Country Foods in Schools: Incorporating Student Preferences in the Inuvialuit Settlement Region, NWT

Alissa Sallans

Thesis submitted to
University of Ottawa
Graduate Studies Faculty of Social Science
Institute of the Environment
in Fulfillment of the Requirements for the
Master of Science in Environmental Sustainability

© Alissa Sallans, Ottawa, Canada, 2024

Table of Contents

Table of Contents ii
Acknowledgements v
Ethics, Research Permits, and Approvals vi
Candidate's Contribution to Research vii
Abstract ix
List of Abbreviations xi
List of Tables xii
List of Figures xiv
Chapter 1: Introduction 1
Study Overview 1
Research Context 1
Geographical Context 4
Research Location 6
Gaps in Knowledge 6
Research Objectives 7
Thesis Structure 7
Chapter 2: Literature Review 9
Country Foods and Food Sovereignty in Northern Canada 9
Country Food Consumption Among Indigenous Peoples 11
Youth Engagement with Country Foods 14
School Food Programs in the ISR 17
Chapter 3: Methodology 21
Research Design 21
Theoretical Framework 22
Philosophical Assumptions 22
Research Paradigm 23
Research Timeline 25
Phase 1 – Survey Development and Community Engagement 25
Phase 2 – Survey Administration and Data Analysis 26
Phase 3 – Interviews, Talking Circles, and Data Analysis 27
Phase 4 – Community Reporting and Feedback 28

Chapter 4: Country Food and Activity Preferences Among Students: Findings from the Inuvialuit Settlement Region, NWT 29
Introduction 29
Methods 30
Student Survey 31
Talking Circles 34
Semi-Structured Interviews 35
Analysis 35
Ethical Considerations 36
Results 36
Student Survey 37
Talking Circles 44
Semi-Structured Interviews 48
Discussion 57
Food Preferences 57
Activity Interest 61
Access To and Preferences for Learning 62
Conclusion 64
Chapter 5: Discussion and Reflection 65
Contextualizing Findings 65
School Food Programs 65
Community Country Food Programming 67
Reflections on the Research Process 67
Unique Features of Research 67
Strengths of Research 74
Limitations to Research 78
Chapter 6: Conclusion 82
Summary of Key Findings 82
Implications and Recommendations 84
Community Information 84
Program Considerations 84
Policy Applications 85
Research Practice 86
Future Areas of Research 87
Concluding Thoughts 87

References 89
Appendices 103
Appendix A: Aurora College NWT Research License 103
Appendix B: Aurora Research Institute Ethics Certificate 104
Appendix C: University of Waterloo Ethics Certificate 105
Appendix D: University of Ottawa Ethics Certificate 106
Appendix E: Letter of Support from BDDEC for the Student Survey on Country Foods 107
Appendix F: Flow Chart for Obtaining Student Consent for Survey 108
Appendix G: Student Survey on Country Foods Sample Page 109
Appendix H: Student Survey Demographics Form 110
Appendix I: Student Survey Information Letter 111
Appendix J: Student Survey Consent Form 113
Appendix K: Talking Circle Guide 114
Appendix L: Talking Circle Information Letter 116
Appendix M: Talking Circle Consent Form 117
Appendix N: Semi-Structured Interview Guide 118
Appendix O: Semi-Structured Interview Information Letter 119
Appendix P: Semi-Structured Interview Consent Form 121
Appendix Q: Preliminary School Report on Student Survey Sample Page 122

Acknowledgements

I would like to acknowledge that this research took place in the Inuvialuit Settlement Region and Gwich'in Settlement Area, where I have the privilege as a non-Indigenous person to live, work, and study. I am deeply grateful to the community members and research leads across the region who have supported this work, to the Hunters and Trappers Committees, Community Corporations, and Elder's Committees who took the time to hear about this project and provide feedback, to the school board and local schools for facilitating this project, to the Inuvialuit Regional Corporation for being supportive of this initiative, and to everyone that participated in surveys, talking circles, and interviews. Quyanainni, mahsi', thank you.

I would also like to acknowledge the immense amount of work that individuals from the ISR Food Security Research Team contributed to this project. Thank you to Sonia Wesche, Sonja Ostertag, Kelly Skinner, and Tiff-Annie Kenny for their guidance, support, and encouragement in this project and in my journey as a master's student. Thank you to Celina Wolki, the ISR Food Security Coordinator, for her inspiring dedication to food security in Paulatuk, and her collaboration on this project. Thank you additionally to the work done by PhD candidate Maria Ramirez Prieto in helping distribute and collect surveys on her visits to ISR communities. I would like to thank my family for inspiring me to be the best version of myself and my partner for his support.

Finally, I would like to acknowledge my positionality as a non-Indigenous woman of settler colonial descent conducting research in northern Indigenous communities. I recognize that this research takes place within a system of Southern research which can be extractive and neocolonial, especially in the North, and I have worked to mitigate these impacts within my research design. I am aware of the power dynamics between researchers and community members and the importance of research being owned, controlled, accessed, and possessed by the communities that any research is about. I also appreciate the amount of time and capacity it takes for groups and organizations to accommodate research. I feel honoured to live in the region where my research has been conducted, and for the community and land-based experiences that have shaped my understanding of the local cultures and food system.

Ethics, Research Permits, and Approvals

This research followed ethical guidance of the TCPS2 and OCAP principles, and received ethics clearance from the Aurora Research Institute, the University of Waterloo, and the University of Ottawa. Additionally, a Northwest Territories Scientific Research License from the Aurora Research Institute was obtained for this study, which sought feedback on the project from 19 community organizations from across the ISR, including local councils, community corporations, and hamlets. A letter of support was provided by BDDEC in support of the student survey research project. See Appendices A - E. Students aged 10 and under needed written or verbal parental consent to complete the survey, with students also providing verbal assent. Students aged 11 and older provided their own written informed consent for the survey, after information had been sent home to parents/guardians. This age-based approach to consent was recommended during our preliminary meeting with BDDEC staff, based on similar studies that had been completed. See Appendices F - J.

Responses were de-identified through unique participant ID numbers. Students' age, grade, and gender were asked, however cultural backgrounds were not. The IRC, as the Inuvialuit governing body and the coordinators of the ISR-wide school food program, will retain ownership of the data following the study period.

Talking circle and interview participants were provided with information letters and consent forms to sign prior to commencing audio recordings. No identifying information from student talking circles was transcribed, and students were required to be age 11 or older, so that they could provide their own informed consent. See Appendices K - P.

Candidate's Contribution to Research

Alissa Sallans (AS) became involved in this research after joining the Inuvialuit Settlement Region (ISR) Food Security Research Team, a collaborative team of academics from the University of Waterloo, the University of Ottawa, and Université Laval, as well as hired community members interested in learning more about food and contaminants in the ISR. AS' role in the research team focused on the involvement of children and youth in regional food security. This topic emerged from community conversations led by the research team prior to AS' involvement.

AS collaborated with the team to compile the student survey shared at all seven schools in the ISR to explore the perspectives of elementary and high school students on country food, thus capturing student opinions, preferences, and experiences. Prior to commencing this research, AS led the ethics approvals and NWT licensing process for this project and visited Paulatuk and Tuktoyaktuk to meet with Hunters and Trappers Committee (HTCs) and Community Corporations (CCs) to get feedback on the survey. The ethics application process was greatly supported by Dr. Kelly Skinner, Dr. Sonja Ostertag, and Dr. Sonia Wesche. AS then coordinated ethics and survey material printing as well as the survey being shared in the schools. Members of the research team supported the administration of the student survey across the ISR. AS completed analysis of survey results and designed summary documents for each school with their survey results. Reporting back on the findings of the student survey was part of community meetings coordinated by the research team. AS developed the interview and talking circle guides and led six interviews and two talking circles. An additional talking circle in Ulukhaktok was conducted by Dr. Sonja Ostertag and master's student Alicia Cowan. This thesis, including the stand-alone article, was written in full by AS. Dr. Sonia Wesche and Dr. Sonja Ostertag reviewed and provided feedback on these documents. The stand-alone article had an added review process from co-authors.

Financial and material support was provided for this project by Dr. Kelly Skinner, Dr. Sonja Ostertag, and Dr. Sonia Wesche. This research was supported through the Country Foods in Community Programming: Supporting Schools, Daycares and Cooking Circles in Tuktoyaktuk and Paulatuk, NWT (CFCP) project, funded by the

Canadian Northern Economic Development Agency, and the Country Foods for Good Health: Promoting foods in the Inuvialuit Settlement Region that reflect Inuvialuit Culture, Knowledge, and Values (CFGH) project, funded by the Northern Contaminants Program. My studies were further funded through the Ontario Graduate Scholarship, the Northern Scientific Training Program, and the Social Sciences and Humanities Research Council

Abstract

Introduction: Food security across Inuit Nunangat is deeply tied to country foods. As fewer youth are spending time harvesting, preparing, and eating country foods than in previous generations, it becomes relevant to understand how to involve young people in their local food systems. In the Inuvialuit Settlement Region (ISR), schools provide one opportunity to support country food consumption and land-based learning as part of efforts to Indigenize education. Given limited research on student country food and activity preferences, this study aims to capture the current state of student preferences, interests, and experiences in the ISR.

Objectives: The objectives of this study are to: (1) document student preferences for country foods and land-based activities, (2) understand student access to and preferences for learning about country foods, and (3) understand how schools are supporting student engagement with country foods and barriers to doing so. As such, this thesis aims to answer the research question: what are student perspectives regarding country foods in the ISR and how can schools foster student engagement with local food systems?

Methods: This cross-sectional, mixed methods study design collected quantitative image-based survey data through purposive-convenience sampling from students in grades 1 to 12 from the seven schools across the Inuvialuit Settlement Region (ISR) between 2022 and 2023 (n=278). The aim was to capture community-level and regional similarities and differences in the country food preferences of students. Once the survey data was analyzed, qualitative methods were utilized to help ground the survey findings. To confirm the validity and reliability of survey results, talking circles with grade 6 to 12 students took place in three ISR communities (n=3). To further explore and elaborate on survey findings, semi-structured interviews were conducted with school food program administrators in five ISR communities (n=6).

Findings: This research finds that perspectives captured through the student survey regarding country foods in the ISR are diverse and linked to local geographies and species distribution; however, there are commonalities across the region regarding the

country foods that students prefer to eat, harvest, and prepare, with caribou being the most commonly preferred. Results also indicate that students have a high level of interest in country food activities, including fishing, berry picking, jiggling, making dry meat, and cooking. Students further expressed a strong desire to learn about country foods from their families. Talking circles and interviews confirmed and expanded upon the findings of the survey, by sharing personal and school experiences of harvesting and preparing country foods. Interview results highlight the experiential land-based opportunities that schools foster across the ISR which promote student engagement with country foods. This research finds that schools can foster student engagement with country foods through on-the-land activities, connecting curriculum with traditional knowledge, and through serving country foods in schools as part of coordinated school food programs.

Conclusion: The results of this research provide a regional baseline against which student interests and preferences for country foods can be measured, an opportunity for schools and communities to continue engaging students in their local food system, and a model for conducting regional surveys with children and youth. This study encourages future research to consider how the voices and perspectives of children and youth can be incorporated into food security research, policy development, and program design.

List of Abbreviations

BDDEC: Beaufort Delta Divisional Education Council

CC: Community Corporations

CFCP: Country Foods in Community Programs

CFGH: Country Foods for Good Health

COVID-19: Coronavirus Pandemic

GNWT: Government of the Northwest Territories

GSA: Gwich'in Settlement Area

HTC: Hunters and Trappers Committee

IFA: Inuvialuit Final Agreement

IRC: Inuvialuit Regional Corporation

ISR: Inuvialuit Settlement Region

ITK: Inuit Tapiriit Kanatami

NWT: Northwest Territories

OCAP: First Nations Principles of Ownership, Control, Access, and Possession

TCPS2: Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans

List of Tables

Table 1……5
Community demographics including population, Indigenous and non-Indigenous residents, and children and youth makeup of the six communities in the ISR based on NWT Bureau of Statistics (2023) community profiles

Table 2……32
Student survey distribution, timing, and respondents by ISR community

Table 3……33
Demographics of student survey respondents by ISR community, grade, and gender

Table 4……37
Country foods selected by ≥30% of students regionally across schools in Tuktoyaktuk (Tuk), Paulatuk (Paul), Aklavik (Akl), Ulukhaktok (Ulukh), Sachs Harbour (Sachs), and Inuvik as preferred foods to eat

Table 5……38
Country foods selected by ≥30% of students regionally across schools in Tuktoyaktuk (Tuk), Paulatuk (Paul), Aklavik (Akl), Ulukhaktok (Ulukh), and Sachs Harbour (Sachs) as preferred foods to harvest

Table 6……38
Country foods selected by ≥30% of students regionally across schools Tuktoyaktuk (Tuk), Paulatuk (Paul), Aklavik (Akl), Ulukhaktok (Ulukh), and Sachs Harbour (Sachs) as preferred foods to prepare

Table 7……39
Student interest in country foods based on the percentage of students that circled 5+ food options for each category of questions at schools in Tuktoyaktuk (Tuk), Paulatuk (Paul), Aklavik (Akl), Ulukhaktok (Ulukh), and Sachs Harbour (Sachs)

Table 8……40
Land-based activities selected by ≥50% of students regionally across schools in Tuktoyaktuk (Tuk), Paulatuk (Paul), Aklavik (Akl), Ulukhaktok (Ulukh), Sachs Harbour (Sachs), and Inuvik

Table 9……41
Average level of interest in all land-based activities at schools in Tuktoyaktuk (Tuk), Paulatuk (Paul), Aklavik (Akl), Ulukhaktok (Ulukh), Sachs Harbour (Sachs), and Inuvik

Table 10……51
Land-based activities that schools in Tuktoyaktuk, Paulatuk, Aklavik, Ulukhaktok, and Inuvik, had recently facilitated

Table 11……61
Comparison of student interest in activities documented through the student survey with reported activity participation across the ISR by the NWT Bureau of Statistics (2023)

Table 12……62
Comparing activities ≥55% students reported wanting to participate in, with the reported student food preferences and reported school activities

Table 13……70
AS' travel to ISR communities from 2022-2024

List of Figures

Figure 1……24
Ethical framework for research, modified from Wilson (2008)

Figure 2……25
Iterative research timeline illustrating the process, inputs and outputs of this study

Figure 3……43
Land-based activity preferences by gender across the ISR in order from highest to lowest regional activity average

Figure 4……44
How often students reported getting out on the land by gender and community

Figure 5……45
Average aggregate student learning preferences

Chapter 1: Introduction

Study Overview

This mixed methods community-based research on student country food preferences took place in the Inuvialuit Settlement Region (ISR) of the northern Northwest Territories (NWT) and westernmost land area of Inuit Nunangat. Country foods are well recognized as being integral to the food security and well-being of Indigenous peoples across Canada. In the ISR, the prevalence of food insecurity was 68.5% in 2021 (ITK, 2021). Understanding methods to strengthen the access, availability, and opportunities to harvest and share country food is therefore an important aspect of bolstering food security in Indigenous communities (Robin, 2019).

To date, little research has been conducted on the country food and activity preferences of young people in Inuit Nunangat. Studies on food preferences to date are either decades old, focus on adults 18+, or examine solely on the nutritional implications, rather than socio-cultural preferences of country foods. Moreover, no research to date has looked at the country food and activity interests of young people at a regional level to better understand differences in geographies, species distributions, cultures, and lived experiences that contribute to the formation of these interests and preferences. This study worked within a school setting to better understand the country food preferences, land-based activity interests, and learning preferences of students from grades 1 to 12 in every community of the ISR. As such, data has been generated which can support programming that engages young people within their traditional food systems.

Research Context

Indigenous food systems have been described in ecological terms as all parts of the land, water, air, plants, animals, and Indigenous ways of knowing, which have sustained Indigenous peoples for time immemorial (Morrison, 2011). Upholding vibrant Indigenous food systems involves both a healthy ecosystem and community participation in the harvesting and consumption of country foods—a term used

interchangeably with traditional foods (Douglas & Chan, 2015; Shukla & Settee, 2020). Country food refers to food that is harvested locally, through hunting, gathering, fishing, and trapping for instance, and is well documented as playing a central role in the culture, health, well-being, nutrition, spiritual connection, and food security of Indigenous peoples (ITK, 2021).

Food insecurity across Inuit Nunangat is among the highest in Canada (ITK, 2021). Decreasing availability of and access to country foods is one of many complex factors driving these high rates of food insecurity in the Canadian Arctic (Food Banks Canada, 2016). Research also indicates that Indigenous youth spend less time harvesting country foods and consume less country foods than previous generations (Sharma, 2010). This generational shift away from country foods and towards less nutritious, more expensive foods bought from the grocery store, referred to as “market foods”, is a defining factor of the nutrition transition that Inuit across Inuit Nunangat are experiencing (Chan et al., 2006; Kenny et al., 2018a; Kolahdooz et al., 2014). Understanding the current country food preferences of young people is therefore important for supporting local food security and food sovereignty (Lambden et al., 2007).

In discussing opportunities to understand and address food insecurity in the North, it is important to distinguish between food security, food sovereignty, and Indigenous food sovereignty. The 1996 World Food Summit coined the definition of food security as existing “when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life” (FAO, 2006, p.1). Food security is well understood as encompassing the four pillars of food availability, access, use, and stability (Aborisade & Bach, 2014). Food sovereignty has been positioned as an alternative to food security, in that it 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” (Food Secure Canada, 2015, p.9). Discourse surrounding food sovereignty brings in conversations around power, policy, control, rights, and obligations (Walsh-Dilley et al., 2016; Wittman, 2011). This terminology highlights food sovereignty’s focus on mobilization for change within global food systems but does not

adequately capture the reality of local food systems in the North (Robin, 2019). Indigenous food sovereignty is described as “achieved by upholding our long-standing sacred responsibilities to nurture healthy, interdependent relationships with the land, plants, and animals that provide us with our food” (Morrison, 2011, p.100). In this sense, Indigenous food sovereignty is rooted in self-determination, decolonization, is supported through participation in land-based food activities (Robin, 2019). While each of these definitions has their role in shaping actions to address food insecurity, this thesis explores further the concept of food security while drawing on the values and relationships described by scholars of Indigenous food sovereignty (e.g., Morrison, 2011; Robin, 2019). Specifically, I recognize that food preferences and interests are shaped by cultures, communities, environments, and activities.

This research seeks to better understand the country food and activity preferences of children and youth. On a broad scale, involving young people in their local food systems is important to foundational knowledge and skills that form food literacy long-term (Amin, et al., 2018). In a cultural context, involving children and youth in eating, harvesting, and preparing country foods is important for intergenerational transmission of knowledge about and taste for country foods (Willows, 2005). Indigenous food systems are intertwined with harvesting and spending time on the land; therefore it is relevant to study both the country food and the land-based activity preferences of young people (Bagelman, 2018).

One unit of analysis for capturing the preferences of young people is students in schools. Schools across the ISR had approximately 1,200 students from JK to grade 12 enrolled as of 2018 (BDDEC, 2018). Schools in many Indigenous communities paradoxically represent both institutions that have historically prevented culture from thriving while also having present-day opportunities to facilitate the sharing of cultural learning among children and youth (Berger et al., 2016; Milloy, 2017; Wesche et al., 2016). Across Canada, schools also represent an opportunity to support food security among students (e.g., Fram et al., 2014, OSNP, 2017). In the ISR, school food provisioning, on-the-land activities, cooking classes, and cultural calendars are just some examples of how healthy and cultural foods are being integrated into the local educational system (Berger et al., 2016; Ruetz et al., 2024). The Inuvialuit Regional

Corporation's (IRC) school breakfast and lunch program, for instance, has expressed interest in incorporating country foods into their menus (ICG, 2022). The goal of incorporating country foods into the ISR school food program is supported by Inuit Tapiriit Kanatami (ITK), the national organization representing Inuit across Inuit Nunangat (ITK, 2022). One of the key recommendations in the 2023 ITK report on a costing model for school food programs across Inuit Nunangat was that school food programs should "prioritize healthy and nutritious food options with an emphasis on the provision of culturally appropriate and country foods" (ITK, 2022, p.3).

Despite the interest in serving country foods to students through schools both in the ISR and across Inuit Nunangat, to date, no recent research has been conducted to understand the country food preferences of students in any region of Inuit Nunangat. School food programming is one opportunity to address security at a community level. Consequently, there is an opportunity locally to help inform both future school menu planning and annual school activities by learning the country food and activity preferences of students in the ISR, and a national opportunity to model how students' interests in country foods can be gathered and shared to inform school food programs.

Geographical Context

This study is based in the ISR, a land claim area established under the Inuvialuit Final Agreement of 1984 to protect the local environment, preserve Inuvialuit culture, and establish Inuvialuit as meaningful participants in the Northern and national economy and society (IRC, 2018). Inuvialuit are Inuit of the Western Arctic with a linguistically and culturally unique identity from Inuit of the Eastern Arctic. This 435,000 square kilometer Inuvialuit land claim is significant as the first comprehensive modern land claim north of 60th parallel and only the second in Canada (Executive and Indigenous Affairs, 2024). Traditionally, Inuvialuit were seasonally nomadic people, and the large land claim area covered by the ISR recognizes the traditional use of the land from the Yukon North Slope, through the Mackenzie Delta, and to the Northern Beaufort Sea. In the early-to-mid 1900s, the six present-day communities of Aklavik, Inuvik, Tuktoyaktuk, Paulatuk, Sachs Harbour, and Ulukhaktok were formally established following the colonial impacts of trading posts, trading opportunities, Catholic missions, and government operations

(Table 1). Within these communities, Inuvialuit belong to three distinct language groups: Ummarmiuit of the Mackenzie Delta (Aklavik and Inuvik), Sallirmiuit of the coastal settlements (Tuktoyaktuk, Paulatuk, and Sachs Harbour), and Kangiryuarmuit of Victoria Island (Ulukhaktok) (IRC, 2024a). These regional dialects of the Inuvialuktun language underscore the genealogical, historical, and geographical differences within Inuvialuit culture.

Table 1. *Community demographics including population, Indigenous and non-Indigenous residents, and children and youth makeup of the six communities in the ISR based on NWT Bureau of Statistics (2023) community profiles*

Community	Land Claim Region	Community Population	% Indigenous Population	% Non-Indigenous Population	% Population Aged 5-24
Aklavik	ISR & GSA	708	92%	8%	30%
Inuvik	ISR & GSA	3,214	66%	34%	27%
Paulatuk	ISR	327	94%	6%	28%
Sachs Harbour	ISR	118	84%	16%	28%
Tuktoyaktuk	ISR	1,058	93%	7%	30%
Ulukhaktok	ISR	499	92%	8%	28%

The Inuvialuit Settlement also overlaps to the southwest with the Gwich'in Settlement Area (GSA) (GSCI, 2016). The GSA was established under the 1992 Gwich'in Land Claim Agreement and spans from the ISR down to the Yukon and Sahtú Region, representing the interests of the Gwich'in First Nations spanning the four communities of Aklavik, Inuvik, Fort McPherson, and Tsiigehtchic (Gwich'in Land Use Planning Board, 2023). Notably, Aklavik and Inuvik are home to both Gwich'in participants and Inuvialuit beneficiaries. Inuvik also has a large population of non-beneficiaries and non-Indigenous peoples, as it is the regional hub for the Western Arctic. The regional history and geography of the ISR is important to contextually understand the cultural diversity across the region, which, for this study, yields insights into the cultural connections and interests that children and youth may have in their food systems.

Research Location

For this study, the ISR is the geographical region in which research was conducted, as this is where the IRC's school food program operates. The Beaufort Delta Divisional Education Council (BDDEC) is the educational body that oversees the schools in the eight communities of the ISR and GSA; all seven schools in the ISR region participated in this study. Inuvik is the only community that has two schools, one elementary and one high school; however, these two schools are grouped together for analysis. Ownership of survey data from the six ISR communities of Aklavik, Inuvik, Paulatuk, Sachs Harbour, Tuktoyaktuk, and Ulukhaktok will be transferred to the Inuvialuit Regional Corporation at the end of the study period, in hopes that this information will be beneficial to future school food program planning.

Gaps in Knowledge

This research fills a knowledge gap on children and youth's interests and preference for country foods by responding to the study by Lambden et al. (2007) highlighting the need for country foods to achieve food security. The contribution of the present study will therefore be an improved understanding of the needs of students in advancing food security. This study generated baseline data on student country food and skill development preferences from 2022-2023 in the ISR. This data may also help monitor how food preferences among young people in the ISR change over time, particularly in a changing climate (e.g., Wein et al., 1996). Additionally, the approach of using an image-based survey is a methodological tool that can be shared across Inuit Nunangat to support other communities in gathering student perspectives around country foods. Finally, this study identified barriers that school food program administrators face to engaging students with country foods in the schools, which may lead to future opportunities to address such constraints. As such, trends in food consumption and procurement preferences can be provided to decision makers at the school, community, regional, and territorial level to demonstrate how programs and policies can fill gaps in local food security.

This project complements and builds on existing Indigenous food system research and activities in the ISR (e.g., Dedyukina et al., 2023; Kenny et al., 2018b;

Ramirez Prieto et al., 2023; Wesche & Chan, 2010). Building an understanding of how children and youth desire to be involved in their local food system can contribute to community food sovereignty. Data from this study can also be leveraged to access funding or support for youth-targeted food programming (e.g., ITK, 2022) and school food programs (Ruetz et al., 2024). More broadly, intergenerational knowledge sharing can allow young people, as the future leaders in their communities, to continue sustainable country food harvesting practices (Baskin, 2008).

It is timely to study the country food preferences of young people in the ISR as the ITK (2022) *Understanding the Costs of an Inuit Nunangat School Food Program* report provides a budget and a call for the federal funding of a school food program consisting of breakfast and lunch across the 75 schools in Inuit Nunangat. In 2024 the federal government announced that $1 billion of funding would go into school food programs across the country over five years. In the ISR, the IRC currently operates a school breakfast program in the six ISR communities and hopes to expand it to a school lunch program that could incorporate country foods (IGC, 2022). Consequently, there is an opportunity to help inform future school menu planning by learning the country food preferences of students across the ISR.

Research Objectives

Recognizing the gap in knowledge about food and activity preferences among young people in the ISR, the objectives of this study are threefold. This study aimed to (1) document student preferences for country foods and land-based activities, (2) understand student access to and preferences for learning about country foods, (3) understand how schools are supporting student engagement with country foods and barriers to doing so. As such, this thesis aims to answer the research question: what are student perspectives regarding country foods in the ISR and how can schools foster student engagement with local food systems?

Thesis Structure

This thesis has six chapters. This introductory first chapter provides an overview of the purpose, context, and objectives of the research conducted. Chapter 2 provides a

literature review which elaborates on the gaps in knowledge around food sovereignty in northern Canada, country food consumption and preferences among Indigenous peoples, youth engagement with country foods, and food programming in the ISR. Chapter 3 describes the methodology of this study, providing details on the design, framework, and timeline by which this research study was conducted. Chapter 4 is a self-contained article that synthesizes the research conducted, including methods, findings, and analysis of the student survey, student talking circles, and food program administrator interviews. Here, results are grouped into three thematic topics–student food preferences, activity interests, and learning preferences–whereby results of the student survey on country foods, and associated talking circles and interviews are explored. Chapter 5 discusses research results within the context of school food programs and community food programming and provides a reflection on the research process. Finally, chapter 6 provides a summary of the research findings and recommendations for future research.

