colonialism. Including Janeta as a partner with equal voice allowed space for me to move from being a colonizer-perpetrator to becoming a colonizer-ally.

Summary of Findings

Overall, this research project has unearthed aspects of complexity as these relate to adopting and implementing policy to support healthy eating and active living in an Indigenous community. The project findings contribute to multiple knowledge bases: policy, Indigenous, school health and population health literature. This project is significant in that it is one of the first policy intervention studies where policy change occurred to support healthy eating in the Northwest Territories. The energy drink ban adopted and implemented as part of the study supports the pre-existing food policy implemented at Moose Kerr School. These policies work together to help build a critical mass to help support healthy eating and active living in Aklavik. A critical mass occurs when a majority of people believe in a new idea, innovation, or change, make the change or adopt the new idea and influence others to make the change (Rogers, 2003). While it cannot be said that a critical mass has been built, one is building in Aklavik through multiple actions occurring concurrently. Additionally, this study provides substantial academic contributions by highlighting the perspectives of decision makers, policy influencers and health practitioners in an isolated Canadian Arctic community. They identified that the role for policy to support healthy eating and active living is limited without first educating community members about the negative consequences of drinking

sugar sweetened beverages, eating unhealthy food and being physically inactive. Many environmental factors such as availability, affordability and accessibility of healthy food also were identified as preventing community members from being able to eat healthily.

There is a call for action through policy to address the underlying social and economic drivers of unhealthy eating and physical inactivity (World Health Organization, 2013). However, policy interventions in Canadian Indigenous communities must come with great care and knowledge of the local context; building trusting relationships and understanding the historical factors that have shaped individuals' health in that particular community are necessary. Additionally, moving forward in Anticolonial ways with Indigenous peoples to build knowledge and capacity for policy interventions will ensure that policy is created, adopted and implemented by Indigenous peoples rather than forced upon them.

As a population health intervention, creating a policy tool kit through Wisdom Circle discussions provided an opportunity for participants to reflect on health issues in their community. This reflection could be considered, in light of Freire's (1979) work, a conscientization process that spiraled into taking action to support healthy choices in the community. The decisions to supply free water at the health center occurred as a result of the wisdom circle discussions, and banning the sale of energy drinks from all public buildings in the community was a result of building knowledge and capacity for policy adoption and implementation. These decisions represent study outcomes and are significant in that Aklavik is the first community in NT to implement a ban on energy drinks. CBC highlighted the ban in a news story (see- http://www.cbc.ca/news/canada/north/aklavik-energy-drink-ban-1.3772624). Additionally, articulating the food policy story that has been in place for more than a

decade provided a case example of a successful policy implementation process. From this policy story it is possible for interested others to learn how to implement a similar policy. However, just as important as these outcomes, was the space that was created and held during the wisdom circle for decision makers to hear each other, discuss what they see as issues in their community, discover what they do and do not know and do not need in order to protect the future health of their community and its members. It was a space for Anticolonial perspectives to emerge.

Overall, participants gained a new understanding of how healthy eating and active living policy can facilitate and hinder community wellness. Understanding the socio-political-historical factors that have shaped not only the culture—people but also the community as a whole—is a key learning from this study. Researchers working in Indigenous communities have an ethical responsibility to be open to learn about the context in detail before being able to truly understand the data they are collecting.

The method used in this research is a distinctive approach that utilized the Policy Readiness Tool (PRT), a validated instrument that has been used to assess policy readiness in municipalities and organizations within non-Indigenous communities. Additionally, to assess the appetite of decision makers regarding various policies, a number of questions were adapted from the Raine et al., (2014) decision maker survey. These questions facilitated a starting place to discuss policy and policy options, by asking if participants supported the particular policy or not. This method was an effective way to get a pulse on the perspectives of participants. In future research the survey could be used as baseline data and the qualitative questions could be used to explore in more detail what participants think about each particular policy option. This method can be applied to other research as a way to assess policy readiness and policy appetite.

Strengths and Limitations of the Study

As with any study, the study reported in this dissertation has both strengths and limitations. These strengths and limitations are described to emphasize the context of the study and to inform future research activities of a similar nature. A key strength of this study was the use of multiple data sources. In case study research, multiple data sources are required for a rich description of the case (Yin, 2012). Triangulation of data from interviews, Wisdom Circles, direct observation and document review strengthened the study in that it anchored findings and implications within a policy context. My own deep personal reflection, reflexivity and personal journaling provided the additional, dynamic, and, Anticoloinially speaking, necessary insights of the non-Indigenous researcher. This allowed for a space to critically examine my beliefs, ways of knowing, and theoretical position in the study. Being a non-Indigenous researcher was a limitation. I was not aware of the subtle nuances of the culture. For instance, when Janeta and I talked about the potential impact of gardening on elders in the community, I was not aware that gardening itself would bring back traumatic memories of residential school life, and gardening as hard labour and punishment. Another strength was having Janeta herself, a local co-researcher, who added a cultural and historical understanding that would not have existed if I had been working alone. Co-writing the policy story with the principal of the school also provided an opportunity to contextualize the data from an Indigenous perspective. Essentially, my experience working with a co-researcher and the principal from the school supports accuracy of findings and maintains the study's Critical and Anticolonial intentions.

Although bound by case study method and its theoretical framework, my intent was to encourage transferability of the findings and encourage further research on this

topic. I expand on three aspects of study limitations related to this focus. First, time in the field was limited to three trips by me ranging from 3-5 days over a 10-month period. Conducting research in a community for the first time typically requires prolonged engagement to build trust with community members and participants. As a result, findings from this study are limited due to shorter engagements in the field.

Second, the sample was from one community in the Northwest Territories, thus limiting the data to a specific community. In addition, this limited the findings to perspectives of a group of decision makers, policy influencers and health practitioners in one municipality. Participants were selected based on their backgrounds and ability to provide information on the topic area and not on the basis of how they were representative of the general population in the community. As a result, these limitations do not allow for acknowledgement of how decision makers, policy influencers or health practitioners from other municipalities in NT feel about policy and policy interventions to support healthy eating and active living. However, it is hoped through reading the case study, decision makers from other communities will recognize similar issues and thus notice if the findings are relevant to their circumstances.

Third, as a non-Indigenous researcher and the primary instrument for much of the analysis, there is a potential to limit the interpretations of the data (Merriam, 2009). The use of meticulous note taking, deep self-reflection, and personal journaling were strategies to diminish the potential for biased interpretations. Despite these efforts, I acknowledge that bias is difficult to eliminate and bias may influence interpretation of the findings, especially from a Eurocentric point of view. The exploratory nature of this single case study captured the thoughts, ideas and feelings of decision makers, policy

influencers, and health practitioners in Aklavik. The findings of the study and generally conducting research in the Canadian Arctic provide direction for possible future research.

Directions for Future Research

In light of the interpretation and discussion of key issues that have emerged in this case study, I offer several recommendations for future research directions. Generally, future research in Canada's North is desperately needed in order to address the health inequities between the North and the South. So little is known from the perspective of Northern Indigenous people about their health when compared to Canada's general population. However, greater funding is needed to support researchers, including Graduate students to work with Northern Canadian communities on priority health, social, and educational issues. Travelling to Northern Canada is an expensive endeavor, and without adequate funding much needed research is not possible. Inadequate funding becomes a social justice issue that must be raised with and addressed by research funding agencies.

Specific research priorities in the hamlet of Aklavik could include an evaluation of the impact of the recently implemented ban of the sale of energy drinks in public buildings on community members' consumption of unhealthy beverages. Intervention research could include an evaluation of how policies such as placing warning signs where energy drinks are consumed affect the social environment to determine if they have any impact on behaviour. It would be beneficial to extend the policy scope to include not only the sale of energy drinks but also the consumption in public facilities. Policy interventions have the potential to lead to improvements in individual health.

Additionally, tracking any diffusion of the energy drink policy to other communities in the NT and elsewhere could further add to the body of knowledge already

developing regarding how polices are diffused over geographical space and time. Policy diffusion occurs when one policy is adopted by another community (Cerna, 2013). Tracking the energy drink ban policy diffusion process is relevant for Indigenous communities for policy learning and for creating a truly locally based Indigenous policy framework (rooted in their worldview) which in turn will help to build knowledge and capacity for policy interventions as articulated by Indigenous peoples. Additionally, educational policy in NT is an area that could benefit from the results of this research project. While many schools in NT have implemented a similar food policy it is still not a government wide educational policy. It continues to be left up to the individual school. Having a Territorial policy in place would ensure the sustainability of the policy and contribute to the overall health of children.

Concluding Thoughts

In closing, I am reminded that preventing chronic disease requires efforts on many fronts - the political, economic, and social environments that foster unhealthy eating and physical inactivity are integral to prevention. Health care costs continue to climb and continuing to treat chronic diseases and initiating chronic disease prevention programs are expensive especially given that they have not shown many demonstrated effects on the rates of chronic disease (Anis, Zhang, Bansback, Guh, Amarsi & Birmingham, 2010). At the same time, many policy options for prevention remain underutilized (WHO, 2013). Health promotion advocates should continue to accelerate the movement from individual level program implementation to building capacity for policy adoption and implementation that can contribute to preventing chronic disease and ultimately creating healthier communities. However, the time may be ripe for new policy interventions at the federal government level to support healthy eating and active living in Canada.

