

Summary Research Report

Food Access and Preparation Among Older Adults Living Alone in Dartmouth North

December 3, 2025



Table of Contents

About this study.....	3
Key Findings.....	4
Background.....	5
What We Did.....	6
What We Learned.....	6
Theme 1. Structural, Environmental, and Systemic Barriers.....	7
Theme 2. Physical and Psychosocial Health Challenges.....	9
Theme 3. Food Practices, Identity, and Autonomy.....	11
Theme 4. Formal and Community Supports.....	12
Implications.....	13
Recommendations and Change Ideas.....	13
Buying Food.....	13
Preparing Food.....	14
Sharing Meals.....	14
Limitations.....	15
Conclusions.....	15
References.....	16

About this study

Team Members

- **Principal Investigator:** Melissa Rankin, RD MscAHN(c)
 - **Co-investigator:** Kelly Hunter, MSc, Executive Director, MicroResearch
 - **Coach mentor:** Dr. Amy Grant, Director of Research, Maritime SPOR SUPPORT Unit (MSSU)
-

Acknowledgments

The team gratefully acknowledges several individuals who made important contributions to the early development of this project, including the research proposal and the NSH Research Ethics Board application: **Katherine Howlett, Ashty Nanakaly, Heather Peddle-Bolivar, Kathleen Chan, Amanda Nickerson, Nancy Frank, and Anne Shileche.**

We extend our sincere thanks to **Dr. Patty Williams** for her valuable guidance and support during the data analysis phase.

Our appreciation also goes to **The North Grove Community Food Centre (TNG)** for their support with recruitment and data collection and for providing a welcoming and accommodating environment that was integral to this study. Thanks also to the **Dartmouth General Hospital Foundation** for funding this study.

Finally, we express sincere gratitude to **the older adults who participated in this study**, sharing their time, wisdom, experiences and insights. Their openness and willingness to reflect on often challenging aspects of daily life provided the foundation for this study. Without their contributions, this research would not have been possible.

The MicroResearch Approach



MicroResearch Canada (MR) trains and supports multidisciplinary, community-focused research teams to improve health outcomes across the country. Its approach empowers community members and professionals to identify local challenges and address them using practical, context-appropriate research methods.

How to cite this report:

Rankin, M., Hunter, K., Grant, A. Food Access and Preparation among Older Adults Living Alone in Dartmouth North. Halifax, Nova Scotia: MicroResearch Canada; 2025.

Key Findings

The experiences of older adults living alone in Dartmouth North illustrate how food insecurity in later life extends beyond financial hardship. It is affected by structural, health, social, and environmental barriers that intersect to shape daily realities of food access and preparation.

- In Dartmouth North, the experiences of food insecurity amongst older adults living alone were multidimensional, rooted in inequities in income, housing, and transportation, and compounded by health and social challenges.
- Declining health and social isolation undermined appetite, motivation, and dignity, showing that food insecurity had both psychosocial and nutritional consequences.
- Food routines—shopping, cooking, and sharing meals—are meaningful activities tied to people’s identity, independence, and social connections. Not being able to carry out these routines impacted older adults’ well-being and quality of life.
- Formal supports were often unaffordable or unsuitable, while community-based programs like Feed Nova Scotia (providing food relief) and The North Grove Community Food Centre (offering both food access, belonging, and inclusion) were highly valued.

Main Themes

1

Structural, Environmental and Systemic Barriers

Rising costs, age-unfriendly housing, poorly lit/inaccessible grocery stores, and unsafe transportation reflected inequities in income, mobility, and living environments.

3

Food Practices, Identity, and Autonomy

Grocery shopping, cooking, and sharing meals were meaningful life activities and fostered identity, dignity, and connection. Their disruption led to loneliness, reduced diet quality, and loss of autonomy and agency.



2

Physical and Psychosocial Health Challenges

Chronic illness, sensory and functional decline, grief, limited social support, and mental health challenges compound barriers. COVID-19 intensified anxiety and disrupted routines.

4

Formal and Community Supports

Formal services were often unaffordable or unknown. Community supports varied from essential food relief to food access combined with age-friendly, inclusive social activities.

Background

What is Food Insecurity?