Chapter 2: Literature Review

Here, existing literature is reviewed to understand country food preferences in northern Canada and how these perspectives can inform food programming. This section seeks to identify what is known, what has been done, and what gaps exist regarding student country food preferences and school food programming in northern Canada. Specifically, this section examines the importance of country foods for food sovereignty, the state of knowledge about country food consumption among Indigenous peoples, how children and youth engage with country foods across the North, and what food programming exists in the ISR.

Country Foods and Food Sovereignty in Northern Canada

The impacts of colonialism and neocolonialism[1] on country food access, and subsequently on Indigenous food sovereignty in northern Canada, are well-described in the literature. Wilson et al. (2020) points out that wage-employment restricts the time that Indigenous harvesters have to go out on the land but is needed to afford the high cost of fuel and required equipment. In addition, an increased reliance on expensive store-bought food, coupled with legislative restrictions to harvesting country foods is impacting food sovereignty across northern regions (e.g., Kuhnlein & Chotiboriboon, 2022; Tod-Tims, 2020; Wesche, et al., 2016). Environmental concerns such as habitat disturbance, changing weather patterns, shifts in animal migratory patterns, and increased travel hazards are other barriers to accessing country foods and are amplified by climate change (Council of Canadian Academics, 2014; Kuhnlein & Chotiboriboon, 2022; Wilson et al. 2020). Additionally, more recent literature points to constraints on Indigenous youth engagement in country food systems, including reduced participation in harvesting and decreased traditional skills needed to survive on the land (Council of Canadian Academics, 2014; Kuhnlein & Chotiboriboon, 2022; Wilson et al. 2020). These challenges to northern Indigenous food sovereignty highlight the importance of

[1] Neocolonialism refers to a more modern form of colonialism created by unequal policy, economic, and power relationships (Sartre, et al., 2005).

supporting access to cultural foods as healthy, preferred, and sustainable food option, particularly in a time of social and environmental change (Lambden et al., 2007).

Literature overwhelmingly supports the connection between country foods and food sovereignty, providing specific definitions for Indigenous food sovereignty (e.g., Wilson et al. 2020). Robin (2019) distinguishes between “food sovereignty” and “Indigenous food sovereignty,” noting the importance of Indigenous communities being able to define their own visions for food sovereignty. Through interviews with representatives from 24 Indigenous food initiatives in Canada—including country food education initiatives and country food programs—Robin (2019) identified four elements of Indigenous food sovereignty: history, connection to the land, relationships, and identity. More specifically, the theme of “relationships” as central to Indigenous food sovereignty has been used to describe the profound connections many Indigenous communities have with the land, water, plants, and animals that are used for sustenance (e.g., Coté, 2016; Morrison, 2011; Snook et al., 2020). A British Columbia-based study by Morrison (2011) has further been influential in defining Indigenous food sovereignty as a broad framework to address the root causes of food insecurity and support communities to uphold their relationships with land and culture. Looking specifically at British Columbia, the author notes that cultures have been intrinsically shaped by the harvesting and consumption of country foods. Complementing this definition, the Inuit Circumpolar Council Alaska (2020) proposes a definition of Inuit food sovereignty across Inuit Nunangat as “the right of all Inuit to define their own hunting, gathering, fishing, land, and water policies; the right to define what is sustainably, socially, economically, and culturally appropriate for the distribution of food and to maintain ecological health; and the right to obtain and maintain practices that ensure access to tools needed to obtain, process, store, and consume traditional foods” (p. 17).

Among studies focused on youth experiences with Indigenous food sovereignty, research to date has focused on urban Indigenous youth in southern Canada. For example, Elliott et al. (2012) conducted a storytelling workshop with 15 Indigenous youth aged 19-30 and six Elders to better understand the youth experience of country food access in Vancouver, British Colombia. They found that disconnection from family, a lack of knowledge of how to harvest or prepare country foods, and colonial policies,

including restrictions on hunting areas, were some of the barriers to food sovereignty that these youth faced. Bhawra et al. (2015) similarly found that a lack of access to country foods was one of the factors contributing to the food insecurity of First Nations children in Midland-Penetanguishene and London, Ontario. The connection between country foods and food sovereignty is portrayed in a positive light by Robin & Cidro (2020) in a Winnipeg, Manitoba, study. This research involved land-based skill-building workshops, interviews, and focus groups with 12 high school students to better understand how land-based learning in schools can promote Indigenous food sovereignty. The findings underscored the value of country food procurement activities to strengthening relationships with the land, with culture, and with fellow students. They highlighted that “Indigenous food sovereignty is not about production. It is about the responsibilities the Indigenous Peoples have with Creation: to care for the land and ensure a safe, healthy, and plentiful land is available for future generations” (p. 145).

Although existing research is unified on the cultural importance of the centrality of relationships, access to the land, and consumption of country foods in achieving Indigenous food sovereignty, there are limited studies about Northern Indigenous child and youth experiences in this context.

Country Food Consumption Among Indigenous Peoples

On a global scale, not all research on Indigenous food preferences has focused on country foods. For example, Kuhnlein et al. (2004) and Story et al. (1998) studied Indigenous fruit and vegetable consumption, rather than country foods, in Alaska and mainland United States and found that intake was low among Indigenous peoples. Some global research on the other hand, identified patterns in access to country foods. Stuart-Fox (2000) conducted a survey on country foods in Australia in 1996 and found that living in a city was a barrier to obtaining traditional “bush” foods. Similarly, Pars, Osler & Bjerregaard (2001) conducted health interview surveys among Greenlandic Inuit between 1993-1994 and found that access to country foods was positively correlated with living in a remote community, as well as having a traditional upbringing and being male. While these studies demonstrate that surveys can be utilized to

understand access to country foods, they were conducted over 20 years ago, presenting a gap in more recent understandings of country food access globally.

In northern Canada, research has also examined the perceptions of and importance of country foods to Indigenous peoples. Lambden et al. (2007) analyzed a cross-sectional survey conducted between 1993 and 2000 of 1,711 Indigenous women aged 20+ in 44 Canadian Arctic communities. This study posed four questions around the advantages of, changes to, health of, and preferences for country foods. One finding was that caribou, Arctic char, other fish, seal, and partridge were among the favourite foods of those surveyed. Pufall et al. (2011) similarly asked Inuit of Nain, Nunatsiavut, aged 20+ about the role, importance, and safety of country food, using focus groups rather than surveys. While the value of country foods was consistently voiced, so was the concern about reduced consumption of country foods among young people in the community. More recently, Snook et al. (2020) conducted 21 interviews with adults aged 30+ in Rigolet, Nunatsiavut, to understand how Western concepts of conservation management impact caribou harvest and consumption. Interviewees discussed the importance of caribou to livelihoods, well-being, and food security, and the need for Inuit involvement in wildlife management decisions. These three studies reinforce the cultural value of country food to Inuit in Canada but highlight the lack of research specific to the country food consumption and experiences of individuals under the age of 20.

In the NWT, the frequency and nutritional implications of country food consumption have been studied over the past 15 years but have focused primarily on the nutrient intake of Inuit adults. Kolahdooz et al. (2014) conducted a dietary food frequency questionnaire with 213 adults aged 19+ in three NWT communities and found a declining consumption of country foods associated with declining daily nutrient intakes. Looking specifically at the ISR, Wesche & Chan (2010) studied the impacts of climate change on diet and health, also focusing on the nutritional impacts of declining country food consumption and possibilities for species substitution. Erber et al. (2010) conducted 24-hour dietary recalls with 64 participants in one Inuvialuit community in 2008, and their findings reflect those of Kolahdooz et al. (2014) indicating that most participants did not meet the recommended nutrient intake for adults. Sharma (2010) was similarly focused on nutrition; they used a food frequency questionnaire in Nunavut

and three Inuvialuit communities to support the development of a healthy foods program. In all the aforementioned studies, the focus was on dietary composition rather than overall physical, mental, and spiritual wellness of Inuvialuit communities with regards to country foods.

Some NWT studies have moved beyond the nutritional value of country foods and examined barriers to country food consumption. Todd (2010) interviewed and surveyed 20 participants from Paulatuk, NWT, aged 20+ regarding their connection to the land and to country foods. This research identified that wage-employment and a lack of time were two of the most significant barriers to spending more time on the land. Their study also revealed that the 2007 caribou quota impacted access to and sharing of country foods in Paulatuk. Identifying these barriers can help to better understand pathways to increase participation in country food harvesting and consumption.

Other studies have examined community preferences for country food consumption. Of methodological and academic significance is the work of Wein and Freeman in the 1990s. They studied the frequency of traditional and store-bought food consumption in Aklavik, NWT among 36 Inuvialuit adults and 35 Inuvialuit students between the ages of 10-16 (Wein & Freeman, 1992). The most frequently consumed country foods at the time were caribou, fish, and beluga. Preference for country foods was higher among adults than students for all country foods surveyed, except for moose and muskrat. Beluga and geese were significantly less preferred by students than by adults. Wein & Freeman (1995) conducted a similar study across the Yukon in Haines Junction, Old Crow, Teslin, and Whitehorse using a food frequency questionnaire with a total of 122 households. A key finding from this research was the correlation between geographic characteristics and consumption of country foods. Among the four participating communities, Old Crow–the most remote community–had the highest rates of consumption of country foods, while Whitehorse–the most urban community–had the lowest rates.

Wein, Freeman & Makus (1996) conducted a survey of country food use and preference with the Belcher Island Inuit in the Hudson's Bay in 1993. This study stemmed from a community request to document the importance of country foods to local diets, so that future studies would have baseline information in the face of cultural

and environmental changes. Household surveys with 100 adults and in-class survey surveys with 64 students between the ages of 11 to 19 allowed for participants to select their preferences for 32 country foods. Students in this study indicated that their favourite foods were geese, beluga, and berries (Wein & Freeman, 1992). The study also found that young people tended to rate their preference for country foods lower than adults and that there was no statistically significant difference between males and females. These three similar studies across the Canadian North are among the first to survey students' country food preferences, examine gender differences, and use images to support their survey work. The work of Wein & Freeman points to the importance of more recent information on food preferences, and the value of learning the perspectives of students.

Further studies point to the gap in knowledge about the connection between country food consumption and food preferences. Notably, in providing a summary of gaps in research on determinants of healthy eating among Indigenous peoples in Canada, Willows (2005) highlights that food preferences do not always translate to food consumption. Availability of country food species and having the time to spend harvesting were listed as two factors that may explain these differences. Hanemaayer et al. (2020) expand on this point suggesting that preferring country foods can lead one to choose to consume more country foods. Their research using Photovoice revealed that Indigenous youth in a Haudenosaunee community in southern Ontario preferred country foods, despite limited opportunity to eat, harvest, or prepare these foods. They also emphasize the importance of family influence in shaping the country food preferences of children and youth. Existing literature lacks data on country food preferences of Indigenous children and youth. Given the understudied relationship between preferences and consumption, studying the country food interests of Indigenous children and youth may be beneficial in understanding how they can be further engaged in country food consumption.

Youth Engagement with Country Foods

Children and youth are being increasingly recognized as an integral part of food system sustainability (Kuhnlein & Choriboriboon, 2022). Engaging youth as future

community leaders in their food systems is especially important for the continuation of culture (Baskin, 2008; Kenny et al., 2018). One of the findings of Snook et al. (2020) was that more than half of the interviewed participants in Rigolet, Nunatsiavut felt that involving youth in caribou management was an important management strategy. As previously noted, however, youth are generally eating less country food and participating less in food harvesting activities than in previous generations (e.g., Kuhnlein & Chotiboriboon, 2022).

Several methods have been used throughout the literature to better understand country food preferences of children and youth. For instance, Wein & Freeman (1992) used questionnaires to better understand the frequency of consumption of traditional and store-bought food among youth, as previously described. Research conducted by Baskin (2008) sought to understand student perspectives on food security from the Elsipogtog First Nation in Canada and Aldeia Cinta Vermelha in Brazil through co-participation in a talking circle. Islam (2016) utilized a participatory research approach to run a collaborative art project with high school youth from Norway House Cree Nation, followed by focus groups to better understand their perspectives on country foods. While their methodological approaches may be different, all three studies indicate the need to involve young people in achieving Indigenous food sovereignty.

In the ISR, one of the primary contributors to literature on youth involvement in country food programming is the work of Kenny et al. (2018b; 2018c). Kenny et al. (2018c) recorded 30 initiatives that support food security in the ISR. Of these food initiatives, four were youth-specific programs: the Take a Kid Trapping/Harvesting, a land-based training program for youth; Project Jewel, a land-based wellness program; Drop the Pop NWT, an educational campaign around healthy foods and beverages; and school breakfast programs. In analyzing all 30 initiatives, Kenny et al. (2018c) identified the theme of youth engagement as an important component, noting the importance of youth in building “sustainable and sovereign food systems” (p. 96). Kenny et al. (2018c) also highlight the distinction between periodic community-based initiatives (such as food sharing) and short-term funded programs (such as from non-profit organizations), as both could be included in the definition of food programming but have vastly different short-and-long term impacts on youth and communities. Similarly, Kenney et al. (2018b)

describes a pilot country food program which was developed for high school and elementary schools in Inuvik, NWT, to engage youth in harvesting, preparing and preserving country foods. As this pilot was only funded for the 2015-2016 year, it is hard to measure the program's long-term impact. Documenting and measuring the benefits of youth-specific programming is a challenge noted by Kenny et al. (2018c), as formal monitoring and evaluation mechanisms are often not in place for many food programs in the ISR. Additional research could be beneficial to understand the outcomes and impacts of youth-focused food programs in the ISR.

Another factor to consider in evaluating the impacts of youth-focused programming is how children and youth desire to learn about their food systems. Salokangas & Parlee (2009) discuss the importance of considering family histories when trying to better understand opportunities for children and youth to learn "the Inuvialuit way" (p.192), including hunting, fishing, and travelling. Through interviews with six multi-generational Inuvialuit families in Tuktoyaktuk, NWT between 2007-2009 this study sought to understand how learning opportunities vary between families. They discuss the trade-offs between spending time in school and on the land, and how individual values and histories play into these family decisions. Some key findings of this research were that youth are highly influenced by their grandparents, family tragedies can reduce opportunities for youth to go out on the land, and that trauma can affect attitudes toward formal education. These findings are important because when identifying where and how youth can learn and engage with country foods, food programming should be reflective of family values and needs.

Two trends emerge from existing literature related to children and youth engagement in their local food systems. First, most research on this topic has focused on youth, leaving a gap in knowledge around the perspectives of younger, elementary-school aged children. Second, there remains little literature which measures whether and how children and youth are benefiting from country food programming. Conducting research as to what children and youth—and more specifically students—in ISR communities want to be learning about and from whom would enable future traditional food programs to tailor their programming to the wants and needs of young people, allowing for an opportunity to better monitor and evaluate such programs.

School Food Programs in the ISR

One pathway to more formally incorporate country food into schools is through school meal programs (Ruetz et al., 2024). The Inuit Nunangat Food Security Strategy reports that while many industrialized nations have national school food programs, Canada does not (ITK, 2021). While some school food programs run across Inuit Nunangat, including the Inuvialuit Regional Corporation's (IRC) breakfast program in the ISR, there are limitations to northern food programs' abilities to meet "Inuit-specific nutritional standards" (ITK, 2021, p. 15). A recent ITK (2022) report affirms this need, stating that a breakfast and lunch program that is grounded in Inuit culture and local needs is needed across Inuit Nunangat.

The federal government has recently recognized the importance of school food programs. On April 1, 2024, the Government of Canada announced the investment of $1 billion over five years to a National School Food Program as part of the 2024 Budget. This program recognizes that "school meal programs act as social equalizers" (Prime Minister of Canada, 2024) by reducing hunger, boosting attendance, and lowering financial burdens on families. Included in this budget, the official announcement also detailed specific support for Indigenous communities and Nations:

> Investments will also support capacity building and engagement with Indigenous partners to co-develop culturally appropriate solutions. These partnerships will aim to tackle food insecurity by advancing Indigenous-led solutions and will further our work on reconciliation (Prime Minister of Canada, 2024).

This announcement follows advocacy Indigenous organizations, like ITK, and from civil society who have campaigned to see school meal programs be introduced across the country. Among civil society, the Coalition for Healthy School Food represents over 270 non-profit member organizations from across Canada and has been one leading voice in the call for a Universal Healthy School Food Program in Canada. One of the key pillars of this call to action has been that funding into school food programs be "committed to Indigenous control over programs for Indigenous

students" (The Coalition for Healthy School Food, 2024). This includes serving locally adapted and culturally appropriate foods (Hernandez et al., 2018).

Given the importance of both consumption and participation in procurement of country foods to Northern food security (e.g., Inuit Circumpolar Council Alaska, 2020), it is equally important to consider the land-based activities students currently have access to. In the ISR, schools provide opportunities for students to engage in land-based experiential education and learning (e.g., Kenny et al., 2018c). Some examples of funded programs that can be accessed by students include the Take-A-Kid-Trapping/Harvesting program and Parks Canada programming through schools, as well as Brighter Futures and Project Jewel through the community.

The Take-A-Kid-Trapping and Take-A-Kid-Harvesting programs provide an opportunity for children and youth across the NWT to learn harvesting activities including hunting, trapping, fishing, and outdoor survival (GNWT, n.d.). This pot of funding allows for schools and Indigenous organizations to hire instructors and take students out on the land to learn traditional skills. This started off as a trapping-focused program in 2002 and expanded to include a complementary harvesting program. An NWT report on these programs from 2012/2013 highlighted ten on-the-land programs run through schools in the ISR, including those in Inuvik, Paulatuk, Tuktoyaktuk, and Ulukhaktok (NTLA, 2014).

Parks Canada also offers on-the-land programming for students in Inuvik, Aklavik, and Paulatuk, as part of their summer youth camps in Ivvavik and Tuktut Nogait National Parks. These week-long camps bring high school aged students along with Elders into the backcountry to connect with their cultures and learn about conservation (Scott, 2019). For example, in previous years, a grade 11 biology class would have the opportunity to connect their school curriculum to land-based learning in Ivvavik National Park, an experiential opportunity which had positive impacts on school attendance and enrollment in science credits (Canadian Parks Council, 2011). In summary, both school meal programs and on-the-land experiences represent avenues that can be explored to expand ISR school country food programming.

Brighter Futures involves a federal pot of funding that flows through the IRC for wellness programming, including around country foods and procurement activities, with an emphasis on activities that benefit children and youth (IRC, 2024b). One of the program areas that offer funding for country food activities is that of mental health promotion, which includes on-the-land programming and traditional skill sharing activities. An example of an initiative funded through the Brighter Futures program was an on-the-land whale harvesting camp to encourage knowledge transmission from Elders to youth in Tuktoyaktuk (DHSS, 2008). Rogers & Raymon (2017), an Inuvialuit Elder and youth, write about their experiences with Project Jewel. Their article notes that an Elder Support Worker is always present at Project Jewel wellness camps, that language is incorporated into programming such as youth fish camps, and the authors discuss the positive impact the program has had in their lives.

Project Jewel is another wellness program run by IRC's Health and Wellness Division with an objective of hosting on-the-land programs that incorporate cultural activities for youth, adults, and Elders (IRC, 2024c). Project Jewel camps include hunting, fishing, and berry picking activities, among others, and participants report feeling re-connected to the land and having stronger confidence in their traditional skills after attending these camps (Ollier et al., 2022).

This chapter has explored the gaps in knowledge and opportunities for future research on country food preferences in the ISR. Firstly, the connection between country foods and Indigenous food sovereignty is affirmed, including the recognized importance of involving young people in their traditional food systems to foster cultural continuity. A gap in research exists, however, in understanding the needs and perspectives from northern Canada in working towards food sovereignty. Next, research on country food consumption among Indigenous peoples is outlined, emphasizing that existing research focuses on nutrient intake rather than the socio-cultural impacts of country food consumption. This coincides with a lack of recent research over the past thirty years on country food preferences among Indigenous peoples, as well as limited children and youth voices included in recent studies on country food preferences. Subsequently, the body of research on youth engagement with country foods highlights

methodological opportunities to capture the perspectives of children and youth. Two gaps in research include the lack of perspectives of younger children on engagement with country food captured through research, and the need to evaluate impacts and benefits of existing country food programming. Finally, food programs in the ISR are summarized, including the IRC school food program and other experiential learning opportunities that can be accessed through schools and communities. The consistent recognition of the importance of country foods to food sovereignty, and the lack of northern children and youth voices in this literature, reflects the potential value in identifying children and youth food preferences to inform future country food program opportunities in ISR schools.

Chapter 3: Methodology

Research Design

Using a community-based research approach, this mixed-methods research prioritized knowledge-sharing, capacity building, and the co-development of research materials, data collection, and research outputs. This study utilized image-based surveys, talking circles, and semi-structured interviews to document perspectives of students on country foods and to understand how schools in the ISR are working to engage students with country foods. The pragmatic design of this study recognizes that student perspectives have a place in school planning, and draws on Indigenous food sovereignty literature, decolonial approaches to research, and youth engagement strategies.

This cross-sectional study design collected survey data from students to uncover community-level and regional differences in the country food preferences of students. The survey was conducted with students in grades 1 to 12 from across the ISR between December 2022 and November 2023. The timing of survey administration was determined based on each school's capacity and availability. All seven schools in the six ISR communities participated**.** The results of the student survey informed the development of both talking circles with youth to help validate survey findings, and semi-structured interviews with school food program administrators to better understand opportunities and barriers for ISR schools to engage students with country foods. Results were provided to each school and were shared with each community through local Hunters and Trappers Committees, Community Corporations, Elders Committees, and Hamlet Offices. Ultimately, the results of this research will be owned by the IRC, the governing body of Inuvialuit and the organization that coordinates the current ISR-wide school food program.

The sample size for this study was 278 students across the ISR, representing over 25% of students enrolled at each school as of 2018, except for the Inuvik Elementary School where only 7% were represented (Table 2). This study utilized opportunistic sampling and inclusion criteria described in detail below. Two key factors played into the expected sample size. The first was the number of signed consent forms

returned by parents/guardians of students aged 10 and under, as this was a requirement for students of the younger age group to participate in the survey. The second was the number of students present in class on the day the survey was conducted. Class attendance can be impacted by time of day (e.g., mornings usually have lower attendance), season (e.g., springtime is goose hunting season, and students in coastal communities may be on the land with their families), weather (e.g., blizzards can lead to lower attendance), or illness.

Theoretical Framework

This section provides an overview of the philosophical assumptions underpinning study methods, and the research paradigm which outlines the ethical framework that guided the research process.

Philosophical Assumptions

The theoretical orientation of this thesis is rooted in interpretivism (Grant & Giddings, 2002), attempting to understand the experiences and perspectives of the ISR student population. Criticisms of this approach to research include that interpretivist studies can lack validity and reliability. To reduce this risk, three mixed-method approaches were utilized to triangulate findings and data (Chowdhury, 2014; Moon, 2019). Zohrabi (2013) discusses that studies which utilize multiple methods with different sample groups yield higher reliability, dependability, and validity than single-source research. The iterative data collection and analysis of this interpretivist research therefore recognizes the subjective nature of the preferences and interests of young people as shaped through cultural and societal experiences and seeks to understand these perspectives from as many points of view as possible.

Mingers (2003) and Creswell & Tashakkori (2007) discuss the importance of clearly stating the philosophical assumptions that underpin research, due to the biases and worldviews held by researchers that influence the development of research projects. Strong research, therefore, must explicitly state the frameworks and assumptions that have guided research. Philosophical assumptions fall into the categories of ontological, epistemological, axiological, and methodological assumptions

(Creswell & Tashakkori, 2007). Aliyu et al. (2015) summarize these assumptions as questioning the perspectives on reality (ontological), questioning what counts as knowledge (epistemological), questioning the role of values (axiological), and questioning the research process (methodological).

Ontologically, this study was guided by the belief that children and youth have real and unique opinions, perspectives, and ideas about their local food systems. Epistemologically, this research asked both what knowledge and experiences children and youth have regarding their food system and how these perspectives might be explained. Axiologically, this study looked comparatively between communities, grades, and genders, to see how certain foods and activities might be valued and prioritized within different demographics. Methodologically, the research process was designed within an ethical framework whereby communities and collaborators were engaged in every step of the study.

Research Paradigm

While this research took place in Indigenous communities of the NWT, this thesis, written by a non-Indigenous researcher, makes no claims of using Indigenous methodologies. Rather, the framework and epistemological values that have guided this research are rooted in the literature about Indigenous methodologies.

As such, following guidance of literature on Indigenous research methodology by Wilson (2008), Kovach (2021), and Tuhiwai Smith (2021), this research was informed by an ethical framework rather than a conceptual framework. Conceptual frameworks have been criticized by Indigenous scholars as privileging Western epistemological values and beliefs (Kovach, 2021). While this study falls in line with more of an interpretivist paradigm in aiming to uncover perspectives and experiences (Alharahsheh & Pius, 2020), this research goes beyond wanting to gain knowledge, emphasizing rather the process by which knowledge is obtained. Wilson (2008) discusses the three Rs of Indigenous research methodologies: Respect, Reciprocity, and Relationality, which are foundational to this research (Figure 1).

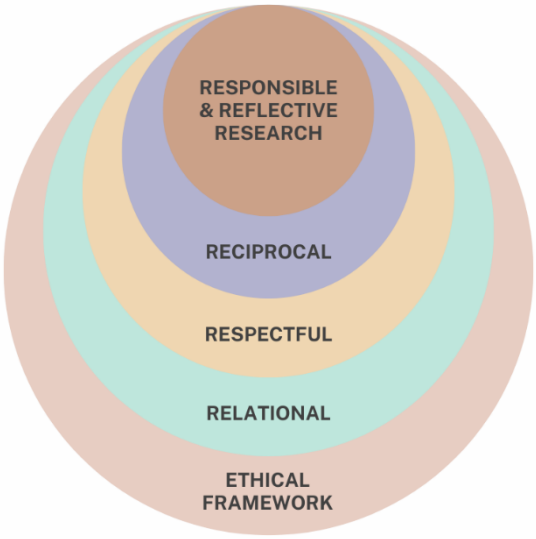


Figure 1. *Ethical framework for research, modified from Wilson (2008)*

The above ethical framework informed the design and processes of this research, including incorporating TCPS2 guidance, obtaining ethics board approvals and research licenses, and following OCAP principles. With ethics at the foundation of this framework, this research was also relational. It was a collaborative process at every stage. Community partners were involved in developing the survey. Interviews and talking circles were utilized to understand whether survey findings reflected community knowledge. Community leadership was involved in establishing how results should be shared. Relational research involved continuously building and sustaining, rather than expecting, trust from community partners. Upon the establishment of these relationships, we sought to be respectful in our research approach, including respect for community members' time, knowledge, and feedback. Respectful research was done transparently and conducted with integrity so that findings were rigorous and applicable to each community. Research was additionally reciprocal, in that there was a clear aim to develop materials and share information that would be useful to schools, communities, and regional programming. The priority at every step of this research was not only to return research findings, but also to give back and be engaged in the community through other non-research components, such as by running cooking classes and supporting the development of school cookbooks. By working within an ethical framework to uphold values of relationships, respect, and reciprocity, this project

yielded critically reflexive, responsible, and reflective results. This included personal awareness of my positionality and role in the spaces and places I enter as a researcher.

Research Timeline

This research followed an iterative timeline of community engagement, data collection, data analysis, and community reporting (Figure 2). This section expands on each phase of the research process.

