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QRP

SCIENTIFIC REVIEW

Navigating Diet and Nutrition: An Analysis of Programs Targeting Newcomer Populations[1]

Geneveave Barbo[2], Anissa Jeeroburkhan[3]

Abstract

This integrative review examines the effectiveness of programs promoting healthy eating habits among newcomers in high-income countries. Given the rising incidence of non-communicable diseases (NCDs) such as cardiovascular disease, diabetes mellitus, and cancer, largely influenced by lifestyle choices, this review identifies dietary habits as a crucial, modifiable risk factor. Utilizing a methodological framework that incorporates searches across academic databases, hand-searching of references, and grey literature examination, this review aims to aggregate evidence on community-based programs tailored for adult newcomers without pre-existing medical conditions. Out of 413 articles screened, six met the inclusion criteria, showcasing diverse methodologies and outcomes but uniformly pointing towards the positive impact of nutritional education and community gardening on improving health outcomes. The interventions reviewed varied from educational programs focusing on nutritional knowledge to practical initiatives like community gardening, all aiming to facilitate healthy dietary practices among newcomers. Notably, the review highlights the importance of culturally sensitive approaches, as most effective programs are those that consider the unique cultural backgrounds and socio-economic conditions of the newcomer populations. These programs not only improved participants' dietary habits and nutritional knowledge but also fostered social integration and mental well-being, showcasing the multifactorial benefits of well-designed health promotion interventions. Despite the promising outcomes, the review identifies significant gaps in the literature, notably the lack of detailed program descriptions and outcomes, which hampers the ability to replicate and scale these interventions effectively. Furthermore, while educational content forms the core of most interventions, the pervasive issue of food insecurity among newcomers underscores the need for programs that also address access to nutritious food. In conclusion, this integrative review underscores the critical role of dietary interventions in improving the health outcomes of newcomers, highlighting the need for culturally tailored, comprehensive programs that go

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[2] Ms. Geneveave Barbo is a community health researcher for the Refugee Centre, Montreal, Quebec, as well as a PhD candidate in the College of Nursing at the University of Saskatchewan, Saskatoon, Saskatchewan, Canada.

[3] Ms. Anissa Jeeroburkhan is the Director of Community Health at the Refugee Centre, Montreal, Quebec, Canada.

beyond education to address broader determinants of health, such as food security. Future research should focus on detailed program evaluation and the development of scalable, replicable models that can address the complex health promotion needs of newcomer populations, thereby contributing to the global effort in reducing the burden of NCDs.

Key Words:

Non-communicable diseases, chronic diseases, risk factors, lifestyle, immigrants, refugees

1 Introduction

Non-communicable diseases are a major health problem worldwide. They have been heavily attributed to the global burden of diseases, accounting for millions of deaths and disabilities annually (Ngom et al., 2016). The primary non-communicable disease that causes most deaths worldwide is cardiovascular disease (CVD), followed by diabetes mellitus (DM), and cancer (Ngom et al., 2016). Canada is no exception, with approximately 25% of Canadians affected by hypertension (HTN) and about 90% chance of developing it during one's lifetime (Leung et al., 2019). The Public Health Agency of Canada also indicated that an estimated 2.4 million Canadians (6.8% of the population) were diagnosed with DM in 2011 (Tenkorang, 2017). This percentage is estimated to increase to as close as 50% from 2015 to 2025 (Hosseini et al., 2019). Additionally, about 90 to 95% of Canadians who have diabetes have type 2 diabetes mellitus, "a condition largely influenced by individual lifestyle choices" (Public Health Agency of Canada, 2011: 8). While an estimated two out of five Canadians are at risk of being diagnosed with cancer in their lifetime and about 25% will die from it (Public Health Agency of Canada, 2021).

