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Food security has been on the agenda of rural, remote and Indigenous (herein referred to as RRI) communities for decades, however its urgency has been elevated during the COVID-19 pandemic. The underlying factors affecting food security for individuals are complex, including issues such as income, employment and housing. At the community-level, food supply chains (e.g. production, storage and transport), food costs and shared cultural values are just some factors that impact the accessibility, availability and nutritional adequacy of food. Addressing these interconnected and complex issues requires a systems approach and can appear daunting; however, several BC projects and policies demonstrate how practical leverage points can improve food security.

RRI communities play a pivotal role in responding to food security challenges brought to light by the pandemic. In developing this policy brief, health authority food security leads shared innovative responses led by community to adapt to their unique needs. These stories were the impetus for the policy brief - they provide examples of the strength and resilience of RRI communities to respond to food security challenges. These stories are not included here as they were only snapshots and do not provide the complexity of the situations or the context and unique considerations for each community. An engagement process, that is grounded in relationship building and recognition of the knowledge and capacity that exists within community, is needed to better understand the barriers these communities face, the innovative approaches they develop to address their unique circumstances and the role government bodies have in supporting community.

RRI communities are working towards creative solutions for addressing food security; however, health disparities still exist. Individuals residing in rural and remote areas have lower life expectancy and a greater prevalence of physical impairment and chronic illness such as diabetes and arthritis. These disparities increase with higher degrees of rurality and remoteness. As a result of systemic marginalization and racism, Indigenous communities experience additional health disparities. Research in other jurisdictions has shown that rural residents are also more likely to be disadvantaged across a range of social determinants of health (SDoH), or the social and economic conditions that influence and explain health disparities. Food security is a determinant of health and is therefore relevant to explaining and understanding RRI health disparities.
At the beginning of the COVID-19 pandemic, an ad hoc working group was struck by the Population and Public Health division of the BC Centre for Disease Control (BCCDC) to address RRI food security issues exacerbated by the COVID-19 pandemic. This group was a sub-group of the Health Authority Food Security Committee and included representatives from the BCCDC, regional health authorities and First Nations Health Authority (FNHA). At the same time, Emergency Management BC convened the Food Programs for Vulnerable Populations Working Group (a cross-governmental working group) to collectively respond to food security needs through the pandemic. Early in the pandemic, the Office of the Provincial Health Officer (PHO) also identified food security as a tier 1 priority issue and unintended consequence of the public health response to COVID-19 requiring immediate cross-sector action.

The purpose of the RRI Working Group was to:

- Identify the unique food security challenges faced by RRI communities, and share what communities are doing to adapt to these challenges; and
- Bring forward issues to the Province through a policy brief to inform Provincial food security planning and action.

The purpose of the brief is to:

1. Review the evidence of the drivers and consequences of RRI food security challenges that existed prior to the COVID-19 pandemic; and
2. Share evidence and stories collected by members of the RRI working group on food security challenges that have surfaced or been amplified by the COVID-19 pandemic.

This brief is an abbreviated version of a policy brief prepared for and provided to the provincial government in spring 2021, outlining considerations for action to respond to the food access and availability challenges facing RRI communities.
Food security means that everyone has equitable access to food that is affordable, culturally preferable, nutritious and safe; everyone has the agency to participate in and influence food systems; and that food systems are resilient, ecologically sustainably, socially just and honour Indigenous food sovereignty. Dimensions of food security have evolved over time to include factors related to the accessibility, availability, affordability, and acceptability/adequacy of food. Briefly, food security exists when:

- Individuals and communities can reliably access food;
- Nutritious foods are sufficiently available; and
- Food is affordable or there is adequate income to purchase foods that meet personal and cultural preferences.

Ecological and social sustainability, agency and Indigenous food sovereignty are also important elements of food security. This refers to food that is produced in ecologically sound and sustainable ways and when communities have the power to democratically manage their own food (including access to Indigenous traditional foods) and agriculture systems.

There is limited research on food security in RRI communities; however, the evidence that does exist demonstrates challenges related to access, affordability and availability of nutritious food.