The Prime Minister of Canada, Justin Trudeau (2015), and his Liberal Party have outlined Indigenous issues and health as priorities for their government. The Health Minister's mandate letter from Prime Minister Justin Trudeau to Minister Philpot, specifies a mandate to promote public health by "introducing new restrictions on the commercial marketing of unhealthy food and beverages to children, similar to those now in place in Quebec." (Trudeau, 2015, para 5). The letter also stated that Minister Philpot was to work with the Minister of Indigenous and Northern Affairs to "update and expand the Nutrition North program, in consultation with Northern communities" (Trudeau, 2015, para 5). Finally, in the letter Minister Philpot was also mandated to introduce tougher regulations to eliminate trans fats, reduce salt in processed foods, and improve food labels by providing more information about added sugars and artificial dyes in processed foods (Trudeau, 2015). Supporting Philpot's mandate is Senator Nancy Greene-Raine who recently introduced Bill S-228, the Child Health Protection Act, in the Senate (Government of Canada, 2015). Her bill prohibits marketing techniques aimed at getting children under 13 to eat foods that are too salty, too sweet or too fatty.

Additionally, the World Health Organization is urging countries to use tax policy to increase the price of sugary drinks and to initiate subsidies to reduce prices for fresh fruits and vegetables (WHO, 2016). Policy windows are opening. With the windows open fresh air can waft in and change the food and beverage landscape and potentially have an impact on the rising rates of obesity, diabetes, cardiovascular diseases and cancer in Canada. Partnering with Indigenous peoples to work towards eradicating their colonially rooted inequities with respect to health and specifically to food, as a colonizer-ally in the position as a nurse, educator and researcher are my next steps.

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Appendix A: Information Letter and Consent Form Interviews

UNIVERSITY OF ALBERTA

FACULTY OF NURSING

Level 3, Edmonton Clinic Health Academy
11405 87 Avenue, University of Alberta
Edmonton Alberta T6G 1C9
Toll Free Telephone: 1.888.492.8089
Fax: 780.492.2551
nursing.graduate@ualberta.ca
www.nursing.ualberta.ca

INFORMATION LETTER and CONSENT FORM

Study Title: Policy Options to Support Healthy Eating and Active Living

Research Investigator:
NAME Bonnie Fournier
Raine
3- 300 Edmonton Clinic Health Academy
Academy
11405 – 87 Ave.

University of Alberta
Edmonton, AB, T6G 1C9
Email: bonnie.fournier@ualberta.ca
Phone Number: 587-222-8889

Supervisor (if applicable):
Professor Supervisor: Dr. Kim
4-308 Edmonton Clinic Health
11405 – 87 Ave.

University of Alberta
Edmonton, AB, T6G 1C9
EMAIL : kim.raine@ualberta.ca
Phone Number: 780-492-9415

Background

- We would like to ask you to participate in a study that is being done in the NWT. We would like to examine the views of decision makers, policy influencers and practitioners about healthy eating and physical activity.
- The results of this study will be used in support of my thesis for a PhD in Nursing. Also in support of a CIHR Training Grant in Population Intervention for Chronic Disease Prevention: A Pan-Canadian Program (Grant # 53893).

Purpose

- We hope that the information we learn from the study can be used to improve the health of individuals in the NWT. We want to know how best to support healthy eating and physical activity through a policy process. The information will also be helpful for completing my PhD in Nursing.

Study Procedures

- If you agree to participate in the study, the researcher or the research assistant will contact you.
- The interview may last for 60 to 90 minutes in length and will be done face to face at a place most suitable for you or on the telephone. The discussion will be audio recorded.
- The discussion will be done in a casual manner. You will be asked questions about your background, the reasons that you would use policy and if you have thought about policy as an option to help support healthy eating and physical activity.
- After the audiotape has been put in written form it will be returned to you to check that the data collected is correct. You may change any part of the transcript and make corrections as necessary.

Benefits

- You will not receive any direct benefits from participating in the study. You may learn something about your community regarding how policy may work to support healthy eating and active living.
- There are no costs for being involved in the research.

Risk

- There are no direct risks to participating in this study, some of the things discussed in the interview may cause some distress. For example, there could be discomfort related to discussing health issues in your community.
- If you become upset discussing your experiences, the interviewer will refer you to a counselor.

Voluntary Participation

- You are under no obligation to participate in this study. The participation is completely voluntary, and you are not obliged to answer any specific questions even if participating in the study.
- Even if you agree to be in the study you can change your mind and withdraw at any time.
- If you withdraw, we will seek your consent regarding using the data we have collected.

Confidentiality & Anonymity

- The research process and results will be included in a written document for my thesis and may also be published in academic journals or for presentations.
- The information you provide will be kept confidential and only the research assistant, my PhD supervisor Kim Raine, and myself will have access.
- No personal information about you will be shared publicly or with our collaborators without your explicit permission.
- You will not be identified in any published work or presentation unless with your explicit permission. Direct quotes may be used in the publications with a false name.
- The audio recordings will be kept in a locked filing cabinet and the files will be stored on a password-protected computer for 5 years following the end of the research project and destroyed.
- If you are interested, you will also receive a copy of a final report. An email will be sent at the end of the study seeking your interest.

Further Information

- If you have any further questions regarding this study, please do not hesitate to contact:
- Bonnie Fournier at bonnie.fournier@ualberta.ca or 587-222-8889
- Kim Raine at kim.raine@ualberta.ca or 780-492-9415

- The plan for this study has been reviewed for its adherence to ethical guidelines by a Research Ethics Board at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Research Ethics Office at (780) 492-2615. It has also been reviewed by the Aurora Research Institute for the NWT.

This study was explained to me by:

I agree to take part in this study.
Signature of Research Participant: ________________________

Printed Name:

Witness (if available): ________________ Printed Name:

I believe that the person signing this form understands what is involved in the study and voluntarily agrees to participate.

Researcher: ________________________

Printed Name:

Appendix B: Information Letter and Consent Form Wisdom Circle

UNIVERSITY OF ALBERTA

FACULTY OF NURSING

Level 3, Edmonton Clinic Health Academy
11405 87 Avenue, University of Alberta
Edmonton Alberta T6G 1C9
Toll Free Telephone: 1.888.492.8089
Fax: 780.492.2551
nursing.graduate@ualberta.ca
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INFORMATION LETTER and CONSENT FORM

Study Title: Policy Options to Support Healthy Eating and Active Living

Research Investigator:
NAME Bonnie Fournier
Raine
3- 300 Edmonton Clinic Health Academy
Academy
11405 – 87 Ave.

University of Alberta
Edmonton, AB, T6G 1C9
Email: bonnie.fournier@ualberta.ca
Phone Number: 587-222-8889

Supervisor (if applicable):
Professor Supervisor: Dr. Kim
4-308 Edmonton Clinic Health
11405 – 87 Ave.

University of Alberta
Edmonton, AB, T6G 1C9
EMAIL : kim.raine@ualberta.ca
Phone Number: 780-492-9415

Background

- We would like to ask you to participate in a study that is being done in the NWT. We would like to examine the views of decision makers, policy influencers and practitioners about healthy eating and physical activity.
- The results of this study will be used in support of my thesis for a PhD in Nursing. Also in support of a CIHR Training Grant in Population Intervention for Chronic Disease Prevention: A Pan-Canadian Program (Grant # 53893).

Purpose

- We hope that the information we learn from the study can be used to improve the health of individuals in the NWT. We want to work with you to develop resources that will support healthy eating and physical activity through a policy process for your community. The information will also be helpful for completing my PhD in Nursing.

Study Procedures

- If you agree to participate in the study, the researcher or the research assistant will contact you.
- There will be up to six wisdom circles for 6 hours per day. The discussion will be audio recorded.
- The discussion will be done in a casual manner. We will discuss healthy eating and physical activity in your community and how to support it through local policies. You will help to create policy resources to help your community and other communities to support healthy and active living.

- After the audiotape has been put in written form it will be returned to you to check that the data collected is correct. You may change any part of the transcript and make corrections as necessary.

Benefits

- You will not receive any direct benefits from participating in the study. You may learn something about your community regarding how policy may work to support healthy eating and active living.
- There are no costs for being involved in the research.

Risk

- There are no direct risks to participating in this study, some of the things discussed in the wisdom circle may cause some distress. For example, there could be discomfort related to discussing health issues in your community.
- If you become upset discussing your experiences, the interviewer will refer you to a counselor.

Voluntary Participation

- You are under no obligation to participate in this study. The participation is completely voluntary, and you are not obliged to answer any specific questions even if participating in the study.
- Even if you agree to be in the study you can change your mind and withdraw at any time.
- If you withdraw, we will seek your consent regarding using the data we have collected. But once the PhD has been submitted for final approval data could not longer be withdrawn. The end date is approximately December 2016.