Non-communicable diseases have been characterized as long-term chronic diseases, resulting from the combination of genetic, physiological, environmental and behavioral factors (World Health Organization, 2023). Nevertheless, accumulating evidence has identified certain factors that have been associated with a greater risk of acquiring the diagnosis of CVD, DM, and/or cancer (Leung et al., 2019; Weisman et al., 2018). These include older age, women, certain ethnic groups, and low socioeconomic status. For instance, previous studies have reported that the prevalence of DM and HTN increases significantly in older age (Leung et al., 2019; Weisman et al., 2018). Women were also found to be more susceptible to HTN (Leung et al., 2019). Additionally, ethnic minority groups have the greatest risk of developing DM, and CVD (Liu et al., 2010; Weisman et al., 2018). With Canada having the highest percentage of foreign-born citizens than of any other G8 country, this is particularly concerning (Houlden, 2018). South Asians, Southeast Asians, East Asians, West Asians, Arabs, Latin Americans, and Blacks respondents were shown to demonstrate a significantly higher prevalence of DM, and HTN than white participants (Leung et al., 2019; Weisman et al., 2018). South Asians living in Canada also have a greater incidence and earlier onset of CVD and DM despite lower body mass index (Liu et al., 2010).

Besides ethnicity, an individuals' socioeconomic status also contributes to the risk of acquiring DM, CVD, and/or cancer. According to a longitudinal National Population Health Survey, people with low-to-middle income are more likely to develop DM (Hosseini et al., 2019). Individuals in the low-income group were 77% more likely to develop type 2

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diabetes mellitus than those in the highest-income group (Houlden, 2018). Indeed, this has also been revealed in the Canadian Community Health Survey where the prevalence of type 2 diabetes mellitus for the lowest income group was 4.14 times greater than that of the highest income group (Houlden, 2018). Individuals with low-income also experience the worst prognosis as they are more likely to acquire myocardial infarction, stroke, all-cause mortality, avoidable hospitalization, amputations, and end-stage renal disease (Weisman et al., 2018).

Newcomers, including immigrants, refugees, and asylum seekers, face significant challenges related to non-communicable diseases (Tan et al., 2021). They are at heightened risk for non-communicable diseases due to a blend of genetic predispositions, lifestyle choices, and socio-economic factors, all influenced by the stressors of migration and acculturation (Tan et al., 2021). This demographic's susceptibility is further compounded by barriers to healthcare access, and the adoption of healthy behaviors (Anderson et al., 2022; Kilbride, 2014; Rousseau & Frounfelker, 2019). Given this context, there is an urgent need for comprehensive research focused on identifying and mitigating preventable lifestyle-related risk factors for chronic diseases among newcomers.

Such research was a key component of a broader project aimed at examining preventable lifestyle-related risk factors among newcomers in Montreal, Quebec. The project's objective was to develop a community-driven program that is culturally adapted to encourage healthy living practices. The results, which will be detailed in a forthcoming publication, identified dietary and eating habits as the primary preventable lifestyle-related risk factor. Consequently, this integrative review contributes to a larger initiative by identifying and aggregating existing and proposed programs designed to improve dietary and eating habits among newcomers.

2 Integrative Review Methodology

Using the framework detailed by Coughlan et al. (2013), Toronto and Remington (2020), and Whittemore and Knafl (2005), this review was conducted according to the following search strategy: (a) running a search in academic databases: CINAHL, OVID MEDLINE, and Web of Science (see Table 1); (b) hand-searching reference lists of all included full-text articles; and (c) seeking out grey literature in pertinent reports and organizational websites (e.g., Health Canada; Cochrane Library; and Immigrant & Refugee Services Association). Articles were included if they were published in English or French and included healthy eating community-based programs tailored specifically at adult newcomers (i.e., immigrants, refugees, asylum seekers, and international students) who did not have any pre-existing medical conditions and resided in high-income countries. However, programs designed for newcomers who are considered elderly, pregnant, children, and infants were excluded (as well as family interventions since these populations were not targeted in the larger project). Additionally, articles focusing on the general racialized population (i.e., not specific to newcomers) were also excluded. Nevertheless, to ensure the inclusion of a wide breadth of literature, there were no restrictions applied on the publication year and type.

