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Cash Economy and Store-Bought Food Biases in Food Security Assessments of Inuit Nunangat

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ABSTRACT. Researchers, community organisations, and Inuit leaders increasingly question the suitability of methods to assess the prevalence of food insecurity in Inuit Nunangat (the Inuit homeland in Canada). Of particular contention is the United States Department of Agriculture's (USDA) Household Food Security Survey Module (HFSSM), applied in modified form as part of Health Canada's nationwide Canadian Community Health (CCHS) and Aboriginal Peoples Surveys. The 18-question HFSSM is the primary survey tool used by the Government of Canada to assess food security prevalence, yet the Module asks only about the affordability of store-bought foods (also termed 'market foods' elsewhere in literature) when collecting data to designate food security status. This is despite communities in Inuit Nunangat having complex 'dual' or 'mixed' food systems and foodways: relying on foods harvested from ancestral lands (country foods) in combination with store-bought foods to sustain mixed cash-subsistence economies and diets. Sourcing country foods requires money for the purchase of equipment and machinery. However, they also have numerous access and availability criteria dictated by non-financial factors. In this paper, we explore the problem of the monetary bias (the focus on an individual or household's ability to purchase foods) in the HFSSM and discuss the knock-on effects of using monetary metrics as the sole means of measuring and monitoring food security in dual food environments. We contend that relying on monetary access as a measure presents an incomplete picture of the reality of food insecurity in Inuit Nunangat. Presently, there is little consideration of the nuance of social norms and cultural values that govern dual food systems or the importance of less tangible non-financial factors that might affect food access (e.g. knowledge of where and how to harvest and maintain machinery, suitable environmental conditions for travel, conducive harvest regulations, social relationships, and ecological stability). Ultimately, this contributes to restricted policy-level understandings of what it means to ensure stable, culturally adequate, and just food systems, and limits self-determination in northern food environments.

Keywords: food security; food sovereignty; nutrition transition; Arctic Canada; food systems; Household Food Security Survey Module; HFSSM

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INTRODUCTION

In 2012, the United Nations General Assembly Special Rapporteur on the right to food in Canada stated that "[a] long history of political and economic marginalization has left many [I]ndigenous [P]eoples [in Canada] living in poverty with considerably lower levels of access to adequate food relative to the general population" (UNGA, 2012). A decade on, achieving food security in Inuit Nunangat, the homeland of Inuit in Canada, remains a formidable sociopolitical, cultural, and public health challenge. Although the Government of Canada recognized the right to food in 1976 (through ratifying and bringing into force the International Covenant on Economic Social and Cultural Rights), almost four decades later, in 2017, approximately 76% of Inuit over the age of 15 living in Inuit Nunangat were food insecure, experiencing either "low", "very low" or "marginal" food security (ITK, 2021a). Similarly, the 2007-2008 Inuit Health Survey indicated that 34% of households with children between the ages of 3-5 years in the region experienced severe food insecurity, while 36% experienced moderate food insecurity (Egeland, 2009; ITK, 2021a).

The United Nations Food and Agriculture Organisation (FAO) defines food security as "a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life" (FAO et al., 2022). Inuit Tapiriit Kanatami (ITK), the national representational organisation responsible for protecting and advancing the rights and interests of Inuit in Canada, has adopted this definition and recognizes food security as a social determinant of health, alongside factors such as inadequate and crowded housing, poverty, and education (ITK, 2014, 2021a). Nutrient-poor diets and malnutrition arising from food insecurity in Inuit Nunangat have been linked to a range of health and wellbeing issues, including elevated instances of obesity, anaemia, diabetes, cardiovascular disease; some cancers; poorer mental health; and increased susceptibility to infectious diseases (Chateau-Degat et al., 2010; Wallace, 2014; Anderson, 2015; Fox et al., 2015; Jamieson et al., 2016; Rønn et al., 2017; Little et al., 2021).