Confidentiality & Anonymity

- The research process and results will be included in a written document for my thesis and may also be published in academic journals or for presentations.
- The information you provide will be kept confidential and only the research assistant, my PhD supervisor Kim Raine, and myself will have access.
- No personal information about you will be shared publicly or with our collaborators without your explicit permission.
- You will not be identified in any published work or presentation unless with your explicit permission. Direct quotes may be used in the publications with a false name.
- Because the participants for this research project have been selected from a small group of people, all of whom are likely known to each other, it is possible that you may be identifiable to other people on the basis of what you have said.
- The audio recordings will be kept in a locked filing cabinet and the files will be stored on a password-protected computer for 5 years following the end of the research project and destroyed.
- If you are interested, you will also receive a copy of a final report. An email will be sent at the end of the study seeking your interest.
- As a group, we will also agree to keep all information that is shared between ourselves.

Further Information

- If you have any further questions regarding this study, please do not hesitate to contact:
- Bonnie Fournier at bonnie.fournier@ualberta.ca or 587-222-8889
- Kim Raine at kim.raine@ualberta.ca or 780-492-9415
- The plan for this study has been reviewed for its adherence to ethical guidelines by a Research Ethics Board at the University of Alberta. For questions regarding participant

rights and ethical conduct of research, contact the Research Ethics Office at (780) 492-2615. It has also been reviewed by the Aurora Research Institute for the NWT.

This study was explained to me by:

I agree to take part in this study.

Signature of Research Participant ________________________

Printed Name:

Witness (if available): ________________ Printed Name:

I believe that the person signing this form understands what is involved in the study and voluntarily agrees to participate.

Researcher: _______________________ Printed Name:

A model resolution

Appendix C: Interview Guide Sample Questions

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Interview Guide Sample Questions

**As new concepts emerge the interview guide will be adapted for subsequent interviews to permit in-depth exploration of all key ideas and themes.

Thank you for agreeing to participate in this interview with me today and for your willingness to share your knowledge. The overall purpose of the interview today is to gain an understanding of the types of chronic diseases in your community and what you feel can be done about them. I would like to confirm that all of the information you share today will remain confidential and no identifying information will be included in any of the final report documents. The interview will last for approximately 30-60 minutes.

We are broadly defining policy as:

- Policy can be considered a coherent set of decisions with a common long-term objective (or objectives) affecting or relevant to governments, institutions, groups or individuals (Food and Agriculture of Organization of the United Nations, ND).
- Policy represents a plan of action agreed to by a group of people with the power to carry it out and enforce it (Raine, 2013). It could be a resolution passed through the band, council or municipality. Examples are: banning junk food in schools, having nutrition guidelines for schools to promote healthy eating- all vending machines contain healthy food choices or special food days are healthy options, regular daily physical activity in schools, wild food support through a community freezer, banning energy drinks from being sold at the community store, etc.

We are defining chronic disease as:

- Chronic diseases are not passed from person to person. They are of long duration and generally slow progression. Types of chronic diseases are cardiovascular diseases (like heart attacks and stroke), cancers, diabetes, and obesity (WHO, 2012).

We are defining chronic disease prevention as:

- An action that helps to reduce the chance that individuals and populations will develop a chronic disease. Usually the focus is on unhealthy diet and physical inactivity (WHO, n.d). An example of an action could be to reduce the amount of sugar in your diet. This can be done through individual choice (not to buy pop) or it can be done through banning food or drinks from your community (policy/resolution).

We are defining policy adoption (decision making) as:

- The stage of the policy process in which decisions are made that favour one or more approaches to addressing a given problem (Benoit, 2013).

We are defining policy implementation as:
The stage of the policy process that describes how the policy decision will be put into action, including the effort, knowledge, and resources that are expended by policy actors to do so (Howlett, Ramesh and Perl, 2009, 160).

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Phase II Questions – Target groups are decision makers (chief, mayor, hamlet councillors), community policy influencers, and health practitioners.

1. Can you tell me about your role in the community and how long you have been in this role?

a. Confirm title of role, type of organization
b. Confirm type and level of relationships and interactions with Aboriginal communities.
c. Explore their level of decision making influence in their community

2. What kinds of issues do you see in your community and which of these are more concerning for you and for your community?

-Probe how they are addressing these issues using and ecological framework

3. What kinds of health issues do you see in your community and which of these are more concerning for you and for your community?

-Probe chronic diseases and if they see obesity as an issue

4. What do you see as the next steps in your community to address these issues? Explore specifically if they think obesity is an issue what is the cause of it and how would they address it. May need to provide a few examples of how other communities are addressing are supporting healthy eating and active living i.e. walking groups, cooking classes, education on healthy eating, banning junk food from schools.

-Probe if policy is seen as a viable option for prevention. If they do not suggested it in their answers then will ask about various policy type interventions such as banning pop from the community, collecting a tax from junk food or sugar sweetened beverages, implementing regular physical activity in the school, etc.

5. Does your community have any policies that you think are helping to encourage healthy eating or active living?

a. Probe re: different policies that may exist- may need to prompt "for instance, are there any policies that discourage unhealthy eating, or encourage healthy eating" etc.
b. If yes to existing policies, can you tell me about the process that led to the development of this particular policy?

- i. How did the policy come about?
- ii. Who developed it?
- iii. Who was involved in policy adoption, implementation and follow up?
- iv. What has been the role of community leaders (Chief, Mayor) in either the adoption or implementation of the policy?
- v. Is the policy being fully implemented?
  - If yes, who has helped to assure its implementation? Probe: what indicators of success are you using? What strategies have been successful in implementation? What have been significant challenges faced through the implementation process?
  - If no, what kinds of issues or barriers are you facing to implement it?
- vi. What resources have helped to implement the policy and what resources could help (or be helpful or necessary) to implement the policy?

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6. Do you think there is a role for policy in your community to prevent chronic diseases such as diabetes, cardiovascular disease, or obesity support healthy eating and active living? If yes, ask: do have suggestions on what type of policies would work in your community and why you think these policies would work?

7. What barriers do you believe exist in putting your suggested policy ideas into action? (stated in #6)?

8. Please describe a policy process that you have participated in that involved some aspects of preventing chronic disease with decision-makers, communities or organizations. (the interviewer might state: "In this context 'decision-makers' might be Community Health Representatives, health professionals in the community, the Band Council, the Chief, Mayor, the Chief Medical Officer of Health or a local Health Committee for example"
-Probe for process by which target audience is defined? e.g. To whom do you specifically target in your policy?

9. How do you engage [your target audience] in the policy process?
   a. When are members [of the target audience] invited to participate in the policy process e.g. at stage of problem identification, planning, adoption, implementation stage?

10. What channels of communication have you used to communicate the policy? Probe: Do you use websites, newsletters, radio, social media to share new policies?
    a. Can you describe what would be the most effective way to share new policies and how they will be implemented?

    -Probe for any current barriers to using what they would perceive as most 'effective' strategy

11. What advice would you give to other communities who want to implement similar policies?

12. What is distinctive about the process of policy adoption within Aboriginal communities or organization?

13. Is there anything that you would like to add about the policy process or policies that we have been talking about?

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Appendix D: No junk food policy at Moose Kerr School

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No Smoking Policy

Moose Kerr School adheres to the "No Smoking " policy that has been set by the Government of the Northwest Territories. **This policy states that no person will be permitted to smoke in or around government buildings.** Any student(s) caught smoking in any area of the school that is subject to an immediate suspension. Students and parents should also note that students will not be permitted to leave school grounds to smoke.

Guests who use the school for public events are to take note & respect the No Smoking Policy as a fine may be imposed if persons are caught smoking on school ground/and or near building entrances as that is breaking the Government regulations. A designated site is the road side away from the school building.

Junk Food Policy

Moose Kerr School, acting under the guidance of the local District Education Authority, has adopted a strong policy regarding the consumption of junk food in the school. BDEC issued a Nutritious Food/Drink Policy effective Aug.01.03 to follow the role modeling done by Moose Kerr School.

Students will not be permitted to consume junk food at anytime while they are inside the school. Teachers may confiscate any junk food until the end of the school day. Reminder to students/parents to **not bring junk food** to any school related activity unless prior approval is given by your child's teacher. Exceptions to this rule can be made for special events such as class parties. These requests should be made to the administrator prior to the scheduled event.

Any **groups (school/outside school group)** using the school for sports, recreational evening events, or any scheduled event are to follow this policy. A breech of this policy will result in losing use of school facility privileges.

JUNK FOOD	VS	HEALTHY SNACKS
Energy Drinks, Pop, Gum, Potato Chips, Chocolates, Candy Bars, Various Candies, Iced Tea, Slushies Gatorade and other sugary drinks.		Granola Bars, Fruits, Crackers, Vegetable, Pretzels, yogurt, dry meat, Fish sticks, Berries, Sun chips.

"A healthy body produces a healthy mind."