Food insecurity is defined as an “inability to acquire or consume an adequate diet quality or sufficient quantity of food in socially acceptable ways, or the uncertainty that one will be able to do so (1). While often talked about as a financial issue, for older adults it is not only about affording food, but also about being able to access, prepare, and enjoy it within the realities of aging. Overall health, functional limitations, the ability to carry out daily activities (2), and limited social supports (3–6) can make daily food activities more difficult, while environmental barriers such as age unfriendly housing, transportation, or neighbourhoods further restrict independence (7). These personal and environmental factors often intersect with broader structural issues, including inadequate income supports and fragmented services, creating cumulative disadvantage that heightens vulnerability particularly for those living alone (4,8,9). In this context, food insecurity is both a public health and healthy aging issue, affecting not only nutrition but also autonomy, dignity, and social participation - core components of well-being in later life.

As Canada’s population ages, with Nova Scotia experiencing some of the country’s fastest demographic shifts (10), supporting older adults to live healthy and independent lives has become a pressing public health priority (11). Nutrition is a cornerstone of healthy aging: it supports physical health, prevents cognitive and functional decline, and reduces risks of chronic disease, institutionalization, and premature death (12–14). Beyond its physiological role, food and food practices also sustain social, cultural, and psychological well-being, fostering identity, dignity, and connection in later life (6,15,16). When access to, or the ability to prepare nutritious food is compromised, the consequences extend far beyond diet, undermining nearly every dimension of health and quality of life (17,18). In this context, food insecurity emerges as both a cause and a consequence of poor health in later life.

In Nova Scotia, where more than one in four residents will be aged 65 and over by 2030 (19), older adults face the highest rates of low income and poverty in Canada (20). Nearly one in ten live in poverty, rates well above the national average, most of these older adults live alone and disproportionately affect women (20,21). The greatest risk factor for experiencing food insecurity is living in poverty (3). Previous research also indicates that low-income older adults have poorer quality diets and are at greater nutritional risk than their wealthier counterparts (4,12).

The consequences are significant: food insecurity contributes to malnutrition and functional decline, both predictors of institutionalization (22,23). It is also associated with poorer physical and mental health, lower quality of life (24) and higher rates of depression (25,26). In addition, food insecurity has been linked to cost-related medication non-adherence, which results in poorer chronic disease management and, in turn, increases the risk of hospitalization (27,28) with Canadian evidence showing higher hospital use among food-insecure adults (29). Yet existing measures and income supports often fail to capture the realities of aging with complex health and social needs (5,30,31).

Given these realities, there is an urgent need to better understand how older adults navigate the challenges of accessing and preparing food in their daily lives. This study responds to that need by examining the experiences of older adults living alone in Dartmouth North, a low-income urban community in Nova Scotia.

Research Questions

How do older adults, living alone, in Dartmouth North:

1. perceive the value of cooking and food preparation at home,
2. experience barriers and facilitators that shape food access and preparation, and
3. experience the intersection of social isolation and food routines in daily life?

What We Did

This project was formed following a MicroResearch Canada (MR) workshop in 2019. The research idea was presented by Melissa Rankin, then Food Skills Coordinator at The North Grove Community Food Centre (TNG) in Dartmouth North. During her time there, she observed that many older adults living alone on low, fixed incomes faced complex, intersecting barriers that made it difficult to reliably access and prepare food at home. Melissa worked with the multidisciplinary research team to develop a project proposal, which was peer-reviewed and approved by MicroResearch Canada in 2019. Work was paused in 2020, but resumed in 2022 with an added focus on how the COVID-19 pandemic impacted food security. The study is approved by the Nova Scotia Health Research Ethics Board REB file #: 1027291.

Descriptive Qualitative Study

We conducted semi-structured interviews with older adults (aged 65–87) living alone in Dartmouth North. Participants were recruited initially through posters placed in the community, and then through different sampling strategies including convenience sampling (inviting individuals who were readily available and willing to participate), purposive sampling (intentionally seeking out participants who met the study's criteria), and snowball sampling (asking participants to suggest others who might be interested in taking part). Data collection took place in 2022 at The North Grove Community Food Centre and by phone. The research followed a transcendental phenomenological approach (32,33) combined with the Social Ecological Model (SEM) (34). The semi-structured interview guide was adapted, with permission, from Rebecca Green-LaPierre's (2008) master's thesis (35) on food insecurity among low-income senior women living in urban Nova Scotia, the findings of which were later published (36). We sought to understand how people's daily lives and food routines were shaped not only by their own choices and perspectives, but also by broader social and community systems. Interviews were transcribed, analyzed, and thematically coded (32) to identify barriers, facilitators, and adaptive strategies.