Research addressing food security in Inuit Nunangat was popularized in academia in the late 1990s, followed by the formalized measurement of food security by the Government of Canada in the early 2000s through the application of the United States Department of Agriculture's (USDA) Household Food Security Survey Module (HFSSM) (see Lawn and Harvey, 2003, Rosol et al., 2011; Huet et al., 2012; Arrigada, 2017). A broad body of social and health sciences scholarship has since developed to identify causal factors and outcomes associated with food insecurity in the region (e.g., Ford and Beaumier, 2011; Beaumier et al., 2015; Gilbert et al. 2021; Little et al. 2021). Elevated household food insecurity in Inuit Nunangat has been attributed to the exorbitant price of store-bought foods

(also often referred to as 'market foods') and wider costs of living in the region relative to southern communities, challenges associated with the harvesting of country foods (culturally and nutritionally significant foods derived from lands and waters close to communities), and wider phenomena interwoven with contemporary and historic colonialism (Ford et al., 2013, 2019; Council of Canadian Academies, 2014; ITK, 2017; Mosby and Galloway, 2017; Kenny et al., 2018a; Willows et al., 2018; St Germain et al., 2019).

Federal policies of the 1950s and 1960s aimed at ending the semi-nomadic livelihoods of Inuit were particularly damaging to Inuit traditional food environments and foodways. Stemming from a desire to assert sovereignty over northern lands and forcibly apply the apparatus of the state, the federal government sedentarized families into permanent, static communities; in some cases moving them hundreds of kilometres as part of the High Arctic relocation, while in others forcibly enrolling Inuit children in residential schools for the sole purpose of assimilating them into a settler society (Tester, 2006; Debicka and Freedman, 2009; Salter, 2019). This led to the disruption of livelihoods that were once predicated on semi-nomadic migration according to seasonal animal movements and increased reliance on store-bought foods and costly mechanized forms of transport (such as the snowmobile), the latter being adopted to ensure that country foods could still be harvested (Damas, 2002; Pavri, 2005; Ready and Power, 2018). Over time, these factors have also altered dietary profiles and resulted in a 'nutrition transition' in Inuit Nunangat, whereby a greater proportion of foods consumed are now nutrient-poor, sugar- and preservativerich, and purchased from stores (Council of Canadian Academies, 2014; Kenny et al., 2018a; St Germain et al., 2019).

Despite considerable academic research and investment in federal, regional, and community-based initiatives to tackle what has become known as the "northern food crisis", the notion of what it really means to be food secure and effective steps that can be taken to alleviate food insecurity in Inuit Nunangat are far from settled issues among stakeholders. The concept of food security remains dynamic, nuanced, and multifaceted, and is contested in both academic and institutional discourses in Canada and the wider international community (Ready, 2016; Naylor et al., 2023a). As early as the year 2000, there were over 200 definitions of food security in academic and policy literatures (Hoddinott, 1999), and researchers and Indigenous organisations have questioned the applicability of such a nebulous concept and its measurements to Indigenous peoples (Power, 2008; Elliot et al., 2012; Harder and Wenzel, 2012; ICC-Alaska, 2015; Ready, 2016; Naylor et al., 2023b). A lack of consensus on the issue has further been attributed to the development and continued implementation of ineffectual and diverging solutions and food policies, both within Inuit Nunangat and globally, which have often failed to capture the nuance and complexity of Indigenous food systems (Grochowska, 2014; ITK, 2017; Ford et al., 2019; St Germain et al., 2019). In 2015, commenting on the issue of food security, the Inuit Circumpolar Council (ICC) (Alaska) (2015:4) noted: "[w] e have often heard people within academia, policy and management speak to us of nutritional value, calories and money needed to purchase food. All of this is important, but not what we are talking about when we say food security". Instead, ICC underlined the need to recognize food security as fundamentally intertwined with the entire Arctic ecosystem: emphasising complex and nuanced factors that affect food security including cultural foodways, language and the role of self-governance of food systems, Indigenous knowledge systems and spirituality as a prerequisite for harvesting foods, and the ways that these link to modernday economic systems (ICC-Alaska, 2015).

