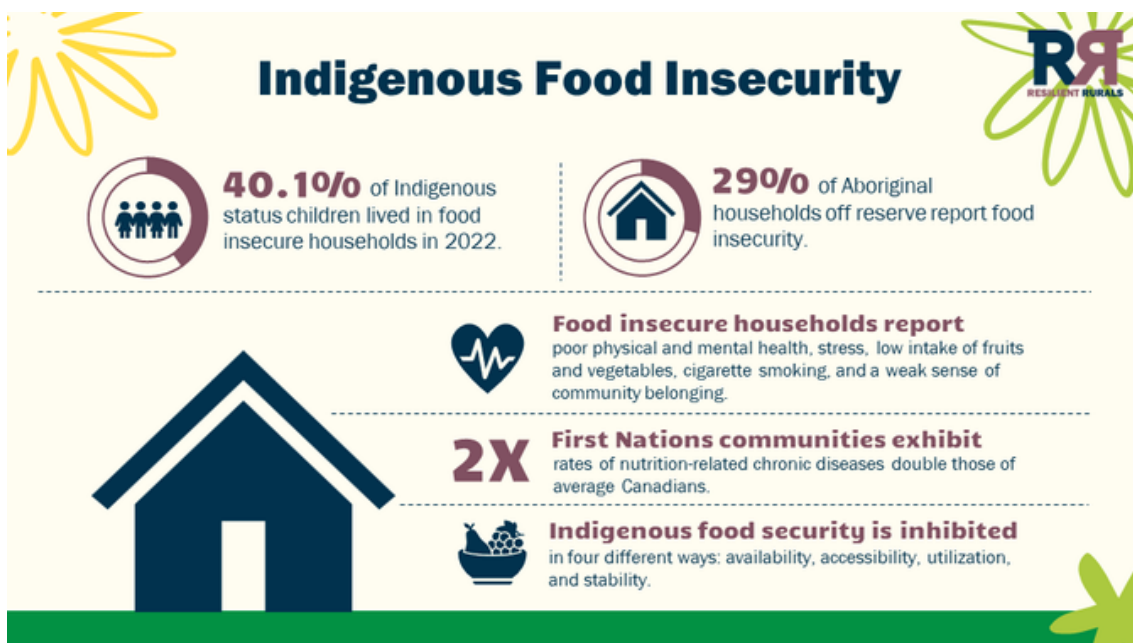# HEALTH IMPACTS OF FOOD DISRUPTIONS

TRANSCRIPTION AND NOTES

0:00 In previous modules, we learned how food systems have changed dramatically in two centuries. In Module 4: Health Impacts of Food Disruptions, we will discuss how our health is changed when food becomes insecure.

Food Insecurity: Mind-Body Killer

Food insecurity **lowers cognitive performance and damages mental health.**

Food insecurity is **associated with higher rates of obesity due to stress, maladaptive coping mechanisms, and inability to afford healthful foods.**

Obesity is **associated with poor long term health** outcomes

Food insecurity stress is **related to maladaptive coping mechanisms** such as over-eating, smoking, and drinking.

Availability and affordability of healthful foods are two highly significant factors in one's dietary patterns.

If healthful food is not there or is too expensive, the poorest among us have **no choice but to eat food lacking vital nutrients.**

0:19 Food is our body's fuel and plays a critical role in our overall functioning. When someone is food insecure, both their cognitive performance and mental health decrease, which can have significant long-term health impacts, especially if food insecurity is their default state (1). The stress of trying to find food to feed oneself and one's family frequently leads to maladaptive coping mechanisms, such as overeating, smoking, and drinking (2). It is possible that increased maladaptive behaviours can explain the association between food insecurity and increased levels of obesity, which is further exacerbated by the fact that nutritious foods such as fruits and vegetables are more expensive (3); obesity is associated with poor long-term health outcomes (4). It is important to add that poor diet quality is highly dependent on both the availability of healthful foods and the affordability of those foods (4). If the only affordable food in one's neighbourhood is a fast food restaurant, it will have a direct impact on the diets of low income residents who cannot afford to travel elsewhere for food.

1:30 As we learned in the previous module, Colonization has had an enduring impact on First Nations peoples and communities. The sudden changes to traditional food systems and access spurred by famine, disease, and loss of culture (5,6,7) had devastating health impacts. This impact is still felt today in the significant food insecurity rates experienced by Indigenous peoples living on and off reserves (8,9). The impact of food insecurity is reflected in the high rates of nutrition-related chronic diseases, such as Type II Diabetes and obesity (10).