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Appendix E: Detailed Methodology

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Methodology

My Approach to Research

My approach for the study was foremost a conversational and relational one, as I engaged in a dialogue with decision makers, policy influencers and health practitioners to create a space for their voice to be heard. When Indigenous peoples tell their own stories through their own frameworks, Anticolonial theorizing occurs. Anticolonial theory uses Indigenous knowledges as an important entry point in an analysis of the colonized whereby Indigenous peoples can seek to resist the ongoing ramifications of colonialism, change it and build something new (Dei, 2000).

Smith proposes the need for critical reflexivity in research to uncover discriminatory practices that perpetuate colonizing research practices before infusing the process with an Indigenous centered "Indigenization" of research methods that seek to promote the inclusion of uniquely Indigenous thematic constructs and is congruent with the Two-Eyed Seeing approach in research with Indigenous peoples. Based on the story told by Mi'kmaw Elder Albert Marshall in 2004, Two-Eyed Seeing is a co-learning process between Indigenous and non-Indigenous peoples bringing together different ways of knowing to find better ways of taking action and leaving the world in better place (Bartlett, Marshall & Marshall, 2012). My approach was to interact with the literature and to question 'Western' research assumptions that frame Indigenous issues as needing to be solved by Western researchers. Furthermore, by encouraging and facilitating community members to direct the approach within the wisdom circle process the participants created their own data (narratives, etc.) which challenged the dominant constructions of knowledge around policy and who has the power to produce and shape it.

Design

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A qualitative single exploratory case study design was used informed by CST (Habermas, 1982), Anticolonial theory (Dei, 2000) and a participatory approach (Freire, 2000). Initially the study was designed using two cases. However, during the community recruitment stage the second proposed community underwent a natural disaster (fire) and had a change in the local government. It was determined that only one case would be explored in depth and broadly to provide a detailed description of the setting, context and interactions. Aklavik, NT was viewed as a unique case as defined byYin (2003). Initial exploration with community leaders led to their self-assessment as 'innovators' (Nykiforuk, Atkey, Nieuwendyk, Raine, Reed & Kyle, 2012) in implementing policy to support healthy eating and active living in their community. As such, the unique nature of the case was confirmed.

Alternative research approaches include quantitative and mixed methods methodology, however, these did not align with the purpose of the study or the research questions. Quantitative methodology seeks to explain the views of a large number of participants in order to identify a trend or relationship between variables (Creswell, 1998). Mixed methods methodology requires the collection of both quantitative and qualitative data, which would necessitate a larger sample of participants in order effectively to conduct this type of study (Teddlie & Tashakkori, 2009). Consequently, there were too few participants available for quantitative or mixed methods methodology to be appropriate. Additionally, an intrinsic case study approach would focus on the case (policy adoption and implementation) instead of the phenomenon (building capacity for policy adoption and implementation). Therefore, an instrumental case study design most effectively aligned with the purpose of the study and the research questions. For the purpose of this study, the intention was to understand decision makers' and policy influencers' perceptions of healthy eating and active living policies in order to create a community driven tool kit, with a number or resources that would facilitate building knowledge and capacity to support policy

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interventions that create conditions for healthy eating and active living. The purpose of developing the tool kit was to support decision makers in building knowledge and capacity to support policy interventions. As a capacity building process, discussing the content of a policy tool kit provided an opportunity for participants to reflect on the health effects of consuming unhealthy food and beverages. This reflection could be considered, in light of Freire's (2000) work, a conscientization process that spiralled into taking action to support healthy food options in the community. Case study research produces a case that should resonate with decision and policy makers with similar issues or interests whereby they can learn what action they may also want to implement.

Identified limitations of case study research include lack of rigor, potential for bias by the researcher, and lack of generalizability (Yin, 2009). We minimized these limitations by addressing three key areas. First, we used a protocol as the descriptive road map to establish systematic procedures demonstrates rigor and transparency, as well as researcher trustworthiness (Yin, 2009). The protocol included the purpose, the questions, procedures and general rules to collect data in the field and analysis of the data (Merriam, 2009; Yin). Second, we employed the procedures of member checking, and triangulation of data sources and methods to increase trustworthiness. Third, although the potential for bias exists in all types of research methodologies, the use of theory in case study gives researchers an opportunity to reveal (and minimize) substantive biases that may affect the design and conduct of a case study (Yin, 2012). By employing CST, Anticolonial theory and using a critical reflexive process, bias was minimized. In response to the criticism regarding poor generalizability, Yin (2009) calls for a distinction between two types of generalizing: statistical generalization and analytic generalization. It is argued for case study research that analytic generalization is an appropriate type (Yin, 2012). Qualitative research cannot statistically generalize to populations in the same

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way as quantitative research can and should make no claims to do so (Yin, 2012). However, a qualitative case study can be analytically generalized to broader theory and facilitates applying the same theoretical propositions to other situations outside the completed case study, where similar concepts and constructs might be relevant (Yin, 2012). The case study does provide new insights about complex and contextualized social phenomenon of policy adoption and implementation in an Indigenous community, enhancing the transferability of findings to other similar communities. Linda Tuhiwai Smith reinforces this point about community sharing:

> The survival of one community can be celebrated by another. The spiritual, creative and political resources that Indigenous peoples can draw on from each other provide alternatives for each other. ...To be able to share, to have something worth sharing gives dignity to the giver. To accept a gift and to reciprocate gives dignity to the receiver. To create something new through that process of sharing is to recreate the old, to reconnect relationships and to recreate our humanness (Smith, 1999, p. 105).

In this way, the sharing of experiences and best practices between communities can help to empower both the givers and the receivers, while each provides tangible support to the other in their endeavors to enhance collective quality of life and wellbeing.

Gaining Entry

As Tervalon and Garcia (1998) point out, while we can never be truly competent in another's culture, we can approach communities and their members with cultural humility-- a commitment to self-reflection about our own biases, to learning about other cultures and community expertise (knowledge, skills and experiences), and to forming respectful and trusting community partnerships. The need for cultural humility refers as well to our status as physicians or other health care professionals (Tervalon & Garcia, 1998). In the context of this study, there

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was a recognition that the "community protocol" – local customs, beliefs, knowledge and practices was followed.

I began my search of a community through accessing the POWER UP! partner in the NT-Department of Health and Social Services (DHSS). The Deputy Chief Medical Officer (DCMO) and the Manager of Health Promotion in the DHSS recommended Aklavik as a community where several health eating and active living interventions were occurring that were innovative. The DCMO and the Manager facilitated a teleconference with the Mayor, SAO and myself to discuss the research study in more detail. The Mayor and SAO expressed interest and invited me to come to Aklavik for my field research. During the three months after the teleconference, a number of emails and telephone calls occurred to discuss logistics of field work (timing, accommodation, resources needed). These emails and phone conversations were the beginnings of building a relationship with the Mayor and SAO.

Sampling and Recruitment. As Aklavik was identified as a rich case for study, purposive sampling was the sampling strategy that was used in this single exploratory case study. This sampling strategy that offered the most and richest information from the phenomenon studied (Creswell, 2007).

Research Protocol

According to Yin (2009) there is no prescribed research design for case studies, rather the design is the blueprint of the study. Yin referred to this blueprint as the protocol of the study and the data collection processes. A case study protocol provides a logical plan increasing reliability of the research and providing a guide to the researcher during data collection for the study (Yin). The following sections describe the key components of the protocol that were employed for this case study, including unit of analysis development, data collection procedures, data analysis processes and ethics.

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Unit of Analysis

Yin (2009) stated the selection of a unit of analysis (the phenomenon for which evidence is collected) needs to be in response to the primary research questions. The unit of analysis can be at the broader level such as the field setting or an organization and at a narrower level such as an analysis of participants in the study (Yin, 2009). In this study both the broader level of analysis and the narrow level was chosen. The broader unit of analysis was the community of Aklavik, NT. Additionally, in order to interpret how policy adoption and implementation is understood and to build knowledge and capacity, the narrower unit of analysis was community decision makers, policy influencers and health practitioners. These participants were recruited through purposeful sampling based on the principle of obtaining different functional perspectives on the subject of healthy eating and active living policy adoption and implementation.

Data Collection Procedures

Case study design provides flexibility regarding data collection methods that were also triangulated to enhance the trustworthiness of the study. Data were collected through in-depth face-to-face individual interviews, direct observation, secondary sources (documents), the Policy Readiness Tool (Nykiforuk, Atkey, Nieuwendyk, Raine, Reed & Kyle, 2011) and Wisdom Circles. Interview guides were developed for the in-depth face-to-face interviews and Wisdom Circles (see Appendix C). All participants were made aware that interviews and Wisdom Circles would be tape recorded for transcription and analysis purposes.

During the initial field visit, several meetings took place to discuss the purpose and logistics of the study. During the first meeting with the Senior Administrative Officer (SAO) and the Mayor, ethical considerations were discussed including going through the consent forms and the data sharing agreement. A more detailed discussion of ethics follows.

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Also during this meeting, we discussed recruiting a co-researcher from the community. I identified I required someone who was interested in healthy eating and active living and someone who has a background in working with researchers. Two potential individuals were discussed and the decision to choose between them was left up to the SAO. I met with the chosen individual, Janeta, for approximately one hour to discuss the research study. She expressed interest in being a co-researcher understanding that role was different from a research assistant. We scheduled time together for the next 5 days to recruit and begin interviewing participants.