This article expands upon current critiques of the conceptualisation and measurement of food security in the context of its application to Inuit Nunangat (e.g., Harder and Wenzel, 2012; ICC-Alaska, 2015; Ready, 2016). The inspiration and arguments in this manuscript arose from conversations and discussions with representatives from Inuit Tapiriit Kanatami and Nutrition North Canada, territorial, regional, and community food security co-ordinators and government delegates, academics, and community members whilst attending and facilitating the event "Moving from understanding to action on food security in Inuit Nunangat" at the ArcticNet Annual Scientific Meeting in December of 2022 (see Naylor et al., 2023a, 2023b). First, we examine the development of food security as a concept and definition. Next, we identify and explore the monetary bias (a focus on an individual or household's ability to purchase foods) of existing food security measures before discussing how food security measurement is operationalized in Inuit Nunangat and Canada. Finally, we contend that the uncritical application of food insecurity when classified and understood through this monetary lens — often at the expense of understanding northern food systems as socially dynamic and complex has influenced the development of federal food strategies for the region. These have ultimately limited academic and policy-level understandings of what it means to ensure stable, culturally adequate, and just food systems, and limited Inuit self-determination in diverse food environments.

THE DEVELOPMENT OF FOOD SECURITY

The FAO definition of food security, as adopted by the Government of Canada (GoC) (GoC, 1998), was first developed at the 1996 World Food Summit (WFS). The 1996 definition, and its more recent 2022 iteration (quoted above), was an evolution from a concept that entered academic and political vernacular following an earlier 1974 WFS. The 1974 WFS established the first of what would become four dimensions, or 'pillars' of food security:

availability. The notion of food availability focused on the ability to physically supply and produce sufficient volumes of food for global markets. Specifically, the 1974 WFS stated that food security was the "availability at all times of adequate world food supplies of basic foodstuffs to sustain a steady expansion of food consumption and to offset fluctuations in production and prices" (FAO, 1975).

With time, researchers began to critique the focus of food security and food systems on the global scale; notably through the development of Amartya Sen's (1981) entitlements theory, which evidenced the failure of a 'world food supply' hypothesis in light of the 1973 Ethiopian and 1974 Bengal famines (see also Devereux, 2001). A move away from 'global supplies' theory developed the impetus for the contemporary FAO definition of food security, which saw a transition toward a more intra-national, household-level view of factors that affect food security among individuals and families. Principally this took a turn from a focus on availability to one which was rooted more in the ability of people to purchase (access) food. Alcock (2009) notes that this focus on monetary access can be pinpointed to a World Bank (1986) report — Poverty and Hunger — which, while influential in developing a more temporal focus on food security by distinguishing between chronic and transitory food insecurity, also identified a lack of household 'purchasing power' as a key cause of food insecurity (FAO, 2003). The World Bank report is seen as the inflection point after which academic and institutional perspectives on food security began to conceptualize an individual or household's ability to access food as directly dependent on their income as opposed to their social networks, or other factors not tied to retail markets (Alcock, 2009).

Later, following other WFSs and meetings of the FAO Committee on World Food Security, a further three pillars were added to the food security concept — availability, utilization and stability — and the modern definition of food security was developed (see FAO, 1996, 2009). However, in discourse and research addressing food security, economic access remains the most prevalent and measured pillar among institutions (Coates, 2013). More recently, two further pillars, sustainability and agency have also been considered, but are yet to receive formal approval by the FAO (FAO et al., 2022; see also Clapp, 2022). The relative strength or fragility of the four food security pillars in the modern conception of food security is considered to affect the degree to which an individual, community, region or nation is deemed 'food secure':

Availability: "[W]hether or not food is actually or potentially physically present, including aspects of production, food reserves, markets, and transportation, and wild foods."

Access: "[W]hether or not households and individuals have sufficient physical and economic access to that food".

Utilisation: [W]hether or not households are maximising the consumption of adequate nutrition and energy".

Stability: "[T]he condition in which the whole system is stable, thus ensuring that households are food secure at all times"

(FAO et al., 2022).