Table 1: Academic Databases' Search Strategy

	Key concepts	Search terms
1	Newcomers	newcomer* OR migrant OR immigrant* OR refugee* OR asylum seeker* OR forced displacement OR "refugee identity" OR "refugee background"
2	Dietary habits	dietary habit* OR diet OR nutrition OR food OR nourishment or food intake OR eating OR eating behaviour
3	Community health promotion programs	community health promotion program* OR culturally based programs OR community health promotion initiative*

Note. Search terms 4 = 1 AND 2 AND 3; search terms 5 = Filter: English and French.

Regarding data selection, titles and abstracts of identified articles were screened based on the inclusion criteria. Once potentially eligible articles were identified, their full texts were retrieved and reviewed in detail. Reasons for exclusion were noted and the selection process was reported in PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) flow chart (Page et al., 2021). All eligible articles were examined, and relevant data were gathered from the articles. Collected data were narratively analysed and then presented in tabular and narrative form.

3 Integrative Review Findings

After screening 413 articles from academic databases and grey literature, a total of six articles met the eligibility criteria of this review (for the detailed data selection process refer to Figure 1). Among the included articles, two applied quantitative methodology, one qualitative, and two mixed methods; one article was also a protocol paper aiming to use a mixed methods approach. Furthermore, three out of six studies focused on newcomers who resettled in the United States of America (USA), one was related to Canada, one to Switzerland, and one to Spain. Sample populations included newcomers from Bhutan, Burma (or Myanmar), Cambodia, Congo, Former Yugoslavia (Bosnia-Herzegovina or Kosovo), the Philippines, and Syria as well as Spanish-speaking immigrants. Table 2 presents more detail on each of the included articles.

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Figure 1. PRISMA 2020 Flow Diagram

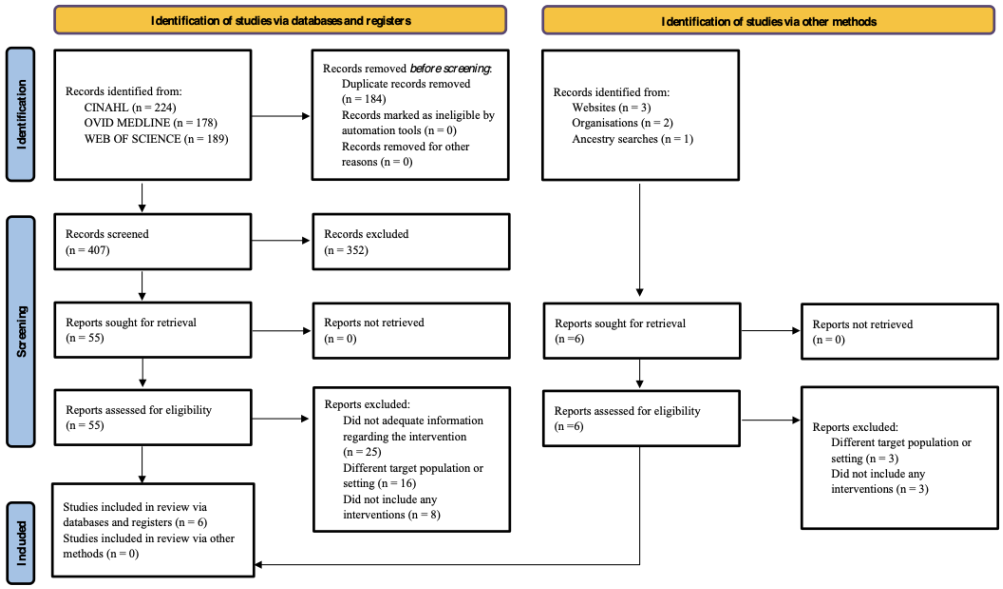

Table 2. Summary of Included Studies

	Objectives	Intervention	Outcomes
Berkson et al. (2018) Quantitative research USA (Minnesota) Adult Cambodian who are survivors of torture (n =126)	Provide health promotion program focused on nutrition, physical activity, stress management, sleep hygiene, and health care practitioner-patient communication	• Session 1: Introduction of the health promotion program and building rapport with participants • Session 2: Basic principles of nutrition and disease prevention while considering traditional Cambodian foods and diet • Session 3: Guidelines on physical activity, health benefits, and examples of low impact exercises • Session 4: Stress and depression normalization and management as well as basic guidelines for sleep hygiene • Session 5: Preparation for doctors' visit	• Reduction in depressive symptoms from 52.8% to 44.0% • Self-reported health status "poor" declined from 20.0% to 7.2% • 80.8% of participants expressed exercising at least 120 minutes per week post-intervention