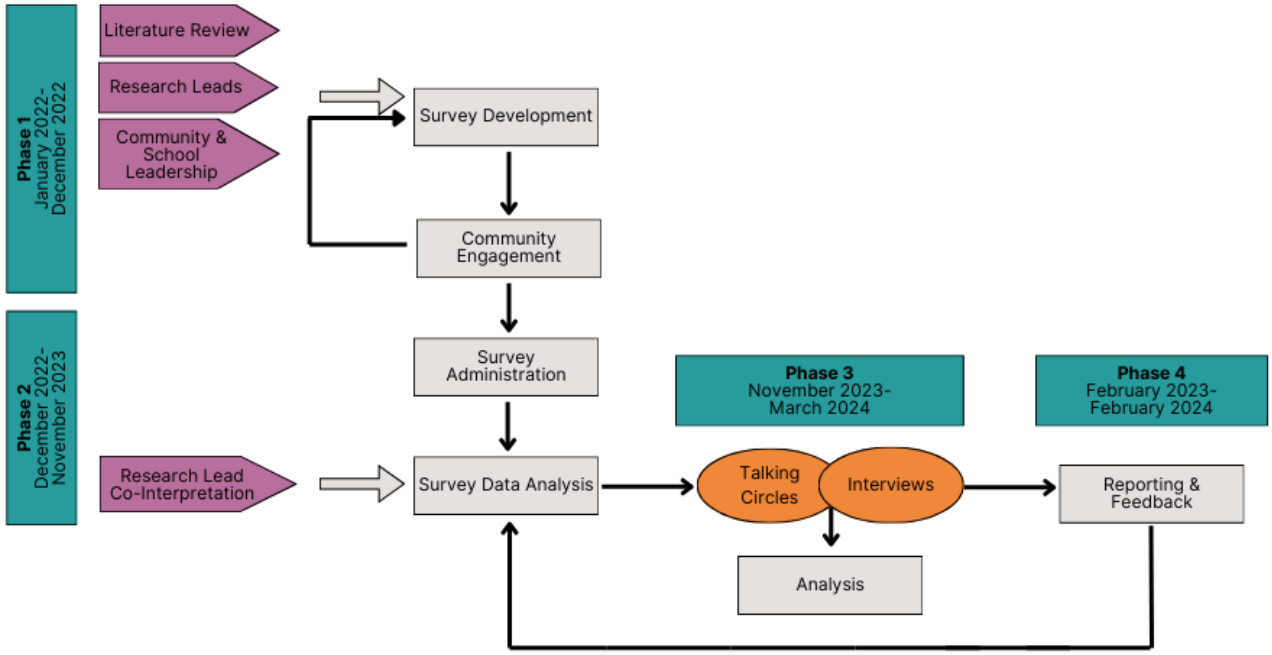


Figure 2. *Iterative research timeline illustrating the process, inputs and outputs of this study*

Phase 1 – Survey Development and Community Engagement

January 2022 to December 2022. This research began with relationship-building across the ISR. Relationship building, while described primarily in Phase 1, was integral to all stages of the research, as described in the ethical research framework. This included working (i) collaboratively with community research leads to develop the survey, (ii) meeting with regional organization representatives from BDDEC and the IRC to discuss research benefits and best practices, and (iii) connecting with school principals to gauge their interest and coordinate school participation in the study. This

phase also involved meeting with HTCs and CCs in Tuktoyaktuk and Paulatuk in April 2022 to seek feedback from community leadership on the drafted survey and collect input on the uses of the survey. Each meeting and conversation led to small revisions to the survey design. This process of research material drafting, feedback, and revisions was completed over the course of one year. This phase also involved connecting and working with members of our broader ISR Food Security Research Team.

Phase 2 – Survey Administration and Data Analysis

December 2022 to November 2023. Image-based student surveys were distributed to all seven schools across the six ISR communities. Survey timing was coordinated based on school schedules and the surveys were either administered by an ISR Food Security Research Team member or by school administrators, who were given specific instructions ahead of time. The surveys were completed by grade 1 to 12 students. Students were asked to respond to primarily closed-ended questions in four categories related to country foods: (i) the types of foods they would like to eat, (ii) the related activities they would like to participate in, (iii) who they would like to learn from, and (iv) the harvesting and preparation skills they would like to learn.

A quantitative analysis of de-identified responses using Microsoft Excel allowed for the coding and comparison of survey responses based on the key variables being tested: gender, age, and community. These results revealed both community-level and regional trends in country food preferences, activity interests, and learning preferences.

Ethical considerations for the survey included having student assent coupled with written or verbal parental consent for students aged 10 and under, and informed written consent for students aged 11 and up. The inclusion criteria for participation required that: (i) students aged 10 and under had written or verbal consent from a parent/guardian, (ii) students were present in class on the day the survey was conducted, and (iii) students were registered in grades 1 to 12 at the time of the survey. Age was not an exclusion factor given that students may repeat grades; however, kindergarten students were excluded based on the complexity of questions posed in the survey.

As part of the data analysis process, co-interpretation of preliminary results was done with the ISR Food Security Research Coordinator in Paulatuk. Presentations to community leadership and/or the public on the high-level findings of the survey were done in Tuktoyaktuk, Paulatuk, Aklavik, and Ulukhaktok. Written reports were shared with the Inuvik HTC and Sachs Harbour HTC. Feedback from these meetings and reports were incorporated into the data analysis and incorporated into the summary of survey limitations.

Phase 3 – Interviews, Talking Circles, and Data Analysis

November 2023 to March 2024. The results of the student survey in each community informed six semi-structured interviews with school food program administrators in five communities. The purpose of these interviews was to better understand: (i) the perceived applicability of school-level survey findings; (ii) the current school country food programming opportunities for students; and (iii) the barriers to administering country food programming in the schools. Three talking circles with grade 6 to 12 students were also conducted in three different schools to confirm the reliability of survey findings. Talking circle participants were selected through convenience sampling, a non-probability sampling method whereby data is collected based on the available population (Etikan et al., 2016). Both interview and talking circle participants provided written consent to both participate in the study and to have their interview or talking circle recorded. Notes were taken during both interviews and talking circles, and audio recordings allowed for discussions to be transcribed, ensuring that no identifiable information was transcribed.

Community feedback on the survey data findings was incorporated into the design of the interview and talking circle guides. Data analysis was conducted using NVivo to deductively code themes from interviews and talking circles, following thematic analysis approaches described by authors such as Braun & Clarke (2006; 2022). Information from this data analysis was subsequently incorporated into community discussions, and ultimately the final report to communities.

Phase 4 – Community Reporting and Feedback

February 2023 to February 2024. Preliminary findings of school-specific results were disseminated to schools and presentations were made to HTCs, CCs, and Elders Committees soon after survey data was analyzed, to hear from community leadership about their perspectives. At all stages of the research process, information was passed on to community leadership and feedback was incorporated back into the design and execution of the research project. Specific research methods and procedures are described in the following chapter.

Chapter 4: Country Food and Activity Preferences Among Students: Findings from the Inuvialuit Settlement Region, NWT

Alissa Sallans[1], Sonia Wesche[1], Sonja Ostertag[2], Kelly Skinner[2], Celina Wolki[3] Maria Ramirez Prieto[2].

[1.] University of Ottawa
[2.] University of Waterloo
[3.] ISR Food Security Coordinator, Paulatuk, NWT

Introduction

Across Inuit Nunangat (the Inuit homeland), food insecurity rates are among the highest in Canada. While country foods are well documented as playing a central role in nutrition and food security of Indigenous peoples, research is pointing to decreased availability of and access to country foods (ITK, 2021). Further, Indigenous youth are reported to be spending less time harvesting and consuming fewer country foods than previous generations (Food Banks Canada, 2016; Sharma, 2010). The importance of involving children and youth in their local food systems to promote food security is well-documented (e.g., Kuhnlein & Choriboriboon, 2022). Research to date, however, has primarily collected the country food perspectives of adults (e.g., Todd, 2010), has focused heavily on the nutritional dimensions of country foods (e.g., Kolahdooz et al., 2014), or is decades old (e.g., Wein & Freeman, 1992). As such, identifying methods to strengthen child and youth access to country foods–including knowing their interests and preferences–is an important tool to support food security locally (Lambden et al., 2007; Robin, 2019). School settings provide one opportunity to capture such perspectives and support food security (e.g., Robin & Cidro, 2020). While the role of schools in addressing food security in northern Canada is largely understudied (e.g., Ramirez Prieto et al., 2023), schools in the North provide opportunities for students to engage with country foods and land-based learning (e.g., Kenny et al., 2018c). This study focuses on the Inuvialuit Settlement Region (ISR) of the Northwest Territories (NWT) and builds off the research of Wein and Freeman (1990, 1992, 1995) in using image-based surveys with students at regional levels to better understand country food preferences.

The Inuvialuit Settlement Region (ISR) of the Western Arctic, covers six remote communities of Aklavik, Inuvik, Paulatuk, Sachs Harbour, Tuktoyaktuk, and Ulukhaktok. The prevalence of food insecurity in the ISR was 68.5% in 2021 and the region has been reported to have one of the highest rates of children living in food insecure households (29%) of all provinces and territories (ITK, 2021; PROOF, 2016). Schools across the ISR support students through integrating healthy and cultural foods into the education system. This includes food provisioning, on-the-land activities, cooking classes, and cultural calendars. The Inuvialuit Regional Corporation (IRC)'s school breakfast and lunch program, for instance, has expressed interest in incorporating country foods into their menus (IGC, 2022). This goal supported by Inuit Tapiriit Kanatami (ITK, 2021), the national organization advocating for Inuit. Consequently, there is opportunity to inform both future school menu planning and ongoing school activities by learning the country food and activity preferences of students in the ISR.

This chapter aims to answer the research question: what are student perspectives regarding country foods in the ISR and how can schools foster student engagement with local food systems? The objectives of this study were to: (1) document student preferences for country foods and land-based activities, (2) understand student access to and preferences for learning about country foods, (3) understand how schools are supporting student engagement with country foods and barriers to doing so. This chapter summarizes the research conducted into student food preferences and activity interests across the ISR, utilizing image-based student surveys, talking circles with students, and interviews with food program administrators to present regional findings.

Methods

This community-based exploratory research is embedded in a long-standing participatory research program in the ISR. This study was developed in consultation with the ISR Food Security Coordinator in Paulatuk, and the survey received feedback on its design from Hunters and Trappers Committees (HTCs) and Community Corporations (CCs) in Paulatuk and Tuktoyaktuk, as well as from representatives of the

Inuvialuit Regional Corporation (IRC) and the Beaufort Delta Divisional Education Council (BDDEC).

Three research methods were employed: (1) a primarily quantitative image-based field survey (Fowler, 2013; Prosser, 1996) with students in the seven schools across the six ISR communities (n=278), (2) qualitative talking circles (Brown & Di Lallo, 2020) with students in three communities (n=3), and (3) qualitative semi-structured interviews (Kallio, 2016) with food program administrators in five communities (n=6). Following survey data collection and analysis, talking circles with students were used to ground truth (NASEM, 2019) the survey findings in three communities, and qualitative interviews with school food program administrators helped to uncover nuances and variations in interpretation of the survey findings.

Student Survey

An image-based survey was developed to capture perspectives from students on three themes: (i) their preferences for eating, preparing, and harvesting country foods, (ii) their land-based procurement activity interests, and (iii) their access to and preferences for learning about harvesting and the land. These themes reappear as deductive codes for talking circles and interview analysis and create the framework for this paper. The survey was conducted in English and consisted primarily of six open-ended multiple-choice questions. Drawings commissioned by an Inuvialuk artist from Tuktoyaktuk were used to illustrate response options. Spaces were also available for students to provide answers in their own words. Regarding theme iii, the survey asked students two categories of questions: (1) how often they felt they got out on the land, and (2) with whom they would prefer to learn about country foods. For the former, these questions involved circling responses on a scale of “not at all” to “a lot” for students in grades 1 to 5, as well as for all Inuvik students. Grade 6 to 12 students in the five smaller communities were asked to provide short answers which were later grouped for analysis based on terminology students used in their answers.

Identical surveys were distributed to the five smaller communities and a modified survey was provided to Inuvik students due to the size and diversity of students in the

Inuvik schools. The modified survey did not include questions on harvesting or preparation preferences, nor did it seek written feedback from the older grades. There were no restrictions placed on the number of options students could select.

Methodological flexibility (Morton Ninomiya et al., 2020) was utilized in the distribution of surveys to schools, allowing the survey to be distributed based on school availability and preferred method of distribution (Table 2). Packages with information letters, consent forms, demographics forms, and surveys were created for each class. Clear instructions for survey administrators ensured that materials were consistently delivered.

Table 2. *Student survey distribution, timing, and respondents by ISR community*

Community	School	Grades Surveyed	Survey Conducted	Method of Survey Administration	# Surveys Completed	Enrollment[2]	% School Surveyed
Aklavik	Moose Kerr School	1-12	December 2022	Administered by teachers with support from local community research lead	32	115	28%
Paulatuk	Angik School	1-12	February 2023	Administered by AS	28	76*	37%
Tuktoyaktuk	Mangilaluk School	1-12	February 2023	Administered by AS and other research team members	66	218	30%
Ulukhaktok	Helen Kalvak School	1-12	March 2023	Administered by another research team member	32	118	27%
Sachs Harbour	Inualthuyak School	1-9	September 2023	Administered by another research team member	6	15	40%
Inuvik	East Three Elementary School	1-6	November 2023	Administered by AS	29	425	7%
Inuvik	East Three Secondary School	7-12	November 2023	Administered by AS	85	268	34%

**Student enrollment the year that surveys were conducted (Personal communication, November 15, 2023)*

[2] BDDEC (2018).

Survey completion required informed written or verbal parental/guardian consent from students aged ≤10 to complete the survey. Students aged ≥11 were able to provide their own written informed consent for the survey, following information being sent home to parents/guardians. Demographics forms were distributed with surveys to collect student age, grade, and gender. Students were not asked about their cultural backgrounds, as the survey aimed to capture school level data that could be used by administrators. Unique identifying numbers to de-identify data from demographics forms, surveys, and consent forms.

The survey was shared with grade 1 to 12 students at the seven schools in the ISR between December 2022 and November 2023. The survey for grade 1 to 5 students was identical to the survey for grade 6 to 12 students, except there was more room for written answers from older students. A total of 278 surveys were completed across the six ISR communities (Table 3), with over 25% response rate from all schools[3] other than the Elementary School in Inuvik. Regionally, 39% of survey respondents were in grades 1 to 6, and 61% of respondents were in grades 7 to 12. Boys represented 46% and girls represented 50% of respondents. Students who did not identify within the gender binary or did not circle a response for gender (3%) are only included in overall community responses to protect anonymity within small communities.

Table 3. *Demographics of student survey respondents by ISR community, grade, and gender*

Community	# Surveys	Grade		Gender		
		1-6	7-12	Boy	Girl	Other
Tuktoyaktuk	66	33	33	34	30	2
Paulatuk	28	19	9	16	9	3
Aklavik	32	11	21	14	18	0
Ulukhaktok	32	10	22	12	17	3
Sachs Harbour	6	6	0	2	4	0
Inuvik	114	29	85	51	62	1
Total	278	108	170	129	140	9

[3] Note that school enrollment is typically much higher than attendance across the ISR, especially post-pandemic (Personal Communication, November 15, 2023).

Talking Circles

Talking circles were used to verify the validity and reliability of survey findings (Ouimet, et al., 2004). Talking circles are similar to focus groups as an approach to provide a nuanced elaboration to research findings (e.g., Parker & Tritter, 2006; Ward, Bertrand & Brown, 1991), but are more culturally relevant (Bohanon, 2013). Three of the six ISR communities were selected by the research team based on convenience sampling and to represent a range of community characteristics (Acharya et al., 2013): Tuktoyaktuk, Paulatuk, and Ulukhaktok. Due to timing, funding, and other constraints, it was not possible to travel to all six communities to conduct talking circles. Inuvik was not selected due to the size and diversity of the school population, for which a single talking circle would not be representative of all student experiences. A talking circle had been scheduled in Aklavik, but due to school closures it did not take place. Talking circles are not representative of the region, but rather give insight into the reliability of school-specific findings.

Talking circles were conducted in half the communities surveyed–Tuktoyaktuk, Paulatuk, and Ulukhaktok–between November 2023 and February 2024, to share survey findings and identify whether these findings reflected student perceptions on the survey themes of (i) food preferences, (ii) activity preferences, and (iii) access to and preferences for learning. Within each theme, talking circle findings were grouped based on information that was (a) similar to survey findings, (b) different from survey findings, and (c) additional information. A total of 18 youth (including students and non-student youth) participated in the three talking circles, each of which lasted 30-40 minutes. Following the distribution of information letters, written consent and verbal assent from students was obtained prior to commending the talking circle. Each talking circle was facilitated by two research team members following a semi-structured question guide. Sticky notes were used as an engagement tool to allow for individual reflection, engage different styles of learners, and document group discussion (Burgess et al., 2021; Peterson & Barron, 2007). Talking circles were facilitated by having students guess the survey results from their school and record these guesses on sticky notes, prior to sharing findings and group discussion. Talking circles were audio recorded and later transcribed. No identifiable information was transcribed.

Semi-Structured Interviews

Semi-structured interviews about the survey results were conducted with school food program administrators[4] (n=6) in the ISR between November 2023 to March 2024 to expand on survey and talking circle findings. Five of the six communities were represented through these interviews. Interviewees were selected through purposive sampling based on their connections to and knowledge about school food programming. Ahead of time, interviewees were provided with an information letter and a copy of the preliminary results from the survey at their school. Interviewees were asked what factors may have contributed to trends in student preferences and interests, and what barriers schools face to student engagement with country foods. Interviews lasted approximately 30 minutes; they were audio recorded following informed written consent and later transcribed.

Analysis

The survey results were analyzed using Microsoft Excel to calculate descriptive statistics (Carr, 2008). Survey data was input into a master worksheet and quantitative responses were coded as a 1 if selected or 0 if not selected. Qualitative responses from grade 6 to 12 students about how often they got out on the land were coded based on descriptors used (e.g., writing “none” coded to the category of “not at all”; writing “always” coded to the category of “a lot”). Summary statistics were calculated to ascertain school-level findings and regional statistics were calculated based on school averages. Community-level findings were reported back through summary reports provided to schools, meetings with community leadership, and public presentations. Community feedback and reflections were compiled and incorporated into the final analysis. Regional data in graph form was additionally co-interpreted with the ISR Food Security Coordinator, Celina Wolki, through two in-person meetings.

Talking circles were analyzed through deductive content analysis (Elo & Kyngäs, 2008; Moretti et al., 2011; Ward et al., 1991). Students were de-identified from talking circle transcriptions and NVIVO software was used to code the ideas that students

[4] In the context of this research, the term “food program administrator” includes administrators that have worked to manage, facilitate, or support initiatives for students to eat and engage with country foods, including through land-based experiences.

shared into categories of analysis (Baralt, 2011). This analysis focused on interpreting school-level findings. Categories of analysis were formed based on the three categories of questions asked in the survey: (i) food preferences, (ii) activity interest, and (iii) access to and preferences for learning. Data was sorted based on content that supported survey findings, did not support survey findings, and revealed new information.

Systematic analysis of the semi-structured interviews utilized a six-step approach to familiarize, define, and identify themes from transcribed interviews (Braun & Clarke, 2006). Coding was done deductively using NVIVO software (Baralt, 2011; Naeem et al., 2023). Codes aligned with the three categories of questions asked in the student survey, and an additional code for administrative barriers was added.

Ethical Considerations

TCPS2 and OCAP principles guided this research. Ethics clearance was obtained from territorial and academic ethics boards to conduct research within the school setting. A Northwest Territories Scientific Research License (#1742) was obtained, and a joint ethics review was subsequently conducted by the Aurora Research Institute and the University of Waterloo (#44227). Ethics clearance was also obtained from the University of Ottawa (#8371). Community engagement took place at every step of the research project, including seeking feedback from and reporting findings to Hunters and Trappers Committees, Community Corporations, Elders Committees, and school administrators. The IRC, as the Inuvialuit governing body and the coordinator of the ISR-wide school food program, will retain ownership of the survey data at the end of the study period.

Results

This section provides an overview of the student survey and the reliability of these results based on facilitated talking circles. A summary of the perspectives from school food program administrator interviews on survey findings is then summarized.

Student Survey

Results from the student survey on country foods presents data gathered from students in grades 1 to 12. This section is organized by their responses to questions about (i) food preferences, including preferences for eating, harvesting, and preparing various species (ii) activity preferences, and (iii) access to and preferences for learning, including how often students felt they got out on the land, and who students reported wanting to learn from.

Food Preferences

Students in all communities reported a strong preference for eating, harvesting, and preparing caribou. Arctic char, geese, and berries were also consistently highly ranked among students across the region. Preference for muskox and beluga varied by community but remained in the top 30-40% of foods regionally that students wanted to eat, harvest, or prepare (Tables 4-6).

Table 4. *Country foods selected by ≥30% of students regionally across schools in Tuktoyaktuk (Tuk), Paulatuk (Paul), Aklavik (Akl), Ulukhaktok (Ulukh), Sachs Harbour (Sachs), and Inuvik as preferred foods to eat*

Country Foods	Community Preferences for Country Foods to Eat (%)						Regional Average (%)	
	Tuk	Paul	Akl	Ulukh	Sachs	Inuvik	Mean	Std Dev
Caribou	**92**	**82**	**97**	**91**	**100**	**66**	88	12
Goose	**61**	**61**	**69**	**84**	**83**	49	68	14
Blueberries	**67**	**64**	**66**	**78**	**67**	51	65	9
Arctic Char	52	**64**	31	**84**	**100**	35	61	27
Muskox	24	25	47	**91**	**100**	23	52	35
Aqpik[5]	**65**	50	**72**	50	17	39	49	20
Moose	42	21	**91**	50	33	49	48	24
Beluga	53	39	**63**	**66**	33	23	46	17
Cranberries	50	14	44	59	50	44	44	15
Blackberries	39	29	41	53	17	35	36	12
Geese Eggs	29	46	28	**66**	33	16	36	17
Fish Eggs	27	29	47	41	33	26	34	8
Qunguliq[6]	11	29	16	**63**	**83**	3	34	32

[5] Aqpik is the Inuvialuktun name for the cloudberry (*Rubus chamaemorus)* (ICRC, 2010).
[6] Qunguliq is the Inuvialuktun name for the plant arctic sorrel (*Oxyria digyna*) (ICRC, 2010).

Lake Trout	35	29	28	56	33	15	33	14
Ptarmigan	27	43	28	38	33	27	33	6

Note. An average of 1% ±2% of students at each school circled 0 food options. Country foods selected by ≥60% of students in each community are bolded.

Table 5. *Country foods selected by ≥30% of students regionally across schools in Tuktoyaktuk (Tuk), Paulatuk (Paul), Aklavik (Akl), Ulukhaktok (Ulukh), and Sachs Harbour (Sachs) as preferred foods to harvest*

Country Foods	Community Preference for Country Foods to Harvest (%)					Regional Average (%)	
	Tuk	Paul	Akl	Ulukh	Sachs	Average	Std Dev
Caribou	53	50	41	44	33	44	8
Arctic Char	26	29	16	41	**83**	39	26
Goose	27	29	28	41	**67**	38	17
Beluga	38	36	41	47	17	36	11
Lake Trout	24	18	19	22	83	33	28
Muskox	23	25	47	47	17	32	14
Cranberries	24	14	28	34	50	30	13

Note. An average of 15.7% ± 16% of student participants at each school circled 0 food options. Country foods selected by ≥60% of students in each community are bolded.

Table 6. *Country foods selected by ≥30% of students regionally across schools Tuktoyaktuk (Tuk), Paulatuk (Paul), Aklavik (Akl), Ulukhaktok (Ulukh), and Sachs Harbour (Sachs) as preferred foods to prepare*

Country Foods	Community Preference for Country Foods to Prepare (%)					Regional Average (%)	
	Tuk	Paul	Akl	Ulukh	Sachs	Mean	Std Dev
Caribou	**67**	**64**	**78**	**78**	**100**	77	14
Arctic Char	39	46	31	**66**	**100**	57	27
Goose	45	50	47	56	**67**	53	9
Muskox	56	29	31	**81**	50	49	21
Beluga	41	50	47	59	17	43	16
Blueberries	45	29	47	34	17	34	13
Moose	36	21	**63**	31	0	30	23

Note. An average of 12.4% ± 10% of students at each school circled 0 food options. Country foods selected by ≥60% of students in each community are bolded.

Regional responses on student preferences on preparation methods included quaq [frozen meat] (41%) and dry meat (39%) as the most frequently preferred types of foods students enjoyed eating, followed by roasted meat (32%), aged meat (30%), and soups/stews (27%).

Students demonstrated a high level of interest in eating and preparing country foods, calculated by the percentage of students at each school that circled five or more country food options. While data shows a regional student interest in eating country foods of 85% and in preparing country foods of 74%, there was a higher no-response rate to the question of harvesting preferences, which may have contributed to the regional student interest to harvest country foods of 43% (Table 7).

Table 7. *Student interest in country foods based on the percentage of students that circled 5+ food options for each category of questions at schools in Tuktoyaktuk (Tuk), Paulatuk (Paul), Aklavik (Akl), Ulukhaktok (Ulukh), and Sachs Harbour (Sachs)*

Category	Community (%)						Regional Average (%)	
	Tuk	Paul	Akl	Ulukh	Sachs	Inuvik	Mean	Std Dev
Eat	89	71	100	94	100	53	85	19
Harvest	39	32	41	53	50	NA	43	8
Prepare	68	61	78	81	83	NA	74	10

Activity Interest

Students were asked to circle the activities they enjoyed participating in or wanted to learn about (summarized as student activity interest). Almost half of the activities listed in the survey were circled by an average of ≥50% of students regionally. An average of ≥66% of students regionally reported an interest in fishing, berry picking, jiggling, and making dry meat. The no-response rate to this question was low; ≤2% of respondents regionally circled 0 activities they were interested in (Table 8).

Table 8. *Land-based activities selected by ≥50% of students regionally across schools in Tuktoyaktuk (Tuk), Paulatuk (Paul), Aklavik (Akl), Ulukhaktok (Ulukh), Sachs Harbour (Sachs), and Inuvik*

Activity	Community (%)						Regional Average (%)	
	Tuk	Paul	Akl	Ulukh	Sachs	Inuvik	Mean	Std Dev
Fishing	58	**69**	**75**	**91**	**83**	54	71	14
Berry Picking	**62**	**63**	**78**	**88**	**83**	42	69	17
Jiggling	**65**	56	**63**	**88**	**100**	39	68	22
Making Dry Meat	45	50	**72**	**84**	**100**	43	66	23
Cooking	**67**	44	**66**	**78**	**67**	49	62	13
Hunting	59	**63**	56	**88**	33	58	59	17
Plucking Geese	55	38	56	**91**	**67**	33	56	21
Working on Fish	47	44	59	**84**	33	38	51	19
Working on Animals	41	44	**66**	**75**	33	42	50	16

Note. An average of 2% ± 3% of students at each school circled 0 activity options. Country food activities selected by ≥60% of students in each community are bolded.

Average level of country food activity interest by gender highlights the reported activity preference differences between boys and girls (Figure 3). Regionally, boys indicated strongest preference for fishing (74%), hunting (67%), jiggling (67%), and making dry meat (63%), and girls indicated strongest preference for berry picking (77%), cooking (75%), jiggling (72%), fishing (68%), and plucking geese (62%). The activities with ≥20% difference in gendered preferences were hunting (B:67%, G:47%), berry picking (B: 55%, G: 77%), cooking (B: 51%, G:75%), and sewing furs (B: 26%, G:56%).

The average level of interest in all land-based activities in each community also varied. This was measured by the average percentage of students that circled each activity per community (Table 9). The average interest among students in any given activity was highest in Ulukhaktok (74%) and lowest in Inuvik (35%).