MEASURING FOOD SECURITY IN CANADA AND THE CREATION OF A MONETARY BIAS

The current definition and conceptualisation of food security as per the FAO has formed the basis for creating assessments that can quantify and categorize food security status. In Canada and Inuit Nunangat, this is achieved through the HFSSM, adopted by the GoC in 1995 and contained within a number of surveys such as the annual Canadian Community Health Survey (CCHS) and the Aboriginal Peoples Survey (both administered by Statistics Canada), in addition to occasional community-level studies by independent researchers (e.g. Lawn and Harvey, 2004; Ford and Berrang-Ford, 2009; Guo et al., 2015). The HFSSM contains a 10-item adult and 8-item child scale including questions addressing issues such as food access, rate of consumption, and anxiety over food availability (see Health Canada, 2012). In many ways, the HFSSM is an excellent tool to measure food insecurity as per the World Bank's understanding of 'limited purchasing power' and through the institutionalized conceptions of food security being an issue of monetary access. The first question of the HFSSM makes specific reference to purchasing foods from stores when using the term "buy more" (emphasis ours). "The first statement is: [You and other household members] worried that food would run out before you got money to buy more. Was that often true, sometimes true, or never true in the past 12 months?" (FSC Q010: Question 1 on the 2017 CHHS HFSSM, (Health Canada, 2018)). All subsequent questions within the survey identify factors such as "because there wasn't enough money", or "couldn't afford enough" as the reasons for cutting the size of meals, skipping meals, or experiencing anxiety around food access (Health Canada, 2007, 2018). The framing of these questions after the first without further clarification is an example of question order bias (Tourangeau et al., 2020), and evidences the fact that the HFSSM is not attempting to tap into other money-related variables that may affect food procurement in in Inuit Nunangat (e.g. the purchase of gasoline or equipment to go hunting in the subsistence economy) (see section: Why is a store-bought food bias in the HFSSM problematic for Inuit Nunangat). Moreover, the HFSSM does not ask about the availability of foods, the frequency with which foods can be procured (beyond 'in the last 12 months') (stability), whether the types of foods bought are of sufficient cultural or nutritional significance, or how these foods are subsequently used in the household (utilisation) (see Health Canada, 2012, 2018). In terms of classification, the most common means of quantifying food security prevalence when using the HFSSM data is through the Health Canada methodology, which determines the degree to which an individual is deemed 'food secure', 'food insecure, moderate', or 'food insecure, severe' based upon affirmative, negative, or non-responses to the monetary access questions in the HFSSM.

Due to the emphasis of the HFSSM on monetary access to store-bought food, its suitability to examine the entire range of pillars that comprise the FAO's definition of food security for Inuit and First Nations communities in Canada has become a point of contention (Harder and Wenzel, 2012; Ashby et al., 2016; Ready, 2016; Naylor et al., 2023b). Ready (2016), in a study assessing the utility of a modified version of the USDA HFSSM, suggests that a failure to ask about food beyond "affordability" or "enough money" means that data derived from the HFSSM do not adequately reflect the complexities and cultural nuance of contemporary Inuit food environments. This assertion is compounded by the diversity of other food security surveys designed to measure alternative pillars of food security or identify root causes that remain infrequently (or not at all) applied to Inuit Nunangat (e.g., the WFS Food Consumption Score (which assesses food quality)) (Jones et al., 2013). Although the preeminent voice of food security in Canada, PROOF ('Research to identify policy options to reduce food insecurity'), has come to define food insecurity as "inadequate or insecure access to food due to financial constraints", the organisation did not include data from the territories (Yukon, the Northwest Territories, and Nunavut) in its most recent 2021 food security reports (PROOF, 2022a, 2022b). Instead, it directed readers to other relevant and more context-based resources such as the upcoming Inuit-led Qanuippitaa? National Inuit Health Survey and the Inuit Nunangat Food Security Strategy (ITK, 2021a). These resources, in addition to those produced by the ICC or the Qikiqtani Inuit Association (QIA), place a greater focus on the importance of self-determination and Inuit rights, including the principle of food sovereignty — the right to nutritious locally-sourced [country] food" (QIA, 2019) — as factors contributing to food security. Food sovereignty is an emerging concept within discourses on northern food environments. However, the concept is yet to be meaningfully incorporated into food security measures that are applied throughout Inuit Nunangat.

WHY IS A STORE-BOUGHT FOOD BIAS IN THE HFSSM PROBLEMATIC?