	Objectives	Intervention	Outcomes
Hartwig and Mason (2016) Mixed methods research USA (Minnesota) Adult refugee and immigrant populations from Karen, Bhutanese, Lisu, and Hmong ethnic backgrounds. Countries of origin include Bhutan, Burma (or Myanmar), and Thailand (n = 214)	Evaluate refugee gardening project hosted by churches	Due to limited community garden plots, a partnership was established between Karen Organization of Minnesota, the Bhutanese Community of Minnesota, CAPI1, and Minnesota churches to establish community gardens for immigrant and refugee populations in the area. This study is based on the 2014 gardening season.	• Increased vegetable intake • Participants expressed appreciation for the fresh vegetables, physical activity, mental health benefits, and the opportunity of being outside as a result of the community gardens
Henderson and Slater (2019) Qualitative research Canada (Winnipeg, Manitoba) Adult newcomers from Burma, Congo, Philippines, and Syria who self-identify as having a predominant role in household food work (n = 22)	Improve knowledge and skills of newcomers to eat healthily in the Canadian context; assist newcomers find a healthy balance between familiar foods and 'Canadian' foods; and encourage traditional food practices	Focused on healthy preparation methods, food safety, whole foods vs packaged foods, label/package reading, healthy school lunch ideas, sugar, plant foods and a grocery store tour • Module 1: Course introduction & food safety • Module 2: Healthy eating • Module 3: Plant foods • Module 4: Packaged food and label reading • Module 5: Sugar • Module 6: Healthy eating on a budget • Module 7: Grocery store tour • Module 8: Celebration day and nutrition trivia	Four themes emerged from the evaluation of the program, demonstrating changes in participants' attitudes, knowledge, and behaviours; these include: • Healthy adaptation to the Canadian foodscape • Enhanced nutrition knowledge and behaviours • Marginal improvements to food security for some participants • Additional benefits such as cross-cultural understanding and enhanced social networks

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	Objectives	Intervention	Outcomes
Khare et al. (2014) Quantitative research USA (Illinois) Spanish-speaking adult immigrants (n = 180)	Address the disproportionate cardiovascular disease risks of the target population	Focused on healthy eating and physical activity. Curriculum of the enhanced intervention is as follows: • Orientation week: Research study overview; curriculum overview - Identifying participants' health needs and concerns (consciousness raising; self-re-evaluation) • Week 1: Illinois WISEWOMAN program nutrition and physical activity philosophies - Determining global and personal health benefits of eating healthy and being physically active (consciousness raising; dramatic relief; environmental re-evaluation; self-re-evaluation) • Week 2: The Food Guide Pyramid - Identifying small ways to improve eating and physical activity behaviours (consciousness raising; counter conditioning; increasing; self-efficacy; social liberation) • Week 3: The Physical Activity Pyramid - Identifying and problem-solving barriers to eating healthy and being physically active (increasing self-efficacy; social liberation) • Week 4: Food labels; dietary fat - Setting good goals (self-liberation; stimulus control) • Week 5: Physical activity log; step counter - Self-monitoring and setting rewards (reinforcement management; self-liberation; stimulus control) • Week 6: Food log; portions vs. servings - Self-monitoring (self-liberation; stimulus control) • Week 7: Shopping strategies; fiber - Recognizing environmental constraints and supports and creating a facilitative environment (consciousness raising; counter conditioning; reciprocal determinism; self-liberation; social liberation; stimulus control) • Week 8: Strength exercises - Identifying, recruiting, and rewarding helpers (helping relationships) • Week 9: Healthy eating away from home - Identifying and planning ahead for situations that trigger unhealthy eating or sedentary behaviors (counter conditioning; self-liberation; social liberation)	• Participants of the enhanced intervention demonstrated positive changes in diet and physical activity after participating in the intervention • Increased fiber intake and improved BMI levels as well as considerable improvement in fat and fiber summary scale scores were also noted at 1-year post intervention