The co-researcher and I drafted a list of potential participants based on the inclusion criteria. Inclusion criteria for our study were persons in a position to influence the policy environment, and/or who have been employed as a senior administrator (policy advisor, decision maker, manager) in the community for a minimum of one year. The in-depth face-to-face interview with the first participant in the study was conducted by the first author while the co-researcher observed. A debriefing between the first author and the co-researcher occurred immediately after the interview, to discuss not only the content of the interview but also the procedures - explaining the research, making sure consent was understood by potential participants, obtaining written consent and discussing the flow of questions. The second interview was co-facilitated by the first author and the co-researcher, with the latter taking the lead in asking questions. Again, debriefing took place. Subsequent interviews were conducted by the co-researcher with the first author present taking field notes.

Wisdom Circle participants were recruited during the second field visit by asking interviewees (decision makers and policy influencers) at the end of their interview if they would be interested in participating in a Wisdom Circle. Other potential participants were telephoned by the co-researcher. The purpose of the Wisdom Circle was discussed focusing on the process of creating a tool kit (see Appendix G). Once the date of the first wisdom circle was confirmed,

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potential participants who expressed interest were telephoned by the co-researcher to confirm attendance.

In-depth face-to-face interviews. Fourteen in-depth face-to-face individual interviews took place. Eight interviews were with decision makers, four interviews were with policy influencers and three interviews were with health practitioners. Interviews lasted between 20 and 60 minutes, and were audio-recorded and transcribed verbatim. The scholarly definitions of policy adoption and implementation were an overt part of the interview's introduction, so as to focus the discussion.

Direct observation. We used direct observation on two different occasions in the local store (across from the school) for approximately one hour each time to discern and record what children were purchasing.

Secondary sources. Secondary sources included the materials produced during the Wisdom Circles, comprising of transcriptions, agendas, co-researcher field notes and reflections. The local school's food policy, food security literature and policy examples from other jurisdictions were reviewed. Field notes from the direct observation event were also included in the study. Yin (1994) states that documentary information "is likely to be relevant to every case study topic" (p. 81). Merriam (1998) claimed that "documents of all types can help the researcher uncover meaning, develop understanding, and discover insights relevant to the research problem" (p. 118). The documents in the study facilitated a broader and contextual understanding of the case study.

Policy readiness tool (PRT). During the first field visit, the Policy Readiness Tool (PRT)[13] was administered with the SAO and Mayor. The PRT has been adapted from the

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[13] Policy ReadinessTool is the name of the tool given by Nykiforuk, Atkey, Nieuwendyk, Raine, Reed & Kyle, 2011. Readiness in this context does not imply racist or colonial perceptions of Indigenous peoples.

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Diffusion of Innovations Theory (Rogers, 1983) and has been used to assess a community, organization or municipality's level of readiness for policy change. The tool describes policy readiness as a set of behavioural categories: innovator, majority, and late adopter. These categories collapse Rogers' (1962) five adopter categories for ease and applicability (Nykiforuk, Atkey, Nieuwendyk, Raine, Reed & Kyle, 2011). Readiness is based on the notion of what it means to be an innovator, majority or late adopter. The PRT describes innovator communities as adventurous and often serving as role models for other places. Majority communities are described as deliberate because they require time to determine whether to adopt a new initiative. Late Adopter communities are described as traditional, skeptical of new ideas and eager to maintain the *status quo*.

Wisdom Circle. A Wisdom Circle is a small group designed to encourage people to listen and speak from the heart in a spirit of inquiry (The National Coalition for Dialogue & Deliberation [NCDD], 2010) and is aligned with Indigenous worldviews (Wilson, 2008). Two Wisdom Circles occurred and did not include health practitioners as the users of the tool kit were decision makers. The first Wisdom Circle was conducted during the second field visit and included five decision makers and policy influencers from the community who met for approximately 120 minutes and was co-facilitated by the first author and the co-researcher. The second Wisdom Circle was held three months later, included ten decision makers, lasted 15 minutes, and was facilitated by the local co-researcher only.

During the first Wisdom Circle, we opened the discussion with a prayer that was led by one of the Wisdom Circle members and closed the Circle by thanking everyone for their ideas. The first Wisdom Circle engaged participants in a dialogue about health, food security, and active living issues in their community. Sample policy options from non-Indigenous Canadian municipalities were presented to stimulate further discussion such as banning the sale of energy

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drink in public buildings. Additionally, information from the literature review and preliminary results from the individual interviews were discussed. Ideas for a tool kit centered around the development of model resolutions for community governance and education/information such as beverages that have high sugar content. Within the context of this study, a tool kit refers to a collected set of strategies such as model resolutions that can be accessed by others.

The second Wisdom Circle occurred while the first author was away from the community and the local co-researcher facilitated the discussion. The five additional participants were explained the purpose of the study and asked to sign a consent form. As this second Wisdom Circle was part of another, unrelated, meeting, the duration was shorter than first Wisdom Circle and was focused on providing feedback on the model resolutions that were developed based on the interview data and the first Wisdom Circle. A resolution expresses a group of decision makers' position on an issue or concern and the adoption of the resolution is not as strict as for those passing a bylaw (Public Health of Ontario, 2014). Four model resolutions that were recommended by participants in the in-depth face-to-face individual interviews and the first Wisdom Circle. The four resolutions included in the tool kit were: (a) banning the sale of energy drinks in public buildings; (b) ensuring access to free drinking water in public buildings; (c) providing healthy catering including country foods[14] at events and for meetings; and (d) banning the consumption and sale of sugar sweetened beverages from public buildings. Banning sports sponsorship of food and beverage companies that provide unhealthy foods was a fifth resolution that was later developed based on a discussion that occurred during one of the knowledge translation activities on the third field visit. The four model resolutions (not including sports sponsorship) were presented at the second Wisdom Circle to obtain feedback and to decide if any

[14] Country food is defined as mammals, fish, plants, berries, and waterfowl or seabirds that are harvested from the local environment for consumption (Van Oostdam et al., 2005).

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of the policy tools could be adopted and implemented. The sport sponsorship resolution was discussed at a hamlet Council meeting where it was decided not to adopt the resolution based on jeopardize funding for their youth teams.

Summary of Data Collection Activities

The study's data collection technique offered complementary perspectives on the healthy eating and active living in the community and regarding potential policies, facilitators and barriers to policy adoption and implementation. Additionally, the Wisdom Circles provided a space to discuss and develop resources that would facilitate building knowledge and capacity for policy adoption and implementation. A primary concern was to develop a knowledge set to enable me to answer the study's research questions.

Data Preparation and Management

Transcription. All interviews were professionally transcribed. Transcription focused on words and nonverbal content (e.g., silences, emotions) (MacLean, Meyer, & Estable, 2004).

Cleaning and expansion. Once transcribed, I listened to each recording and the corresponding transcript was reviewed to ensure accuracy (Poland, 1995). To enhance readability, false starts and 'uh-hms' were removed unless they contributed to meaning. Transcripts were further edited (e.g., tense, pronoun) to enhance readability but without changing meaning.

Management. Transcripts, field notes, summaries from Wisdom Circles, personal journaling and co-researchers reflections were stored in NVIVO 10. Some annotations and memos were also created and retained using this software.

Data Analysis

Unlike many methods such as ethnography, grounded theory, phenomenology, and narrative inquiry, case study does not contain a process and set of steps to follow during data

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analysis (Yin, 2014). Instead, the researcher adopts strategies from other qualitative methods. Qualitative content analysis guided my analysis. The distinguishing feature of conventional content analysis, the approach that I used, is that it is entirely inductive; codes are derived from the data versus using existing theory.

Although conventional content analysis provides general guidance about how to 'do' analysis, it is not a formulaic set of steps. The researcher must create a specific process. I established a two-stage process for analysis of the various data sources and a three-stage process when analyzing the policy story using the adapted RE-AIM framework. Strategies described by Miles and Huberman (1994) were used to create this process. Stage one included data reduction, and stage two included conclusion drawing and verification (Miles & Huberman, 1994). Data reduction, a process to focus and simplify the data, occurred through written summaries of meetings between the first author and co-researcher and personal journaling, and through coding processes iteratively constructed from the raw data from the interviews and Wisdom Circles. There were two cycles of data reduction allocating codes and then categories. During data reduction, we used qualitative data analysis software, NVivo10 (QSR International, Burlington, MA), as a data management strategy and to code transcripts from the study. Within the software program, words and phrases were first coded in vivo and as the second iteration of coding took place, in vivo codes were then labeled that seemed to be forming into clusters of similar categories such as "policy perceptions" and descriptive codes such as "education" (see Appendix F). Memos were used within the software program, like sticky notes, to keep a running log of thoughts and interpretations to make connections with what was being read. Stage two, conclusion drawing and verification, occurred throughout the analysis. Myself and Janeta, the co-researcher, looked at the big picture and asked questions such as "what is happening here?" and "what are we learning about this?" during the initial stages of data collection. After Janeta moved

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away from the community, I continued this form of questioning. Additionally, various available documents and data from direct observation were drawn upon to provide a thorough description of the different pieces of information used to inform the development of the tool kit.