As argued above, the HFSSM primarily assesses the ability of a household to purchase foods from stores. However, Inuit food systems are starkly in contrast to the more Eurocentric and Westernized means of food procurement (those predicated on financial transactions) that the Module is designed to assess. Inuit food environments are often termed 'mixed' or 'dual'; in these,

monetary access to store-bought foods comprises but one of two main components (Wenzel, 2019). The other involves the harvesting and sharing of culturally and spiritually significant country foods — foods derived from lands, ice, and marine ecosystems proximal to communities. Means of distributing country foods are often also at odds with those of store-bought foods. The sale of country foods is contentious in some communities (Ford et al., 2016: Searles et al., 2016), and ethics governing the sharing of country foods are complex, often striking a balance of cultural expectation, kinship, need, and reciprocity (Condon et al., 1995; Ready and Power, 2018; Ready, 2019). According to Gombay (2005), involvement in this aspect of the dual food system reflects and preserves "a whole set of moral principles about the world that contribute to, and reflect, people's construction of place" (see also Datta, 2021). Involvement in the subsistence economy itself is also often a costly endeavour. Past research has identified the considerable upfront costs associated with machinery and ongoing costs relating to gasoline, naphtha (camp stove fuel), spare parts, and oil and ammunition as substantial obstacles to Inuit participation in harvesting (Fawcett et al., 2018; Naylor et al. 2021a). In this sense, wider strategies aimed at poverty reduction may be a baseline condition for healthy, sustainable sharing or even productivity. However, there are also substantial non-monetary resources required for the subsistence economy, including hunters with sufficient knowledge and time, environmental conditions that are suitable to safe travel, conducive harvest regulations, and healthy animal populations (Pearce et al., 2011; Natcher et al., 2016; Snook et al., 2020; Kourantidou et al., 2021; Naylor et al. 2021a, 2021b; Gilbert et al., 2021; Ready and Collings, 2021).

Notwithstanding their cultural and spiritual significance, the importance of country foods from a nutrition and dietetics perspective was recently emphasized in a set of dietary profiles developed from data in the Qanuilirpitaa? 2017 Nunavik Inuit Health Survey. Aker et al. (2022), based on a sample of 1176 Inuit living in the region, found that 36% had either a 'country-food dominant' (12.6%) or 'diverse consumption' (store-bought and country foods) (23.4%) diet. Research by Kenny et al. (2018b), based on data from 2095 respondents to the 2007-2008 Inuit Health Survey, established that country foods accounted for between 23-52% of dietary protein among adults and comprised a principal source of their macronutrient intakes of iron (Fe), niacin, and Vitamins D, B6 and B12. Yet, there is currently no widely applied method or means of assessing food security in Inuit Nunangat that fully incorporates the notion of country foods access and availability.

A point of progress and notable exception to the monetary bias in food security surveys came in the form of the 2017 *Qanuilirpitaa*? 2017 Nunavik Inuit Health Survey, which will also form the basis of the planned Inuit Nunangat-wide *Qanuippitaa*? National Inuit Health Survey (QNIHS). When developing the survey, a lack of clarification in the first (and subsequent) questions of

the HFSSM led investigators to specifically identify the 'resources' available for food from both a financial and social relationships perspective in their food security module — encouraging participants to think beyond simply cash — in addition to exploring the importance of an ability to harvest and equipment access as determinants of food security:

"In the last year since... ('interviewer to say month of the survey'') last year...How often did you worry that the food in your house would run out before you had the resources to get more (e.g. money to buy food, equipment to hunt, fish or gather food, social connections to get food from etc)?"

"Identify your use of the following strategies when you don't have enough food to eat in your household...