	Objectives	Intervention	Outcomes
		• Week 10: Stretching and balance exercises - Recognizing the effect of stress on the body and healthy choices and managing stress (consciousness raising; counter conditioning; dramatic relief; emotional coping responses; self-liberation; social liberation) • Week 11: Popular diets; healthy weight loss - Recognizing the effects of negative thoughts and turning negative thoughts into positive thoughts • Week 12: Healthy cooking strategies - Staying on track with healthy eating and physical activity behaviors (relapse prevention) (Khare et al., 2009: 413)	
Kruseman et al. (2003) Mixed methods research Switzerland (Geneva) Adult refugees from the Former Yugoslavia (Bosnia-Herzegovina or Kosovo) (n = 32)	Reduce oil use/content of traditional dishes consumed by the target population	• Workshop 1: - Preparation of the participants' dish of choice while being observed by facilitators - Oil bottles were weighed in the beginning and end of the cooking session - Group tasting session was then held after the preparation of meals. Topics of discussion include sensorial analysis, personal beliefs about dishes, health problems associated with excess fat intake • Workshop 2: - Group discussions were held based on barriers and benefits of cooking with less oil, and methods in reducing oil use - Examples and demonstrations on the techniques to reduce oil use while cooking was shown • Workshop 3: - Participants were asked to prepare the same dish they have prepared in the first workshop and encouraged the techniques they have learned in the second workshop - A group tasting session was again held along with a discussion about the differences between the taste of the meals prepared in Workshop 1 compared to Workshop 3. - The amount of oil used by each participant in Workshop 1 and 3 was also shown to the participants.	• On average, participants reduced their oil use per recipe by 58% • Reduction of oil use varied from 9 to 93% among each participants • Majority of participants reported their skepticism about changing their cooking habits in the beginning of the program • Reported benefits of the intervention include weight loss, lowering of blood pressure, and monetary savings

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	Objectives	Intervention	Outcomes
Mohamed-Bibi et al. (2022) Protocol paper for a mixed method research Spain (Barcelona) Pakistani women (n = 137)	Evaluate the efficacy of the food education program	• Session 1: Most common health problems of Pakistani population • Session 2: Food myths and beliefs • Session 3: Basics of healthy diet • Session 4: Strengths and weaknesses of traditional diet • Session 5: Small changes to eat better • Session 6: Small changes to eat better continuation • Session 7: Small changes to eat better continuation • Session 8: Weekly food purchase planning • Session 9: Planning of a balanced menu • Session 10: Photovoice on healthy dish or snack	Not available at this time

3.1. Intervention Descriptions

The majority of the interventions evaluated in the included articles were composed of teaching curricula aimed to educate newcomers on healthy eating habits except for Hartwig and Mason (2016) who solely focused on examining community gardens. In this study, community gardens established in churches in Minnesota, USA, were evaluated for their health benefits to Karen, Bhutanese, Lisu, and Hmong newcomers during the 2014 gardening season (Hartwig & Mason, 2016). Orientation and training were provided to the church staff and community members (Hartwig & Mason, 2016); however, the details about these were not shared in the article.

Comparatively, the other five articles primarily focused on providing educational content to newcomers. Two articles out of the five (Berkson et al., 2018; Khare et al., 2014) relied on passive learning of nutritional education, where the facilitators shared teaching materials through verbal lectures and the participants listened and passively absorbed the knowledge. Whereas the three remaining studies incorporated practical activities within their educational sessions (e.g., creating weekly menus, interpreting labels of nutritional products, and cooking) (Henderson & Slater, 2019; Kruseman et al., 2003; Mohamed-Bibi et al., 2022).