Table 9. *Average level of interest in all land-based activities at schools in Tuktoyaktuk (Tuk), Paulatuk (Paul), Aklavik (Akl), Ulukhaktok (Ulukh), Sachs Harbour (Sachs), and Inuvik*

Category	Community (%)						Regional Average (%)	
	Tuk	Paul	Akl	Ulukh	Sachs	Inuvik	Mean	Std Dev
Procurement Activities	42	47	53	74	49	35	50	12

Access To the Land and Preferences for Learning

When asked about how often they get out on the land, students regionally responded “a lot” (Figure 4). Similarly to the regional findings, Tuktoyaktuk, Paulatuk and Ulukhaktok had the highest percentage of respondents indicating that they got out on the land “a lot”. In Aklavik, the highest percentage of respondents felt they got out on the land “not at all”. Inuvik had a wide range of responses, with “a lot” having the lowest percentage, and the highest percentage of students feeling they got out on the land “a little,” “sometimes,” and “often.” Sachs Harbour had too small of a sample size to properly compare their student responses. Gender differences within student responses suggested that girls were more likely to feel that they got out on the land less than boys. This is highlighted in Aklavik and Ulukhaktok where the highest percentage of girls felt they got out on the land “not at all”.

Students consistently indicated wanting to learn from their families (73%) about country foods (Figure 5). Within the family unit, students regionally responded that they currently learn about country foods from their fathers (27%), grandmothers (21%), mothers (19%), and grandfathers (18%). Learning from friends (34%) and harvesters (32%) were the next most commonly selected options. While not listed as an option to circle on the survey, 4% of students indicated their interest in learning from Elders by writing it in the “other” section. This was especially emphasized in Inuvik (3% of surveys).

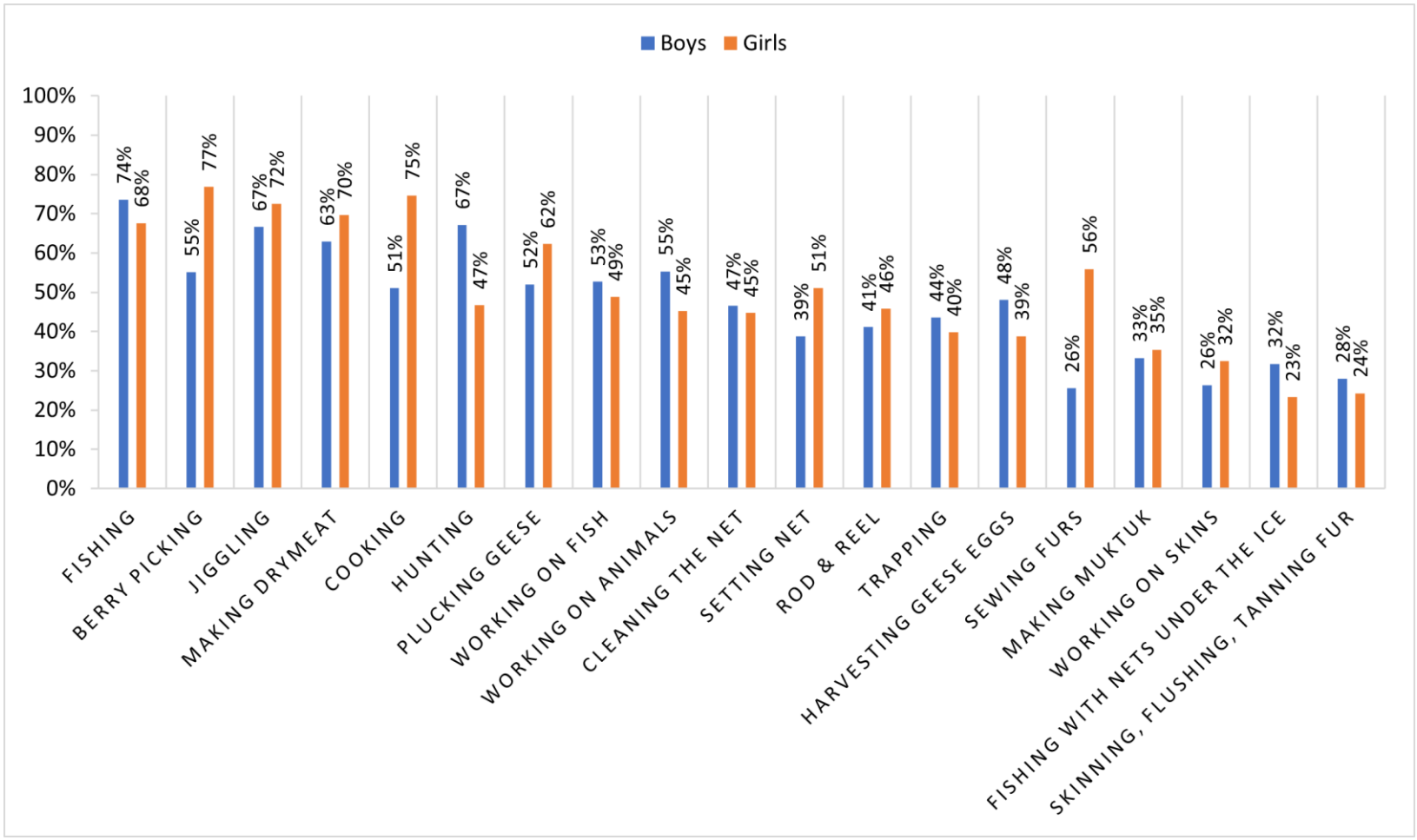


Figure 3. *Land-based activity preferences by gender across the ISR in order from highest to lowest regional activity average*

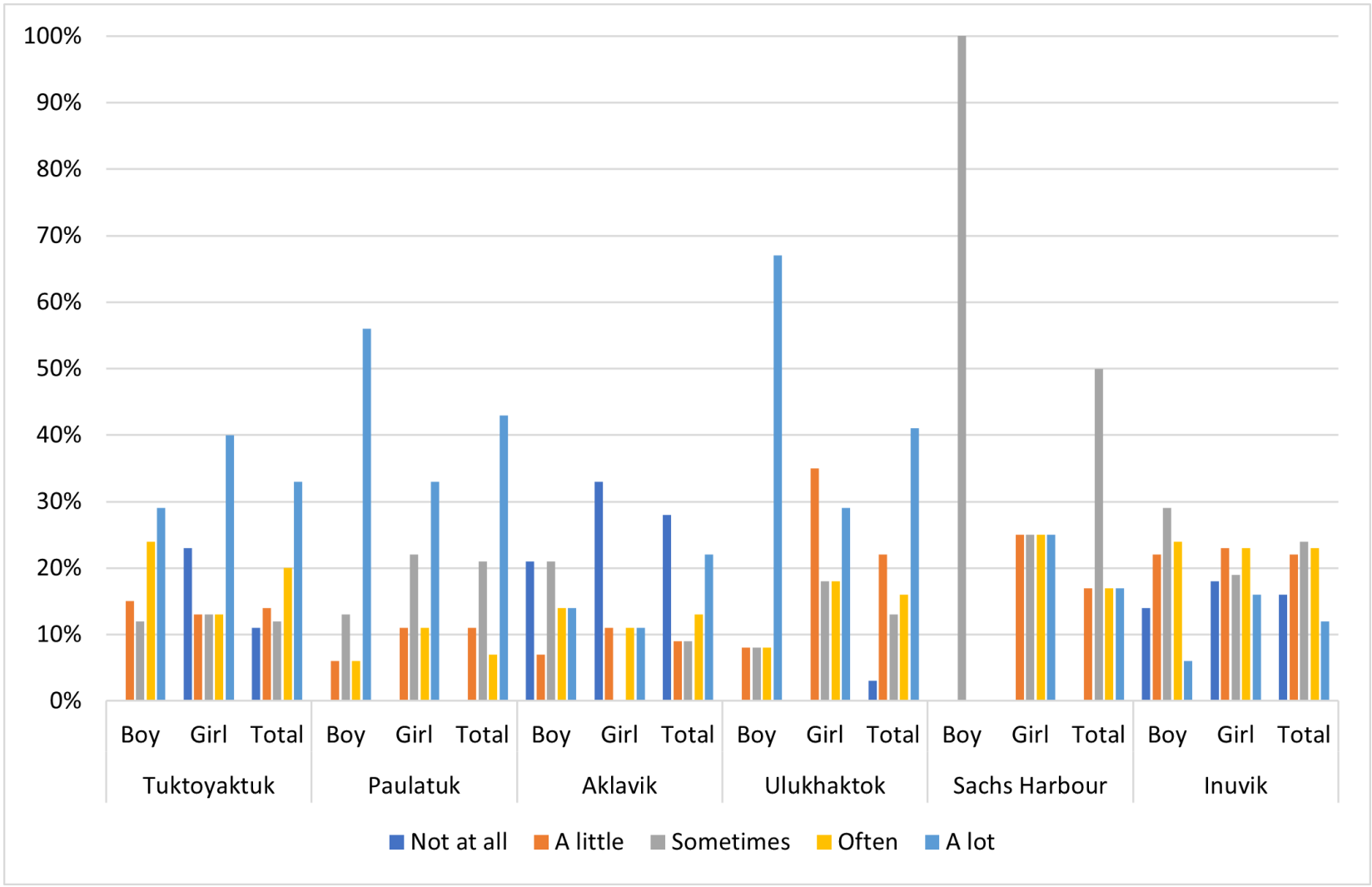


Figure 4. *How often students reported getting out on the land by gender and community*

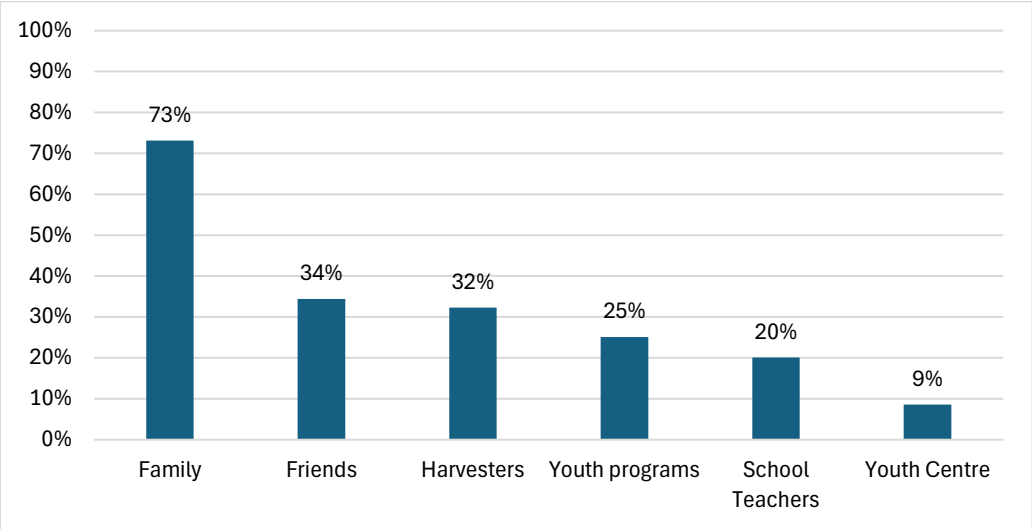


Figure 5. *Average aggregate student learning preferences*

In summary, the student survey documented regionally that students expressed a high level of interest in eating and preparing country foods, a high level of interest in participating in country food activities, an overall feeling of spending “a lot” of time on the land, and a strong preference to learn about country foods from family. The survey results showed variances in favourite country foods and country food activities between the communities, as well as gender differences in preferences within communities.

Talking Circles

To test the reliability and validity of the survey findings, content from the three talking circles was grouped into three categories: (a) similar to survey findings, (b) different from survey findings, and (c) additional information. Overall, talking circles consistently supported the findings of the student survey, and emphasized the wide range in student experiences and preferences across the ISR. This section will go through each of the three survey themes, (i) food preferences, (ii) activity preferences, and (iii) access to and preferences for learning and summarize findings from each of the three categories of analysis from the talking circles.

Food Preferences

Similarities to Survey Findings

Overall, there was a strong parallel between the food preferences identified in the survey results and those suggested in the talking circles. In all three talking circles, caribou was identified as a priority, with 100% of talking circle participants in Tuktoyaktuk, 66% of participants in Paulatuk, and 60% of participants in Ulukhaktok listing caribou as a preferred food. While survey results pointed to Arctic char also being highly preferred, students in the talking circle generally suggested “fish” broadly as a favourite food, with only some individuals listing char by name. In Ulukhaktok, specific types of food were mentioned by the talking circle participants, including biffi (dry fish), mitku (dried caribou or muskox), and quaq (frozen meat), and these were consistent with the foods that were most highly ranked in their school’s survey results. The survey found that students preferred consuming dry meat and quaq. This was confirmed through the talking circles, as dry meat and dry fish were listed as a favourite food by 60% of participants in Tuktoyaktuk and Ulukhaktok, respectively, and quaq came up frequently in Ulukhaktok. Additionally, talking circle participants in Tuktoyaktuk and Ulukhaktok discussed the differences in survey findings between what students were interested in eating as compared to harvesting and preparing; they indicated that this could be connected to the challenges in accessing certain types of animals. Some participants summarized this by explaining that “some animals are harder to get than others” and “not everybody can go – like – hunting and harvesting, like [for] caribou and muskox a lot” (Participants in Ulukhaktok).

Differences from Survey Findings

Talking circle participants identified foods that might be missing from the survey or did not feel appropriately ranked. In Ulukhaktok, eider duck was identified as a food that students would enjoy preparing, but it was not listed on the survey as eider ducks are most commonly found in the island communities of Ulukhaktok and Sachs Harbour. Ptarmigan was also thought to be much lower ranked in the survey in Ulukhaktok than it should be. There was some disagreement with survey findings around muktuk (whale skin and blubber) preference in two communities. In Paulatuk, students felt that muktuk would “be at the top” of foods that students want to eat; however, the survey indicated

that less than 40% of Paulatuk students were interested in eating beluga. Conversely, in Tuktoyaktuk only 20% of talking circle participants independently listed muktuk as a highly ranked preference of students, while the survey indicated that over 50% of Tuktoyaktuk student respondents were interested in eating beluga. This led to a conversation with students around the possibility that younger students might not have as much of a taste for muktuk as older students, such as those participating in the talking circles.

Additional Information to Survey Findings

The distinction in definitions between traditional foods and country foods was discussed during the talking circles. While country foods refer to foods that can be harvested from the land, traditional foods were thought to include other foods that would be traditionally prepared. In both Ulukhaktok and Tuktoyaktuk, for example, bannock and Eskimo donuts, were thought to be “traditional foods” which were not captured in the survey.

Activity Interest

Similarities to Survey Findings

Both survey findings and talking circles point to a high level of interest among students for participating in land-based activities. In Tuktoyaktuk, more than 12 activities were suggested by participants to be student favourites. The student survey found that hunting was an activity that an average of 59% of students regionally were interested in. Talking circle participants in all three communities agreed that hunting should be highly ranked. When the first three most common activity preferences from the survey findings were shared with the students in Tuktoyaktuk, one participant exclaimed “how was hunting not on there?”. 66% of talking circle participants in Paulatuk and 70% of participants in Tuktoyaktuk suggested hunting as one of students’ top favourite activities.

Differences from Survey Findings

Berry picking was highly preferred in survey findings; however, this activity was not frequently suggested by talking circle participants as a preferred student activity. Berry picking was brought up by 0% of Paulatuk talking circle participants, and by 40%

of talking circle participants in both Tuktoyaktuk and Ulukhaktok despite survey results indicating berry picking as among the most frequently preferred activities regionally.

Additional Information to Survey Findings

Student interest in on-the-land skill building was emphasized as extending beyond the survey options. Talking circle participants brought up wanting to learn survival skills, how to make tools for harvesting, how to maintain equipment, and how to travel on the ice, as examples of activities not listed on the survey.

Access to and Preference for Learning

Similarities to Survey Findings

This section includes data from the two talking circles, Paulatuk and Tuktoyaktuk, as there was not time to ask all talking circle questions in Ulukhaktok. In both Paulatuk and Tuktoyaktuk, the survey finding of a strong preference to learn about country foods from family members was validated, hearing from students that “family is definitely the best” and that “then you pass it on to younger generations, like your own kids” (Participants in Tuktoyaktuk). There was a wide range of feelings about student’s ability to get out on the land, reflecting the wide range of personal experiences expressed in the survey findings. In Tuktoyaktuk, participants felt that limited time, especially for students in older grades, can make it challenging to spend time on the land, but that “lots of students still get out” (Participant in Tuktoyaktuk) despite barriers.

Differences from Survey Findings

There was disagreement with the survey findings regarding differences between boys and girls in terms of access to spending time on the land. In Paulatuk, the survey found that nearly double the percentage of boys felt they got out “a lot” compared to girls. Talking circle participants in Paulatuk explained that times are changing. One student shared that “it always has been, like, the woman was staying at home and, like, doing the cooking and the harvesting of, like, the berries and the plants and the men out hunting. I don't know I - there's, like, really, my friend group is big and a lot of girls love going out on the land” (Participant in Paulatuk). Another Paulatuk talking circle participant added that while gender roles might not be equal yet, that “a lot more [girls

are getting out on the land] […] I guess [this transition] is happening naturally" (Participant in Paulatuk).

Additional Information to Survey Findings

Talking circle participants from Ulukhaktok highlighted the role of community in supporting student learning. One participant explained: "this is a very cultural community as well. And they encourage, like the students' participation in, like, any sort of, like, cultural activity, like hunting or, like traditions and all that" (Participant in Ulukhaktok). In summary, talking circles confirmed the reliability of survey findings at their respective schools and provided more nuanced reflection on the regional and locally aggregated results.

Semi-Structured Interviews

To better understand how ISR schools are currently supporting student engagement with country foods and the barriers to doing so, interviews were conducted with school food program administrators (n=6) across five ISR communities. Administrators were asked to provide insight into each of the three themes of the student survey, including their perspectives on student survey findings and the current state of school activities within each theme. An additional question of administrative barriers that schools face to engaging students with country foods was also posed. As such, this section will summarize administrator perspectives connected to these four themes: (i) food preferences, (ii) activity preferences, (iii) access to and preferences for learning, (iv) administrative barriers.

Food Preferences

All interviews confirmed that the survey findings regarding food preferences made sense in their respective communities. Caribou was emphasized by five interviewees due to its importance to students, with words such as "predominant" and "big" used to describe the caribou preference. Interviewees from all schools provided examples of how their school engages with caribou (e.g., through coordinated hunts, meat processing with students, or serving the meat when an animal is donated to the school):

> “Recently […] some of our EAs [Educational Assistants] they - they did it as part of the foods program. They were talking about caribou, so she brought in caribou and cooked it up for the kids” (Interview Participant 1).

Berries were another food preference regionally that was unsurprising to the administrators interviewed. In Ulukhaktok, the berry season does not overlap with the school year, however berries were still seen as “plentiful”, and picking was seen as an activity that students would enjoy participating in with their families. In the four other communities where the school year did overlap with berry picking season, all schools consistently planned annual berry harvests with the students. Some fond memories were shared:

> “They really love eating those berries. And they're a little bit of a delicacy. Sometimes in the summer, they are plentiful. And sometimes they are rare. Last summer, they were rare, but the summer before they were plentiful, so they really love those and desserts and things made with [berries]” (Interview Participant 4).

While geese were the third highest rated food preference among students regionally, they did not come up as frequently in interviews as a food students would enjoy eating. Rather, goose hunting was indicated as an activity that students would enjoy participating in. Three administrators talked about having students participate in plucking geese in the school, and three administrators talked about students’ enjoyment of hunting geese in the community:

> “Geese, a lot of geese here. A lot of people hunt geese [...] they love to geese hunt” (Interview Participant 6).

Interviewees further revealed that student preference for moose should be considered on a community basis rather than on a regional scale. In Tuktoyaktuk for instance, located beyond the typical habitat of moose, having fewer students interested in moose was unsurprising to one administrator. They described moose as not being “a

priority”. In inland delta communities where moose populations are abundant, however, interviewees agreed that students would prefer moose:

> “The younger generations, they're hunting moose like you would never believe” (Interview Participant 6).

A similar distinction between communities was related to the preference for muskox. While in some communities, “people don’t really care for it” (Interview Participant 6), in others, it can be seen as an exciting challenge to work with:

> “Muskox, yeah, for sure. I mean, it's at the top, it's either second or first in terms of preparing, I think the correlation for preparing is that it's one of the bigger animals to work with” (Interview Participant 5).

The survey finding that a high percentage of students regionally wanted to participate in preparing and harvesting beluga was similarly unsurprising. In Ulukhaktok, students were described as not having much of an opportunity to harvest beluga due to population fluctuations and high stakes with hunting. In Aklavik and Tuktoyaktuk on the other hand, reference was made to beluga being a strong preference of students:

> “That's a big part of their summer season. And muktuk- they love muktuk. You know they call it black gold, right?” (Interview Participant 4).

Finally, a surprise to several administrators was how highly Arctic char was ranked. In Tuktoyaktuk, one administrator felt that Arctic char would not be a fish that was commonly caught near the community, while in Ulukhaktok, it was suggested that:

> “Char is just one of those things, just everybody loves it. It is an amazing fish obviously. It's just, it's harder to come by” (Interview Participant 5).

Activity Interest

Interviews with food program administrators showcased that schools in the ISR are taking an active role in Indigenizing education through land-based learning. 100% of

interviewees highlighted that schools coordinate hunting and/or fishing trips with students in addition to country food processing or cooking activities in the school (Table 10). Stories of bringing country foods into the school and sharing with the community were frequently discussed:

> “It's also quite common [...] if somebody in the community, for example, shot a moose, and they will sometimes donate that to the school [...] so they put, you know, all kinds of tarps in the middle on the gym floor, everybody from the school came down. And the hunters were there, they you know, they quartered the moose, they put the hind legs there, and the head and everything and all the kids had the opportunity with the knife, even the little ones to you know, separate the meat from the hide, and then whatever they cut, they put in Ziploc bags and took home” (Interview Participant 4).

Table 10. *Land-based activities that schools in Tuktoyaktuk, Paulatuk, Aklavik, Ulukhaktok, and Inuvik, had recently facilitated*

Community	On-The-Land Activities Recently Facilitated by Schools
Tuktoyaktuk	Fishing, dog mushing, berry picking, geese plucking, cooking, net pulling
Paulatuk	Fishing trip, ptarmigan hunt, berry picking, geese plucking, cooking
Aklavik	Caribou hunt, moose hunt, ice fishing, berry picking, trapping, sewing
Ulukhaktok	Caribou hunt, muskox hunt, fish camp
Inuvik	Trapping, moose hunt, geese hunt, fish camp, berry picking

The high level of student interest to learn and participate in several land-based activities in most communities is consistent with the numerous opportunities students have through schools to get out on the land. Hunting, fishing, berry picking, and cooking are among the most highly preferred activities of students regionally, and these activities are frequently coordinated in the schools. Inuvik had the lowest average interest of students to participate in country food activities. The timing of the survey being shared in November 2023, however, reflects a school year that has had less programming:

> “We haven't been really doing much [on the land programming] either [...] the weather has been really horrible. The overflow before Christmas. [...] we couldn't go anywhere anyway [...] we checked the school camp in December, and there was overflow everywhere” (Interview Participant 6)

Overall, schools are creating opportunities for students to learn about and engage with country foods and related procurement activities.

Access to and Preferences for Learning

Administrators were shown the community-level graphs displaying how often students felt they got out on the land and were asked their thoughts on student responses. In considering the finding of gender differences in access to the land, two considerations came up in interviews. The first was the role and stigma surrounding female menstruation as a barrier to young women wanting to get out on the land. One administrator shared their experience of girls in grades 7 and 8 saying they could not join on a school trip because they were menstruating (Interview Participant 3). The other consideration for seeing different responses between boys and girls is the history of gender roles within local cultures, a topic which came up in three of the six interviews, expressing that boys might be more trusted with recreational vehicles, or that there are some activities that are associated with some genders more than others:

> “Back traditionally, the Gwich'in, how they used to do it was the men would hunt [geese], they'd bring it home, and then the younger children and women would pluck up and prepare them. That was tradition back then [...] so it was embedded in them. It was part of their way of life” (Interview Participant 6).

Notably, two interviewees discussed the correlation between gender and school attendance. From the perspective of access to land-based learning opportunities, higher attendance among female students results in higher numbers of female students going out on the land through the school, even if boys might be getting more personal opportunities to get out:

> “In general, I would say, like, if you looked at attendance, the girls are here more often and they take part in more of the activities [run by the school] than the boys do” (Interview Participant 2).

Administrators also made suggestions about how the survey question might have been interpreted. For example, responses might not have reflected personal experiences, but rather community expectations:

> “What if it's just the norm for boys to get on land, because I'm going to tell you frankly, not all boys do have the resources to get out on the land [...] And so maybe it's just socially more acceptable to say, I get out all the time. Even though it's more of a desire than actually doing it” (Interview Participant 5).

Beyond the gender differences in students’ responses about frequency of getting out on the land, administrators also suggested that survey responses could have been made in the context of how often students felt they got out on the land with the school. In this case, older students might feel restricted in what they can and cannot do on school trips because of insurance or safety requirements:

> “When they go fishing [on their own], they hop on their skidoo and go. When they go with the school, they're not allowed to take their own skidoos because they don't have registration or insurance, they have to wear a helmet. And they have to sit in the back of a sled. And when you are a 17–18-year-old kid [...] they're like, I don't see why” (Interview Participant 4).

Several other barriers arose as interviewees considered why students might feel that they are not getting out on the land as much as they would like to. The impact of the COVID-19 pandemic on students came up in four interviews. During the peak of the pandemic, while there was increased funding for land-based activities, some of the challenges with schools’ country food engagement included schools not running on-the-land programming while shut down, reduced school attendance, and restrictions on how the community could be involved in student learning in the schools. Post-pandemic, the

cost of getting out on the land in general has also increased, which was seen as a barrier students might face:

> “When COVID hit and everything, there was lots of money for them to go on land. And, you know, probably for a year or two there. And then all of a sudden, they didn't have that, too. So, I think costs, gas is expensive. Parts, skidoo parts, are expensive, everything has gone up since then. So, I really think that that's impacting them” (Interview Participant 4).

Communities’ proximity and access to land-based activities was also thought to be a factor to consider in why students from across the region feel so differently about their ability to get out on the land. In Inuvik for instance, it was confirmed that students likely feel they get out on the land less than in other communities due to geographic differences:

> “The smaller communities, they didn't - they weren't so bad for this lockdown. They just went on the land anyway. You know, like, like Aklavik is more close to the land, Tuk is more close to the land. Tsiigehtchic and McPherson, they are more close to the land [... Inuvik] is a more urban area [...] it is farther to do stuff” (Interview Participant 6).

Finally, the surge in technology among students was another barrier that two interviewees felt might distract students from spending time on the land:

> “Distractions, I think, are huge, because technology is, you know, we have a lot of students that are up all night playing video games, and you know, it's they don't really know how to interact and do things. So, when they don't have those distractions. It's - it's uncomfortable for them, right” (Interview Participant 4).

With regards to students’ interest in learning from their families, this was not much of a surprise to interviewees. The role of family in sparking an interest in engagement with country food activities was highlighted:

> “If your parents don't go on the land or do much on the land, you probably won't have much motivation to go into land either. To go on the school trips. Because we find that, I found that for sure, like all the kids that always go on the land, might be the ones to go, like right now. They were the students that have families that go out on the land on a regular basis” (Interview Participant 6).