- [a] I go hunting, fishing, or gathering country food myself.
- [b] Someone other than me in my house goes hunting/fishing/gathering country food
- [c] Go to family or friend's house to eat / ask for food from family or friends"

(Questions PHFS_S9_Q2 and PHFS_S9Q11A, PHFS_S9_Q11E, PHFS_S9Q11F [combined by authors]: *Qanuilirpitaa?* Nuanvik Inuit Health Survey, 2020, p.289, 291; see also Furgal et al., 2021 for a discussion on methodological adaptations of HFSSM questions for the *Qanuilirpitaa?* Nuanvik Inuit Health Survey)

The importance of focusing on the notion of resources as more than simply 'cash' in food security assessments in Inuit Nunangat is evidenced in research as far back as the early 2010s, which found that homes with sufficient harvesting equipment and a hunter (i.e. an individual with knowledge and skills to harvest) were less likely to experience food insecurity (Ford and Berrang-Ford, 2009; Huet et al. 2012). Similarly, more recent work by BurnSilver et al. (2016) and Baggio et al. (2016) has highlighted the importance of less tangible social ties in resource-sharing networks and the role of high-productivity households when assessing the robustness of mixed economy communities in Alaska.

The distribution and sharing patterns of harvested country foods are, however, linked to diverse and complex kin relationships in northern communities, and possible relationships between sharing and food security are multifaceted, requiring further research (Dombrowksi et al., 2013; Ready, 2019; Little et al., 2023). The relative omission of how country foods influence Indigenous food environments in discourses and measures of food security has led some academics to question the degree to which "etic concepts such as food insecurity relate to the lived

experience of food insecure [Indigenous] people" (Ready, 2016, p.277; Elliot et al., 2012; Harder and Wenzel, 2012). For some time, the FAO (2003) has recognized that, "considering its 'cultural dimensions', food security for Indigenous peoples goes far beyond the mere satisfaction of needs". Despite this, concepts such as food sovereignty and self-determination have gained limited traction in the GoC's approach to food security policy in Inuit Nunangat.

POLICY IMPLICATIONS OF THE HFSSM AND FUTURE DIRECTIONS

There of course remains utility to the figures and metrics developed as part of the HFSSM and associated food security studies. The HFSSM can provide a 'broad brush' indication of food scarcity and how this may vary by communities within the same food environments. In addition, a body of literature examining food poverty and food pricing highlights that healthy, nutrient-rich foods are typically more costly than ultra-processed, non-nutrient-dense equivalents in Inuit Nunangat, and that the latter are consumed with a greater frequency as a result (Sharma et al., 2010; Akande et al., 2015; Kenny et al., 2018a; Little et al., 2021). Therefore, understanding to what extent a household is struggling to afford food from stores may allow some inferences to be made about their dietary intake.

Data from surveys have also been used as a means of positive empowerment by a number of Indigenous rights groups, as they can provide an opportunity to expropriate a tool and a language, legitimated and used by the Governments of Canada and the United States, to evidence the structural violence of colonialism, the ineffectiveness of current federal food policies within borders, and the need for greater self-determination. An example of this can be seen in the recent 2021 Inuit Nunangat Food Security Strategy, which leverages food security data from the 2017 Aboriginal Peoples Survey to argue for action, wherein Natan Obed, President of Inuit rights group Inuit Tapiriit Kanatami (ITK), describes the state of food security in Inuit Nunangat as "a shameful human rights violation that Canada is legally obligated to remedy" (Obed in ITK, 2021a:2) (see also NFSC, 2014). Following the strategy's development, ITK has used it to lobby the federal government for funds to aid in its implementation.

While the Implementation Plan for the Strategy (see ITK, 2022a) outlines an intent to measure food security through the Inuit-lead *Qanuippitaa* National Inuit Health Survey, which will focus on the notion of food security from a resource (as opposed to monetary access) perspective, similar to the *Qanuilirpitaa*? Nunavik Inuit Health Survey, it is principally focused on actions to address food security as a holistic phenomenon rather than a metric measured by survey data by underscoring the importance of northern food sovereignty.

The Implementation Plan provides a roadmap, developed by Inuit for Inuit, and rooted in community priorities, aimed at concrete and achievable steps to combat the root causes of food security as understood by lived experience and quantitative and qualitative research. Examples of steps within the Plan include i) assessing the efficacy of current social assistance programs and, where lacking, to create poverty reduction measures; ii) fostering increased economic self-reliance in Inuit Nunangat to combat the high costs of harvesting, living, and store-bought foods; iii) ensuring that harvesting and participation in country food economies is a viable livelihood; and iv) addressing the issue of supply chains in store-bought foods, which are increasingly affected by climate change and remain costly in part due to capitalist profit-driven models of consumption (ITK, 2022a).