Indigenous Food Insecurity

40.1% of Indigenous status children lived in food insecure households in 2022.

29% of Aboriginal households off reserve report food insecurity.

Food insecure households report poor physical and mental health, stress, low intake of fruits and vegetables, cigarette smoking, and a weak sense of community belonging.

2X **First Nations communities exhibit** rates of nutrition-related chronic diseases double those of average Canadians.

Indigenous food security is inhibited in four different ways: availability, accessibility, utilization, and stability.

2:03 Food insecurity in First Nation communities is influenced by factors such as (7):

- The limited availability of affordable and quality store goods
- Reduced population sizes of cornerstone species such as caribou or salmon
- The economic inaccessibility of hunting equipment
- Distance and lack of transportation to larger supermarkets with greater variety
- Government restrictions to traditional harvesting and food sharing practices
- Loss of traditional knowledge regarding how to harvest and prepare foods
- Potentially unsafe traditional foods due to environmental contaminants
- Unstable access to grocery stores and unstable stocking of grocery stores
- And finally, increasingly unstable environments due to the impacts of climate change

Rural Food Insecurity

Food costs more in rural communities than in urban settings.

The further from an urban center a community is, the greater the percentage of low-income households.

Rural residents are more likely to live with obesity and chronic disease than urban counterparts.

Research on rates of rural food insecurity in Alberta is highly limited.

3:01 Similar to Indigenous communities, many small towns and rural communities do not have access to larger grocery stores like Superstore or Costco. Small, family-owned stores can be significantly more expensive, which means low income, rural residents are at a significant risk of food insecurity and the associated impacts. The further a community is from an urban centre, the greater the percentage of low-income households (11). Additionally, rural residents are more likely to live with obesity and chronic conditions than urban counterparts (12), which may reflect the potential for high rates of food insecurity.

3:33 While these correlations are significant and suggest a higher rate of food insecurity, especially coupled with the fact that rural communities do not offer as many support services, there is limited research done on rural food insecurity in Alberta. We do not know the true picture of food insecurity in rural Alberta. As such, many of these gaps remain unfilled.

3:58 These individual health impacts have significant rippling effects into the community. Among poor mental health outcomes in food insecure households is a high rate of self-isolation (3), which means these households are not active members of their communities. Reduced cognitive performance (1) impacts both students and the workforce and may reduce the skills or educational attainment of those community members. Food insecurity is a complex problem, however, offering options for community participation around food can help alleviate some food insecurity, while promoting community participation. Collective kitchens are one way that food knowledge can be shared, costs can be lessened, and relationships can be built (13). Especially valuable to single mothers, community newcomers, and new cooks, these kitchens can also act as a stepping-stone to further community participation, making food security a tool to build a vibrant community (13).

Food Security As A Tool To Build A Vibrant Community

St. Paul - Model of Community Growth Around Food

- Healthful options at community events increases overall nutrition.
- Efforts to include and promote local food providers in events such as the Harvest Ball.
- Incredible Edible Barrels - a community garden-style project that provides free produce and knowledge about growing vegetables to all community members.
- Established policies limiting how close fast-food restaurants can be to schools.

St. Paul CHAMPIONS for CHANGE

4:55 In Alberta, St. Paul is a community that is showcasing how building a more vibrant community is inherently tied to food security, knowledge, and healthy options (14). Since 2003, this community has worked to improve their chronic disease rates by improving movement opportunities, cultivating a strong sense of community through art and

revitalization, and improving community nutrition (14). Their efforts to improve community nutrition include offering healthful options, such as strawberry parfaits alongside cake and ice cream at community events (14). They've also worked to showcase local producers, and share knowledge about how different plants grow through their program Incredible Edible Barrels (14); community members are free to harvest herbs, vegetables, and fruits from these container gardens and the town even includes information on ways to use the different plants (14). Finally, they have taken their nutrition goals to the policy level by limiting how close a fast food restaurant can be to a school (14). As we know, the quality of the food that is closest to us can impact our health, and even this small step can significantly improve the nutrition of children and youth.

6:11 That concludes Module 4: Health Impacts of Food Disruption. Check out our references to learn more about this topic.

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