What We Learned

A total of 13 older adults participated in the study. All lived alone in Dartmouth North, ranged in age from 65 to 87, and the majority were women. Participants were predominantly White and reported a range of health conditions, mobility limitations, and low fixed incomes reflecting the diverse circumstances shaping their daily lives. Through their accounts, four main themes emerged, capturing the interconnected barriers that influenced how they accessed, prepared, and consumed food at home.

Structural, Environmental, and Systemic Barriers

This theme describes interconnected barriers that were consistently reported: financial hardship and rising costs, transportation limitations, age-unfriendly housing, and grocery environments with accessibility barriers. Together, these challenges made food access unstable and unpredictable, forcing many to “make do” with limited options.

1.1 Financial Hardship and Rising Costs

Most participants lived on low, fixed incomes. While higher government supplements after age 65 and subsidized housing provided some relief, rising costs of food, medications, transportation, and utilities left very little for groceries. The result was frequent trade-offs between basic needs.

Small increases in rent or unexpected expenses could tip participants into food insecurity. Many expressed frustration that income supports did not reflect the realities of aging alone with health needs.

“
Even with the rent subsidy, I still don’t have much money left over for groceries... After paying my deductible on prescriptions, there’s not much left. (#5)
”

1.2 Barriers to Transportation and Mobility

Access to affordable, safe transportation emerged as a central barrier. Public transit was often unsuitable due to poor vision, chronic conditions, and safety concerns. Some were denied eligibility for Access-A-Bus despite clear limitations. Taxis were prohibitively expensive, leaving many to rely on walking or small shopping trips.

The COVID-19 pandemic intensified these challenges, with participants avoiding buses altogether out of fear of infection.

“
I was denied Access-A-Bus because I could walk a short distance. Even though the bus vibrations trigger my bladder, they said I didn’t qualify. (#4)
”

“
Since COVID, I avoid taking the bus, so I buy groceries in small amounts I can carry home. (#3)
”

1.3 Age Unfriendly Housing

Inadequate housing conditions created barriers not only to preparing meals but also to accessing groceries. Steep stairs, lack of elevators, and narrow hallways made it difficult to carry groceries or use mobility aids.

Inside apartments, small kitchens, limited storage, and outdated appliances restricted participants ability to batch cook, store food economically, or move safely while using mobility aids.

I'd love to have a little chest freezer, but we're not allowed. There have been so many times I could have saved money if I'd had more space. (#3)

“

I have a heart condition and am limited in how much I can carry... I get winded walking from the bus stop and up the stairs. (#6)

”

“

If somebody in the building comes along, they'll take the groceries up the stairs for me, which is helpful—there's no elevator. (#2)

1.4 Grocery Environments with Accessibility Barriers

Some participants described difficulties within grocery stores themselves. Poor lighting, hard-to-read labels and prices, and self-bagging requirements created additional obstacles, particularly for those managing sensory decline such as vision loss or mobility limitations.

The grocery store feels dark to me, I have diabetes and with my eyesight, I have to feel my way along. I also find it hard to read prices and labels, even with glasses. (#6)

I had to pack my own groceries... When you're taking your own bags and you've got to lift them up and pack them, it's really hard. (#9)



Nova Scotia has the highest poverty rate among adults 65+ in Canada — 10.4%.

Physical and Psychosocial Health Challenges

Participants described a wide range of physical and psychosocial health challenges, often occurring together, that limited their capacity to shop, prepare, and consume food.

2.1 Complex Chronic Health Needs

Most participants lived with multiple conditions such as arthritis, Chronic Obstructive Pulmonary Disease (COPD), cancer, diabetes, chronic pain, and fatigue, alongside sensory decline (vision, hearing, oral health). Tasks like chopping, standing, lifting, or reading labels became exhausting or impossible.