Administrative Barriers

Lastly, the final question posed to interviewees asked what barriers school administrators may face to engaging with country foods in schools. These conversations were often connected to barriers schools might face to running on-the-land programs, given the interconnections of food and the local environment. Three emergent themes were discussed: transportation, capacity, and reliance on the community.

Transportation came up twice in interviews as a barrier to engaging students in on-the-land activities. From an accessibility perspective, in communities without road access, freeze-up and thawing of surrounding water bodies make it challenging to take students out year-round. From a physical transportation perspective, lacking access to appropriately insured vehicles was brought up as a concern:

> “If we want to use ATVs they need to be insured. And most people here don't have insured ATVs. So, we don't really have the means of getting everybody out” (Interview Participant 2).

This was considered less of an issue in communities with more established roads nearby, as schools have access to busses that can transport larger numbers of students to and from on-the-land activities:

> “We've had some berry picks where it [went] south fast, wind and rain and cold. But we had [a] big bus, so it was nice. We could fire it up and have nice heat” (Interview Participant 6).

Capacity within schools was also discussed with several administrators. For instance, planning outings with students requires a lot of paperwork and administrative time, which can be challenging to accomplish with limited staff capacity. Similarly, preparing food for students requires sufficient staff. When new staff are brought in, teachers without a strong connection to the local culture or environment may also feel less comfortable engaging students with country foods and activities:

> “Yeah, like if you have a teacher that's just come from Toronto, and is just like teaching, what, the first or second year here, [...] they're gonna be pretty scared from the cold just from walking around from checking traps and stuff” (Interview Participant 6).

Additionally, administrators have shared that “the best way to prepare kids is to ensure they are strong in both worlds” (Interview Participant 3). Ensuring that students are prepared both academically and culturally involves meaningfully drawing learnings from experiences. As such, having the capacity to balance curriculum needs with experiential learning for students can sometimes be challenging for staff:

> “We still have a curriculum that we have to follow [...] but at the same time, they want the kids to be out on the land. And, you know, not only do we have one curriculum, we have basically, you know, [have] three now, because we have the Dene Kide, the Inuuqatigiit[7] and now we have the Indigenous Languages curriculum, too. So, it's, it's a lot of information, you know, to kind of try to put together and make connections and make it meaningful” (Interview Participant 4).

Finally, the topic of school's reliance on the community came up in most interviews, highlighting the interconnections between local communities and educational spaces in the ISR. For instance, under the Government of the Northwest Territories’ Hunting and Trapping Regulations, meat harvested from the land, in most cases, cannot be sold without a permit or commercial tag (GNWT, 2022). As such, schools are limited in their ability to purchase meat, relying on community donations of meat to share or prepare with students:

[7] (ECE, 2024a; ECE, 2024b)

> “We can purchase berries, but we can't purchase the meats or the fish or things like that, right. So, it is on like an in-kind - unless another organization buys it and gives it to us or whatever but that's our biggest barrier” (Interview Participant 1).

Schools also rely on local knowledge holders in the community to lead or assist with both on-the-land and in the classroom country food activities. Finding people or having existing connections with individuals in the community who have the time and energy to support on-the-land programming was brought up as sometimes being a challenge - especially in small communities. One participant suggested the potential benefits of hiring a local community liaison, as a bridge to school activities and local knowledge.

Other barriers that were discussed included balancing a mix of cultures when planning programming, having sufficient storage space for meats, and having limited daylight hours to run on-the-land programming throughout a large portion of the year. Overall, School food program administrators expressed gratitude for the programming they can do and felt supported and encouraged to run experiential opportunities for students to engage with country foods and activities in the local community.

Discussion

This section discusses the findings of the student survey as well as the contributions of the talking circles and interviews. Results from the three survey themes are considered in-depth: (i) food preferences, (ii) activity interests, and (iii) access to and preferences for learning.

Food Preferences

Overall, this study found that students across the ISR have a high level of interest in eating, harvesting, and preparing country foods, and that schools in the region provide opportunities to help students engage with country food and get out on the land. These findings are consistent with the ITK (2021) goal of incorporating country foods into school food programs and activities.

The finding that a regional average 88% of students surveyed reported preference for eating caribou reflects research and Indigenous knowledge about the cultural importance of caribou in the Western Arctic (e.g., Parlee & Wray, 2016). Similar studies on country food preferences in the ISR reveal caribou as being the “most frequently consumed species across all regions [Tuktoyaktuk, Aklavik, Paulatuk, Ulukhaktok]” (Wesche & Chan, 2010). Across Inuit Nunangat other studies have concurred that caribou are one of the most preferred country foods (Lambden et al., 2007). Lambden et al. (2007) found that “preference for caribou decreased with age”, however across the Inuvialuit Settlement Region, this study highlights that young people still have a strong preference for caribou.

Looking at food preferences in each ISR community, this study shows a strong correlation between the geographical ranges of species and student preference for them. Parlee & Wray (2016) and Wein & Freeman (1995) state that access to country foods and preference are interrelated. For example, muskox is much more abundant on Victoria and Banks Islands than they are on the mainland as a result of localized extirpation in the early 1900s. Aerial surveys of muskox on the mainland of the ISR in 2009 estimate the total mainland muskox population to be approximately 2,855 (Davidson & Branigan, 2014). Comparatively, a 2019 aerial survey of muskox on Banks Island in 2019 revealed a population estimate of nearly 11,000 adults (Davidson & Baryluk, 2021). These population estimates, along with the species’ proximity to communities on the Islands, aligns with students’ strong preference for eating muskox in Sachs Harbour (100%) and Ulukhaktok (91%).

Survey results highlighted a stronger consumption preference for moose in Aklavik (91%) and Inuvik (49%) compared to the other communities. This is unsurprising given the abundance of moose in the Mackenzie Delta region, as moose live in forested areas surrounded by willow, aspen and water (Timmermann & McNicol, 1988). Interestingly, Wein and Freeman (1992) found that Inuvialuit youth in grades 5 to 9 in Aklavik had a much stronger preference for moose than adults, which appears to remain an ongoing trend.

Berries, on the other hand, are widespread throughout the ISR, and were rated among the top foods that students want to eat in every community. Oceans North Conservation Society et al. (2018) suggested that berries were the second-most consumed country food in the ISR, which is reflective of berries ranking as the second highest preferred food among students in the region. Berries are important country foods to both Gwich'in and Inuvialuit, with Murray et al. (2005) discussing the role of aqpiks and blueberries in Gwich'in culture and diets, and Wein & Freeman (1992) reporting that 72% of Inuvialuit households in consumed aqpiks and 75% consumed blueberries in the 1992 Aklavik food preferences survey.

Beluga was not as highly ranked in foods students want to eat, despite interest in harvesting and preparing beluga. One reason for this could be due to children not yet having developed the taste for commonly prepared foods like muktuk, and the fact that 39% of all survey respondents were children in grades 1 to 6. While age could play a factor in the lower preference for beluga, so too could changes in beluga harvest levels. Research by Worden et al. (2020) on beluga harvest levels suggests that from 1996 to 2017, there was an average of only six whales harvested in Aklavik each year, compared to an average of 22 whales per year from 1975 to 1995. Several factors for this decline include environmental changes and social considerations, but this reduction in harvest could explain the lower preference for beluga in Aklavik. Environmentally, more frequent, extreme, and unpredictable weather is making travel by boat difficult, and coastal erosion and flooding is leading to a significant loss of coastal whaling camps. Socially, this research points to the loss of knowledge and mobilization when Elders in the community pass, technology distracting youth from wanting to get out on the land, and youth having less interest in harvesting beluga because they are not eating as much muktuk anymore.

Arctic char was a highly preferred food regionally, ranking as the second or third highest food students reported wanting to eat in Ulukhaktok, Sachs Harbour, and Paulatuk. This finding reflects the Oceans North Conservation Society et al. (2018) marine atlas which found Arctic char to be the third highest consumed country food in the ISR, after caribou and berries. Arctic char are known for being the most Northern

freshwater fish species. As Arctic char are an androgynous fish species, they can be found in both salt water and inland freshwater lakes at different stages of life, making their exact distribution hard to measure (Oceans North Conservation Society et al., 2018). This survey result, however, requires further research based on the nuances of char species. Char is the common name for the genus *Salvelinus* within the salmon family (Lane, 2013). This includes Arctic char and lake trout, which were listed on the survey, and Dolly Varden char, which was not listed on the survey. Lake trout and Dolly Varden char look very similar to Arctic char and have slightly different ranges (DFO, 2001). While Arctic char are thought to be found primarily around Ulukhaktok, Sachs Harbour, and Paulatuk, Dolly Varden char populations are found west of the Mackenzie River in river drainages throughout the Yukon North Slope—areas accessed by the communities of Aklavik and Inuvik (DFO, 2001). Lake trout are often seen in similar areas to Arctic char, and studies in the Eastern Arctic have described the two species as “like best friends” due to their similar habitats (Dubos et al., 2023, p.538). An added layer of complexity is that lake trout, Arctic char, and Dolly Varden char are colloquially referred to as “char” across the ISR (GSCI, 2010), therefore it is possible students were misinterpreting the survey option of Arctic char. A broader take-away from student preference for Arctic char, therefore, is that students enjoy fish within the genus *Salvelinus* of the salmon family.

Finally, geese were a highly rated food preference among students in every community. This is reflective of studies such as Wesche & Chan (2010) who found that geese are an important source of food and nutrients in Tuktoyaktuk and Paulatuk in particular, as well as Wein & Freeman (1992) who found that geese were the most frequently reported bird consumed by Inuvialuit in Aklavik in 1992. A limitation of the survey was that the image drawn to reflect “geese” was a Canada goose; therefore, if students were looking only at the image and not at the caption, they may not have circled goose as a food they want to eat. Preference for snow geese or white fronted geese were species that may therefore have been missed in survey responses. Despite this, interview participants were unsurprised about students’ preference for eating goose, and talking circles confirmed that hunting geese was a big part of the local culture.

This study provides a current view into the food preferences of students across the ISR. Knowing that 88% of students regionally want to eat caribou is significant. As climate change impacts species distributions and access to the land over time, it would be relevant to sample students' food preferences again to see how preferences for country foods among children and youth might be impacted by environmental changes, and how in turn, cultures might be impacted by climate change.

Activity Interest

This research found a high level of interest among students in on-the-land activities in all communities except Inuvik. Inuvik is a diverse community with 66% of residents identifying as Indigenous, compared to 84-93% of residents identifying as Indigenous in the other five ISR communities (NWT Bureau of Statistics, 2023). Higher diversity is likely correlated to higher variance in survey responses about cultural country food activities.

Student activity preferences show variation from the NWT Bureau of Statistics (2023) community profiles of activities that households indicated participating in 2019 (Table 11). While there are similarly high average community results between the two surveys for hunting and fishing, students showed a higher interest in trapping, and gathering berries, than is reported by average household participation across the region[8].

Table 11. *Comparison of student interest in activities documented through the student survey with reported activity participation across the ISR by the NWT Bureau of Statistics (2023)*

Activity	ISR Youth Activity Preferences (This Study, 2022-2023)	Reported Activity Participation Across the ISR (NWT Bureau of Statistics, 2023)
Hunting & Fishing	Hunting: 59% Fishing 71%	60%
Trapping	45%	9%
Gathering Berries	69%	37%

[8] Note that these two sets of survey results represent different datasets. The student survey results described in this study indicate the activities students were interested to participate in. The NWT Bureau of Statistics survey shows activities that adults currently participated in.

The top activity preferences indicated by students also bear similarities to students' food consumption preferences and activities students have opportunities to engage with through the schools (Table 12). This likely reflects the interconnection between access, preferences, and interests in land-based activities (e.g., Willows, 2005). As students are exposed to new foods and activities, whether that be within the family unit or at school, their interest in spending time on-the-land learning new activities likely increases.

Table 12. *Comparing activities ≥55% students reported wanting to participate in, with the reported student food preferences and reported school activities*

Regional Student Activity Interest	Regional Student Food Preferences	Recent Activities Facilitated at the Schools (see Interviews)
Fishing (71%) & Jiggling (68%)	Arctic Char (61% want to eat)	5/5 schools had participated in fishing activities recently.
Berry Picking (69%)	Blueberries (65% want to eat) Aqpik (49% want to eat) Cranberries (44% want to eat)	4/5 schools had participated in berry picking recently.
Making Dry Meat (66%)	Caribou (81% want to eat) Muskox (51% want to prepare) Moose (49% want to eat) Beluga (46% want to prepare) 39% of students reported preference for dry meat (2nd highest ranked.	Dry meat was suggested as being a food preference of students in one community (Interview Participant 4).
Cooking (62%)	74% of students circled 5+ food options they were interested in preparing.	2/5 schools had participated in cooking country foods recently.
Hunting (59%)	Caribou (88% want to eat) Goose (68% want to eat) Muskox (52% want to eat) Moose (30% want to eat)	4/5 schools had participated in hunting activities recently.
Plucking Geese (50%)	Goose (68% want to eat)	2/5 schools had participated in geese plucking recently.

Access to and Preferences for Learning

The student survey revealed variance between communities as to how often students felt they got out on the land. Food program administrators discussed factors

that may have influenced the interpretation of this question, including students responding based on community expectations or school opportunities. Other factors discussed included female menstruation, cultural norms, school attendance, COVID-19, cost, and geographical proximity to land-based activities.

The impact of COVID-19 on the engagement with country foods is highlighted in other studies. Research by Horlick & Chatwood (2023) on the impact of the COVID-19 pandemic on food security in Nunavut found that COVID lockdowns led to higher levels of funding available for families to purchase equipment to be able to get out on the land. While this may have been a temporary benefit, Caughey et al. (2024) reiterate the challenges families face after losing pandemic funding, as described by Interview Participant 5.

The impact of traditional gender roles on how often boys and girls felt they got out on the land was identified by two interviewees but thought to be a changing norm by talking circle participants. The current state of gender roles between men and women in the northern harvesting economy is understudied (Todd & Camus, 1997). This is an area of future research to better understand the role models children and youth have for land-based learning. The student survey did not ask students why they felt they did or did not get out on the land often, which would also be an area of future exploration. Additionally, for the purposes of this regional analysis of students' access to the land, a binary gender analysis was appropriate to protect the anonymity of students who may identify as LGBTQ+ in small communities. More research would, however, be beneficial to better understand the lived experiences of LGBTQ+ children and youth, including supports they may need to access to cultural learning opportunities.

Unsurprising was the finding that students want to learn from their families. Salokangas & Parlee (2009) discuss the importance of considering family histories when trying to better understand opportunities for children and youth to learn "the Inuvialuit way" (p.192), including hunting, fishing, and traveling on the land. Their research gives insight from Tuktoyaktuk as to the importance of family history in the transmission of traditional knowledge to youth. Research by Ford et al. (2013) on

country food programs in Inuvik found through surveys that 70% of country foods in Inuvik were obtained through family and friends, therefore it is additionally relevant that students reported wanting to learn from their friends.

Conclusion

This mixed method exploratory study captured community-level and regional data on student perspectives regarding country food preferences, land-based activity interests, and learning preferences from across the ISR. The top five reported country food preferences among students were caribou, goose, blueberries, Arctic char, and muskox, with considerable variation in preferences between communities. The top five land-based activities students expressed interest in regionally were fishing, berry picking, jiggling, making dry meat, and cooking, with variations in preferences between genders. Students across the region overall felt they were getting out on-the-land “a lot” and indicated a preference for learning about country foods from their families.

These findings highlight the strong connection that children and youth have to their local culture and food systems across the Western Arctic, as well as the opportunity for schools to continue to facilitate cultural learning. The results of this research provide a regional baseline against which student preferences for, interests in, and experiences with country foods can be measured, and serves as a model for conducting regional surveys with children and youth. These findings highlight the feasibility of including students’ perspectives in decision making within school food programs, and the importance of recognizing localized perspectives within regional studies. This study encourages future research to consider how the voices and perspectives of children and youth can be incorporated into food security research, policy development, and program design.

Chapter 5: Discussion and Reflection

The goal of this research was to document and understand the country food preferences, land-based activity interests, and learning preferences of children and youth, captured through the school setting. The findings of this research indicate that despite variations in results between schools, students across the ISR are interested and engaged in their local food system. Data points to a consistent preference for caribou, high levels of interest in country food activities, and the desire to learn from families. These findings are important for the establishment of baseline data on country food preferences and interests of children and youth in the ISR and as a source of information for local and national school food programs. The first section of this chapter will contextualize the findings of this research within the discourse surrounding school and community food programs. The second section of this chapter will provide a reflexive analysis of the methods and processes through which this data was generated, including general reflections, study design, strengths, obstacles, and limitations.

Contextualizing Findings

This section explores the implications of this research within the broader context of school food programs and community food programming.

School Food Programs

Given the importance of culturally appropriate foods in Indigenous communities and the funding commitment to support food security through a national school food program (ITK, 2023; The Coalition for Healthy School Food; Prime Minister of Canada, 2024), it is timely to consider pathways to achieving these symbiotic goals. This research provides three unique insights into how this can occur by (1) demonstrating the variability in country food preferences between communities and among genders, (2) developing a template and methodology for how to collect student country food preferences through an image-based survey, and (3) reinforcing that culturally adapted food programs go hand in hand with land-based learning.

In the ISR, one barrier to both regional food security and to incorporating country foods into schools are the restrictions placed on selling and purchasing wild meats (Inuit Circumpolar Council Alaska, 2020; Personal Communication, Interview Participant 2, November 2023). In the NWT, the Ministry of Environment regulates the sale of wildlife and general wildlife regulations under the Wildlife Act, and the Ministry of Health and Social Services regulates food establishment safety under the Public Health Act (Judge et al., 2022). The regulations under the Wildlife Act stipulate that it is not permitted to commercially harvest or sell country food meat without a commercial license or commercial tag. Local harvesting committees may provide commercial tags for barren-ground caribou, muskox, and polar bear (GNWT, 1998), and no territorial regulations restrict the sharing of country foods in the ISR (Judge et al., 2022). Operational policies for the Northwest Territories Health and Social Services Authority (NTHSSA) are currently being developed to regulate the serving of country foods to Indigenous patients in hospitals (GNWT, 2020). While hospitals may soon have guidance on how to serve country foods, no such policies have been developed for the purchase and serving of country food meat in NWT schools. As discussed by interviewees, this poses a challenge to obtaining country foods, as schools must rely on donations of country foods for programming. When schools receive donations of country food, a further challenge that exists is limited freezer space, especially with larger animals such as muskox (Interview Participant 6).

One opportunity to incorporate country foods into the IRC's existing school food program is through partnership with the Inuvialuit Community Economic Development Organization Country Food Processing Plant (IGC, 2022). This initiative compensates Inuvialuit harvesters from across the ISR for providing different wild foods, which are in turn brought to Inuvik, processed, and re-distributed to households across the region (Loreen, 2023). If this partnership can be achieved, knowing student food preferences can be beneficial in helping to shape school lunch menus to reflect the foods students have a desire to eat.

With the federal government, Indigenous leadership, and civil society all recognizing the importance of having culturally relevant food options be part of a school

food program, finding pathways to facilitate serving country foods in schools will hopefully follow. The results of this survey indicate not only food preferences but also an overall high interest in consuming country foods, suggesting that incorporating country foods into school food programs would be welcomed by students.

Community Country Food Programming

The ISR is rich with programs to immerse young people in country food activities (Kenny et al., 2018c; Ramirez Prieto et al., 2023). These programs provide opportunities in the ISR for children and youth to spend time on the land and learn traditional skills. The results of the student survey may be beneficial in designing targeted programming based on the activity interests of students. For example, the student survey found that 66% of students regionally were interested in making dry meat, which could be an opportunity for a future school program. One food program administrator brought this up, sharing that “as soon as you mentioned dry meat, I wrote that down, because I think we should get a couple of dehydrators you know, we can [also] do it the old fashioned way […] work with them [on] how to do that […] so I'm just thinking that might be a project that we can do for the springtime” (Interview Participant 4). Statistics from the results of this survey may also be helpful to use in grant applications to securing additional funding to run more country food or land-based learning activities, given the high interest of students in participating in these activities across the region.

Reflections on the Research Process

This section provides a reflection on the two-year research process that culminated in this thesis. Unique features of this project are summarized and detail is provided on the strengths and limitations of the research design.

Unique Features of Research

Food Security Research Team

This study is embedded in several larger research projects around food security in the ISR being facilitated by the ISR Food Security Research Team. This team

consists of researchers from the University of Ottawa, the University of Waterloo, and Université Laval. The projects taking place through this research team while I was part of the group include:

- (CFCP) Country Foods in Community Programming: Supporting Schools, Daycares and Cooking Circles in Tuktoyaktuk and Paulatuk, NWT. Funded by the Canadian Northern Economic Development Agency.
- (CFGH) Country Foods for Good Health: Promoting foods in the Inuvialuit Settlement Region that reflect Inuvialuit Culture, Knowledge, and Values. Funded by the Northern Contaminants Program.
- (C4FS) Community Capacity for Climate Change and Food Security. Funded by the Canadian Institutes of Health Research.

My research initially started off as a project under the CFCP project, and as it expanded to a regional study, became part of the CFGH project. Working as part of a large team had four important impacts on my research: (1) having a guidance network, (2) established relationships, (3) expanding the scope of my project, and (4) financial support.

The first impact that being part of a larger research team had on my research was the existence of a support and guidance network. The opportunity to work with and learn from academics from several institutions who have been working in the ISR and in the field of food security for over 15 years was a valuable learning experience. Working with the ISR Food Security Coordinator in Paulatuk enabled me to gain insight into the perspectives and experiences of different ISR communities. I felt very supported as I developed my research question and methodology. I was also encouraged to think outside the box with regards to how I developed my survey and dissemination materials.

Working with a team on a pre-existing research project was additionally beneficial in that a lot of community relationships were established before I started. For example, I was not reaching out to HTCs, CCs, or Elders Committees on my own, this was done by research team members who had been setting these meetings prior to me

starting my master's around various other projects in the communities. While I took the lead on connecting with the schools, the community level and regional connections were made by others in the larger research team, which was beneficial in helping me learn about community collaboration processes.

Having a large research team also offered the ability to expand the scope of my project from two communities to all six, as I had the support from supervisors and other students. As individuals within the research team were working in different ISR communities and at different times of the year, despite not being able to travel to all communities myself, I was able to receive support with material dissemination and data collection from other graduate students and supervisors traveling in the ISR for their research. It is this support that made it feasible to conduct the survey at a regional level, and talking circles in 50% of the communities.

Finally, working on this research within a larger research team, I was provided with financial support for material development and travel that I otherwise would not have had. For example, when establishing the student survey, it was important that this be accessible to a wide range of ages and learning styles, and therefore drawing on other studies that used image-based surveys, it was decided that we would commission an artist to draw the ~50 images needed for the survey. Thanks to financial resources from the research team, we were able to commission a young artist from Tuktoyaktuk to complete these sketches. Printing off the surveys, consent materials, and paying for shipping costs was another avenue for which having financial support allowed for my research to take place, as it was important that students had a hard copy of the survey, rather than a digital version, for accessibility purposes. Moreover, I have been grateful to be able to travel to several ISR communities as part of my research, before, during, and after developing the student survey (Table 13). Being part of the ISR Food Security Research Team has been an invaluable opportunity that has shaped my research and been a huge support to my academic endeavours.

Table 13. *AS' travel to ISR communities from 2022-2024*

Community	Time of Visit	Reason for Visit
Inuvik	2022-Present	Home Location
Paulatuk	April 2022	Master's – Community Engagement
	August 2022	Personal - Hiking trip through Tuktut Nogait National Park
	February 2023	Master's - Survey Administration
	November 2023	Master's - Reporting Back +Talking Circles + Interviews
Tuktoyaktuk	April 2022	Master's – Community Engagement
	August 2022	Personal - Berry Picking
	February 2023	Master's - Survey Administration
	August 2023	Personal - Assisting with Elder's Picnic
	November 2023	Master's - Reporting Back + Talking Circles + Interviews
Aklavik	July 2023	Personal - Travelling to visit Shingle Point
	February 2024	Master's - Reporting Back + Interviews
Ulukhaktok	Not yet visited	
Sachs Harbour	Not yet visited	

Working with Students

The decision to capture the country food preferences and interests of children and youth within a school setting stemmed from the CFCP program's objectives. Working with such a young age range came with a unique set of notable challenges such as aligning timing of research with school availability and student attendance. As discussed by food program administrator interviewees, schools across the ISR offer a lot of unique cultural programming for students, keeping school administrators very

busy. Coordinating with school principals to run research activities in the schools therefore needed to align with timing that worked best for as many students as possible. In some cases, even when a set date was planned to conduct research in the schools, other factors arose. In Ulukhaktok, during the week that the student survey was distributed, a bad flu led to numerous student absences and therefore reduced survey completion rates. In Aklavik, the day that a talking circle was scheduled to run at the school, a sewage leak led the school to close early for the day and students to leave for home. With the added challenge of researchers not living in the communities where research activities were taking place, resulting in constrained timeframes for data collection, coordinating research activities with large groups of school students was at times challenging.

Another consideration when working with students are the challenges that the consent process can pose. Through discussions with the superintendent of BDDEC, it was decided that students aged 10 and under would require parental/guardian consent to complete the survey. This consent process involved sending home an information letter and consent form that needed to be signed by a parent/guardian and returned with the students to school. As a result of low form-return rates, which had been forewarned as a potential challenge by principals and BDDEC, less students in grades 1 to 5 ultimately completed the survey. The exception to this was in Paulatuk, where school administration was highly involved in the collection of consent from parents/guardians. In this community, school administration individually called home to each students' parent/guardian to obtain verbal consent, once information letters had been sent home. This was not possible in every school, however, due to differences in administrative capacity and school population. Attendance, parental/guardian consent, and other factors contributed to the ability to capture student perspectives, so it was not feasible to have equal numbers of students in each grade complete the survey.

From a methodological perspective, designing a research project that is accessible to students of a wide age range—grades 1 to 12—also presented a challenge. In designing a survey that all ages could complete, it was decided that the student survey on country foods would be primarily multiple-choice. To be designed in a

format that all ages and all learning levels could understand, the survey was image-based, which added a layer of complexity to the survey design. As the survey aimed to be as culturally relevant as possible, an Inuvialuit artist was commissioned to draw the survey images to clearly represent the foods and activities listed. While these considerations added initial work to the student survey design, they were ultimately important to engaging with as many students as possible.

Co-Development and Interpretation

Co-development was an essential aspect of this research. Even before commencing this research, trips were made to Tuktoyaktuk and Paulatuk to meet with HTCs and CCs to discuss the opportunity to conduct this survey and seek feedback on the questions being asked in the survey. Similar meetings took place with IRC and BDDEC representatives in the survey's design and development stages. Prior to these meetings, the survey itself was drafted in collaboration with the ISR Food Security Research Team, including one-on-one meetings with the ISR Food Security Coordinator in Paulatuk, Celina Wolki, and a hired community research lead in Tuktoyaktuk, to ensure that cultural components of the survey were accurately captured.

Once the survey results were administered and preliminarily analyzed, the next step was a series of two meetings with Celina Wolki to help interpret the findings from across the ISR. Celina provided insight into why certain phenomena emerged, and considerations for additional analysis. For example, discussions included the sense of pride that kids have when they have successful hunts and fishing trips, the reliance that some children and youth have on their friends in getting to go out on the land, the increasing relevance of muskox to local diets over the past 10 to 15 years, and the increasing number of women spending time on the land over the past 20 years, to name a few. While the survey findings do not attempt to generalize or justify the reasons for the results, the insights provided through these co-interpretation meetings were beneficial in having a background understanding and context for emerging trends.