### 2.1 Evidence on food accessibility

Geographic or spatial accessibility to food is often discussed in relation to ‘food deserts’, a term which is used to define areas where access to stores that carry healthier goods is more limited, or where the food available in store is of higher cost and poorer nutritional quality. In the last 20 years, smaller stores have been consolidated into fewer large-format supercenters. This has resulted in a decline in store locations for RRI communities, where lower population densities and transportation infrastructure (e.g. boat or air access) are incompatible with large-scale retailing. A 2016 study of food access in BC found that 10.9% of rural residents had low access to a food store. Low access was defined using standard definitions of driving time of greater than 15 minutes. Low access is exacerbated in areas of high economic deprivation where individuals face financial constraints to travel for food shopping. In

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1 The BC Centre for Disease Control is currently leading a process to revise the definition of food security. The definition included here is a working draft of that definition.
BC, areas with both low access and high deprivation were concentrated in the Central Coast, Cariboo, Vancouver Island West, Peace River North and Fort Nelson West regions of rural BC, and nearly 25% of 117 rural First Nation reserves in BC were classified as low access in terms of driving time to supermarkets or grocery stores.

Often, food shopping by RRI residents occurs through travel to ‘service hubs’ that are connected to smaller communities through leisure, goods and services. In a qualitative study of the retail food environment in Northern BC, store owners and managers reported that travel for these purposes is normalized in RRI communities and customers are more likely to frequent large-format supermarkets for larger weekly or monthly shopping trips while relying on smaller stores for ‘top up’ shopping, making it difficult for these stores to consistently offer a larger variety of goods. Given these dynamics and considering the low access to public transit in RRI areas, private transportation is an important factor for accessing food, particularly nutritious foods that are often perishable. People with financial or physical constraints that limit access to private transportation, such as the elderly, single-parent families or individuals on low-income, therefore face greater food access challenges.

### What we heard: COVID-19 and food accessibility

- ‘Panic-buying’ in urban centres had a flow effect on the supply chains of RRI communities. Communities where food access is already less stable due to distance and transport (e.g. boat or fly-in access) were concerned that supply would be disrupted.
- Stores put in place measures to restrict access to a number of high demand, essential items (e.g. meat, infant formula) given supply chain challenges. This was an issue for residents of RRI communities who travel long distances to bulk purchase items to last a longer period of time or who help shop for others.

### 2.2 Evidence on food affordability

While it is important that nutritious foods are readily accessible, they must also be affordable. The cost of food and household income are two main factors that influence food choice. There is not a clear picture of the cost of food for RRI communities in BC.

While the average monthly cost of a nutritious food basket is a provincial food security indicator assessed bi-annually in BC, several limitations to the current methodology likely lead to an underestimate of the cost of food for RRI residents. First, individual transportation or freight costs or costs related to seasonal transport restrictions are not included in food costing, which adds additional costs for residents in communities without a grocery store. Next, rural and remote communities who do not have a full-service grocery store are excluded as their stores do not have all of the items required to cost the nutritious food basket. The result is that communities with the highest food costs are not represented in the data. The Canadian consumer price index indicated that costs rose for some items during the pandemic. Compared to 2019, the price of meat rose 13%, and costs of...
non-perishable foods such as tuna, flour and rice rose between 9-14%\textsuperscript{13}. The overall cost of food has increased approximately 3% since the start of the pandemic which is comparable to the annual average increase in 2019\textsuperscript{14}. Data comparing the relative increases in the cost of food between rural and urban communities is not available.

Income is the main underlying factor in household food insecurity, or the inadequate or insecure access to food due to financial constraints\textsuperscript{15}. Average total incomes are higher and continue to grow more rapidly in highly urban census divisions compared with rural census divisions in Canada\textsuperscript{16}. Over 50% of Indigenous peoples in BC live in rural areas or small population centres, and experience some of the greatest economic constraints\textsuperscript{17}. In Canada, living in a rural area is associated with lower rates of severe food insecurity due to economic constraints, however the rates of marginal or moderate food security are comparable across urban and rural areas\textsuperscript{18}. These differences may reflect rural-urban differences in the costs of living (e.g. housing) that mitigate the impacts of economic hardship for rural residents. There are also important differences within rural regions. In general, health service delivery areas (HSDAs) in BC that are comprised of the most rural and remote communities have the highest rates of food insecurity\textsuperscript{19}.

While overall rates of food insecurity in RRI communities are lower than their urban counterparts, Indigenous peoples living on reserve are not included in this data, and studies repeatedly demonstrate that Indigenous households in Canada have a higher likelihood of food insecurity. In British Columbia, 55% of Indigenous people living in community (on reserve) report moderate or severe food insecurity\textsuperscript{20}.

Food insecurity is associated with poorer physical and mental health in children and adults and is a strong predictor of increased healthcare costs and use. In Canada, the economic burden of not meeting healthy eating recommendations is estimated at $13.8 billion per year, with food insecurity contributing to this burden as food insecure individuals cannot afford to meet basic dietary needs\textsuperscript{21}.