The amount of time I spend chopping, slicing, grating - all by hand - is absolutely ridiculous. When I do a batch cooking weekend, I'm exhausted. (#3)

Now the problem is some of the bigger vegetables I can't even cut myself, like turnip. Because I have osteoarthritis in my right wrist as well as carpal tunnel syndrome, and they're just too thick. If you go to Sobeys, they have cut-up stuff, but it costs a fortune. (#11)

These conditions rarely existed in isolation, amplifying barriers to food routines and creating a cycle where poor nutrition and declining health reinforced one another.

Food insecurity later in life is both a cause and a consequence of poor health.



2.2 Psychosocial Impacts

Loss of partners, friends, and family reduced appetite and motivation to cook. Meals that were once shared became solitary routines.

“*I don’t feel like cooking—for who, for me?*
(#4)

“*During COVID, everything shut down... when your mood is low, your appetite goes too.*
(#2)

COVID-19 worsened isolation, heightening anxiety about leaving home and disrupting food practices. Some avoided outings altogether, while others reported changes in eating patterns as coping strategies.

“*I haven’t been out much, and it’s gotten to where I dread going out -it feels like I’m almost having a panic attack. The night before an appointment, I can’t sleep.* (#11)

2.3 Limited Support and Self-Blame

Participants reported inconsistent family support, often limited by distance, strained relationships, or relatives’ own challenges. Many were reluctant to ask for help, fearing they would be a burden. Feelings of guilt and self-blame were common, even when barriers were clearly beyond their control.

“*...There are still unresolved issues in my family. I fought, and I fought for years to get help but we never got the help that we needed.* (#11)

“**If it were me and I were healthy, and someone in my family was in my situation, I’d call and say, ‘I’m going for groceries - can I pick something up for you?’ But I don’t like asking, especially with some family members... it’s hard to explain.** (#11)

2.4 Adaptive Responses

Despite significant barriers, participants described creative ways to conserve energy and maintain independence. These included simplifying recipes, batch cooking, modifying their environments (e.g., brighter kitchen lighting, cutting food while seated), and using mobility aids.

These adaptations helped sustain routines but often came at the expense of diet quality and enjoyment.

“*I’ve got six crushed vertebrae, five herniated discs, osteoarthritis, and osteoporosis... At noon I’d have soup, then another can later. For months I lived on Chunky soups—buying 10–12 cans each grocery trip.* (#5)

“*I put a new light in my kitchen right over the counter where I work. It’s very bright, so that helps—and I take my time.* (#6)

Food Practices, Identity and Autonomy

Food practices were deeply tied to identity, dignity, and autonomy. When disrupted, older adults experienced loss of connection, daily rhythm, and quality of life.

3.1 Lifelong Food Skills and the Meaning of Cooking

Participants reflected on early food memories and skills passed down through family. Cooking was described as both a survival skill and a meaningful practice tied to independence and pride.

My grandmother was a wonderful cook... They made soup out of bones to make stock —because they had no money, and they had to feed the family. (#8)

Even as appetite and capacity changed, many continued to take pleasure in preparing meals when possible.

3.2 Balancing Informal Support and Control

Some participants received help with grocery shopping or heavy lifting, but many valued being able to choose their own food. Shopping was described as both a necessity and a social outing.

When others shopped on their behalf, participants sometimes felt disconnected from their food choices, underlining the importance of autonomy in food routines.

“

Yeah, I do like going grocery shopping. It's an outing for me. I've shopped there for so long they all know me... it really makes life more pleasant. (#13)

”



Food practices sustain identity, dignity, and connection in later life.

Formal and Community Supports

Participants described experimenting with a range of formal and community-based supports, with stark differences between the two.

4.1 Barriers to Formal Supports

Formal services such as grocery delivery and meal programs were often unaffordable or unsustainable. When used, they were sometimes impractical (e.g., groceries left in lobbies, heavy bags to carry upstairs).

One participant described how valuable a grocery assistance program had been, offering both transportation and in-store support with shopping. Note, this program was offered through Northwood, however, it has since been discontinued.