After completing first cycle coding with a portion of the raw data, I began second cycle coding. In this stage, I cleaned, organized, and compared each code. I reviewed its contents and considered the following: word(s) that best describe it, concepts within and thus whether a code should be split into several codes or merged with others, and, similarities, differences, and overlap between codes. I then wrote a tentative definition of each code including what distinguished it from other codes and lingering questions about it. At times, this required me to return to original transcripts and re-code sections to ensure that codes, particularly new codes, were complete and consistent. In second cycle coding, I also grouped similar codes together and built a hierarchy of codes and sub-codes (e.g., codes relating to policy perceptions, power, and education. The next step I undertook was categorizing which was organized using the study objectives: (a) assessing policy readiness; (b) potential policies; (c) barriers to policy adoption and implementation; (d) Wisdom Circle recommendation #1: educating the community (e) Wisdom Circle recommendation #2: making healthy choices available; and (f) power. Additionally, I undertook a third stage when analyzing the policy story which included utilizing constructs of the adapted RE-AIM framework to provide an understanding of the case.

Ethical Considerations

The study followed all of the principles of the ownership, control, access and possession (OCAP) model developed by the First Nations Regional Longitudinal Health Survey and the First Nations Information Governance Centre (Schnarch, 2004) and CIHR guidelines for conducting research with Aboriginal peoples. The OCAP principles call for engaging the community in research that is more holistic, community controlled and meaningful, (Schnarch, 2004). The Tri-

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Council Policy Statement (TCPS) on ethical conduct for research involving humans also emphasize the importance of a participatory approach to any research that involves Indigenous peoples (Canadian Institutes of Health Research, 2010). Ethical approval was also obtained from the University of Alberta Research Health Ethics Board and an Aurora Research Institute license for conducting research in the NT was also secured.

Confidentiality

Confidentiality was held with the highest ethical standards. Each interview was in a private location, taking place on a date and time convenient for the participant. Only the transcribers, the co-researcher and I read the transcripts and heard the interviews. The transcriptionists hired to transcribe and the co-research signed a confidentiality agreement. Some participants preferred to remain anonymous. However, others including the Mayor, SAO and principal of the local school wanted to be credited for their contribution to the study. The decision about how they wanted themselves and their contribution to be given credit was raised directly with each individual and followed as requested.

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Appendix F: Data Management for Interviews and Wisdom Circles (Transcripts/Raw Data)

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Objectives (1 and 2)	**Source** (Decision Maker, Policy Influencer, Health Practitioner)	**Codes**	**Categories**
1.To increase understanding and support for policy adoption and implementation	**Decision Maker** Policy Readiness Tool - administered with Mayor and SAO	Innovator	Assessing policy readiness
1.To increase understanding and support for policy adoption and implementation	**Decision Maker** "I think more education and information on it... You can eat junk food moderately but it's a matter of providing more information and educating them **Policy Influencer** "I think it would be a good idea. Something I would support " "I think it would be a good idea. Something I would support " **Health Practitioner** "I think it would be possible. They [the store] would do that because the best seller is pop. Pepsi and Coke and stuff like that". "We need to make community members more aware of the health effects of unhealthy eating through posters, radio station, flyers or newsletters"	Education Supportive Education Supportive Education	**Potential policies** Providing programs to educate community members about how to make healthy food choices Banning unhealthy food Providing programs to educate community members about how to make healthy food choices Banning the sale of energy drinks in the community Providing programs to educate community members about how to make healthy food choices
1.To increase understanding and support for policy adoption and implementation	**Decision Maker** "I am not a big policy person. I'd rather – well when there's something written on paper that you have to follow, if they're entrenched as a must, people don't like being told you have to do this. I still like to have that bit	Policy perceptions Government Colonialism Power	Barriers to policy adoption and implementation

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	of leeway so we can make up our own mind…" **Policy Influencer** "you offend people, you infringe on people's feelings of rights". "To me, policy is government".	 Infringe on rights Colonialism Power taken away Policy Perceptions	 Barriers to policy adoption and implementation
2.Collaborative Tool Kit Intervention Development	**Decision Maker** We need to give people the option…But to start to make it a policy – this is not allowed, and this is not allowed…the better trail is to provide the healthy option and education is a big part of healthy eating". "But if you try to drop it [policy] right on the community it is hard to digest so in the tool kit we need to start educating the individual and family to start practicing healthy eating just to start talking among themselves, **Policy Influencer** "To try to tell the community to do this will not work. The onus should be on the individual and family and when we get a list of food that is good for you and bad for you it may help some families and get them to cut down. Family education".	 Policy Perceptions Power over Education Choice/options Policy Perceptions Education Choice Paternalism/Power Individualism Education	 Wisdom Circle recommendation #1: educating the community Wisdom Circle recommendation #1: educating the community
2.Collaborative Tool Kit Intervention Development	**Decision Maker** "Maybe we should invest in providing free water. It would be interesting to see if they take the free water over the Pepsi. It	 Policy Action	Wisdom Circle recommendation #2: making healthy choices available

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	would be an interesting experiment" **Policy Influencer** "It has to be gradual and you give them healthy options... I was thinking if we stop selling pop, chips and chocolate, yesterday, what are we going to sell? What keeps long are apples and oranges…You give them that choice".	Choice/options Challenges Action	Wisdom Circle recommendation #2: making healthy choices available

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Appendix G: Tool kit

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Resolution 1

We do not sell or serve energy drinks in public buildings: A resolution that makes sense!

Municipalities and Hamlets play a strategic role in the prevention of chronic diseases such as diabetes, obesity and cancer, as their interventions have an immediate impact on the environment and on community members' lifestyles. Be it to improve the food supply and access to healthy foods, to encourage participation in the natural environment, or to increase access to sports facilities, the possibilities for action are numerous and varied for municipalities that wish to make a difference.

Cities and First Nations Communities are taking action to reduce access to energy drinks

In the course of an ordinary session on October 17, 2011, the members of the municipal council of the town of Amqui in Quebec passed a resolution to proscribe the sale of energy drinks in all buildings under its jurisdiction.

In response to pressure exerted by energy-drink manufacturers, the mayor of Amqui launched an appeal to his elected colleagues to urge them to adopt, like his town, a resolution prohibiting the sale of energy drinks in their municipal buildings. To date, numerous other municipalities in Quebec have followed suit:

- ➔ Amqui: October 17, 2011
- ➔ Causapscal: December 5, 2011
- ➔ Rimouski: December 19, 2011
- ➔ Havre-Saint-Pierre: January 9, 2012
- ➔ Salaberry-de-Valleyfield: January 24, 2012
- ➔ Roberval: February6, 2012
- ➔ Mont-Saint-Hilaire: February 6, 2012
- ➔ Saguenay: March 14, 2012

In Nova Scotia, Waycobah First Nations* also banned energy drinks when a girl on another reserve was hospitalized with heart problems related to consuming energy drinks. The Council discovered that children as young as 10 years of age were taking energy drinks on a daily basis which was being supplied through older children in the community.

* See CBC story - http://www.cbc.ca/news/canada/nova-scotia/waycobah-first-nation-bans-energy-drinks-1.2778619

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Energy drinks, obesity, and health risks

Though there are numerous other factors at play in the development of chronic diseases well-known organizations such as the *Institute of Medicine*, the *Centers for Disease Control and Prevention*, the *United States Department of Agriculture*, and the *Rudd Center* are taking action to diminish the consumption of sugar-sweetened beverages. It has been demonstrated, among other things, that the consumption of one such beverage per day is associated with a 60% higher risk for obesity among children. Moreover, sugar-sweetened beverages are associated with various illnesses, including type 2 diabetes, hypertension, cardiovascular diseases, tooth and bone conditions, as well as certain types of cancer.

Because they are first and foremost highly sweetened beverages, energy drinks must only be consumed sparingly. Furthermore, they contain high concentrations of stimulating substances, such as caffeine. As such, they constitute a potential health risk, which is why the *American Academy of Pediatrics* recommends that children and adolescents not consume energy drinks. For its part, the Government of Canada announced in October 2011 that it would require cans to carry a warning indicating that the product is not recommended for children. Nevertheless, many young people still consume these drinks as they are easily available to them.

Finally, it is inadvisable, if not dangerous, to consume energy drinks when practising a sport. Consequently, a ban on selling such drinks on sports and recreation premises under municipal or hamlet jurisdiction, including ice rinks, soccer and baseball fields, curling arenas and so on, should be strongly encouraged both for the sake of rationality and in order to protect the more vulnerable members of the community.

A CALL TO ACTION!

In light of the above, the Hamlet of Aklavik encourages all of NWT's municipalities and hamlets to follow by banning the consumption and sale of energy drinks from their public buildings.