Khare et al. (2014) focused their 12-week curriculum on healthy eating and physical activity, specifically covering the following topics: Food Guide Pyramid; food labels; dietary fat; food log; food portions and servings; shopping strategies; fiber; healthy eating away from home; popular diets; healthy weight loss; healthy cooking strategies; Physical Activity Pyramid; physical activity log; step counter; strength exercises; stretching; and balance exercises, details of which can be accessed through Khare et al. (2009). Berkson et al. (2018) provided five sessions surrounding the topics of nutrition, physical activity, stress management, sleep hygiene, and practitioner-patient communication.

As for the interactive programs, all three studies focused entirely on healthy eating habits. Mohamed-Bibi et al. (2022) described a mixed method protocol that encompasses ten theoretical-practical sessions that emphasized on balanced diet as well as Pakistani culture and linguistic considerations. An example of this is the incorporation of photovoice in which the participants will be encouraged to bring photos of healthy dishes and snacks

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in Pakistani cuisine (Mohamed-Bibi et al., 2022). Group discussions about the meaning of such foods in their culture will then be conducted (Mohamed-Bibi et al., 2022). In comparison, Henderson and Slater (2019) described the integration of cooking and providing nutritional information within their program. This study took place in a kitchen where participants prepared healthy Canadian meals while alternative cooking methods, ingredients, and recipes were explained (Henderson & Slater, 2019). Similarly, the study presented by Kruseman et al. (2003) was also held in a fully equipped kitchen, with all the ingredients available to the participants, in conjunction with educational materials. This program, however, specifically focused on the reduction of oil use by the participants when preparing their traditional dishes (Kruseman et al., 2003). At the same time as participants were cooking the dish of their choice, the facilitators (i.e., experienced dietician, trained cook, and dietician trainee) were explaining the benefits of reducing oil intake and offered technical suggestions on achieving this goal (Kruseman et al., 2003).

3.2. Intervention Outcomes

All included studies except for Mohamed-Bibi et al. (2022), as this is a protocol paper, shared their program outcomes. These studies demonstrate a consistent trend towards positive health outcomes resulting from nutritional interventions and community gardening initiatives. Berkson et al. (2018) observed significant improvements in health status, though they did not specify the results of nutritional outcomes. In contrast, Hartwig and Mason (2016) explicitly linked participation in community gardens to increased vegetable intake and highlighted additional benefits such as enhanced mental health, physical activity, and social opportunities. This theme of improved dietary habits is further supported by Henderson and Slater (2019), where participants identified changes in attitudes, knowledge, and behaviors towards food, noting healthy adaptations, increased food security, and benefits extending to social networks and cross-cultural understanding. Moreover, participants in Khare et al. (2014) demonstrated increased fiber intake, improved BMI levels, and better fat and fiber summary scale scores post-intervention. Similarly, Kruseman et al. (2003) detailed a significant reduction in oil use among participants, with varied individual results but overall positive health impacts, including weight loss and reduced blood pressure. Across these studies, the narrative points to the effectiveness of such programs in not only enhancing nutritional knowledge and intake but also fostering broader social and health benefits.

4 Discussion

This review identified effective programs for promoting healthy diet and eating habits for newcomers. Educational interventions and community gardens emerged as impactful initiatives, improving dietary habits, increasing vegetable intake, and providing social and health benefits. These findings stress the importance of culturally sensitive and practical approaches to health promotion among newcomer populations. Furthermore, most of the interventions identified focused on providing educational content to newcomers. Though crucial, education does not address the pressing issue of inaccessibility to safe and nutritious food (Chevrier et al., 2023; Davison & Gondara, 2021; Jefferies et al., 2022). Programs must also target problems relating to food insecurity, that is the “inadequate access to safe and nutritious food to meet dietary needs and food preferences for an active and healthy life” (Davison & Gondara, 2021: 110).