“

Someone suggested I get grocery delivery, but even small costs add up fast... I never even considered paying for delivery—not a chance. (#3)

”

4.2 Community-Based Supports

The North Grove Community Food Centre (TNG), an organization offering programs focused on Healthy Food Access, Food Skills Development, and Education, Engagement and Advocacy, was frequently mentioned as an important source of both nutritious food and social connection. Its affordable produce market was especially valued for low cost, proximity, social atmosphere, and the option to buy small quantities, including pre-chopped vegetables and soup kits. During the pandemic, access to free healthy prepared meals were appreciated and in terms of social connection, participants described sharing meals with the community, trying new foods, and how this opened their mind to trying new things and cooking at home. Feed Nova Scotia deliveries were also described as reliable and essential.



Once this place opened [TNG], things became a whole lot easier... I feel very fortunate to have all the support I have here now. (#1)



I just don't know what I'd do without Feed Nova Scotia. (#3)

These examples highlighted how community-based initiatives provided not only nourishment but also belonging, demonstrating the value of programs that integrate food access with social connection.

Implications



For Community Organizations

- Small initiatives that support older adults to buy, prepare and share food can help them to meet their unique health needs, stay independent, and build social connections.
- Tailored food programs and supports for older adults should reflect their specific circumstances, such as health and mobility challenges, transportation barriers, and the design of their living spaces.
- Co-designing these programs with older adults ensures accessibility and relevance.



For Government

- Income assistance and systemic supports to remove financial barriers to accessing food should be paired with local, community-based approaches that support older adults' specific needs.
- Funding small, community-based initiatives can play a vital role in supporting older adults' well-being, autonomy, and social connections.
- Policies and strategies that aim to address food insecurity need to account for the unique barriers older adults face.

Recommendations and Change Ideas

Specific recommendations and change ideas for government and community-based organizations address the challenges identified by older adults who experience food insecurity and also build on strategies identified by these individuals that help them to overcome these challenges.

Buying Food

Recommendations	Change Ideas
<ul style="list-style-type: none">• Offer safe, accessible, affordable transportation options that consider the physical mobility of older adults.• Offer assistance to those with health and mobility issues in transporting their groceries from store to car.	<ul style="list-style-type: none">• Taxi chits for groceries.• Expanded eligibility for access-a-bus.• Local, affordable transportation options that offer door-to-door service and help with unloading of groceries/heavy items.
<ul style="list-style-type: none">• Offer affordable food delivery options for seniors that allow for unpacking and unloading of groceries into people's homes.	<ul style="list-style-type: none">• Community volunteers to help deliver and unload groceries for seniors.• Food delivery services that offer senior-specific support.• Financial subsidies for grocery delivery services.

Preparing Food

Recommendations	Change Ideas
<ul style="list-style-type: none"> • Offer services that assess the home environment and help implement feasible changes. 	<ul style="list-style-type: none"> • Teams of professionals including occupational therapists, nurses, and handymen who assess home environments and make necessary changes (e.g. CAPABLE VON Canada). • Loans or grants to improve faulty or broken kitchen appliances.
<ul style="list-style-type: none"> • Offer services that help with food preparation or affordable options at the grocery store. 	<ul style="list-style-type: none"> • Free services in community centres or within grocery stores where seniors can bring produce to be chopped at no charge. • Expanded access to occupational therapy at home and kitchen assessments for older adults experiencing pain, fatigue, or functional decline.
<ul style="list-style-type: none"> • Offer free, individualized nutrition support and group-based food skills programs to help older adults adapt to the challenges of aging and living alone. 	<ul style="list-style-type: none"> • Provide access to one-on-one consultations with registered dietitians for personalized guidance on nutrition, meal planning, and affordable food preparation. • Offer practical cooking classes tailored for older adults (e.g., cooking for one, preparing affordable meals, adapting diets for mobility or health changes).