Despite widespread support for the Strategy and its Implementation Plan among community members, and researchers and specialists, and a commitment from the Government of Canada to support the Strategy through the Inuit-Crown Partnership Committee, no funding for the Strategy has been provided to date (ITK, 2022b). In their 2022 Pre-Budget Submission to the Government of Canada, ITK stated that "an initial investment of \$100 million over four years for the implementation of the Inuit Nunangat Food Security Strategy would ensure that Inuit-driven food security solutions can effectively address the priorities of our communities." (ITK, 2021b:3). Similarly, in their 2023 budget, ITK reiterate that, despite a commitment for federal funds and support, "no resources have been dedicated to date" and ask for the same request of \$100m to implement the strategy (ITK, 2022b).

Notwithstanding the utility of food security statistics derived from the HFSSM for speaking truth to power when evidencing the need for systemic change, the HFSSM is limited in its ability to identify root causes. Therefore, the overreliance of the federal government on data from food security surveys when informing policy development has implications for Inuit self-determination, and for tackling issues surrounding access to culturally appropriate foods and food sovereignty. Deaton and Scholz (2022) highlight the difficulties surrounding a monetary bias when it comes to assessing interventions developed in response to the 2019 federal Food Policy for Canada, especially those involving country foods. It appears that programs intended to address the 'action areas' laid out in the Policy will likely measure their efficacy (and the degree they can affect perceived rates of food security) based on the "income-related" Health Canada USDA HFSSM. This could in many ways explain the disparity between funding for store-boughtfoods-focused interventions versus those aimed at country foods or food environments and foodways reform in the north, whereby a monetary bias in the measurement of food security leads to policies that reinforce that bias. By extension, it calls into question the degree to which current policy approaches make interventions effective at reducing actual food insecurity (food insecurity as defined/ conceptualized by Inuit) as opposed to measured food security.

A monetary bias in food security has resulted in a longterm focus of interventions in the North on the costs of store-bought foods. This is part of a wider trend in settler-Indigenous relations globally, whereby, as per Green (2015), settler governments attempt to placate calls for decolonisation and increased self-determination through economic investment, while simultaneously bypassing any meaningful concession of jurisdiction or control. In a recent analysis of food policy interventions in Labrador by Bowers et al. (2020) that mapped dimensions of food security against food programmes, initiatives focusing on access were the most dominant, being addressed in nine of the 25 policies identified. Pertinent examples of access policies might include the federal Food Mail Program of the late 1960s, and its subsequent replacement in 2011 by the Nutrition North Canada (NNC) program. Both of these aimed to make store-bought foods more affordable, either by reducing the shipping costs of foods or by attempting to reduce their actual costs in stores through a subsidy. Despite a 2022-23 budget of CAN\$131.3 million, there remains considerable controversy as to whether NNC has been effective in its goal of making perishable foods more accessible and reducing food insecurity (Galloway, 2014; Ford et al., 2019; St Germain et al., 2019; Naylor et al., 2020). NNC operates on a market-competition-driven model, despite an oligopoly operating in many northern communities, and many consider a lack of community consultation in program development, and the fact that the program consolidates considerable power in food retailers as opposed to the communities, as stifling prospects of Inuit self-determination and governance over northern food environments (Galloway, 2014; Chin-Yee and Chin-Yee, 2015).