Reporting back to community leadership and to schools was also prioritized. Feedback from HTCs and CCs was helpful in considering limitations to the survey findings, as well as variables to better examine. Reporting back on survey findings in

Paulatuk some of the points of discussion brought up by HTC, CC, and Elders Committee members included explanations for and questions about survey findings. For example, members brought up the importance of comparing results not just between genders but also between ages, as young children may not have developed a taste for muktuk compared to older students. They also brought up the limitation of not exploring the seasonality of food preferences, as the season in which the survey was administered in could have impacted student responses based on their current preferences. Additionally, we discussed their expectations for what the survey findings would have revealed, and there was some surprise around the ranking of the highest preferred country food activities. Committee members shared that geese hunting, fishing, and beluga harvesting were the favourite activities when they were young.

Two important considerations were raised after meeting with the HTC in Tuktoyaktuk to share the findings of the student survey. The first was surrounding the image associated with the response “goose” was a Canada goose and not a snow goose, which could have impacted students’ responses and interest levels in this food. There was also a shared sentiment that ptarmigan has a real cultural importance in the community, and that ptarmigan may have been rated lower than students’ actual consumption preference. Overall, the HTC members were happy to hear that students were enthusiastic about country foods and thought that having data on differences in gendered experiences with country foods could be beneficial in creating targeted country food programming.

At the meeting with the Aklavik Community Corporation to report back on survey findings, members were not surprised by the finding that many students felt they did not get out on the land very often. Some of the reasons discussed for this included the cost of boats, skidoos, and cabins, and that changing climate makes the land more challenging to access.

At the meeting with the HTC and CC in Ulukhaktok, members of the ISR Food Security Research Team presented back the findings of the student survey. The directors were happy to hear that youth were being involved in the research. The

Ulukhaktok Youth Council were very interested in the results from their community and planned to use them to create programming for local youth. The importance of family for learning opportunities resonated with the Youth Council, and they mentioned being interested in organizing summer harvesting camps for families.

While these community reporting and interpretation meetings were not formally incorporated as a research method, as the interviews with food program administrators were, they were integral to gaining new insights about the findings and considerations for future studies.

Strengths of Research

Living Where you Research

As a non-Indigenous researcher of settler colonial descent, I am aware of my positionality in conducting research in the ISR. Having moved to the ISR prior to commencing my master's, I recognize the value of living where you conduct your research. Within a research context, Holmes (2020) discusses the difference between 'insiders' with lived experience connected to the research, and 'outsiders' as individuals who are not part of the group being studied. Having grown up in a suburb of southern Canada, I certainly fit within this classification as an 'outsider' in the ISR; however, the knowledge I have gained, the relationships I have built, and the connection to place that I have developed while living in Inuvik provide me with a unique lens on the research being conducted.

While my research has been focused on youth engagement with country foods, the other side of the discussion around food security relates to market foods (e.g., Rosol, et al., 2016). Market foods can supplement meals made with country foods or in some cases provide alternatives when country food is not available in a household (Lambden et al., 2006). Having personally experienced the high prices, price volatility, empty shelves, seasonal changes in availability, and lower quality market food compared to southern Canada, I can reflect on the importance of supporting the next generation in consuming and learning to prepare and harvest foods from the land as a form of resilience. Resilience is multifaceted. In the context of food security in northern

Canada, research has looked at resilience from the perspectives of adaptation to environmental changes (e.g., Berkes & Jolly, 2002), and cultural continuity (e.g., Newell et al., 2020).

Environmentally, seeing the day-to-day and season-to-season fluctuations of grocery store prices and market food availability has been eye-opening to how market foods may hinder the food security of northern communities. I have seen cucumbers range in price from $3 to $6, I have purchased $15 milk that had already gone bad, and I have seen empty produce and dairy shelves during seasonal road closures to Inuvik. This past winter, the Dempster Highway, the road that food travels along to get to Inuvik, was closed more than 40% of the season (Williams, 2024). The year-round Inuvik-Tuktoyaktuk highway was also closed for two consecutive weeks this winter due to heavy snowfall, leading to food shortages in Tuktoyaktuk (CBC News, 2024). The seasonal Aklavik Ice Road was open to vehicles five weeks less than the historical average duration due to the warm winter weather this year, making it more challenging for food delivery to the community (O'Connor, 2024). Last summer, during the wildfires that devastated the southern NWT, signs in the Inuvik grocery store on empty produce shelves read "aircraft are still being used to evacuate communities and as a result we are not receiving many items." The Arctic is seeing and feeling the impacts of climate change two to four times faster than the rest of the world (Zhou, et al., 2023). Impacts of climate change that we are experiencing in the Western Arctic include rising temperatures, thawing permafrost, increased precipitation, and reduced sea ice (Hassol & Corell, 2006). These changes impact not only market foods, but also the plants and animals that are relied upon for subsistence.

Environmental changes will continue to affect the harvesting abilities of northern communities (e.g., Ford, 2006; Pearce et al., 2007). I have seen the impact of coastal erosion along the Arctic Ocean while travelling to *Tapqaq* (Shingle Point), a present-day whaling camp used by Akalvik community members. I have also passed by locations such as *Niaqunnaq* (West Whitefish), a whaling camp that was once the preferred location of Inuvialuit from Aklavik, that is now flooded and unused as a result of flooding following coastal erosion. In the summer of 2023, I experienced the noticeably short

aqpik season when the Beaufort Delta experienced the hottest temperature ever recorded at 33oC (Bowling, 2023). This sort of change in species availability is reflected in interviews conducted with food program administrators as part of this research. In Ulukhaktok, for instance, muskox and caribou were reported to be moving farther and farther from the community and in the delta communities, muskrat trapping did not happen in the fall due to thin ice and overflow.

Having the privilege to live in Inuvik, I hear stories, see impacts, and feel changes in the local environment faster than I would if I was only visiting this community. It also made striking up conversations and developing relationships with community members while traveling throughout the ISR much easier, as living in Inuvik gave me a talking point and familiarity with activities taking place at different points of the year. These experiences of living in the ISR have clearly helped to shape my understanding of student survey results, talking circle findings, and interview discussions.

Regional Analysis

Initially, this research was set to take place solely in Tuktoyaktuk and Paulatuk, to provide a student perspective on country food preferences from the mainland coastal communities in the ISR. After discussion with the ISR Food Security Research Team, the decision was made to expand the scope of the research to include all six communities in the ISR to capture a more regional perspective. As a result, this study highlights that while a region can be similar in culture and lifestyle, differences in geographies and resources reinforce the importance of examining community-level experiences. For example, moose was a higher ranked preference of students in the inland Delta communities of Inuvik and Aklavik, because forested lakes and rivers are moose habitat. On the other hand, eider duck was found to be a preference of students in Ulukhaktok because their range does not extend throughout the entire ISR.

Specifically, this study emphasizes the importance of not generalizing findings across entire regions. For example, although Inuvik represents the largest sample size of students surveyed, had this research focused solely on Inuvik students' perspectives on country foods, a very different picture about student interests in the ISR might have

been painted. Among the six communities, Inuvik ranked lowest in average student interest in country food activities, lowest in preference for consuming caribou, and lowest for student interest in eating multiple country foods. These findings reflect previous research that has found Inuvik households consuming less country foods and spending less time on the land compared to other ISR communities (Petrov, 2018). This, however, is not reflective of the larger student experience in the surrounding ISR communities, and therefore it is important not to assume qualities about communities based on the findings in a regional center.

While it was financially and logistically challenging to get to all communities to conduct this research, important findings in differences between communities have been highlighted with regards to student experiences, preferences, and interests around country foods. These differences offer insight into potential targeted programming opportunities at a regional level.

Community Products

Two community products came out of this research. The first was the short preliminary reports to individual schools about the high-level findings of the survey from their school. These reports were no longer than 7 pages, and were highly visual in nature, showing graphs but also drawings that captured the top student preferences at each school (Appendix Q). These reports were shared with school administration and discussed as part of the semi-structured interviews. Feedback on these reports included that they would be great resources for the school cultural program, and that it was a fun survey for students to fill out. The other community product came in slides presented at meetings with community leadership (HTCs, CCs, Elders Committees) and public meetings. These short presentations allowed for information to be concisely shared in each community, and enabled conversations around student interest in country foods and activities on a broader scale.

Limitations to Research

Study Design

As a result of the age range, geographical spread, and cultural differences between and within schools, several methodological limitations to this research exist. In terms of study design, in order to develop an accessible survey that could be answered by any student regardless of age, grade, or literacy level, images were used in a multiple-choice format to provide options for circling. While this was beneficial to the accessibility and engagement levels of the survey, it also posed limitations. For one, because each multiple-choice image had to be large enough to see, the survey became lengthy in pages, which led to students skipping questions closer to the end. Had the survey been a fill-in-the-blank approach, it likely would not have been feasible for large numbers of younger students to complete but would have ultimately been much shorter.

The other limitation to this image-based approach was that it was not possible to capture every species of animal that might be consumed across the ISR. Instead, in designing the survey, input was requested from community research leads and community leadership in Tuktoyaktuk and Paulatuk as to what common foods community members eat, and these animals and plants were incorporated into the survey. This meant, however, that some species were left out. Wein & Freeman's (1992) study on food preferences in Aklavik, listed species which were not included in the student survey. These included beaver, muskrat, hare, bear, sheep, ducks, swan, bowhead whale, red currant, roots, and willow buds. While some of these species were more specific to the delta environment than the whole ISR and several species were found to not be highly preferred in the 1992 research, these represent a gap in the survey information captured. Additionally, in the question about who students wanted to learn from, "Elders" was not a listed multiple-choice option. Several students wrote "Elders" in on their own (n=11), indicating that it may have had a high response rate. Though a space was left blank for "other" answers in each question, this only captured the additional preferences of those who took the time to add these additional responses.

Moreover, the images used in the survey were also biased in species and gendered experiences. For example, in asking what foods students wanted to eat, harvest, and prepare, one option was “goose”, however the picture of the goose was that of a Canada goose, and not of a snow goose or other species of goose. This may have led to different interpretations of what preferences students had for Canadian geese over snow geese. In terms of gender, the images drawn for activity interests included pictures of people which in several cases included gender. For instance, the image for “hunting” was of two men, while the image of “berry picking” was of an older woman. It is possible that this image bias could have impacted the selections students made in their survey responses.

The survey was also initially designed to gather information on what country foods and activities students currently consume and participate in compared to what country foods and activities they desire to consume and learn, which is reflected in the wording of the survey. This distinction did not work with any age group, and therefore the survey ended up collecting data more generally on what foods and activities students were interested in.

Data Collection

The flexible nature of the survey administration within the schools to accommodate timing, capacity, and school preferences, meant that one limitation to the survey was that its administration was not consistent across all seven schools. As such, some schools administered their own surveys, some schools had several researchers administering the surveys, and other schools had just one researcher administering the survey. It is possible that as a result, this led to misinterpretation of survey questions. Several measures were put in place to try to ensure consistency in survey administration. All research team members were trained virtually and provided with written summaries of what to do when administering surveys. Surveys to all schools were also packaged identically with the same clear instructions taped to the envelopes that were brought to the schools. The use of images within the survey also aimed to reduce misinterpretation bias. That said, data collection could have been more rigorous if a less community-adapted methodology was applied.

The survey was conducted over a twelve-month period across the region, and therefore the seasonality of student interests must be taken into consideration. Seasonal activities (e.g., berry picking) may therefore have received higher or lower preference rankings based on how close the survey was conducted to that activity's season. An area of future exploration could be to try to capture student activity interest across the ISR at one point of time, to avoid any potential biases in responses.

Moving to the data collection from student talking circles, a limitation was that only half the communities had participants involved in talking circles. It was not possible to complete talking circles with students in every community due to logistical, financial, and timing constraints. While not all communities had talking circles, this method was designed to verify the reliability of the survey findings, rather than act as its own source of data.

Data Analysis

Although each question provided an option to fill in "other" answers, there was no dedicated spot for students to indicate "none of the above". This led to challenges with data analysis, as it was not possible to distinguish whether non-responses indicated that students were not expressing an interest in the topic, or whether the question was just skipped. As the students were told that responding to questions was optional and they could stop at any time, it was an option for them to skip questions for any reason. This ultimately skewed data by lowering average school percent response rates. This may explain in part why the survey data shows that fewer students want to harvest than to eat country foods.

A final limitation of this study is that no demographic questions around cultural affiliations were collected from students. As such, it is not possible to analyze whether responses showing less interest in country foods and activities came from non-Indigenous students, particularly in Inuvik where there is great diversity within the schools. This limitation was recognized prior to survey dissemination, and the decision not to collect cultural information stemmed from two places. First, from a risk management perspective, we did not want students to feel any sort of pressure or stigma in identifying their affiliation with a cultural group. Second, the aim of this study

was to capture school-level data that could inform school food programming for all students, regardless of cultural background. Overall, despite some limitations in the study design, data collection, and data analysis, this research managed to capture perspectives, interests, and experiences from a wide range of students, showcasing an innovative approach and offering worthy contribution to literature on country food preferences.

Chapter 6: Conclusion

Summary of Key Findings

This thesis aimed to answer the research question: what are student perspectives regarding country foods in the ISR and how can schools foster student engagement with local food systems? More concretely, the objectives were to: (1) document student preferences for country foods and land-based activities, (2) understand student access to and preferences for learning about country foods, (3) understand how schools are supporting student engagement with country foods and barriers to doing so.

Objective 1 was achieved through the image-based student survey, which documented student preferences for eating, harvesting, and preparing country foods, as well as their interests in land-based country food activities. These preferences and interests were captured for over 25% of enrolled students in each ISR school, apart from the Inuvik Elementary School. Results from the student survey show that across all communities, caribou was among the most preferred foods for students to eat, harvest, and prepare. Goose and Arctic char were similarly highly ranked as food preferences across the region. Survey results showed a high level of student interest for consuming country foods; an average of 85% of students circled more than five country food options they were interested in eating. The interest among students in land-based activities was found to be similarly high. Across the six communities, the average activity interest was found to be 50%. Fishing, berry picking, jiggling, making dry meat, and cooking were activities with highest interest levels (≥60%). Gender differences (≥20%) were observed for the activities of hunting, berry picking, cooking, and sewing furs. Talking circles with students in three communities about the findings of the survey confirmed the validity and reliability of the survey results.

Objective 2 was accomplished through the image-based student survey, which asked students about their perceived access to land-based activities and about whom they wanted to learn about country foods from. On a regional scale, a large percentage

of students felt they were getting out on the land “a lot”; however, differences between communities were observed. For example, Aklavik had the highest percentage of students responding that they did not get out on the land at all, whereas Inuvik had the widest range of responses among students. Gender differences were notable in Aklavik and Ulukhaktok especially, where larger percentages of girls reported feeling that they were not getting out on the land at all. With regards to whom students wanted to learn from, family was consistently the most circled response (73%). Students who participated in the talking circles confirmed this finding, sharing that “family is definitely the best”.

Objective 3 was met after analyzing survey results, by conducting semi-structured interviews with school food program administrators to understand the context in which schools support country food engagement and land-based learning. Schools support student engagement with country foods through a wide variety of activities, including on-the-land programs, processing donated animals in the schools, and cooking activities. All interviewees mentioned that their schools coordinated hunting or fishing trips each year, and 83% of interviewees talked about taking students out on berry picking trips. Administrative barriers to running on-the-land programming and country food activities discussed during interviews included transportation limitations, internal capacity, and reliance on community time and donations. The interviews yielded insight into the unique challenges and opportunities for country food engagement in each community, while highlighting the experiential opportunities that students in the ISR have through schools to engage with their local food systems.

This research finds that student perspectives regarding country foods in the ISR are diverse and linked to local geographies and species distribution, with commonalities across the region in the top preferred country foods to eat, harvest, and prepare. Based on existing programming happening across the ISR, this research finds that schools can foster student engagement with country foods through on-the-land activities, connecting curriculum with traditional knowledge—as described in the Dene Kide and the Inuuqatigiit curriculums (ECE, 2024a; ECE, 2024b)—and through serving country foods in schools as part of coordinated school food programs. I hope that this research

provides insight locally into the types of country food programming that may benefit ISR students. This study additionally aims to provide ideas for other Indigenous communities across Canada as to how student perspectives can be collected and how schools can support student engagement with country foods.

Implications and Recommendations

Community Information

Surveying 278 students across the six communities in the ISR on their country food preferences, activity interests, and learning opportunities provides tangible data which will be transferred to the IRC to retain ownership following the end of the study period. These findings may be utilized by the IRC to inform future school food programming. Findings may also be referenced by schools to develop their cultural calendars and student activities or applied by the local BDDEC school board to plan experiential opportunities regionally. Conclusions that can be drawn at a community-level include that young people across the ISR have an interest in engaging with country foods, that there is real interest in participating in land-based activities, and that engaging families in student learning opportunities about country foods would be welcomed by children and youth.

In the face of climate change, this data is relevant at a local scale for longer-term tracking and comparison to see how future changes may impact country food and activity preferences among the next generation. These changes may include access to the land, species distribution, and cultural practices. This survey has developed baseline data against which student preferences and interests can be compared in future studies. As such, it would be beneficial for future research to re-examine food preferences among children and youth in the ISR in ten years, to help identify and trace the interconnections between environmental and cultural change over time.

Program Considerations

This study found differences between the experiences of girls and boys in relation to their perspectives on access to the land in several communities. While more

research would be needed to better understand the reasons behind these results, this study points to the need to examine how children and youth are provided equitable experiential opportunities. Beyond the school level, community programs might consider taking steps to ensure that all genders are receiving opportunities to spend time on the land. This might include looking at which demographics have benefitted from community programs in the past, and considering how to advertise, target, and involve demographics that might be underutilizing community programs - for instance girls and young women, if found to be relevant.

Our results also suggest that it is important to seek opportunities for families to be involved in school and community programs related to country foods, given the expressed interest of students in learning from their families. Many schools in the ISR already welcome family members to participate in cultural activities; therefore, considering how family engagement could be built into program planning may be a worthwhile pursuit. This study provides a summary of the land-based activities that students across the ISR expressed interest to participating in. It would therefore be beneficial to determine how these interests reflect current community food programming and identify opportunities to further engage children and youth in any less frequently facilitated country food activities. This study can serve as a tool for planning skill development opportunities among young people in the ISR.

Policy Applications

From a policy perspective, this research may serve as a methodological tool for surveying children and youth about their food preferences across Inuit Nunangat. This is of relevance given the Government of Canada’s commitment to spending $1 billion on a national school food program over five years. As this program rolls out while recognizing the need for culturally appropriate food in Indigenous communities, there is a benefit to knowing what country foods students want more opportunities to consume. Increased data on country food preferences across Inuit Nunangat and other Indigenous communities in Canada may therefore provide the necessary data to advocate for incorporating country foods into school food programs federally and for the need to develop clear wild meat regulations for serving country foods in schools territorially.

From an environmental policy lens, the consistently high ranking of caribou as a country food that students want to eat, harvest, and prepare highlights the cultural significance of caribou in the ISR among the younger generation. As species distribution, range, and herd sizes change over time, it is important to ensure that any harvest quotas still allow for all ages to procure and consume caribou. More specifically, as exploitative resource extraction projects are proposed in environmentally sensitive areas, it is important to consider the generational effect of harming the environment, local wildlife, and local cultures. For example, in the Arctic National Wildlife Refuge, the calving grounds of the Porcupine Caribou which migrate through the ISR, while the oil exploration lease was canceled by the United States government in 2023, this key habitat is not immune to future development (Windeyer, 2023). Our research into student food preferences highlights the cultural importance of caribou and may be useful in helping to advocate for the protection of land and wildlife in future years.

Research Practice

This study encourages future researchers to consider how the voices and perspectives of children and youth can be incorporated into food security research. The student survey on country food preferences demonstrates one method to capture these perspectives. Utilizing culturally relevant images–drawn by local community members–to illustrate multiple-choice responses offers a mechanism to collect such perspectives in a way that is accessible to a broad range of students. Hosting talking circles with small groups of young people and using tools like sticky notes to engage different types of learners is another method to understand youth perspectives. Research on food preferences and food security to date has often focused on adult experiences, and this study showcases the wide range of experiences and perspectives that young people offer to the conversation around country foods and food security. This study thus recommends that future research on food security in Indigenous communities involve young people in conversations about their local food systems.

Future Areas of Research

Further research is needed to better understand some of the findings of this data. One such area relates to differences in student access to the land. This would include the need for specific research into the gendered experiences of youth, including LGBTQ+ youth, in accessing country foods. Additional research to better understand the relationship between food preferences and food intake would also be beneficial for understanding the current state of country food consumption among children and youth in the ISR. This could include further research into the role of intergenerational knowledge sharing in learning about country foods.

Future research could also examine existing country food programming beyond schools to better understand what gaps in programming might exist on a community level. It would also be worthwhile to evaluate existing community programs that bolster food security, including evaluating program demographics. This would be beneficial for both understanding future opportunities for community programs to support children and youth and for recognizing the benefits and impacts of these programs on young people in the community. This information could further inspire community food security programs in other regions and provide data to justify federal or territorial funding applications.

Territorially, it would be beneficial to continue research that supports the development of guidelines for preparing and serving country foods in schools in the NWT. These guidelines and future regulations will be an important enabler to improve incorporation of country foods into school food programming locally and across other Indigenous communities. Over time, studying the impact of culturally appropriate school food programs on students would be beneficial to measuring the success of such an initiative.

Concluding Thoughts

The ISR-wide student survey on country foods provides data on student preferences for eating, harvesting, and preparing country foods, highlights student

interest in land-based activities, and provides insight into student access to and preferences for country food learning opportunities. This data indicates that students in the ISR are interested in being actively involved in their local food systems and that ISR schools are taking actions to engage students with country foods. This information is valuable for informing school activities, calendars, and food programs, and serves as a model for future research studying the food and activity preferences of children and youth.

References

Aborisade, B., & Bach, C. (2014). Assessing the pillars of sustainable food security. *European International Journal of Science and Technology*, 3(4), 117-125.

Acharya, A. S., Prakash, A., Saxena, P., & Nigam, A. (2013). Sampling: Why and how of it. *Indian journal of medical specialties*, 4(2), 330-333.

Aliyu, A. A., Singhry, I. M., Adamu, H.A.R.U.N.A., & AbuBakar, M. A. M. (2015, December). Ontology, epistemology and axiology in quantitative and qualitative research: Elucidation of the research philosophical misconception. In *Proceedings of the Academic Conference: Mediterranean Publications & Research International on New Direction and Uncommon* (Vol. 2, No. 1, pp. 1054-1068).

Amin, S. A., Panzarella, C., Lehnerd, M., Cash, S. B., Economos, C. D., & Sacheck, J. M. (2018). Identifying food literacy educational opportunities for youth. *Health Education & Behavior*, 45(6), 918-925.

Bagelman, C. (2018). Unsettling food security: The role of young people in Indigenous food system revitalisation. *Children & Society*, 32(3), 219-232.

Baralt, M. (2011). Coding qualitative data. Research methods in second language acquisition: A practical guide, 222-244.

Baskin, C. (2008). Indigenous youth exploring identities through food security in Canada and Brazil. *MAI Review*, *3*(5), 1-11.

(BDDEC) Beaufort Delta Divisional Education Council. (2018). *Operating plan for 2018-2019 school year.* Government of Northwest Territories. Retrieved from https://beaufortdeltadec.ca/sites/default/files/2021-11/2018-2019%20Annual%20Report_0.pdf

Berger, P., Johnston, J., & Oskineegish, M. (2016). Culture in schooling in the Inuvialuit Settlement Region. *In education*, 22(1), 61-76.

Bhawra, J., Cooke, M. J., Hanning, R., Wilk, P., & Gonneville, S. L. (2015). Community perspectives on food insecurity and obesity: Focus groups with caregivers of Métis and off-reserve first nations children*. International journal for equity in health*, 14, 1-10.

Burgess, H., Jongbloed, K., Vorobyova, A., Grieve, S., Lyndon, S., Wesseling, T., ... & Pearce, M. E. (2021). The “sticky notes” method: Adapting interpretive description

methodology for team-based qualitative analysis in community-based participatory research. *Qualitative health research*, 31(7), 1335-1344.

Berkes, F., & Jolly, D. (2002). Adapting to climate change: social-ecological resilience in a Canadian western Arctic community. *Conservation ecology,* 5(2).

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology,* 3(2), 77-101.

Braun, V., & Clarke, V. (2022). Conceptual and design thinking for thematic analysis. *Qualitative psychology*, 9(1), 3.

Brown, M. A., & Di Lallo, S. (2020). Talking circles: A culturally responsive evaluation practice. *American Journal of Evaluation*, 41(3), 367-383.

Bohanon, J. P. (2013). The talking circle: A perspective in culturally appropriate group work with indigenous peoples. *University of Southern Mississippi.*

Bowling, E. (2023). *July 4 was the hottest day in Inuvik. Ever.* NNSL Media. Retrieved from https://www.nnsl.com/news/july-4-was-the-hottest-day-in-inuvik-ever-7274141

Canadian Parks Council. (2011). *Engaging youth in Canada's parks: Where are we now? Where do we need to be? How do we get there?. Alberta Parks*. Retrieved from https://www.albertaparks.ca/media/3878520/cpc_-_engaging_youth_in_canada_s_parks.pdf

Carr, N. T. (2008). Using Microsoft Excel® to calculate descriptive statistics and create graphs*. Language Assessment Quarterly*, 5(1), 43-62.

Caughey, A., Kilabuk, P., Koonoo, T., Sanguya, I., Jaw, M., Allen, J., ... & Harper, S. L. (2024). "We call it soul food": Inuit women and the role of country food in health and well-being in Nunavut. *Arctic Science*.

CBC News. (2024). *Highway closure leaves Tuktoyaktuk, N.W.T., running low on supplies.* CBC North. Retrieved from https://www.cbc.ca/news/canada/north/tuktoyaktuk-n-w-t-mayor-highway-closed-1.7113278

Chan, H. M., Fediuk, K., Hamilton, S., Rostas, L., Caughey, A., Kuhnlein, H., ... & Loring, E. (2006). Food security in Nunavut, Canada: Barriers and recommendations. *International Journal of Circumpolar Health*, *65*(5), 416-431.

Chowdhury, M. F. (2014). Interpretivism in aiding our understanding of the contemporary social world. *Open Journal of Philosophy,* 2014.

The Coalition for Healthy School Food. (2024). *About Us.* The Coalition for Healthy School Food. Retrieved from https://www.healthyschoolfood.ca/who-we-are

Collings, P. (2011). Economic strategies, community, and food networks in Ulukhaktok, Northwest Territories, Canada. *Arctic*, 207-219.

Coté, C. (2016). “Indigenizing” food sovereignty. Revitalizing Indigenous food practices and ecological knowledges in Canada and the United States. *Humanities*, *5*(3), 57.

Creswell, J. W., & Tashakkori, A. (2007). Differing perspectives on mixed methods research. *Journal of mixed methods research*, 1(4), 303-308.

(CCA) Council of Canadian Academics (2014). *Aboriginal food security in Northern Canada: An assessment of the state of knowledge.* CCA.

Davidson, T. & Branigan, M. (2014). *Aerial Survey of Muskoxen (Ovibos moschatus) in the Mainland of the Inuvialuit Settlement Region, March 2009.* Government of the Northwest Territories. Retrieved from https://www.gov.nt.ca/ecc/sites/ecc/files/wildlife_manuscript_report_243.pdf

Davidson, T. & Baryluk, S. (2021). *Aerial Survey of Muskoxen (Ovibos moschatus) and Peary Caribou (Rangifer tarandus pearyi) on Banks Island, July and August 2019.* Government of the Northwest Territories. Retrieved from https://www.gov.nt.ca/sites/ecc/files/resources/295_manuscript.pdf

Dedyukina, L., Wolki, C., Wolki, D., Wesche, S. D., Kenny, T. A., & Skinner, K. (2023). Process evaluation of a cooking circle program in the Arctic: developing the mukluk logic model and identifying key enablers and barriers for program implementation. *Canadian journal of program evaluation*, 38(2), 219-242.