Sharing Meals

Recommendations	Change Ideas
<ul style="list-style-type: none"> • Offer free, accessible programs where older adults can regularly share meals in a welcoming, social setting. 	<ul style="list-style-type: none"> • Create free, seniors-only congregate lunch programs at community centres - a priority frequently suggested by study participants

Limitations

This study is limited by its small, non-random sample of 13 participants, all of whom were White, predominantly women, and residing in one low-income urban community. As a result, the findings may not reflect the experiences of older adults in other contexts, such as rural areas, more ethnically diverse populations, or those with different cultural food practices. Recruitment during the COVID-19 pandemic may also have influenced both participation and the perspectives shared, given the heightened challenges of that period. These factors constrain transferability, yet the study provides rich, in-depth insights into the lived experiences of a group often underrepresented in food security research.

Conclusions

These findings show that food insecurity among older adults living alone in Dartmouth North is multidimensional, rooted in overlapping financial, structural, health, and social factors. Participants' accounts reveal how systemic inequities in income, housing, transportation, social support and health converge to make food access precarious, with profound impacts on nutrition, identity, and well-being.

This study underscores the need for policies and programs that go beyond financial assistance to address broader determinants of food security. Age-friendly approaches such as affordable housing, accessible transportation, and integrated community food programs could help ensure that older adults not only meet their nutritional needs but also maintain autonomy, dignity, and social connection.

Ultimately, tackling food insecurity in later life requires cross-sector collaboration between government, health care, and community organizations to build environments where older adults can thrive.

References

1. Statistics Canada. Household food insecurity in Canada: Overview - Canada.ca [Internet]. 2020 [Accessed 2025 Oct 9]. Available from: <https://www.canada.ca/en/health-canada/services/food-nutrition/food-nutrition-surveillance/health-nutrition-surveys/canadian-community-health-survey-cchs/household-food-insecurity-canada-overview.html>
2. Wolfe WS, Frongillo EA, Valois P. Understanding the Experience of Food Insecurity by Elders Suggests Ways to Improve Its Measurement. *The Journal of Nutrition*. 2003 Sept;133(9):2762–9. DOI: [10.1093/jn/133.9.2762](https://doi.org/10.1093/jn/133.9.2762).
3. Gualtieri MC, Donley AM. Senior Hunger: The Importance of Quality Assessment Tools in Determining Need. *Journal of Applied Social Science*. 2016 Mar 1;10(1):8–21. DOI: [10.1177/1936724414561258](https://doi.org/10.1177/1936724414561258).
4. Keller HH, Dwyer JJM, Senson C, Edwards V, Edward G. A Social Ecological Perspective of the Influential Factors for Food Access Described by Low-Income Seniors. *Journal of Hunger & Environmental Nutrition*. 2007 June 25;1(3):27–44. DOI: [10.1300/J477v01n03_03](https://doi.org/10.1300/J477v01n03_03).
5. Mills CM. Food Insecurity in Older Adults in Canada and the United States: A Concept Analysis. *Canadian Journal of Dietetic Practice and Research*. 2021 Dec 1;82(4):200–8. DOI: [10.3148/cjdp-2021-016](https://doi.org/10.3148/cjdp-2021-016).
6. Vesnaver E, Keller HH. Social Influences and Eating Behavior in Later Life: A Review. *Journal of Nutrition in Gerontology and Geriatrics*. 2011 Feb 9;30(1):2–23. DOI: [10.1080/01639366.2011.545038](https://doi.org/10.1080/01639366.2011.545038).
7. Chung WT, Gallo WT, Giunta N, Canavan ME, Parikh NS, Fahs MC. Linking Neighborhood Characteristics to Food Insecurity in Older Adults: The Role of Perceived Safety, Social Cohesion, and Walkability. *J Urban Health*. 2012 June;89(3):407–18. DOI: [10.1007/s11524-011-9633-y](https://doi.org/10.1007/s11524-011-9633-y).
8. Fernandes SG, Rodrigues AM, Nunes C, Santos O, Gregório MJ, De Sousa RD, et al. Food Insecurity in Older Adults: Results From the Epidemiology of Chronic Diseases Cohort Study 3. *Front Med*. 2018 July 12;5:203. DOI: [10.3389/fmed.2018.00203](https://doi.org/10.3389/fmed.2018.00203).
9. Lee JS, Frongillo Jr EA. Nutritional and health consequences are associated with food insecurity among US elderly persons. *The Journal of Nutrition*. 2001;131(5):1503–9. DOI: [10.1093/jn/131.5.1503](https://doi.org/10.1093/jn/131.5.1503).
10. Statistics Canada. The populations of the Atlantic provinces are aging quickly [Internet]. 2022 [accessed 2025 Sept 19]. Available from: <https://www150.statcan.gc.ca/n1/daily-quotidien/220427/mc-a004-eng.htm>
11. National Seniors Council. Supporting Canadians aging at home: Ensuring quality of life as we age. Gatineau, Quebec: Government of Canada; 2024. [Accessed September 18, 2025]. <https://www.canada.ca/content/dam/esdc-edsc/documents/national-seniors-council/programs/publications-reports/aging-home/NSC-ExpertPanel-AgingAtHome-FinalReport-EN-20240621.pdf>.