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Model Resolution

RESOLUTION # ____________________

ENERGY DRINKS AND MUNICIPAL BUILDINGS

WHEREAS health habits are heavily influenced by the supply of food in different settings and municipalities have a predominant role to play in the development of healthy food environments;

WHEREAS the rate of type 2 diabetes, obesity, hypertension, heart disease is of serious concern and this condition affects the health, quality of life, and well-being of the population, in addition to generating significant social costs;

WHEREAS the Government of NWT alone cannot stop the obesity and diabetes epidemic and must count on the contribution of municipalities and hamlets;

WHEREAS the municipality wishes to take an active role in promoting health and well-being by helping citizens adopt a healthy lifestyle;

WHEREAS numerous municipal and hamlet buildings, including sports and recreation facilities, are heavily frequented by children and adolescents;

WHEREAS the consumption of energy drinks can carry health risks for some groups in the population, including children and adolescents;

WHEREAS, like many public health organizations, the hamlet of Aklavik is concerned with the growing consumption of energy drinks by young people;

WHEREAS the consumption of energy drinks when practising a sport can carry health risks and, consequently, the sale and the consumption of such beverages is irrational in places for physical activity;

It is moved by ______________________________, seconded by ___________________________ ________, and (*unanimously resolved* OR *resolved by majority vote*) that:
The sale and consumption of energy drinks is not authorized in the hamlet buildings of the hamlet of Aklavik.

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Resolution 2

Access to free drinking water in public places (recreation centre)- Bring your water bottle and protect our land!

Through their land use and services, municipalities have a large influence on their communites' health, lifestyle, and quality of life, not to mention the environment. In this regard, making water more accessible to the population can be highly beneficial for the **health** and **quality of life** of community members.

Besides being in sync with the spirit of a healthy recreation centre, this measure is also very popular, as evidenced by the Drop the Pop Campaign in NWT schools**.**

Enabling healthy hydration
Though the over-consumption of sugar sweetened beverages [SSB] (pop, juice, sports, flavoured milk, energy drinks) is strongly associated with obesity, type 2 diabetes, poor dental health, and numerous chronic illnesses, our food environment tends to encourage the drinking of these beverages.

Providing access to free drinking water makes it possible to offer community members a genuine healthy, economical, and eco-friendly hydration option. Increasing the number of free water points in public places can be beneficial for municipalities as well. Indeed, such a measure can help reduce the use of single-use containers, such as water or SSB bottles, which ultimately end up in municipally managed community recycling depots or garbage dumps. As well, encouraging community members to bring a water bottle also helps to protect the land.

Adopting a resolution: a coherent and promising measure
The Hamlet of Aklavik calls on other municipalities to offer drinking water in public places, including municipal buildings and sports facilities. Adopting a resolution to favour access to free drinking water is a measure that can help promote drinking-water consumption and healthy hydration among community members.

Inspiring initiatives
Improve access to water at special and popular-holiday events
There are temporary drinking water installations available that allow adding to the regular supply of drinking water at special or popular-holiday events and during heat waves, for example. The City of Longueuil, for instance, owns a mobile water fountain that it deploys at certain public events (1). Drinking water cisterns can be rented as well.
A fountain in every park!
Some municipalities have opted to install at least one water fountain in every park. This makes it easy for residents to locate a fountain when need be. It also encourages park users, particularly children, to enjoy healthy hydration.

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Conclusion

Municipalities play a strategic role in the promotion of health and wellness and in the prevention of obesity, type 2 diabetes, and many diseases through their interventions, which have an immediate impact on the environment and the lifestyle of citizens. Whether it be to improve food options and access to healthy food and beverages, to encourage the use of the natural environment for physical activities, or to increase access to sports facilities, the possibilities for action are numerous and varied for municipalities. Enhancing access to free drinking water in public places is a useful and coherent endeavour that meets with community approval.

In order to make matters easier for municipalities that would like to implement a policy favouring access to free drinking water in public places, a model resolution to this effect has been made available (see page 3).

References

1. Ville de Longueuil (2011). Marketing municipal drinking water. Tap water is tops in Longueil: An innovative and unique concept] Retrieved at www.longueuil.ca/fr/node/23205.

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A model resolution

Model resolution

ACCESS TO DRINKING WATER IN PUBLIC PLACES

WHEREAS (name city/town/hamlet) is actively involved in promoting the health and wellness of its community members by way of its municipal policies, land use, and services offered;

WHEREAS, from a health perspective, water is the ideal beverage for healthy hydration and its consumption must be encouraged and enabled;

WHEREAS it is important for the vast majority of community members to have access to drinking water in public places, whatever the season;

WHEREAS the water of (name city/town/hamlet) is safe, clean, and of excellent quality (specify any certification obtained);

WHEREAS (name city/town/hamlet) has embraced an approach centred on sustainable development;

WHEREAS the bottling of water and other beverages in plastic containers and their distribution have a harmful impact on the environment;

WHEREAS only a small portion of single-use plastic bottles are recycled and that said bottles end up in the streets, parks, and waterways of the municipality, in addition to cluttering up landfill sites;

WHEREAS the municipality does not wish to promote the consumption of sugar-sweetened beverages by increasing their visibility and accessibility following the removal of bottled water from its vending machines;

It was so moved by ___________________________, seconded by ________________________, and further resolved by (unanimous/majority) vote that:

The city/municipality of (name of city/town/municipality/hamlet):

1- Eliminate the option of bottled water in municipal buildings and parks, as well as at special events, and replace it with access to public tap water rather than with other bottled drinks, such as sugar-sweetened beverages;
2- Encourage the use of water bottles and re-usable containers;
3- Provide for the presence of water fountains when planning new public spaces, particularly near parks, playgrounds and sports facilities and pedestrian paths.

* To take it further:

4- Ensure that at least one water fountain is available in every public building and park under municipal jurisdiction.

Resolution 3

Healthy Catering in Municipal Buildings and Recreation Centres

We understand that food is a gift and that we have a sacred responsibility to nurture healthy, interdependent relationships with the land, water, plants, and animals that provide us with our food.

Food is part of celebration, ceremony, social functions, learning opportunities and is one of our best ways to bring people together. Serving healthy foods in our community means having healthy food selections at all community activities that include food such as: community programs, gatherings, meetings and special events as well as at daycares, elders home and schools and even as part of fundraising events.

Serving healthy foods starts with the types of food offered as well as the amount of food offered.
Creating a culture of health and wellness in community programs, gatherings, meetings and special events, daycares, elders home and school and fundraising events is an important way to help people eat well and be physically active, foster healthier work environments, and cultivate social norms around healthier choices and behaviors.

The Hamlet of Aklavik is committed to improving the health and wellbeing of staff, visitors, and community members and aims to provide a supportive environment that encourages healthy food choices. Adopting healthy catering standards sends the message that health is important to the Hamlet of Aklavik and that you support the health of your staff, visitors and community members. It models healthy behavior and helps local governments to "walk-the-talk."

Purpose

The purpose of this resolution is to promote health and wellbeing for all staff, visitors, and community members by developing an environment supportive of healthy beverage choice within the municipality/hamlet of Aklavik. The resolution aligns with the vision of both the Aklavik Municipality Strategy, the NWT wellness strategy and Drop the Pop Campaign.

Aklavik municipality will not offer for sale, provide or promote any beverages that are sugar sweetened for consumption by staff, visitors, including work functions, canteens operating in or on Aklavik municipal buildings, vending machines, training courses and social functions. These include soft drinks, sugar-added fruit juice, sports/energy drinks; sugar added flavoured milk and yogurt drinks. Healthy beverage choices (water and milk) should be made readily available in sufficient quantities.

The Hamlet of Aklavik will actively promote healthy food options with staff. Wherever possible the healthier options will be readily available, competitively priced and promoted

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to make it easier to select for those who are not informed and to encourage the selection of healthy options.

Definition

SSB for the purpose of this resolution is: Any beverage that contains added caloric sweetener usually sugar but also include artificial sweeteners. The main categories of sugary drinks include soft drinks/fizzy-drinks, sachet mixes, fruit drinks, cordials, flavoured milks, cold teas/coffees, and energy/sport drinks including diet drinks or Zero drinks.

100% fruit juices are not considered to be SSBs and are therefore excluded from this definition.

Adopting a resolution: a coherent and promising measure

In a factsheet titled **How much sugar?**, the Aklavik municipality calls on other municipalities/hamlets to drop SSB in municipal buildings and sports facilities[1]. Adopting a resolution to favour healthy drinking options is a measure that can help promote health and prevent disease among community members.

Conclusion

Municipalities play a strategic role in the promotion of health and wellness and in the prevention of obesity and many diseases through their interventions, which have an immediate impact on the environment and the lifestyle of community members.

In order to make matters easier for municipalities that would like to implement a policy favouring dropping SSB in municipal buildings and sports facilities, a model resolution to this effect has been made available (see page 3).

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A model resolution

Model resolution

Healthy Catering in Municipal Buildings and Recreation Centres

WHEREAS, desserts and pastries add excess calories, added sugars, and fats, while adding few, if any, positive nutrients. Providing desserts and pastries causes people to eat extra calories they probably wouldn't have. By replacing desserts and pastries with fruit or another healthful food you help your staff, visitors, and community members make healthier choices instead of tempting them with extra calories.