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According to the recent study conducted by Bhawra et al. (2021) based on a national cohort study participants from Toronto, Montreal, Vancouver, Edmonton, and Halifax, Canada, nearly 30% of survey participants resided in households experiencing food insecurity, with 19% facing moderate levels of food insecurity and 10% encountering severe conditions. Individuals identifying as Black or Indigenous were at a higher risk of being in moderate to severe food-insecure situations than those of mixed or other ethnic backgrounds (Bhawra et al., 2021). Participants who reported extreme difficulty in managing their finances were more prone to moderate and severe levels of food insecurity (Bhawra et al., 2021). Additionally, those categorized as having a "normal" or overweight status were less frequently found in moderate food-insecure conditions compared to individuals dealing with obesity (Bhawra et al., 2021). Poor health, diet quality, and mental health conditions were more commonly linked to severe food insecurity, especially when contrasted with those reporting very good or excellent well-being in these areas (Bhawra et al., 2021).

It is therefore evident that dietary habits are crucial in impacting preventable lifestyle-related risk factors and that they offer considerable opportunities for intervention. Unlike stress levels or cultural attitudes towards smoking and alcohol, which can be more challenging to alter, eating habits are often more amenable to change through targeted interventions. Educational initiatives, community-based programs, and personalized dietary plans can be effectively implemented to promote healthier eating habits. Additionally, improving diet and eating habits can lead to broader health benefits. A well-balanced diet enhances overall energy levels, mental health, and quality of life, contributing to a more holistic approach to health.

While physical activity, smoking, alcohol consumption, and stress levels are undoubtedly important in the context of chronic illness prevention, addressing diet and eating habits presents a more direct and actionable pathway for reducing chronic disease risks. Focusing on this area can yield immediate and long-lasting benefits for the health of the participants, making it a priority for program implementation and intervention.

4.1. Recommendations

Based on the relevant literature, a culturally tailored program for newcomers targeting healthy eating and food insecurity is critical in reducing newcomers' preventable lifestyle risk factors. Since all six articles identified in the integrative review demonstrated promising results, these programs could be adapted and improved to meet the health needs of newcomers in Montreal, Quebec. For instance, a collaboration with local community organizations can be established to acquire access to community garden lots where newcomers could be allowed to plant and harvest vegetables and fruits, and a kitchen where educational workshops can be held while cooking healthy meals. These workshops would consist of the adapted curriculum from the five included articles in the integrative review – i.e., Berkson et al. (2018), Henderson and Slater (2019), Khare et al. (2014), Kruseman et al. (2003), and Mohamed-Bibi et al. (2022) – with added topics on the link between a balanced diet and eating habits.

Also, long-term health-related endpoints, such as cardiovascular morbidity and cancer-related outcomes, must be incorporated within these programs to ensure comprehensiveness and generalizability, particularly if they were to be implemented on a national level. In so doing, programs may have a broader impact to produce significant

health benefits over time and the potential to be sustainable. However, such initiatives would certainly require substantial financial support and resources.

4.2. Strengths and Limitations

This review, however, emphasized a pervasive issue in the literature concerning the scarcity of detailed interventions on diet and eating habits tailored to adult newcomers – impeding the ability to learn from and replicate effective health promotion strategies. This gap highlights the necessity for funding agencies to mandate comprehensive descriptions of interventions, aiming to not only facilitate knowledge transfer and innovation in this field but also support the development of evidence-based programs that can be replicated and scaled to benefit a wider segment of the population. Furthermore, although the integrative review was limited by being conducted by a single reviewer, raising concerns about potential bias, it importantly signals the urgent need for systematic reviews and interventions tailored to the health promotion needs of newcomers, paving the way for future research directions with increased rigor and inclusivity.

5 Conclusion

This integrative review explored the process and outcome of various programs aimed at promoting healthy diet and eating habits among newcomers, particularly in high-income countries like Canada. With non-communicable diseases posing significant health risks globally, the focus on preventative lifestyle changes, such as diet and nutrition, is critical. The findings from the review demonstrate a positive trend towards improving health outcomes through nutritional interventions and community gardening projects, highlighting the importance of culturally sensitive and practical approaches in health promotion strategies for newcomers. This review paves the way for future research and program development, aiming to enhance the health outcomes of newcomers through focused, practical, and inclusive health promotion strategies.

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