- 12.** Carey S, Deng J, Ferrie S. The impact of malnutrition on cognition in older adults: A systematic review. *Clinical Nutrition ESPEN*. 2024;63:177–83. DOI: [10.1016/j.clnesp.2024.06.014](https://doi.org/10.1016/j.clnesp.2024.06.014).
- 13.** Drewnowski A, Evans WJ. Nutrition, physical activity, and quality of life in older adults: summary. *The Journals of Gerontology Series A*. 2001;56(suppl_2):89–94. DOI: [10.1093/gerona/56.suppl_2.89](https://doi.org/10.1093/gerona/56.suppl_2.89).
- 14.** Keller HH. Promoting food intake in older adults living in the community: a review. *Appl Physiol Nutr Metab*. 2007 Dec;32(6):991–1000. DOI: [10.1139/H07-067](https://doi.org/10.1139/H07-067).
- 15.** Bernstein M, Munoz N. Position of the Academy of Nutrition and Dietetics: Food and Nutrition for Older Adults: Promoting Health and Wellness. *Journal of the Academy of Nutrition and Dietetics*. 2012 Aug;112(8):1255–77. DOI: [10.1016/j.jand.2012.06.015](https://doi.org/10.1016/j.jand.2012.06.015).
- 16.** Plastow NA, Atwal A, Gilhooly M. Food activities and identity maintenance among community-living older adults: A grounded theory study. *The American Journal of Occupational Therapy*. 2015;69(6):6906260010p1–10. DOI: [10.5014/ajot.2015.016139](https://doi.org/10.5014/ajot.2015.016139).
- 17.** Rodríguez-Mañas L, Murray R, Glencorse C, Sulo S. Good nutrition across the lifespan is foundational for healthy aging and sustainable development. *Front Nutr*. 2023 Jan 24;9:1113060. DOI: [10.3389/fnut.2022.1113060](https://doi.org/10.3389/fnut.2022.1113060).
- 18.** World Health Organization (WHO). World Report on Ageing and Health [Internet]. Geneva, Switzerland: WHO; 2015. [Accessed September 18, 2025]. <https://www.who.int/publications/i/item/9789241565042>.
- 19.** Nova Scotia Department of Seniors. Shift: Nova Scotia’s Action Plan for an Aging Population. Halifax, Nova Scotia: Province of Nova Scotia; 2017. [Accessed September 18, 2025]. <https://novascotia.ca/shift/shift-action-plan.pdf>
- 20.** Canadian Centre for Policy Alternatives (CCPA). Nova Scotia saw alarming increase in poverty and food insecurity—some of the highest in the country [Internet]. Media Release, CCPA. April 29, 2024 [Accessed September 19, 2025]. <https://www.policyalternatives.ca/news-research/press-release-nova-scotia-saw-alarming-increase-in-poverty-and-food-insecurity-some-of-the-highest-in-the-country>
- 21.** Food Banks Canada. Poverty Report Cards - Nova Scotia [Internet]. Food Banks Canada. 2023. [Accessed January 29, 2024]. <https://foodbankscanada.ca/poverty-index/2023-nova-scotia/>.
- 22.** Chang Y, Hickman H. Food Insecurity and Perceived Diet Quality Among Low-Income Older Americans with Functional Limitations. *Journal of Nutrition Education and Behavior*. 2018 May 1;50(5):476–84. DOI: [10.1016/j.jneb.2017.09.006](https://doi.org/10.1016/j.jneb.2017.09.006).
- 23.** Payette H, Coulombe C, Boutier V, Gray-Donald K. Nutrition risk factors for institutionalization in a free-living functionally dependent elderly population. *Journal of Clinical Epidemiology*. 2000;53(6):579–87. DOI: [10.1016/S0895-4356\(99\)00186-9](https://doi.org/10.1016/S0895-4356(99)00186-9).
- 24.** Aljahdali AA, Na M, Leung CW. Food insecurity and health-related quality of life among a nationally representative sample of older adults: cross-sectional analysis. *BMC Geriatr*. 2024 Feb 1;24(1):126. DOI: [10.1186/s12877-024-04716-9](https://doi.org/10.1186/s12877-024-04716-9).