WHEREAS, definitive scientific studies have concluded that a major cause of the dramatic increase in diabetes is that individuals consume nearly 300 more calories per day than 30 years ago (2) and 43 percent of that caloric increase comes from the consumption of sugar sweetened beverages (2);

WHEREAS, the latest medical studies show that sugar sweetened beverages such as sodas and energy drinks do more harm to the body than solid sugar - like candy or cake because your body processes liquid sugar much more quickly and turns them directly into fatty deposits;

WHEREAS, it is a community member's choice to drink sugar sweetened beverages, there are several healthy alternatives such as water, unsweetened teas, low fat milk, and carbonated and still water;

WHEREAS the municipality does not wish to promote the consumption of unhealthy food;

Therefore be it resolved, that the Hamlet of Aklavik recognizes that serving healthy food and beverages at meetings, conferences, and community events helps to create an environment that supports staff, visitors and community members in their efforts to eat well and be physically active;

It was so moved by ____________________________, seconded by _________________________, and further resolved by (unanimous/majority) vote that:

The city/municipality of (name of city/town/municipality):

1. Water or milk is the main choice of drink.
2. Offer low-fat or non-fat milk or skim milk powder with coffee and tea service
3. Ensure a fruit, vegetable or cheese platter is provided.
4. Offer >50% of sandwiches are to be served on wholemeal or wholegrain bread, rolls or wraps.
5. Choose low fat foods and cooking methods such as baking, boiling, grilling, microwaving or steaming.
6. Avoid providing sweets and baked goods. Fruit may be served as dessert/sweet option.
7. Avoid serving processed meats (including salami, bacon, and frankfurters/hot

Resolution 4

Eliminating the sale, promotion and provision of Sugar Sweetened Beverages (SSB) in hamlet buildings and recreation centres

Unhealthy beverages such as Sugar Sweetened Beverages (SSBs) have a major influence on health and wellbeing. SSBs contain large amounts of sugar. A high sugar intake causes tooth decay and is linked to obesity, and thus to type 2 diabetes, cardiovascular disease and several types of cancer (1). Consumption of SSBs leads to weight gain in children and thus long standing conditions in later life. In general terms, healthier options are those with fewer calories, less sugar and salt content and an appropriate serving size.

What we eat and drink affects our health and wellbeing and reflects our culture and beliefs. It is also a source of great pleasure, with important social, cultural and traditional functions.

Food and drink choice can be influenced by what is provided and promoted. The Hamlet of Aklavik is committed to improving the health and wellbeing of community members and aims to provide a supportive environment that encourages healthy drink choices.

The purpose of this resolution is to promote health and wellbeing for all staff, visitors, and community members by developing an environment supportive of healthy beverage choice within the hamlet of Aklavik. The resolution aligns with the vision of both the Aklavik Municipality Strategy, the NWT wellness strategy and Drop the Pop Campaign.

The Aklavik Hamlet will not offer for sale, provide or promote any beverages that are sugar sweetened for consumption by staff, visitors, including work functions, canteens operating in or on Aklavik municipal buildings, vending machines, training courses and social functions. These include soft drinks, sugar-added fruit juice, sports/energy drinks; sugar added flavoured milk and yogurt drinks. Healthy beverage choices (water and milk) should be made readily available in sufficient quantities.

Definition

SSB for the purpose of this resolution is: Any beverage that contains added caloric sweetener usually sugar but also include artificial sweeteners. The main categories of sugary drinks include soft drinks/fizzy-drinks, sachet mixes, fruit drinks, cordials, flavoured milks, cold teas/coffees, and energy/sport drinks including diet drinks or Zero drinks.

100% fruit juices are not considered to be SSBs and are therefore excluded from this definition.

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Adopting a resolution: a coherent and promising measure
The Aklavik Hamlet calls on other municipalities/hamlets to drop SSB in municipal buildings and sports facilities[2]. Adopting a resolution to favour healthy drinking options is a measure that can help promote health and prevent disease among community members.

Conclusion
Municipalities play a strategic role in the promotion of health and wellness and in the prevention of obesity and many diseases through their interventions, which have an immediate impact on the environment and the lifestyle of community members.

In order to make matters easier for municipalities that would like to implement a policy favouring dropping SSB in municipal buildings and sports facilities, a model resolution to this effect has been made available (see page 3).

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1. Must A, Strauss RS. (1999). Risks and consequences of childhood and adolescent obesity. International Journal of Obesity, 23(Suppl. 2), p. 2-11.
2. Charlotte M, Parker L, Lamont D, Craft A. (2001) Implications of childhood obesity for adult health: Findings from the Thousands Families Cohort Study. British Medical Journal, 323, p. 1280-1281.

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A model resolution

Model resolution

Eliminating the sale, promotion and provision of SSB in municipal buildings and recreation centres

WHEREAS, diabetes has become an epidemic both in our Territory and in our local community throughout such that, unless the trend is reversed, many children will go on to develop Type 2 Diabetes in their lifetimes (1);

WHEREAS, definitive scientific studies have concluded that a major cause of the dramatic increase in diabetes is that individuals consume nearly 300 more calories per day than 30 years ago (2) and 43 percent of that caloric increase comes from the consumption of sugar sweetened beverages (2);

WHEREAS, the latest medical studies show that sugar sweetened beverages such as sodas and energy drinks do more harm to the body than solid sugar - like candy or cake because your body processes liquid sugar much more quickly and turns them directly into fatty deposits;

WHEREAS, it is a community member's choice to drink sugar sweetened beverages, there are several healthy alternatives such as water, unsweetened teas, low fat milk, and carbonated and still water;

WHEREAS the municipality does not wish to promote the consumption of sugar-sweetened beverages by increasing their visibility and accessibility;

Therefore be it resolved, that the community has made clear it strongly discourages the over consumption of sugary beverages and educating our community members about the associated health risks;

It was so moved by ___________________________, seconded by ________________________, and further resolved by (unanimous/majority) vote that:

The city/municipality of (name of city/town/municipality):

6- Eliminate the sale, promotion or provision of SSB in municipal buildings and recreation centres, as well as at special events, and replace it with access to water and/or milk

Resolution 5

Sports Sponsorship

The sponsorship by unhealthy food and beverage companies of major sporting events and children/youth sports teams' is a growing concern. Children are more vulnerable to advertising messages and these messages easily influence children's food preferences, purchase requests and consumption patterns[15]. As a marketing strategy to increase profits, these companies' logos are on banners, children's sporting equipment, and clothing and exhibited around the arena or recreation centre to encourage consumption their products.

Marketing and Advertising – Harmful to Children

The marketing and advertising of these unhealthy food and beverage products has been shown to be a factor in the increasing rates of childhood overweight and obesity by the World Health Organization[16]. These unhealthy foods are high in saturated fats, trans-fatty acids, or sodium and unhealthy beverages are high in free sugar, sodium and can include stimulants such as caffeine which have been known to be harmful to children.

The marketing and advertising of information or products known to be harmful to children's health and wellbeing is wrong and contravenes the UN Convention on the Rights of the Child, which demands that, "In all actions concerning children … the best interests of the child shall be a primary consideration."[17]

A CALL TO ACTION!

In light of the above, the Hamlet of Aklavik encourage all of NWT's municipalities and hamlets to ban the sponsorship of sports teams and of sporting events by unhealthy food and beverage companies!

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15 World Health Organization. (2012). A framework for implementing the set of recommendations on the marketing of foods and non-alcoholic beverages to children.

16 World Health Organization (2003). Diet, Nutrition, and the Prevention of Chronic Diseases. WHO Technical Report Series No. 916. Geneva, WHO

17 Restricting marketing of unhealthy foods and beverages to children and youth in Canada. Ottawa, ON: Heart and Stroke Foundation of Canada; 2013. Available from: **www.hypertensiontalk.com/wp-content/uploads/2013/05/Final-Policy-Statment-Marketing-to-Kids.pdf**

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Model Resolution

RESOLUTION # ____________________

SPORTS SPONSORSHIP

WHEREAS health habits are heavily influenced by the supply of food in different settings and municipalities/hamlets have a predominant role to play in the development of healthy food and beverage environments especially when it comes to sports;

WHEREAS the rate of obesity, type 2 diabetes, hypertension, and heart disease is of serious concern and these condition affects the health, quality of life, and well-being of the population, in addition to generating significant social costs;

WHEREAS the Government of NWT alone cannot stop theses chronic and life threatening diseases and must count on the contribution of municipalities and hamlets;

WHEREAS the municipality/hamlet wishes to be proactive in ensuring unhealthy food and beverage sponsorship does not occur;

WHEREAS sports and recreation facilities, are heavily frequented by children and adolescents;

WHEREAS the marketing and advertising of unhealthy food and beverages are harmful to children and adolescents and consequently, sponsorship of sports teams and of sporting events is unethical and contravenes the UN Convention on the Rights of the Child;

It is moved by ______________________________, seconded by ____________________________________, and (*unanimously resolved* OR *resolved by majority vote*) that:
The sponsorship by unhealthy food and beverage companies will not be authorized in the municipality /hamlet of (*name of municipality/Hamlet*).

____

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