Recently there has been an increase in federal initiatives aiming to improve or sustain country food harvests. Many of these retain a focus on economic access through subsidies such as the Nunavut Harvester Support Program, the Inuvialuit Harvesters Assistance Program, or the Inuit Nunangat-wide Harvester Support Grant (HSG) administered through NNC. Support grant eligibility and the proportion of costs covered varies by region and grant, often providing either a portion of the upfront costs associated with hunting (e.g., being used toward the cost of a new snowmobile) or providing funds for ongoing costs (e.g., gasoline, naphtha). For instance, under the HSG up to 50% of the costs associated with travelling to a hunting area can be claimed (CIRNAC, 2020). However, notwithstanding the importance of grants for sustaining the subsistence economy, income generated from harvesting is both inconsistent and infrequently sufficient to overcome major economic and social inequities in northern communities (Natcher et al., 2016; Gilbert et al., 2021; Ready and Collings, 2021). Increased expansion of the NNC program stands in stark contrast to more comprehensive poverty alleviation strategies that have gained limited traction from government funders (such as those proposed within the ITK Inuit Nunangat Food Security Strategy), which may be a baseline condition for continued development of the subsistence economy, healthy, sustainable sharing, and northern community economies more widely.

Moreover, while harvest support programs are developed predicated on cost-benefit analyses, a limited understanding of which factors result in the success of harvesters complicates subsidy-based approaches. Research has demonstrated how intangible factors, such as Indigenous knowledge about hunting, time spent on the land, social relationships and sharing, household demography, or species preference complicate associations between cashnecessitating variables, such as gasoline use or equipment ownership, and hunting productivity and success (Collings, 2009; Ready, 2018; Naylor et al., 2021a; Hilleman et al., nd.). This is not to suggest that the subsidies associated with offsetting the costs of harvesting are not essential and necessary for a dual food system (Natcher et al., 2016; Naylor et al. 2021a, 2021b). It does, however, make an approach focused on subsidies and 'return on investment' limiting when deciding which programs should get funding, and could explain why there is a sparse funding landscape for land camps and other educational programs focused on more nuanced factors that can affect harvesting and increased self-determination and control over food environments (Kenny et al. 2018a). Dissatisfaction with past subsidy programs and a previously limited focus on country foods in funding initiatives generally led to suggestions by the Qikiqtani Inuit Association in 2019 that a more effective policy intervention to increase rates of country food production and sharing in communities would be to make hunting a paid profession (QIA, 2019). A less formalized version of this has been enacted with success for some time in Nunavik through the Nunavik Hunters Support Program, where harvesters can be paid per-day for involvement in community-organized hunting activities (Kishigami, 2000; Gombay, 2009). Further research is needed to evaluate such programs to determine if they are more effective at reducing food insecurity in comparison to economic subsidies, their wider implications for poverty reduction in communities, and their possible effect on the dynamics of country food-sharing networks.

CONCLUSION

This commentary has examined and evaluated the monetary bias in food security assessments in Inuit Nunangat. We argue that a focus on the "affordability" of store-bought foods in measures of food security in the region creates difficulties, not only in reliably measuring and understanding the degree to which households or communities might experience food insecurity but also through the knock-on implications of creating food security interventions that are biased toward buying foods from stores in communities that are undergoing nutrition transition. Although the central thesis of this work is that monetary bias in the measurement of food security leads

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to policies that reinforce that bias, it should be recognized that social and cultural nuances within the dual foods system in Inuit Nunangat, the complex relationship that the subsistence economy also has with money, and the unwillingness or inability of federal food policy to embrace or account for these, are also significant contributory factors. While this article has focused on Inuit Nunangat - principally due to the level of comment and discourse on the issue of food security in the region in previous years — it has implications for understanding policy approaches and food security measurement in dual food systems across Canada and wider North America. The current policy and assessment landscape on food security calls into question why Indigenous Peoples are not being listened to when stating that hegemonic conceptualisations and metrics do not represent their lived realities and food environments. There is a critical need to take on board these calls and to work with communities to develop more appropriate, comprehensive measures and understandings of what policymakers mean when examining food security. Presently, the federal government is failing to amend

measures of food security to improve their applicability for Indigenous peoples, or changing how food security initiatives are appraised to better reflect the nuance of northern food environments. Whilst there is widespread understanding that food security as either a measured or more nebulous concept is a persistent issue in Inuit Nunangat, funding for Inuit-led and Inuit-determined strategies and steps to deal with the root causes of the crisis remains scarce. Despite this, Inuit organisations and communities themselves are now taking the initiative to develop measures for, and monitor their own, food security based on a desire to have self-determined, culturally appropriate research and policy on their territories.

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