- 25.** Gundersen C, Ziliak JP. Food Insecurity And Health Outcomes. *Health Affairs*. 2015 Nov;34(11):1830–9. DOI: [10.1377/hlthaff.2015.0645](https://doi.org/10.1377/hlthaff.2015.0645).
- 26.** Kansanga M, Sano Y, Bayor I, Braimah J, Nunbogu A, Luginaah I. Determinants of food insecurity among elderly people: findings from the Canadian Community Health Survey. *Ageing and Society*. 2021 Feb 22;42:1–15. DOI: [10.1017/S0144686X20002081](https://doi.org/10.1017/S0144686X20002081).
- 27.** Afulani P, Herman D, Coleman-Jensen A, Harrison GG. Food Insecurity and Health Outcomes Among Older Adults: The Role of Cost-Related Medication Underuse. *Journal of Nutrition in Gerontology and Geriatrics*. 2015 July 3;34(3):319–42. DOI: [10.1080/21551197.2015.1054575](https://doi.org/10.1080/21551197.2015.1054575).
- 28.** Srinivasan M, Pooler JA. Cost-Related Medication Nonadherence for Older Adults Participating in SNAP, 2013–2015. *Am J Public Health*. 2018 Feb;108(2):224–30. DOI: [10.2105/AJPH.2017.304176](https://doi.org/10.2105/AJPH.2017.304176).
- 29.** Men F, Gundersen C, Urquia ML, Tarasuk V. Food Insecurity Is Associated With Higher Health Care Use And Costs Among Canadian Adults. *Health Affairs*. 2020 Aug 1;39(8):1377–85. DOI: [10.1377/hlthaff.2019.01637](https://doi.org/10.1377/hlthaff.2019.01637).
- 30.** Griffin P, Tabbara M. A fine line: Finding the right seniors’ poverty measure in Canada. Toronto, ON: Maytree; 2023. [Accessed February 8, 2024]. <https://maytree.com/wp-content/uploads/A-fine-line.pdf>
- 31.** Leroux J, Morrison K, Rosenberg M. Prevalence and Predictors of Food Insecurity among Older People in Canada. *IJERPH*. 2018 Nov 9;15(11):2511. DOI: [10.3390/ijerph15112511](https://doi.org/10.3390/ijerph15112511).
- 32.** Moustakas C. Phenomenological Research Methods. SAGE; 1994. 207 p.
- 33.** Moerer-Urdahl T, Creswell JW. Using Transcendental Phenomenology to Explore the “Ripple Effect” in a Leadership Mentoring Program. *International Journal of Qualitative Methods*. 2004 June 1;3(2):19–35. DOI: [10.1177/160940690400300202](https://doi.org/10.1177/160940690400300202)
- 34.** McLeroy KR, Bibeau D, Steckler A, Glanz K. An Ecological Perspective on Health Promotion Programs. *Health Education Quarterly*. 1988 Dec;15(4):351–77. DOI: [10.1177/109019818801500401](https://doi.org/10.1177/109019818801500401)
- 35.** Green R. Accessing Nutritious Food: The Realities of Lone Senior Women in Urban Nova Scotia. [Halifax, NS, CA]: Mount Saint Vincent University; 2008.
- 36.** Green-LaPierre RJ, Williams PL, Glanville NT, Norris D, Hunter HC, Watt CG. Learning from “Knocks in Life”: Food Insecurity among Low-Income Lone Senior Women. *Journal of Aging Research*. 2012; 2012:1–11. <https://doi.org/10.1155/2012/450630>