(DFO) Department of Fisheries and Oceans Canada. (2001). *Rat river dolly varden.* DFO Science. Retrieved from https://waves-vagues.dfo-mpo.gc.ca/library-bibliotheque/264842.pdf

(DHSS) Department of Health and Social Services. (2008). *Community handbook and tools for Brighter Futures projects in the NWT: Guide for Inuvialuit communities.* Retrieved from http://library.assembly.gov.nt.ca/2008/HSS/a275758.pdf

Douglas, V., & Chan, L. (2015). Food and cultural security. *From Science to Policy in the Canadian Western and Central Canadian Arctic: An Integrated Regional Impact Study (IRIS) of Climate Change and Modernization*, 343-359.

Dubos, V., May, P., Gillis, C. A., St-Hilaire, A., & Bergeron, N. (2023). Nunavik anadromous Arctic char life histories, behaviour, and habitat use informed by both Inuit knowledge and western science: a year in Ungava Bay. *Arctic science*, 9(3), 526-544.

(ECE) Education, Culture, and Employment. (2024a). *Dene Kede and Inuuqatigiit Curriculum Information and Documents*. Government of the Northwest Territories. Retrieved from https://www.ece.gov.nt.ca/en/services/jk-12-school-curriculum/dene-kede-and-inuuqatigiit

(ECE) Education, Culture, and Employment. (2024b). *Our Languages Curriculum. Government of the Northwest Territories*. Retrieved from https://www.ece.gov.nt.ca/en/services/indigenous-languages-and-education-secretariat/our-languages-curriculum

Egeland, G. M. (2010). *Inuit health survey 2007-2008: Inuvialuit Settlement Region*. Centre for Indigenous Peoples' Nutrition and Environment.

Elliott, B., Jayatilaka, D., Brown, C., Varley, L., & Corbett, K. K. (2012). "We are not being heard": Aboriginal perspectives on traditional foods access and food security. *Journal of environmental and public health*, 2012.

Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of advanced nursing,* 62(1), 107-115.

Erber, E., Hopping, B. N., Beck, L., Sheehy, T., De Roose, E., & Sharma, S. (2010). Assessment of dietary adequacy in a remote Inuvialuit population. *Journal of Human Nutrition and Dietetics*, *23*, 35-42.

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American journal of theoretical and applied statistics*, *5*(1), 1-4.

Executive and Indigenous Affairs. (2024). *Concluding and Implementing Land Claim and Self-Government Agreements.* Government of the Northwest Territories. Retrieved from https://www.eia.gov.nt.ca/en/priorities/concluding-and-implementing-land-claim-and-self-government-agreements/inuvialuit

Fillion, M., Laird, B., Douglas, V., Van Pelt, L., Archie, D., & Chan, H. M. (2014). Development of a strategic plan for food security and safety in the Inuvialuit

Settlement Region, Canada. *International journal of circumpolar health*, *73*(1), 25091.

(FAO) Food and Agriculture Organization. (2006). *Food security.* Policy Brief. Retrieved from https://www.fao.org/fileadmin/templates/faoitaly/documents/pdf/pdf_Food_Security_Cocept_Note.pdf

Food Banks Canada (2016). *What will it take to make real progress on Northern food security?* Canadian Food Banks.

Food Secure Canada. (2015). *Resetting the table: A people's food policy for Canada.* Retrieved from https://foodsecurecanada.org/wordpress/wp-content/uploads/2023/06/2015-FSC-22Resetting-the-Table-A-peoples-food-policy22.pdf

Ford, J. D. (2006). *Vulnerability to climate change in Arctic Canada* (Doctoral dissertation, University of Guelph).

Ford, J. D., Lardeau, M. P., Blackett, H., Chatwood, S., & Kurszewski, D. (2013). Community food program use in Inuvik, Northwest Territories. *BMC Public Health*, *13*(1), 1-15.

Fowler Jr, F. J. (2013). Survey research methods. *Sage publications.*

Fram, M. S., Frongillo, E. A., Fishbein, E. M., & Burke, M. P. (2014). Roles for schools and school social workers in improving child food security. *Children & Schools*, 36(4), 231-239.

(GNWT) Government of the Northwest Territories. (n.d.). *Trapping in the Northwest Territories: Information for applicants and local harvesting committees.* Retrieved from https://www.gov.nt.ca/ecc/sites/ecc/files/resources/enr_trapping_in_the_nwt_fact_sheet_web.pdf

(GNWT) Government of the Northwest Territories. (1998). *Sale of wildlife regulations. Wildlife Act.* Retrieved from https://www.justice.gov.nt.ca/en/files/legislation/wildlife/wildlife.r10.pdf

(GNWT) Government of the Northwest Territories. (2020). *Serving traditional foods in NWT Health and Social Services facilities.* Ministerial Directive. Retrieved from:

https://www.hss.gov.nt.ca/sites/hss/files/resources/md-serving-traditional-foods-nwt-health-social-services-facilities.pdf

Grant, B. M., & Giddings, L. S. (2002). Making sense of methodologies: A paradigm framework for the novice researcher. *Contemporary nurse*, 13(1), 10-28.

Gwich'in Land Use Planning Board. (2023). *The Gwich'in region.* Gwich'in Land Use Planning Board. Retrieved from https://www.gwichinplanning.nt.ca/theRegion.html

(GSCI) Gwich'in Social and Cultural Institute. (2010). *Gwich'in traditional knowledge: Rat river Dolly Varden char.* Gwich'in Tribal Council. Retrieved from https://gwichin.ca/about-the-gwichin

(GSCI) Gwich'in Social and Cultural Institute. (2016). About the Gwich'in. Gwich'in Tribal Council. Retrieved from https://gwichin.ca/about-the-gwichin

Hanemaayer, R., Anderson, K., Haines, J., Lickers, K. R., Lickers Xavier, A., Gordon, K., & Tait Neufeld, H. (2020). Exploring the perceptions of and experiences with traditional foods among first nations female youth: a participatory photovoice study. *International journal of environmental research and public health*, 17(7), 2214.

Hassol, S. J., & Corell, R. W. (2006). Arctic climate impact assessment. *Avoiding dangerous climate change*, 205.

Heredia Vazquez, I. (2019). *Implications of socio-ecological changes for Inuvialuit fishing livelihoods and the country food system: The role of local and traditional knowledge* (Doctoral Dissertation, University of Ottawa).

Holmes, A. G. D. (2020). Researcher Positionality--A Consideration of Its Influence and Place in Qualitative Research--A New Researcher Guide. *Shanlax international journal of education,* 8(4), 1-10.

Horlick, S., & Chatwood, S. (2023). Exploring community perspectives on the impacts of COVID-19 on food security and food sovereignty in Nunavut communities. *Scandinavian journal of public health,* 51(7), 1027-1032.

Inuit Circumpolar Council Alaska. (2020). *Food sovereignty and self-governance: Inuit role in managing Arctic marine resources.* Anchorage, AK

(ICG) Inuvialuit Corporate Group. (2022). *Inuvialuit corporate group update*. Retrieved from https://irc.inuvialuit.com/wp-content/uploads/2023/10/January2022Newsletter.pdf

(ICRC) Inuvialuit Cultural Resource Centre. (2010). *Inuvialuit Nautchiangit: Relationships between people and plants.* Inuvialuit Cultural Resource Centre.

(IRC) Inuvialuit Regional Corporation. (2018). *Inuvialuit final agreement 101.* Retrieved from https://irc.inuvialuit.com/about-irc/inuvialuit-final-agreement/

(IRC) Inuvialuit Regional Corporation. (2024a). *Inuvialuktun dialects.* Retrieved from https://irc.inuvialuit.com/about-irc/culture/language/

(IRC) Inuvialuit Regional Corporation. (2024b). *Mental wellness (brighter futures).* Retrieved from https://irc.inuvialuit.com/programs/mental-wellness-brighter-futures/

(IRC) Inuvialuit Regional Corporation. (2024c). *Project jewel.* Retrieved from https://irc.inuvialuit.com/programs/project-jewel/

(ITK) Inuit Tapiriit Kanatami (2021). *Inuit Nunangat food security strategy.* ITK.

(ITK) Inuit Tapiriit Kanatami. (2022). *Understanding the costs of an Inuit Nunangat school food program executive summary.* Retrieved from https://www.itk.ca/wp-content/uploads/2023/03/ITK_School-Food-Costing_Executive-Summary_English.pdf

(ITK) Inuit Tapiriit Kanatami. (2023). *Report calls for a coordinated school food program across Inuit Nunangat.* ITK. Retrieved from https://www.itk.ca/report-calls-for-coordinated-school-food-program-across-inuit-nunangat/#:~:text=ITK%20is%20seeking%20%241.66%20billion%20to%20implement%20and,secure%2C%20long-term%20investments%20in%20human%20resources%20and%20infrastructure.

Islam, D. (2016). *Indigenous fisheries and food security: Norway House Cree Nation, Manitoba, Canada.* (Doctoral Dissertation, University of Manitoba).

Judge, C., Spring, A., & Skinner, K. (2022). A comparative policy analysis of wild food policies across Ontario, Northwest Territories, and Yukon Territory, Canada. *Frontiers in communication*, 7, 780391.

Kallio, H., Pietilä, A. M., Johnson, M., & Kangasniemi, M. (2016). Systematic methodological review: developing a framework for a qualitative semi-structured interview guide. *Journal of advanced nursing*, 72(12), 2954-2965.

Kenny, T. A., Fillion, M., MacLean, J., Wesche, S. D., & Chan, H. M. (2018a). Calories are cheap, nutrients are expensive–the challenge of healthy living in Arctic communities. *Food policy*, *80*, 39-54.

Kenny, T. A., MacLean, J., Gale, P., Keats, S., Chan, H. M., & Wesche, S. D. (2018b). Linking health and the environment through education—A traditional food program in Inuvik, Western Canadian Arctic. *Journal of hunger & environmental nutrition*, *13*(3), 429-432.

Kenny, T. A., Wesche, S. D., Fillion, M., MacLean, J., & Chan, H. M. (2018c). Supporting Inuit food security: A synthesis of initiatives in the Inuvialuit Settlement Region, Northwest Territories. *Canadian food studies/la revue canadienne des études sur l'alimentation*, *5*(2), 73-110.

Kolahdooz, F., Butler, L., Lupu, M., Sheehy, T., Corriveau, A., & Sharma, S. (2014). Assessment of dietary intake among Inuvialuit in Arctic Canada using a locally developed quantitative food frequency questionnaire. *Journal of the American college of nutrition*, *33*(2), 147-154.

Kovach, M. (2021). *Indigenous methodologies: Characteristics, conversations, and contexts*. University of Toronto press.

Kuhnlein, H. V., & Chotiboriboon, S. (2022). Why and how to strengthen Indigenous peoples' food systems with examples from two unique Indigenous communities. *Frontiers in sustainable food systems*, 173.

Kuhnlein, H. V., Receveur, O., Soueida, R., & Egeland, G. M. (2004). Arctic Indigenous peoples experience the nutrition transition with changing dietary patterns and obesity. *The journal of nutrition*, *134*(6), 1447-1453.

Lambden, J., Receveur, O., Marshall, J., & Kuhnlein, H. (2006). Traditional and market food access in Arctic Canada is affected by economic factors. *International journal of circumpolar health*, 65(4), 331-340.

Lambden, J., Receveur, O., & Kuhnlein, H. V. (2007). Traditional food attributes must be included in studies of food security in the Canadian Arctic. *International journal of circumpolar health*, *66*(4), 308-319.

Lane, E.D. (2013). *Char*. The Canadian Encyclopedia. Retrieved from https://www.thecanadianencyclopedia.ca/en/article/char

Loreen, D. (2023). *Country food distributed to more than a thousand Inuvialuit beneficiaries.* CBC North. Retrieved from https://www.cbc.ca/news/canada/north/country-food-delivered-isr-1.6904125

Milloy, J. S. (2017). *A national crime: The Canadian government and the residential school system* (Vol. 11). Univ. of Manitoba Press.

Mingers, J. (2003). A classification of the philosophical assumptions of management science methods. *Journal of the operational research society*, 54, 559-570.

Moon, M. D. (2019). Triangulation: A method to increase validity, reliability, and legitimation in clinical research*. Journal of emergency nursing,* 45(1), 103-105.

Moretti, F., van Vliet, L., Bensing, J., Deledda, G., Mazzi, M., Rimondini, M., ... & Fletcher, I. (2011). A standardized approach to qualitative content analysis of focus group discussions from different countries. *Patient education and counseling,* 82(3), 420-428.

Morrison, D. (2011). Indigenous food sovereignty: A model for social learning. *Food sovereignty in Canada: Creating just and sustainable food systems,* 97, 113.

Morton Ninomiya, M. E., Hurley, N., & Penashue, J. (2020). A decolonizing method of inquiry: using institutional ethnography to facilitate community-based research and knowledge translation. *Critical public health*, 30(2), 220-231.

Murray, G., Boxall, P. C., & Wein, R. W. (2005). Distribution, abundance, and utilization of wild berries by the Gwich'in people in the Mackenzie River Delta Region. *Economic botany*, 59(2), 174-184.

Naeem, M., Ozuem, W., Howell, K., & Ranfagni, S. (2023). A step-by-step process of thematic analysis to develop a conceptual model in qualitative research. *International journal of qualitative methods*, 22, 16094069231205789.

(NASEM) National Academies of Sciences, Engineering, and Medicine. (2019). *Ground truthing how communities measure resilience*. In building and measuring community resilience: Actions for communities and the gulf research program. National Academies Press (US).

(NTLA) Northwest Territories Legislative Assembly. (2014). *Take a Kid Trapping/Harvesting: Annual report 2012-2013.* Retrieved from https://www.ntlegislativeassembly.ca/sites/default/files/legacy/td_36-175.pdf

Newell, S. L., Dion, M. L., & Doubleday, N. C. (2020). Cultural continuity and Inuit health in Arctic Canada. *Journal of epidemiol community health*, 74(1), 64-70.

NWT Bureau of Statistics. (2023). *NWT Summary of Community Statistics*. Retrieved from https://www.statsnwt.ca/community-data/index.html

Oceans North Conservation Society, World Wildlife Fund Canada, & Ducks Unlimited Canada. (2018). *Canada's Arctic marine atlas.* Ottawa, Ontario: Oceans North Conservation Society. Retrieved from https://www.oceansnorth.org/wp-content/uploads/2018/07/en-04-canadas-arctic-marine-atlas-chapter-four-fish.pdf

O'Connor, J. (2024). *Youth Parliament attracted grade 9 and 10 students from the NWT's 19 ridings to learn about territorial politics*. CLBK Radio. Retrieved from https://cklbradio.com/2024/04/29/show-my-people-theres-a-promise-for-a-better-tomorrow-says-tuk-teen-miley-woolki/

Ollier, M., Giles, A. R., Etter, M., Ruttan, J., Elanik, N., Goose, R., & Ipana, E. (2022). Required elements for success and benefits of participation in camps of an on-the-land program in the Inuvialuit Settlement Region. *Études inuit studies*, 46(1), 85-109.

(OSNP) Ontario Student Nutrition Program. 2017. *The role of school food programs in promoting student well-being.* Sustain Ontario.

Parker, A., & Tritter, J. (2006). Focus group method and methodology: current practice and recent debate. International journal of research & method in education, 29(1), 23-37.

Parlee, B., & Wray, K. (2016). Gender and the social dimensions of changing caribou populations in the Western Arctic. *Living on the land: Indigenous women's understanding of place,* 169-90.

Pars, T., Osler, M., & Bjerregaard, P. (2001). Contemporary use of traditional and imported food among Greenlandic Inuit. *Arctic*, 22-31.

Pearce, T. D., Smit, B., Duerden, F., Katayoak, F., Inuktalik, R., Goose, A., ... & Wandel, J. (2007). *Travel routes, harvesting and climate change in Ulukhahtok, Canada.* Tristan Pearce.

Peterson, E. R., & Barron, K. A. (2007). How to get focus groups talking: New ideas that will stick. *International journal of qualitative methods*, 6(3), 140-144.

Petrov, A. (2018). Inuvialuit social indicators: Applying Arctic social indicators framework to study well-being in the Inuvialuit communities. *Northern Review*, (47), 167-185.

PROOF (2016). *Children in food insecure households*. Retrieved from https://proof.utoronto.ca/resource/children-in-food-insecure-households/

Prime Minister of Canada. (2024). *A national school food program to set kids up for success.* Government of Canada. Retrieved from https://www.pm.gc.ca/en/news/news-releases/2024/04/01/national-school-food-program-set-kids-success

Prosser, J. (1996). What constitutes an image-based qualitative methodology?. *Visual studies,* 11(2), 25-34.

Pufall, E. L., Jones, A. Q., McEwen, S. A., Lyall, C., Peregrine, A. S., & Edge, V. L. (2011). Perception of the importance of traditional country foods to the physical, mental, and spiritual health of Labrador Inuit. *Arctic*, 242-250.

Ramirez Prieto, M., Sallans, A., Ostertag, S., Wesche, S., Kenny, T. A., & Skinner, K. (2023). Food programs in Indigenous communities within northern Canada: a scoping review. *The canadian geographer/Le géographe canadien*.

Rathwell, K. J., & Armitage, D. (2016). Art and artistic processes bridge knowledge systems about social-ecological change: An empirical examination with Inuit artists from Nunavut, Canada. *Ecology and society*, *21*(2).

Robin, T. (2019). Our hands at work: Indigenous food sovereignty in Western Canada. *Journal of agriculture, food systems, and community development,* 9(B), 85-99.

Robin, T., & Cidro, J. (2020). *Rebuilding cultural identity and Indigenous food sovereignty with Indigenous youth through traditional food access and skills in the city.* In Indigenous food systems: Concepts, cases, and conversations, 135-151.

Rogers, S. & Raymond, F. (2017). Project jewel: Helping Aboriginal people re-discover their value. *Innovations in Community Health and Wellness.*

Rosol, R., Powell-Hellyer, S., & Chan, H. M. (2016). Impacts of decline harvest of country food on nutrient intake among Inuit in Arctic Canada: impact of climate change and possible adaptation plan. *International journal of circumpolar health,* 75(1), 31127.

Ruetz, A.T., Michnik, K., Engler-Stringer, R., et al. (2024). School Food Programs in Canada: 15 Promising Cases. Saskatoon: University of Saskatchewan and Coalition for Healthy School Food. Retrieved from https://hdl.handle.net/10388/15712

Salokangas, R., & Parlee, B. (2009). The influence of family history on learning opportunities of Inuvialuit youth. *Études/Inuit/Studies*, *33*(1), 191-207.

Sartre, J. P., Haddour, A., Brewer, S., & McWilliams, T. (2005). *Colonialism and neocolonialism.* Routledge.

Scott, M. (2019). *On-the-land camp at Ivvavik National Park connects Inuvialuit teens to culture.* CBC North. Retrieved from https://www.cbc.ca/news/canada/north/ivvavik-national-park-culture-camp-1.5242042

Sharma, S. (2010). Assessing diet and lifestyle in the Canadian Arctic Inuit and Inuvialuit to inform a nutrition and physical activity intervention programme. *Journal of Human Nutrition and Dietetics*, *23*, 5-17.

Shukla, S., & Settee, P. (2020). Synthesis: revitalizing the past, nourishing the present, and feeding the future. *Indigenous Food Systems: Concepts, Cases, and Conversations*, 269-284.

Snook, J., Cunsolo, A., Borish, D., Furgal, C., Ford, J. D., Shiwak, I., ... & Harper, S. L. (2020). “We’re made criminals just to eat off the land”: colonial wildlife management and repercussions on Inuit well-being. *Sustainability*, *12*(19), 8177.

Srivastava, P., & Hopwood, N. (2009). A practical iterative framework for qualitative data analysis. *International journal of qualitative methods*, 8(1), 76-84.

Story, M., Neumark-Sztainer, D., Resnick, M. D., & Blum, R. W. (1998). Psychosocial factors and health behaviors associated with inadequate fruit and vegetable intake among American-Indian and Alaska-Native adolescents. *Journal of Nutrition Education*, *30*(2), 100-106.

Stuart-Fox, E. (2000). Survey on traditional and bush foods in the Aboriginal and Torres Strait Islander community in Brisbane. *Aboriginal and Islander Health Worker Journal*, *24*(5), 24-28.

Tait, H. (2008). *Aboriginal Peoples Survey, 2006: Inuit health and social conditions*. Ottawa: Statistics Canada, Social and Aboriginal Statistics Division.

Timmermann, H. R., & McNicol, J. G. (1988). Moose habitat needs. *The Forestry Chronicle*, 64(3), 238-245.

Todd, Z., & Camus, A. (1997). This is the life: Women’s role in food provisioning in Paulatuuq, Northwest Territories. New York. doi:10.15215/aupress/9781771990417.01

Tod-Tims, C. (2020). *"Hungry all the time": Contemporary experiences of and perspectives on traditional food access in Inuvik, NWT.* (Master's Thesis, Simon Fraser University).

Todd, Z. S. C. (2010). *Food security in Paulatuk, NT–opportunities and challenges of a changing community economy.* (Master's Thesis, University of Alberta).

Tuhiwai Smith, L. (2021). *Decolonizing methodologies: Research and Indigenous peoples*. Otago University Press.

Walsh-Dilley, M., Wolford, W., & McCarthy, J. (2016). Rights for resilience: Food sovereignty, power, and resilience in development practice. *Ecology and society,* 21(1).

Ward, V. M., Bertrand, J. T., & Brown, L. F. (1991). The comparability of focus group and survey results: Three case studies. *Evaluation review*, 15(2), 266-283.

Wein, E. E., & Freeman, M. M. (1992). Inuvialuit food use and food preferences in Aklavik, Northwest Territories, Canada. *Arctic Medical Research*, *51*(4), 159-172.

Wein, E. E., & Freeman, M. M. (1995). Frequency of traditional food use by three Yukon First Nations living in four communities. *Arctic*, 161-171.

Wein, E. E., Freeman, M. M., & Makus, J. C. (1996). Use of and preference for traditional foods among the Belcher Island Inuit. *Arctic*, 256-264.

Wesche, S. D., & Chan, H. M. (2010). Adapting to the impacts of climate change on food security among Inuit in the Western Canadian Arctic. *EcoHealth*, *7*, 361-373.

Wesche, S. D., O'Hare-Gordon, M. A. F., Robidoux, M. A., & Mason, C. W. (2016). Land-based programs in the Northwest Territories: Building Indigenous food security and well-being from the ground up. *Canadian Food Studies/La Revue canadienne des études sur l'alimentation*, *3*(2), 23-48.

Williams, C. (2024). *A weird winter on one of the North's most isolated highways*. Cabin Radio. Retrieved from https://cabinradio.ca/181459/news/travel/a-weird-winter-on-one-of-the-norths-most-isolated-highways/

Willows, N. D. (2005). Determinants of healthy eating in Aboriginal peoples in Canada: the current state of knowledge and research gaps. *Canadian Journal of Public Health/Revue Canadienne de Sante'e Publique*, S32-S36.

Wilson, A., Levkoe, C. Z., Andrée, P., Skinner, K., Spring, A., Wesche, S., & Galloway, T. (2020). Strengthening sustainable northern food systems. *Arctic*, *73*(3), 292-311.

Wilson, S. (2008). Research is ceremony. *Indigenous Research Methods.* Winnipeg: Fernwood.

Windeyer, C. (2023)*. Gwich'in celebrate cancellation of oil exploration leases in Alaska's Arctic refuge.* Retrieved from https://www.cbc.ca/news/canada/north/gwich-in-celebrate-alaska-oil-lease-cancellation-1.6959600

Wittman, H. (2011). Food sovereignty: a new rights framework for food and nature?. *Environment and Society*, 2(1), 87-105.

Worden, E., Pearce, T., Gruben, M., Ross, D., Kowana, C., & Loseto, L. (2020). Social-ecological changes and implications for understanding the declining beluga whale (Delphinapterus leucas) harvest in Aklavik, Northwest Territories. *Arctic Science*, 6(3), 229-246.

Zhou, S. N., Liang, Y. C., Mitevski, I., & Polvani, L. M. (2023). Stronger Arctic amplification produced by decreasing, not increasing, CO2 concentrations. *Environmental Research: Climate,* 2(4), 045001.

Zohrabi, M. (2013). Mixed method research: Instruments, validity, reliability and reporting findings. *Theory and practice in language studies*, 3(2), 254.

Appendices

Appendix A: Aurora College NWT Research License

License No. 17242
File Number: 12 410 1157
April 27, 2023

2023

Northwest Territories Scientific Research Licence

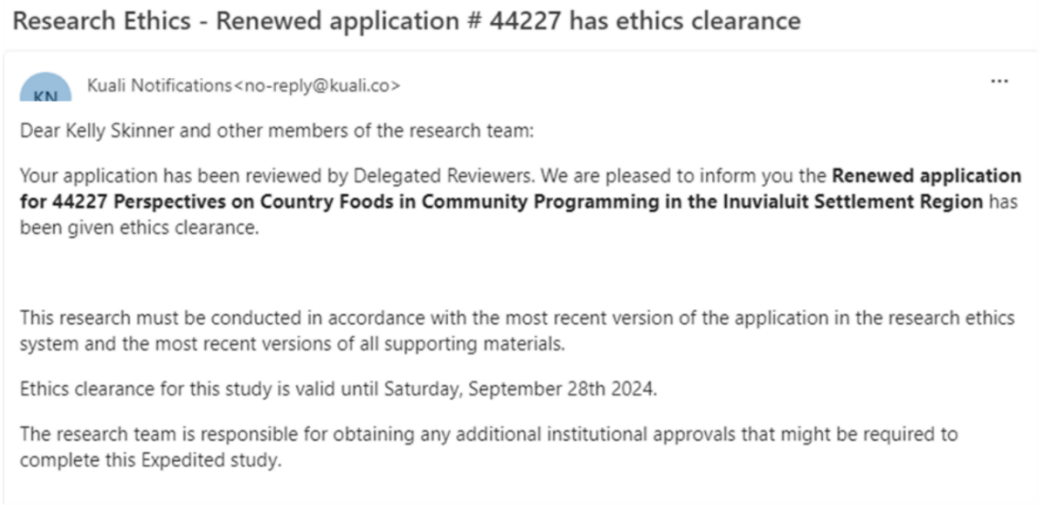
Issued by:	**Department of Education, Culture and Employment (ECE)** **Inuvik, Northwest Territories**
Issued to:	Dr. Kelly Skinner University of Waterloo School of Public Health Sciences 200 University Avenue West Waterloo, ON N2L 3G1
Affiliation:	University of Waterloo
Funding:	Canadian Northern Economic Development Agency
Team Members:	Alissa Sallans, Celina Wolki, Sonia Wesche, Maria Ramirez, Kelsey Zhao
Title:	**Perspectives on Country Foods in Community Programming in the Inuvialuit Settlement Region**
Objectives:	To determine the types of country foods and country food activities students in the Inuvialuit Settlement Region want more opportunities to engage with and determine how and from whom children and youth in these communities want to learn about country foods.
Dates of data collection:	April 26, 2023 to December 31, 2023
Locations:	Aklavik, Ulukhaktok, Inuvik, Sachs Harbour, Tuktoyaktuk, Paulatuk.