### What we heard: Covid-19 and food affordability

- **Lost employment and income put additional pressure on individuals and families.** The root cause of household food insecurity is inadequate income. Food banks, despite not being able to address the root cause of food insecurity, are accessed by people who are food insecure to meet their immediate needs. While food banks received increased financial support in BC and Canada, some programs were still unable to meet demand, while more remote communities reported not having access to these resources as they did not have food banks in place.

- **The higher cost of food in some RRI communities did not appear to factor into the amount of COVID-19 financial support provided to residents of those regions.**
2.3 Evidence on food availability

Availability of market foods in RRI communities is impacted by geographic factors. RRI stores have food demand and supply constraints that affect the price, quality and variety of nutritious foods that they can offer. These challenges are especially true for perishable or ‘fresh’ foods such as fruits and vegetables, and dairy. RRI communities are more likely to be served by smaller, independent retailers who serve a relatively small population, which limits opportunities for economies of scale that increase variety while keeping costs affordable.

Availability and access to traditional foods is an important consideration for Indigenous people and communities. It refers to non-market ways of obtaining food including foraging (hunting, trapping and gathering), fishing, small-scale gardening and barter trading. Access to safe traditional food is important to the maintenance of culture and thus important to both physical and cultural health. Indigenous peoples are experiencing a decrease in the consumption of traditional foods that has been attributed to a multitude of factors including a decline in the quality, safety and access due to industrialization, environmental decline, government policies and cultural change. A cross-Canada study of Indigenous traditional food systems reported that 75% of BC First Nations households reported some level of engagement in any type of traditional Indigenous food activity, with a greater reporting of fishing (58%) and hunting (45%), and 91% of First Nations adults expressed they would like more traditional foods in their households.

What we heard: COVID-19 and food availability

- Lack of supplies and facilities limit communities’ ability to engage in agricultural and land-based food practices. This is exacerbated by the high cost of transporting materials and grant restrictions on purchasing supplies and equipment.

- Producers lack physical access to processing facilities (e.g. abattoirs), and where access is available, face bottlenecks during months when it is most cost-efficient for producers to process their animals.

- Several charitable food organizations could not keep up with demand due to challenges in establishing relationships with local distributor(s), distributors’ difficulty filling orders, and lack of infrastructure for storage.

- Climate change and industrial activity on or near Indigenous hunting, gathering, and fishing territories is believed to have negatively impacted wildlife numbers and wild plant availability and diversity.
2.4 Cross-cutting issues: Ecological and social sustainability and food sovereignty

There are unique considerations across the dimensions of food security for both the ecological and social sustainability of our food system, and individuals’ and communities’ agency and sovereignty within it. Food sovereignty is an approach to food security based on principles of self-determination, autonomy and democratic and collective approaches across the food system. These core principles map closely onto processes of decolonization and reconciliation for Indigenous peoples, and should be integrated into all policy considerations to improve food security in rural, remote and Indigenous communities.
Food security has long been on the agenda of rural, remote and Indigenous (RRI) communities; however, the COVID-19 pandemic and recent climate related events have elevated the urgency of existing and emerging challenges. Early in the pandemic, the Rural, Remote and Indigenous Working Group was formed by the Population and Public Health division of the BC Centre for Disease Control to address these challenges.

This policy brief reviews evidence on the drivers and consequences of food availability, accessibility and affordability on RRI communities that existed prior to the pandemic, and shares stories from BC on challenges that have surfaced or been amplified by the pandemic. While this brief does not provide specific recommendations, it illuminates the need for short- and long-term action at multiple levels in order to address structural inequities faced by rural, remote and Indigenous communities. Any response will require systematic and comprehensive engagement with RRI communities to ensure that actions respond to the unique needs and circumstances in RRI communities. The dominant food system is based on a white-settler, colonial vision of healthy food and nutrition. As such, cultural sensitivity, humility and safety, including recognition of the historic and ongoing racism and colonialism faced by Indigenous communities, are imperative to engagement and actions. The Disaggregated demographic data collection in British Columbia: The grandmother perspective report by the BC’s Office of the Human Rights Commissioner provides a framework for community engagement using a decolonial and human-rights based approach that is grounded in respectful relationship.

This brief is not a comprehensive account of all the issues, and there continues to be significant data and research gaps on food security in British Columbia. Our main consideration for action is to better understand the food security issues and responses in RRI communities, with the aim to systematically and collaboratively respond to the structural inequities faced by these communities. Since the writing of this report, the Ministry of Health and BCCDC have committed resources to further explore food access and availability in RRI communities through stories and case studies.
References