Licence No. 17242 expires on December 31, 2023
Issued in the Town of Inuvik on April 27, 2023

_____

Andrea Giesbrecht
Science Administration Officer
Department of Education, Culture and Employment (ECE)

Appendix B: Aurora Research Institute Ethics Certificate



Research Ethics - Renewed application # 44227 has ethics clearance

KN Kuali Notifications<no-reply@kuali.co>

Dear Kelly Skinner and other members of the research team:

Your application has been reviewed by Delegated Reviewers. We are pleased to inform you the **Renewed application for 44227 Perspectives on Country Foods in Community Programming in the Inuvialuit Settlement Region** has been given ethics clearance.

This research must be conducted in accordance with the most recent version of the application in the research ethics system and the most recent versions of all supporting materials.

Ethics clearance for this study is valid until Saturday, September 28th 2024.

The research team is responsible for obtaining any additional institutional approvals that might be required to complete this Expedited study.

Appendix C: University of Waterloo Ethics Certificate

UNIVERSITY OF WATERLOO

Notification of Ethics Clearance to Conduct Research with Human Participants

---

Principal Investigator: Kelly Skinner (School of Public Health Sciences)

Co-Investigator: Sonja Ostertag (School of Public Health Sciences)

Research assistant: Kelsey Ying-xiao Zhao (School of Public Health Sciences)

Co-Investigator: Alissa Sallans (School of Public Health Sciences)

Research assistant: Maria Ramirez Prieto (School of Public Health Sciences)

Co-Investigator: Sonia Wesche (University of Ottawa)

Research assistant: Celina Wolki (Paulatuk Community Corporation)

Collaborator: Tiff-Annie Kenny (Université Laval)

Waterloo File #: 44227

AC REC #: 22-08

Title: Perspectives on Country Foods in Community Programming in the Inuvialuit Settlement Region

---

The Human Research Ethics Board (REB) at the University of Waterloo and the Aurora College Research Ethics Committee (REC) have completed a joint review of the noted project. This review was conducted in accordance with the guidelines at both institutions that oversee research with human participants as well as the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans. This project has been determined to be ethically sound and has received ethics clearance from both institutions.

Ethics clearance is granted to conduct the above noted project according to the application description (and any revised materials) reviewed by both institutions. All modifications must receive prior ethics clearance through both institutions before the changes are put into place.

Ethics clearance is valid for one year from the date shown and is renewable annually. The principal investigator must submit the required annual renewal report to both REBs. Failure to complete the necessary annual reporting requirements may result in Research Finance being notified.

In the event that there is an unanticipated event involving a participant that adversely affects them (e.g., a physical injury, negative emotional or psychological response) the principal investigator shall report this to both institutions within 24 hours of the event taking place. Any unanticipated or unintentional changes which may impact the research protocol shall be reported within seven days of the deviation to both institutions.

All the best for the successful completion of your project.

Initial Approval Date: 09/27/22 (m/d/y)

Expiry Date: 09/28/23 (m/d/y)

Signed on behalf of the Human Research Ethics Board

Appendix D: University of Ottawa Ethics Certificate

24/10/2022

Université d'Ottawa
Bureau d'éthique et d'intégrité de la recherche

University of Ottawa
Office of Research Ethics and Integrity

CERTIFICAT D'APPROBATION ÉTHIQUE | CERTIFICATE OF ETHICS APPROVAL

Numéro du dossier / Ethics File Number	S-10-22-8372
Titre du projet / Project Title	Perspectives on Country Foods in Community Programming in the Inuvialuit Settlement Region
Type de projet / Project Type	Recherche de professeur / Professor's research project
Statut du projet / Project Status	Approuvé / Approved
Date d'approbation (jj/mm/aaaa) / Approval Date (dd/mm/yyyy)	24/10/2022
Date d'expiration (jj/mm/aaaa) / Expiry Date (dd/mm/yyyy)	28/09/2023

Équipe de recherche / Research Team

Chercheur / Researcher	Affiliation	Role
Sonia WESCHE	Département de géographie / Department of Geography	Chercheur Principal / Principal Investigator
Alissa SALLANS	Département de géographie / Department of Geography	Assistant de recherche / Research Assistant

Conditions spéciales ou commentaires / Special conditions or comments

The expiry date is matched with the one on the ethics certificate from University of Waterloo Research Ethics Board.

Appendix E: Letter of Support from BDDEC for the Student Survey on Country Foods

BEAUFORT DELTA DIVISIONAL EDUCATION COUNCIL

Aklavik, Ft. McPherson, Inuvik, Paulatuk, Sachs Harbour, Tsiigehtchic, Tuktoyaktuk, Ulukhaktok

May 17, 2022

Kelly Skinner
University of Waterloo, School of Public Health Sciences
200 University Avenue West
Waterloo, ON, Canada N2L 3G1

Letter of Support for the "Perspectives on Country Foods in Community Programming in the Inuvialuit Settlement Region" Research Project on Youth Country Food Preferences

To Whom It May Concern:

On behalf of the Beaufort Delta Divisional Education Council, I am writing to express support for the "Perspectives on Country Foods in Community Programming in the Inuvialuit Settlement Region" research project which will administer surveys to K-12 students at schools across the Inuvialuit Settlement Region (ISR) to determine country food preferences among young people in each of the region's six communities. The youth survey research is part of the Canadian Northern Economic Development Agency (CanNor) project led by Dr. Kelly Skinner, entitled "Country Food in Community Programming: Supporting Schools, Daycares and Cooking Circles in Paulatuk and Tuktoyaktuk".

The Beaufort Delta Divisional Education Council is the most Northern education body in the Northwest Territories. We serve 1508 students in the region, and are responsible for 302 administrators, teachers and support staff.
The proposed youth survey on country food preferences:

- Fits within our vision statement of "Capable Citizens Through Indigenized Education"
- Would be beneficial to us and the communities in informing the types of foods children and youth would want to see in the renewed school breakfast and lunch programs that are being implemented in the coming year. Results of this survey may support the inclusion of country food into the School Food Program as it evolves.

While working within the schools, we have recommended that this research project:

Obtain active consent from parents of students aged 10 and under and passive consent from parents of students aged 11 and up, as we have similarly done with other projects in the past

The Beaufort Delta Divisional Education Council looks forward to collaborating on this youth country food preferences survey in fall 2022 and winter 2023.

Mahsi Quyanainni Quana

Devin Roberts
Superintendent of Education

Appendix F: Flow Chart for Obtaining Student Consent for Survey

Appendix G: Student Survey on Country Foods Sample Page[9]

I LIKE TO HELP...

Circle the country food activities that you have helped with.
Underline the country food activities that you want to try.
Draw and/or write any other country food activities that you think are missing.

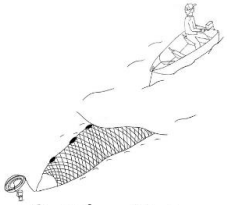
Hunting

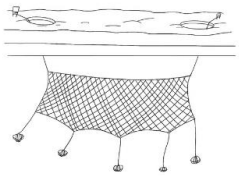
Trapping

Fishing

Jiggling

Rod & Reel


Setting Net

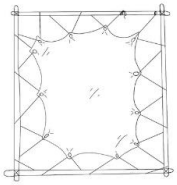

Fishing with nets under the ice

Cleaning the net

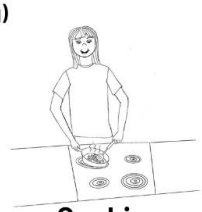
Working on Animals
(cutting up, skinning, preparing)

Working on Fish

Working on Skins

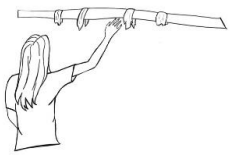

Skinning, Flushing, Tanning Furs

Sewing Furs


Cooking

Harvesting Geese Eggs

Plucking Geese


Making Dry Meat

Making Muktuk

Berry Picking

_____

[9] All drawings in the student survey were sketched by Shania Noksana, an Inuvialuit artist from Tuktoyaktuk.

Appendix H: Student Survey Demographics Form

UNIVERSITY OF WATERLOO | FACULTY OF HEALTH School of Public Health and Health Systems

uOttawa

Demographic Information Collection Sheet

Circle Below.

Grade:

JK	SK	1	2	3	4	5
6	7	8	9	10	11	12

Age:

4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24+

Gender:

Boy (he/him) Girl (she/her) Non-Binary (they/them)

I prefer to self-define: _____ I prefer not to answer

Appendix I: Student Survey Information Letter

Information Letter for Parents/Guardians: Country Foods Youth Survey

[DATE]

Dear Parent/Guardian,

This letter is an invitation for your child(ren) to participate in the research project "Perspectives on Country Foods in Community Programming in the Inuvialuit Settlement Region" led by researchers from the University of Waterloo and the University of Ottawa. This project involves hearing about the country food preferences of students in [insert community] by having them fill out a survey at school. Your child(ren) are invited to fill out this survey in class on [DATE].

Students have a unique perspective on the country food system in the Inuvialuit Settlement Region. We would like to capture their experiences of hunting, preparing, processing and/or eating country foods, as well as how and from whom they most like to learn about country food. We are inviting students from schools across the ISR to participate in this study to learn about their lived experiences and opinions around access to country food. We hope that their responses can help to shape country food programming in [insert community]. Your child(ren) can take part in the youth survey if they are a current grade 1-12 student at [insert school] and would like to share their ideas and experiences related to eating, harvesting, preparing and learning about country foods.

Purpose of this study

Our goal is to hear from students about the country foods and country food activities they enjoy and would like to learn more about. The results will help the school and community better understand how and from whom the students want to learn about country foods. This information will help when planning country food activities in the future.

Involvement in the study

In total, learning about and completing the survey should take a maximum of 1 hour and will be done during class time. Support for distributing and completing the survey will be provided by either a local community coordinator, and/or Alissa Sallans, a University Research Assistant.

Participation in this study is voluntary. Children aged 10 and under are required to have parents/guardians sign & return to school a consent form in order to participate in the survey. You may choose for your child(ren) 10 and under not to complete the survey, and an alternate activity will be provided to them at the time of the survey. Your child(ren) may also choose not to complete the survey or may also choose to stop filling out the survey at any time. You may request that their survey responses be removed from the study up to three weeks after the time of survey completion by contacting Kelly Skinner by email at **. Children aged 11 & up will be asked to provide their own consent.

As part of the survey, your child(ren)'s age, grade, and gender will be asked, but no identifiable information about them will be shared publicly.

What will happen after your child(ren) complete the surveys

The survey results will be collected from all students in ISR schools who agreed to participate. They will be analyzed to look for trends in country food preferences and interests. Final results and findings will be shared with your school to share as they see appropriate (e.g., a post on the school Facebook page, information shared in classrooms…) as well as with the Inuvialuit Regional Corporation (IRC) so that future country food programs can be tailored to the interests of young people in the ISR.

Privacy

Your child(ren)'s identity and participation will remain confidential in study results. Identifying information will be removed from the data that is collected and stored separately. No personal identifying information will appear in any research papers or publications resulting from this study. Anonymous quotations shared publicly with permission will not include participant names. All electronic data will be stored on a password-protected computer by Dr. Kelly Skinner for a minimum of seven years at the University of Waterloo. With your permission, survey results will be transferred to the Inuvialuit Regional Corporation (IRC) at the end of the study period (i.e., 2024) for indefinite storage and use for community program planning to ensure that ownership of the information remains in the ISR.

Reporting

Presentations and reports using information from the surveys will not identify your child(ren) or any of their personal information. At the end of this study, we will work with our project partners at the Inuvialuit Regional Corporation and your child(ren)'s school [insert school name], to develop appropriate knowledge-sharing materials for your community, which could involve community presentations, social media posts, or reports. We also plan to publish academic papers that will share the knowledge from this study with other researchers, governments, and community members.

Ethics statement

This study has been reviewed and received ethics clearance through Research Ethics Boards at the University of Waterloo (REB #44227) and the University of Ottawa (REB#8372). If you have questions for the Board, contact the Office of Research Ethics at **.

There are no known or anticipated risks associated with participation in the study.

Contact

If you have any questions regarding this survey or would like additional information to assist you in reaching a decision about your child(ren)'s participation in completing this survey, please contact [insert contact information for local community coordinator] or Kelly Skinner by email at **.

We hope that the results of this study will be beneficial to you and children and youth across the ISR and NWT, as well as the broader community. Thank you in advance for your support.

Yours sincerely,

Alissa Sallans
Research Assistant

Appendix J: Student Survey Consent Form

Parent/Guardian Consent Form (Youth 10 and under): Country Foods Youth Survey

I have had the opportunity to read the information letter and have my questions answered about the survey on country food preferences.

I am aware that with my permission, the answers my child[ren] write in the survey may be used as quotations in academic publications, but that my child's name will not be used.

I am aware that completing this survey is voluntary, that my child(ren) may choose not to complete the survey and/or may stop filling the survey out at any time. I know that I may ask for my chid[ren]'s survey responses to be removed from the study up to three weeks after they fill out the survey.

I understand that with my permission, anonymized data collected for this study will be stored with the Inuvialuit Regional Corporation.

This study has been reviewed and received ethics clearance through Research Ethics Boards at the University of Waterloo (REB #44227) and the University of Ottawa (REB#8372). If you have questions for the Board, contact the UWaterloo Office of Research Ethics at ***.

Research Use

With full knowledge of all of the above, I agree, of my own free will, for my child to participate in this study.

☐YES ☐NO

I agree to the use of my child's anonymous quotations in any thesis or publication that comes from this research.

☐YES ☐NO

Community Use

With your permission, anonymized data collected for this study will be sent to the Inuvialuit Regional Corporation (IRC) once the study has ended (approx. 2024). The IRC may store this information for future use by the community.

I give permission for the following to be sent to the IRC for the purpose stated above:

☐ Survey Responses

PARENT/GUARDIAN CONSENT:

Student's Name: _____ (Please print)

Parent/Guardian Signature: _____

Date: _____

(Please return this page with your child to school by [DATE])

Appendix K: Talking Circle Guide

Talking Circle Guide

Context

- We have done surveys about country food and activity preferences among students across the ISR. The goal was to find out what country foods students are wanting to eat and learn about, and what land-based activities they want to learn and participate in.
- The goal of talking circles will be to find out whether youth feel the findings capture student preferences, whether any food preferences are missing, and help to understand factors that influence traditional food preferences
- We have invited grade 6-12 students to participate in this 30 minute talking circle

Materials to bring

- 3 copies of the survey, 3 copies of the school's preliminary results document
- Sticky notes and pens
- Handout that shows graphs of school's answers to whether students felt they go out on the land enough (by school and gender)
- Handout that lists students ideas re barriers and opportunities for learning about food and getting out on the land

The following questions and discussion points will guide the talking circle.

Setting the Stage

- *Give context of the survey, share info letters / consent forms to sign.
- This will be recorded, but when we are sharing the outcomes of this conversation, what you share won't be able to be connected to you as an individual.
- We won't have any order for who shares their ideas when, you can just jump in when you are comfortable

Intro Discussion

1. To start, can everyone share their name and tell us your favourite traditional food and a memory you have about this food? (e.g. Alissa's favourite is moose - learned how to flesh moose hide this winter)

Results Interpretation

- *The survey asked four categories of questions: what foods students like to eat, what country food activities to participate in, who students want to learn from, and what foods students want to learn to harvest and prepare. So we will be chatting about these four topics.

1. There is a sticky note pad and pen under each of your chairs, I want to start by getting everyone to write down what you think students from your schools' **top three favourite animals/plants from the land to EAT are**. When you're done give me a thumbs up and I will tell you what the survey said.
    a. Can we go around and share what your guesses are about the top three favourite foods?

    b. Here are the survey findings, does this seem similar to your guesses? Why might that be?
2. What foods do students want to **harvest**
3. What foods do students want to **prepare**
4. On your next sticky note, write down what **food-related activities students want to learn about and participate in** (you can look at the blank survey if you need ideas)
    a. Can we go around and share what your guesses are about the activities students would be most interested in learning about and participating in?
    b. Here are the survey findings, does this seem similar to your guesses? Why might that be?
5. Here (give handout) is the breakdown of **whether students felt they got out on the land enough** at your school.
    a. Looks like a lot of students feel they don't get out on the land a lot - what might make it challenging for students to get out on the land in your opinion?
    b. Do you ever notice if boys get to do more food related activities than girls?
    c. Do these answers make sense?
6. Next, when asked **who students want to learn from**, family was the most common response. Does that make sense to you looking at the other options?
    a. How can families be involved in food programming at the schools?

Exploring Realities

- *Thanks for going through those questions together. I have two more broader questions for you about school food programming for you.

1. Have you ever participated in programs through school or through the community that have helped you learn about traditional foods? Can you give some examples?
    a. Does anyone have any ideas for other school programs that would you be interested in participating in that would help you learn about traditional foods?
2. What sort of programs and activities might you want to see at your school to help you learn about traditional foods or get out on the land?

Appendix L: Talking Circle Information Lette

UNIVERSITY OF WATERLOO | FACULTY OF HEALTH School of Public Health and Health Systems

uOttawa

PROJECT TITLE: Traditional Food Programming in Schools: Incorporating Children and Youth Preferences in the Inuvialuit Settlement Region, NWT

Participant Information Letter for Talking Circle

Research Team:

- This research project is led by researchers from the University of Waterloo and the University of Ottawa.

Purpose and Benefits of Research:

- To hear from students about the traditional foods and traditional food activities they would like to learn about through image-based surveys across the ISR.
- To share student perspectives with schools, HTCs, Community Corporations, BDDEC, and IRC.
- To serve as a tool to support the integration of traditional food–related activities into existing community programs, including on-the-land camps, cultural calendars, and school breakfast and lunch programs.
- To build an understanding of how children and youth in the ISR can be better engaged in food sovereignty.

Purpose and Format of Talking Circle:

- Small group talking circle with 3-5 youth in the community.
- The purpose of these talking circles will be to interpret the results of the student survey on traditional foods.
- The talking circles will last about 1 hour, and participation is voluntary.
- Talking circles will be conducted by master's student Alissa Sallans and information shared will be used in her thesis project as well as in local community outputs.

Data Storage and Privacy:

- Your personal identity will be de-identified in any reports or publications, unless you wish to attach your name to what you say. Because of the small number of participants, it may be possible to identify who comments came from.
- Talking circles will be audio recorded and transcribed.
- Recordings and transcriptions will be securely stored on a password protected computer.
- With your permission, the talking circle findings will be transferred to the IRC at the end of the study period (i.e., 2024) to ensure that ownership of the information remains in the ISR.
- You may withdraw from the research project an any time up to two weeks following the talking circle.

Ethics statement:

This study has been reviewed and received ethics clearance through Research Ethics Boards at the University of Waterloo (REB #44227) and the University of Ottawa (REB#8372). If you have questions for the Board, contact the Office of Research Ethics at **. There are no known or anticipated risks associated with participation in the study.

Contact:

If you have any questions regarding this survey or would like additional information to assist you in reaching a decision about participation in the talking circle, please reach out to Research Assistant Alissa Sallans at **

Appendix M: Talking Circle Consent Form

UNIVERSITY OF WATERLOO | FACULTY OF HEALTH School of Public Health and Health Systems

uOttawa

PROJECT TITLE: Traditional Food Programming in Schools: Incorporating Children and Youth Preferences in the Inuvialuit Settlement Region, NWT

Consent Form for Talking Circle

I have had the opportunity to read the information letter for this study and I have any my questions answered. I consent to participate in this research project, understanding that:

- This talking circle is voluntary, I may choose to leave at any time, and I may withdraw my consent to participate up to two weeks after the talking circle.
- I may choose to allow quotations from this talking circle to be used in academic publications and community reports. My name will not be used in any publications or reports.
- With my permission, information collected for this study will be stored with the IRC.

With full knowledge of all foregoing, I agree, of my own free will, to participate in this study.

□YES □NO

I agree with the use of de-identified quotations in any thesis or publication that comes from this research.

□YES □NO

I give permission for this transcribed interview to be sent to the IRC for future use by the community.

□YES □NO

WRITTEN CONSENT:

Interviewee Name: _____ (Please print)

Interviewee Signature: _____

Date: _____

This study has been reviewed and received ethics clearance through a University of Waterloo Research Ethics Board (REB #44227).

Appendix N: Semi-Structured Interview Guide

PROJECT TITLE: Traditional Food Programming in Schools: Incorporating Children and Youth Preferences in the Inuvialuit Settlement Region, NWT

Interview Guide

---

1. Introduction
    a. Could you share your name and what community you live in?
    b. In what capacity are you involved in school food programming in your community / in the ISR?
    c. How long have you worked in your current role?

2. Grounding Findings
    a. Can you tell us about the types of school food programming offered to students in the ISR/in your community (e.g. any programming related to eating, learning, harvesting, preparing food)?
    b. Does any school programming currently incorporate traditional foods?
    c. What do you see as the role of schools in food security in the ISR?
        i. How do traditional foods fit into this role?
    d. Share specific findings from the community (or regionally for interviews with IRC and BDDEC) and ask if that finding reflects their knowledge of student preferences and perspectives.
        i. I.e.: We found that x% of students felt that they did not get out on the land enough in **insert community**. Do you think this finding is reflective of student experiences? Why or why not? Can you think of any reason why less students feel they get out on the land enough?
        ii. I.e.: One of the most popular foods that students in the community reported wanting to eat was **insert food**. Would this make sense to you? Are there any other foods that you would have expected students to report wanting to eat?
        iii. I.e.: x% of students said they enjoyed or wanted to spend more time doing **insert skill**. Have there been any programs in the community to give students an opportunity to engage in this activity that you can recall?

3. Application of Findings
    a. Based on the survey findings shared, discuss how could these findings be applied in the community?
        i. I.e.: x% of students in the community wanted to learn to harvest **insert animal** - can you think of any opportunities that exist or that could be done to facilitate students learning to harvest this animal? Who would be best to lead this sort of initiative?
        ii. I.e., What are some of the differences between the schools and communities that might influence student food preferences and their relationship to traditional foods?
        iii. I.e., What challenges exist to running school food programs for children and youth? What resources would be needed to overcome these challenges?
    b. What challenges are there to incorporating traditional food programming into schools?
        i. What knowledge/ resources would be needed to overcome these challenges?

4. Future of Research
    a. Inquire if there are any other questions they have or research that might be beneficial to identifying pathways to involving students in their local food system.
        i. I.e.: Who else do you think it would be important to share and discuss these findings with? Who would be important to involve in leading traditional food programming?
        ii. I.e.: Is there any other information that you think would be useful to know about student food preferences and perspectives?

Appendix O: Semi-Structured Interview Information Letter

UNIVERSITY OF WATERLOO | FACULTY OF HEALTH School of Public Health and Health Systems

uOttawa

PROJECT TITLE: Traditional Food Programming in Schools: Incorporating Children and Youth Preferences in the Inuvialuit Settlement Region, NWT

Participant Information Letter for Interviews

Research Team:

- Dr. Sonia Wesche (Professor, Department of Geography, Environment and Geomatics, University of Ottawa)
- Dr. Sonja Ostertag (Research Assistant Professor, School of Public Health Sciences, University of Waterloo)
- Dr. Kelly Skinner (Associate Professor, School of Public Health Sciences, University of Waterloo)
- Alissa Sallans (MSc Student at the University of Ottawa)
- Celina Wolki (Regional Food Security Coordinator, Inuvialuit Regional Corporation)

Purpose and Benefits of Research:

- To hear from students about the traditional foods and traditional food activities they would like to learn about through image-based surveys across the ISR.
- To share student perspectives with schools, Hunters and Trappers Committees, Community Corporations, BDDEC, and IRC.
- To serve as a tool to support the integration of traditional food–related activities into existing community programs, including on-the-land camps, cultural calendars, and school breakfast and lunch programs.
- To build an understanding of how children and youth in the ISR can be better engaged in food sovereignty.

Purpose and Format of Interviews:

- One-on-one semi-structured interviews with school and food program administrators.
- The purpose of these interviews will be to better understand the gaps and opportunities that exist around current traditional food programming within schools in the ISR.
- The interviews will last about 30 minutes and participation is voluntary.
- Interviews will be conducted by master's student Alissa Sallans and information shared will be used in her thesis project as well as in local community outputs.

Intended Outcomes:

- Interview results will be used to identify themes in opportunities for ISR schools to be involved in traditional food programming and to identify pathways to incorporate student perspectives into these programs.
- Information will be shared in a final report, a plain-language summary, and community reports.

Data Storage and Privacy:

- You may choose to not have your name and position title shared in any publication or community report.
- Interviews will be audio recorded and transcribed following the interview. A copy of your interview transcription can be sent to you.
- Recordings and transcriptions will be securely stored on a password protected computer.
- With your permission, your interview transcription will be transferred to the Inuvialuit Regional Corporation (IRC) at the end of the study period (i.e., 2024) for indefinite storage and use for community program planning to ensure that ownership of the information remains in the ISR.
- You may withdraw from the research project an any time up to two weeks following your interview.

Ethics statement:

This study has been reviewed and received ethics clearance through Research Ethics Boards at the University of Waterloo (REB #44227) and the University of Ottawa (REB#8372). If you have questions for the Board, contact the Office of Research Ethics at **. There are no known or anticipated risks associated with participation in the study.

Contact:

If you have any questions regarding this survey or would like additional information to assist you in reaching a decision about participation in completing this survey, please reach out to Alissa Sallans at **.
We hope that the results of this research will be beneficial to school food programs across the ISR and NWT. Thank you in advance for your participation in this project.
Yours sincerely,

Alissa Sallans
Research Assistant

Appendix P: Semi-Structured Interview Consent Form

PROJECT TITLE: Traditional Food Programming in Schools: Incorporating Children and Youth Preferences in the Inuvialuit Settlement Region, NWT

Consent Form for Interviews

I have had the opportunity to read the information letter for this study and I have any my questions answered. I consent to participate in this research project, understanding that:

- This interview is voluntary and that I may end the interview at any time.
- I may withdraw my consent to participate up to two weeks after the interview.
- I may choose to allow quotations from my interview to be used in academic publications and community reports.
- With my permission, data collected for this study will be stored with the IRC.

With full knowledge of all foregoing, I agree, of my own free will, to participate in this study.

□YES □NO

I agree to have my interview audio recorded. The recorder will be turned off any time I request it.

□YES □NO

I agree to have my name and position title associated with my interview responses in publications and community reports.

□YES □NO

I would like the opportunity to review my transcribed interview.

□YES □NO

I agree with the use of quotations in any thesis or publication that comes from this research.

□YES □NO

I give permission for this transcribed interview to be sent to the IRC for future use by the community.

□YES □NO

WRITTEN CONSENT:

Interviewee Name: _____ (Please print)

Interviewee Signature: _____

Date: _____

This study has been reviewed and received ethics clearance through a University of Waterloo Research Ethics Board (REB #44227).

Appendix Q: Preliminary School Report on Student Survey Sample Page

Overview

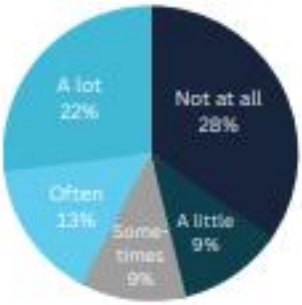
Students consistently reported wanting to eat, harvest, and prepare:

97% of students reported wanting to eat caribou.

91% of students reported wanting to eat moose.

Students reported wanting to learn about country foods from their family members.

When asked how often they get out on the land, 35% of students responded "often" or "a lot" while 37% of students responded "a little" or "not at all".



The top 6

Activities that students reported wanting to learn about and participate in were: