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Systematic Review

Food insecurity among older adults in the United States: A systematic review through the gerontological public health framework

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Highlights/Key Messages

- Identifies structural and sociocultural determinants of food insecurity.
- Associates food insecurity with chronic disease and poor mental health.
- Underlines barriers to food access and healthcare among older adults.
- Demonstrates nutrition, community, and healthcare intervention strategies.

Background
Food insecurity is a concerning public health problem linked to poor physical, psychological, and social health outcomes among older adults in the United States. However, evidence has not been fully synthesized through the Gerontological Public Health Framework, which highlights the interplay of biological, social, economic, environmental, and healthcare determinants of healthy aging.

Objective
To systematically synthesize evidence on the structural and sociocultural determinants, health outcomes, and intervention strategies about food insecurity among older adults in the United States, using the Gerontological Public Health Framework.

Methods
The review followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 guidelines. Searches were conducted in CINAHL Ultimate, PubMed, Scopus, Web of Science, PsycINFO, and Google Scholar for peer-reviewed studies published between 2010 and 2025. Quantitative, qualitative, and mixed-methods studies meeting the eligibility criteria were included. The Joanna Briggs Institute critical appraisal instruments were used to evaluate study quality, while thematic analysis was used to synthesize 19 studies.

Results
Pooled evidence identified financial hardship, social isolation, transportation barriers, chronic disease burden, and limited access to healthcare as key determinants of food insecurity among older adults. Food insecurity was associated with poorer nutritional status, diabetes, obesity, hospitalization, depression, anxiety, and lower quality of life. Sociocultural factors, including community support networks and traditional dietary habits, shaped food security experiences. Healthcare-based food interventions, community-based nutrition services, and nutrition assistance programs were reported as effective strategies in alleviating food insecurity and improving health.

Conclusions
Food insecurity is a complex public health problem influenced by interrelated structural, social, and sociocultural factors. The Gerontological Public Health Framework provides a useful lens for understanding these factors and informing integrated, culturally responsive interventions that promote food security, healthy aging, and reduced health disparities among older adults.

Keywords: food insecurity, older adults, gerontological public health framework, chronic disease, mental health, United States

Introduction

Food insecurity is recognized as a public health challenge in the United States and as an important social determinant of health. The United States Department of Agriculture (USDA, 2022) states that food insecurity is the lack of or inconsistent access to adequate, nutritious, safe, and socially acceptable food for individuals or families to maintain an active and healthy life. Food insecurity includes anxiety about food availability and uncertainty about future access to food. It requires individuals to rely on coping strategies such as reducing meal size, skipping meals, or prioritizing other needs over food purchases (Bublitz et al., 2019; Carvajal-Aldaz et al., 2022).

Even with overall economic growth and ongoing federal nutrition assistance programs, food insecurity continues to affect a significant number of the U.S. population. Recent national estimates indicate that approximately 13.7% of U.S. households experience food insecurity (Rabbitt et al., 2025). Rising food prices, inflation, transportation costs, and climate-related disturbances have further worsened the vulnerability of economically disadvantaged groups (Osei-Owusu et al., 2024). Among these groups, older adults represent a particularly vulnerable population because of factors like fixed incomes, chronic health conditions, failing physical function, limited mobility, and social isolation (Reid, 2021).

Food insecurity among adults aged 60 years and above has been associated with various adverse health outcomes, including poor nutritional status, obesity, diabetes, depression, anxiety, and reduced quality of life (Carlson et al., 2023). These outcomes highlight that food insecurity in later life extends beyond a mere deficit in food volume to include broader issues impacting healthy aging.

This review aimed to synthesize the structural and sociocultural determinants, health outcomes, and intervention strategies related to older adults' food insecurity through the Gerontological Public Health Framework (GPHF). The GPHF is an interdisciplinary model that analyzes how biological aging interacts with social, economic, environmental, and healthcare factors to influence health outcomes (American Geriatrics Society, 2024). It centers on healthy aging, equity, and social determinants, and focuses specifically on economic stability, healthcare access, the built environment, and community support (Administration for Community Living, 2024). In line with this model, ongoing research demonstrates that nutritional risk in later life is not random. It is associated with compounding vulnerabilities like poverty, social isolation, chronic illness, and systemic healthcare inequities (Perone et al., 2025; WHO, 2023). This means that older adults' food insecurity is often worsened by the combined effects of fixed income, limited mobility, and high out-of-pocket medical costs. Exploring these determinants through the GPHF is essential for designing evidence-based, culturally responsive interventions needed to promote health equity in later life.

While research has examined general food insecurity, existing studies often overlook the broader public health dimensions of older adults' food insecurity, particularly regarding how structural and sociocultural factors form their experiences and health outcomes. Existing reviews often focus on nutritional consequences without integrating broader gerontological public health perspectives. To address this gap, this systematic review uses the GPHF to synthesize United States evidence on the sociocultural determinants, physical and mental health outcomes, and evidence-based interventions associated with older adults' food insecurity.

Methods

Study Design

This systematic review was conducted and reported in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 guidelines (Page et al., 2021). The review synthesizes evidence on food insecurity among older adults in the United States using the Gerontological Public Health Framework to organize and interpret the findings.

Review Question

The following review question guided the literature search: What do the existing studies report about the structural and sociocultural determinants, health outcomes, and intervention strategies related to food insecurity among older adults in the United States when interpreted through the Gerontological Public Health Framework?

Literature Search Strategy

A comprehensive literature search was conducted utilizing the following electronic databases: CINAHL Ultimate, PubMed, PsycINFO, Scopus, Web of Science, and Google Scholar. Search terms were developed through preliminary scoping of the literature and combined using Boolean operators. Keywords included food insecurity, food security, older adults, elderly, aging, seniors, nutrition disparities, food access, chronic disease, mental health, health outcomes, and United States. Filters applied were English language and publication dates from January 2010 to December 2025. Where database searches yielded many results, targeted modifiers such as a specific age range or geographic location were included to improve specificity. For reproducibility, an example of the PubMed search strategy is provided: ("food insecurity" OR "food security") AND ("older adults" OR "elderly" OR "seniors") AND ("health outcomes") AND ("United States" OR "USA").

Eligibility Criteria

Articles were eligible if they investigated adults aged 60 years or older in the United States and used quantitative, qualitative, or mixed-methods designs. Eligible studies also examined food insecurity, food access, or related social determinants and reported associated physical health, mental health, healthcare access, or intervention outcomes. Studies were excluded if they focused exclusively on children or younger adult populations or examined populations outside the United States without specific U.S. analyses. Editorials, commentaries, conference abstracts, dissertations, and other non-peer-reviewed publications were not included. Further excluded were those that did not report food insecurity or its associated health or behavioral outcomes.

Study Selection

Literature selection followed the PRISMA 2020 guidelines. Following database searching, duplicate reports were removed before title and abstract screening. A total of 266 records were screened, of which 247 full-text articles were assessed for eligibility. After applying the inclusion and exclusion criteria, 19 studies were retained for the final review (Figure 1).

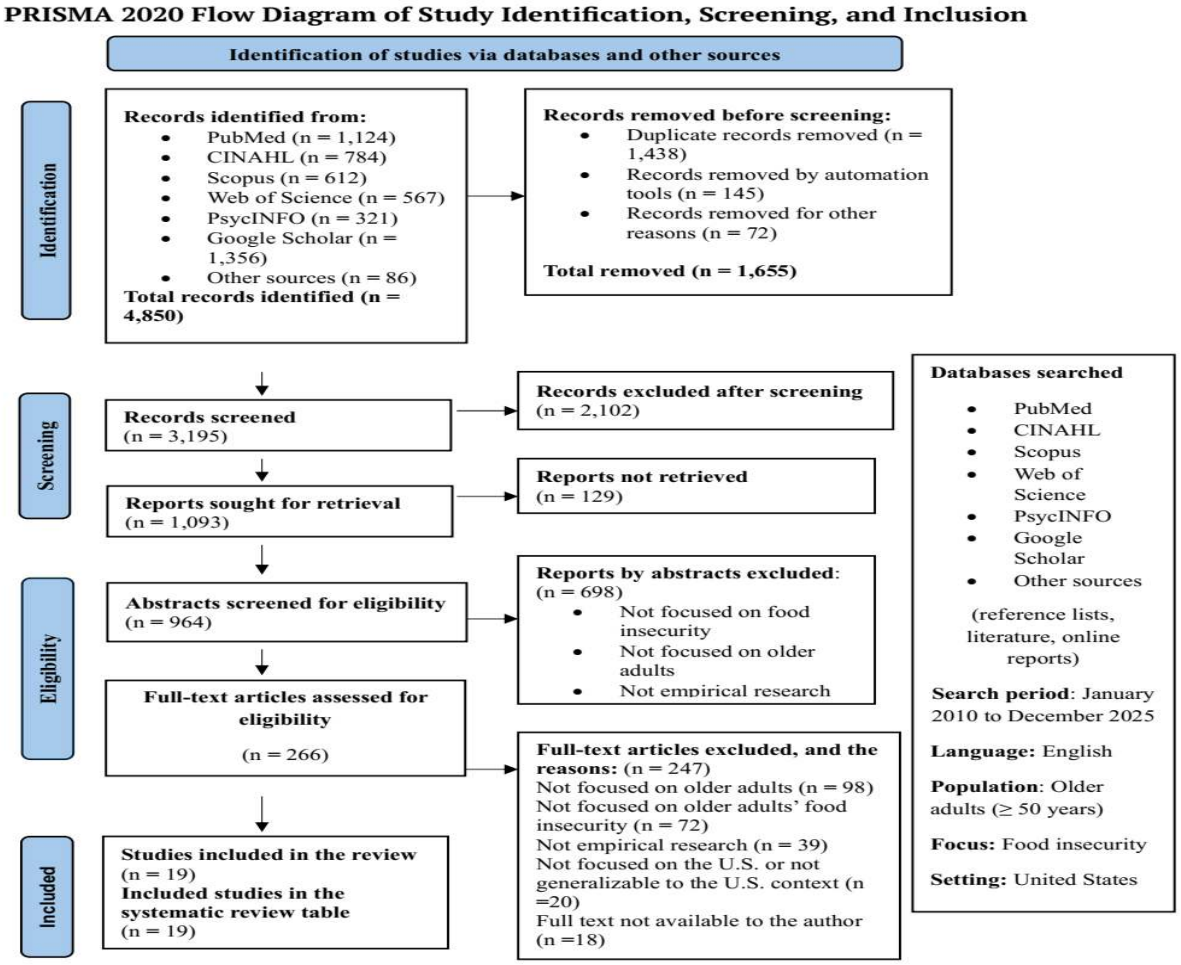


Figure 1. PRISMA 2020 flow diagram adapted from Page, McKenzie et al. 2021

Data Extraction and Quality Assessment

A standardized data extraction form was used to collect information from each included study, including authors, publication year, study design, population characteristics, methodology, main findings, and relevance to the review question.

Methodological quality was evaluated using the Joanna Briggs Institute (JBI) Critical Appraisal Checklists, tailored to each study design (Hilton, 2024). Overall, 19 studies were included, with 17 rated as high quality and 2 appraised as moderate methodological quality (Table 1). Many of the studies used cross-sectional designs and relied on self-reported measures of food insecurity and health outcomes. Furthermore, geographic sampling restrictions limit the broader generalizability of the included studies. Even with these limitations, all studies met the minimum methodological quality required for inclusion in the review.

Data Synthesis

Due to considerable heterogeneity in study designs, participant demographics, and outcome measures across the included studies, statistical pooling and meta-analysis were not feasible. Therefore, data were synthesized narratively. Evidence was organized into four domains and interpreted through the lens of the Gerontological Public Health Framework. These domains are: (1) structural and sociocultural determinants of food insecurity; (2) chronic disease outcomes; (3) mental health outcomes; and (4) intervention and policy strategies addressing food insecurity and its consequences. This approach enabled the identification of consistent patterns, areas of agreement across studies, and evidence gaps.

Table 1. Methodological Quality Assessment (JBI)

Authors	Study Design	JBI Critical Appraisal Tool Used	Overall Methodological Quality
Bergmans et al. (2019)	Cohort	JBI cohort checklist	High
Brady et al. (2021)	Analytical cross-sectional	JBI cross-sectional checklist	High
Brady et al. (2023)	Qualitative interviews	JBI qualitative checklist	High
Carlson et al. (2023)	Analytical cross-sectional	JBI cross-sectional checklist	High
Choi et al. (2025)	Analytical cross-sectional	JBI cross-sectional checklist	High
Dhakal et al. (2025)	Longitudinal observational (older Americans)	JBI cohort checklist	High
Goldberg & Mawn (2014)	Cross-sectional	JBI cross-sectional checklist	High
Heflin et al. (2022)	Analytical cross-sectional (survey analysis)	JBI cross-sectional checklist	High
Inoue et al. (2024)	Cross-sectional	JBI cross-sectional checklist	High
Johnson & Walsh (2022)	Observational cohort/ retrospective evaluation	JBI cohort checklist	Moderate
Kihlstrom et al. (2018)	Cross-sectional	JBI cross-sectional checklist	High
Leddy et al. (2020)	Qualitative	JBI qualitative checklist	High
Leung et al. (2020)	Cross-sectional	JBI cross-sectional checklist	High
Leung et al. (2024)	Repeated cross-sectional/longitudinal trend analysis (Panel Study of Income Dynamics)	JBI cohort checklist	High
Marshall et al. (2021)	Longitudinal cohort (Health and Retirement Study)	JBI cohort checklist	High
Oldewage-Theron et al. (2018)	Cross-sectional community survey	JBI analytical cross-sectional checklist	Moderate
Pak & Kim (2019)	Longitudinal/observational study using the Health and Retirement Study	JBI cohort checklist	High
Vaccaro & Huffman (2017)	Cross-sectional epidemiological analysis	JBI cross-sectional checklist	High
Wang et al. (2025)	Cross-sectional (NHANES 2017-2020)	JBI cross-sectional checklist	High

Note: Joanna Briggs Institute (JBI) Critical Appraisal Checklist adapted from Hilton (2024). JBI critical appraisal checklist for systematic reviews and research syntheses (product review).

Results

Characteristics of Included Studies

Table 2 shows the 19 studies that met the inclusion criteria and were included in the final synthesis. Much of the evidence relied on analytical cross-sectional designs (n = 12), while five employed longitudinal or cohort designs, and two were qualitative designs. Quality appraisal using the JBI instruments demonstrated robust methodological rigor across the studies. Only two received a moderate quality rating, while the rest were rated high.

The data were primarily derived from large national datasets such as the Health and Retirement Study and the National Health and Nutrition Examination Survey (NHANES), along with smaller regional or community-dwelling samples of older adults.

Eight studies examined physical health outcomes, focusing on chronic diseases; seven investigated the structural and sociocultural determinants of older adults' food insecurity; and three documented related mental health implications. Three studies also assessed food assistance, policy, or community interventions. Because numerous studies addressed more than one domain, the classifications were not mutually exclusive.

Table 2. Articles on food insecurity meeting the eligibility criteria for systematic review

Authors	Year	Title	Study Design	Population	Main Findings	Relevance to the Review Question
Bergmans et al.	2019	Food Insecurity and Geriatric Hospitalization	Cross-sectional study	Community-dwelling U.S older adults	Food insecurity was significantly associated with increased hospitalization among older adults, suggesting poorer overall health and more use of healthcare.	Demonstrates that food insecurity is associated with adverse health outcomes and increased healthcare utilization among older adults
Brady et al.	2021	Vulnerability and Food Insecurity among Adults Aged 50+	Mixed-methods analysis	Adults aged 50 years and older	Political and economic vulnerability contributed significantly to food insecurity in later life.	Highlights social determinants associated with food insecurity among older adults.
Brady et al.	2023	Perceptions of the Right to Food	Qualitative interviews	Adults aged 60 years and older	Perceptions about food as a human right varied across participants.	Explores cultural and social values surrounding food security.
Carlson et al.	2023	The Relationship of Food Insecurity to Nutritional Risk in Independent Living Older Adults	Cross-sectional study	Independent-living older adults in the United States	Older adults experiencing food insecurity had significantly higher nutritional risk, highlighting the relationship between inadequate food access and poor nutritional status	Provides evidence that food insecurity contributes to nutritional vulnerability among independent-living older adults

Authors	Year	Title	Study Design	Population	Main Findings	Relevance to the Review Question
Choi et al.	2025	Food Insecurity and Depression Among Older Adults: The Mediating Role of Health Literacy and Perceived Health Status	Quantitative cross-sectional study	Older adults	Food insecurity was directly associated with greater depressive symptoms among older adults. Health literacy and perceived health status significantly mediated the relationship between food insecurity and depression	Highlights the mental health effects of food insecurity and the mediating roles of health literacy and perceived health status.
Dhakal et al.	2025	Food Insecurity, Food Assistance, and Physical and Cognitive Functioning among Older Americans	Observational study (secondary analysis of nationally representative data)	Older Americans	Food insecurity was associated with poorer physical and cognitive functioning, while food assistance programs partially reduced these adverse outcomes	Shows the relationship between food insecurity, functional health, and the protective role of food assistance programs among older adults
Goldberg & Mawn	2014	Predictors of Food Insecurity Among Older Adults	Cross-sectional survey	Older adults in the United States	Low income, poor health, and minority status predicted food insecurity.	Identifies major predictors of food insecurity among older adults.
Heflin et al .	2022	Hypertension, Diabetes, and Medication Adherence in the SNAP Population	Survey analysis of SNAP users	SNAP-eligible older adults in the United States	Medication adherence for chronic illness was lower among food-insecure older adults.	Links food insecurity with poor nutrition, medication nonadherence, and chronic disease.
Inoue et al.	2024	Prevalence and Correlates of Food Insecurity	Cross-sectional study	National sample of older adults	Food insecurity was strongly associated with income and chronic illness.	Provides updated evidence on food insecurity trends among older adults in the United States.
Johnson & Walsh	2022	Food Assistance Programs and Reduced Hospitalizations for Older Adults with Diabetes	Quantitative observational study	Older adults with diabetes in the United States	Participation in food assistance programs was associated with reduced hospitalization rates and improved disease management.	Highlights the importance of food assistance programs in improving outcomes among food-insecure older adults.
Kihlström et al.	2018	Food Insecurity and Health-Related Quality of Life	Cross-sectional study	Older adults in Florida	Lower health-related quality of life was associated with food insecurity.	Demonstrates the psychological and physical burden of food insecurity among older adults.
Leddy et al.	2020	Exploring the Role of Social Capital in Managing Food Insecurity Among Older Women in the United States	Qualitative and mixed-methods analysis	Older women in the United States	Social support networks and community relationships helped older women cope with food insecurity.	Demonstrates the role of social capital and community support in reducing the effects of food insecurity.
Leung et al.	2020	Food Insecurity Is Associated with Multiple Chronic Conditions and Physical Health Status	Cross-sectional analysis using NHATS data	Older adults in the United States	Food insecurity was associated with chronic conditions such as hypertension and diabetes.	Shows the relationship between food insecurity and worsening health conditions among older adults.
Leung et al.	2024	Trends in Recurring and Chronic Food Insecurity Among U.S. Families with Older Adults	Longitudinal trend analysis	U.S. families with older adults	Recurring and chronic food insecurity remained prevalent among households with older adults.	Provides recent evidence on persistent trends in food insecurity affecting older adult households.
Marshall et al.	2021	Dynamics of Financial Hardship in the United States	Longitudinal analysis using Health and Retirement Study data (2006–2016)	Older adults in the United States	Ongoing financial strain reduced access to health-supporting resources, including food.	Connects prolonged financial hardship with compromised food access among older adults.
Pak & Kim	2019	Food Stamps, Food Insecurity, and Health Outcomes among Elderly Americans	Longitudinal observational study	Elderly Americans participating in a national survey	Participation in the Supplemental Nutrition Assistance Program (SNAP) was associated with reduced food insecurity and improved health outcomes among older adults.	Highlights the importance of food assistance programs in reducing food insecurity and improving the health of older adults.

Authors	Year	Title	Study Design	Population	Main Findings	Relevance to the Review Question
Oldewage-Theron et al.	2018	Food Insecurity Among Seniors in Texas	Quantitative cross-sectional study	Older adults in Lubbock, Texas	Older adults face barriers in accessing nutritious food.	Directly investigates food access by older adults.
Vaccaro & Huffman	2017	Sex and Race/Ethnic Disparities in Food Security and Chronic Diseases	Epidemiological survey analysis	Older adults in the United States	Significant disparities existed by sex and race/ethnicity in food security and chronic illness prevalence.	Highlights intersectional vulnerabilities among older adults.
Wang et al.	2025	Association of Food Insecurity with Diet Quality and Anthropometric Measurements among American Elderly: Results from 2017-2020 National Health and Nutrition Examination Survey	Cross-sectional analysis (NHANES 2017-2020)	American adults aged 60 years and older	Food insecurity was associated with poorer diet quality and unfavorable anthropometric indicators, suggesting an increased risk of nutrition-related chronic diseases.	Demonstrates that food insecurity adversely affects dietary quality and nutritional health among older adults in the United States.

Note. NHATS = National Health and Aging Trends Study; SNAP = Supplemental Nutrition Assistance Program; NHANES = National Health and Nutrition Examination Survey. Table formatted according to APA 7th edition style

Structural and Sociocultural Determinants of Food Insecurity

Studies have linked food insecurity in older adults to various structural and sociocultural issues. Poverty and fixed retirement incomes (Goldberg & Mawn, 2014), as well as the neighborhood environment and social isolation (Inoue et al., 2024), were the main structural determinants of food insecurity. Poor transportation and limited access to healthcare were also reported to exacerbate these challenges (Brady et al., 2021; Marshall et al., 2021).

Food insecurity disproportionately affects racial and ethnic minority populations, particularly Hispanic older adults (Vaccaro & Huffman, 2017). Qualitative data reveal that older adults navigate food insecurity problems through the lens of cultural values and dignity (Brady et al., 2023), while balancing complex perceptions of social responsibility (Leddy et al., 2020).

Food Insecurity and Chronic Disease Outcomes

A substantial body of research documents strong correlations between food insecurity and declining physical health in older adults. These studies associate food insecurity with diabetes, hypertension, reduced physical functioning, and multimorbidity (Bergmans et al., 2019; Carlson et al., 2023; Leung et al., 2020; Wang et al., 2025). Notably, food-insecure individuals may face a significantly higher risk of managing two or more chronic diseases at once (Leung et al., 2020).

Research shows poorer medication adherence among diabetic SNAP participants facing food insecurity (Heflin et al., 2022). Participation in food assistance programs is linked with reduced diabetes-related hospitalizations (Johnson & Walsh, 2022).

Nutritional vulnerabilities also alter diet and body composition. Food insecurity often accompanies compromised diet quality, making cheap, calorie-dense foods appealing (Carlson et al., 2023; Wang et al., 2025) and further increasing nutritional risks. The consumption of poor-quality diets, alongside irregular eating habits, often manifests as obesity, especially within socioeconomically disadvantaged groups (Vaccaro & Huffman, 2017). Lastly, food insecurity is associated with progressive physical and cognitive decline (Dhakal et al., 2025).

Food Insecurity and Mental Health Outcomes

Psychological vulnerability remains a hallmark of food insecurity among older adults, as evidenced across multiple peer-reviewed articles. Common psychiatric and emotional challenges include chronic anxiety, severe stress, and weakened emotional well-being (Brady et al., 2023; Choi et al., 2025; Kihlström et al., 2018). Food insecurity is connected to the development of depressive symptoms (Choi et al., 2025). It is associated with poorer health-related quality of life, particularly among socially isolated older adults (Kihlström et al., 2018).

Financial constraints directly impact self-worth. Qualitative data indicate that older adults navigate food insecurity as a threat to their personal identity and dignity, viewing the experience primarily as a loss of personal autonomy that may affect their mental health (Brady et al., 2023).

Intervention and Policy Strategies

Structural and systemic interventions would seem central to addressing food insecurity in older adult populations. At the federal level, the Supplemental Nutrition Assistance Program (SNAP) is the most widely studied intervention (Heflin et al., 2022). Evidence suggests that SNAP participation decreases hospital readmission rates (Johnson & Walsh, 2022) and improves management of existing chronic diseases (Pak & Kim, 2019).

Localized community-driven efforts were also identified as promising strategies. Community-based interventions that build social capital, empower caregivers, and provide culturally responsive nutrition services may offer vital support to community-dwelling older adults (Basu et al., 2023; Leddy et al., 2020). More importantly, reviewed studies reveal that many successful interventions go beyond basic

food delivery to address environmental barriers, specifically targeting transportation barriers, local food environments, and healthcare integration (Pooler et al., 2019). Healthcare systems play an important role in mitigating food insecurity through nutrition screening, medically tailored meals, and referrals to community food resources (Pooler et al., 2019; Reid, 2021). These interventions were suggestive of improved dietary intake and reduced preventable hospitalization among older adults (Johnson & Walsh, 2022).

Discussion

This systematic review applied the Gerontological Public Health Framework to synthesize evidence of food insecurity among older adults in the United States. Data from the nineteen reviewed studies consistently show that older adults' food insecurity extends beyond nutritional deficits. It reflects the compounding, long-term effects of economic disadvantages, chronic disease burden, limited healthcare access, and social isolation. These findings agree with reports of previous systematic reviews (Dickinson & Thompson, 2025; Muñoz-López et al., 2025). Ultimately, these reports substantiate the Gerontological Public Health framework's principal premise that healthy aging is a product of interacting biological, environmental, and policy-related systems rather than individual behavioral choices alone.

Evidence across the reviewed studies consistently indicated that financial instability remained a serious threat to food security among older adults. This pattern emphasized how limitations of fixed incomes and financial hardship act as barriers to acquiring safe, adequate food (Goldberg & Mawn, 2014; Inoue et al., 2024). Furthermore, these economic challenges intersect with environmental barriers, such as lack of reliable transportation options and scarce affordable, nutritious foods within the neighborhood (Brady et al., 2021; Marshall et al., 2021). These findings reinforce the core tenets of the Gerontological Public Health Framework by demonstrating that economic stability and community resources are fundamental social determinants of healthy aging. From a public health perspective, food insecurity can be redefined not as an isolated lifestyle problem, but as a reflection of accumulated structural inequities that disproportionately affect older adults.

Empirical data from this review further demonstrate the relationship between food insecurity and chronic disease outcomes, including hypertension, diabetes, and declining physical function (Carlson et al., 2023; Leung et al., 2020; Wang et al., 2025). This dynamic is closely linked to the food insecurity-obesity paradox, in which financial constraints may limit access to nutritious food (Carlson et al., 2023; Leung et al., 2020). Consistent findings suggest that food insecurity is associated with metabolic vulnerabilities, and its management cannot be separated from social determinants of health.

The intersection of food access and clinical care represents an important public health concern. Food insecurity largely undermines medication adherence and disease management among vulnerable patients (Heflin et al., 2022). These findings highlight the potential role of systemic interventions in supporting food security and chronic disease management. They strengthen the notion that participation in nutrition assistance programs can stabilize patients and reduce emergency hospitalizations (Bergmans et al., 2019; Johnson & Walsh, 2022). Taken together, this evidence points to the importance of integrating nutrition support into chronic disease prevention and management strategies for older adult populations.

Mental health also appeared as a profound but often hidden burden of food insecurity. Findings across studies detailed that food insecurity contributes to chronic anxiety, depression, social isolation, and declining quality of life in later life (Choi et al., 2025; Kihlström et al., 2018). This pattern shows that the burden of food insecurity goes beyond nutritional deprivation to include major psychosocial challenges that may impede older adults' ability to maintain independence and engage in effective self-care. Qualitative evidence further shows that food insecurity threatens personal dignity, identity, and autonomy, especially when older adults feel unable to meet their own needs (Brady et al., 2023; Leddy et al., 2020). Collectively, these dynamics clarify that public health interventions cannot successfully achieve health equity without treating mental health and nutritional support as integral components.

The review emphasizes the sociocultural impacts of older adults' food insecurity. The evidence indicates that food choices in later life result not only from financial resources but also from cultural identity, long-held family traditions, language, and social norms that shape food preferences and help-seeking behaviors (Brady et al., 2023; Leddy et al., 2020). These findings present evidence that interventions focused on increasing food availability may not be sufficient if they do not consider the cultural relevance and acceptability of the foods and services provided. Evaluating these perspectives under the Gerontological Public Health Framework requires that interventions intentionally address physical food availability with culturally acceptable foods to support an increasingly diverse U.S. aging population.

The intervention strategies evidenced in this review further demonstrate that addressing food insecurity requires structured, multi-sector collaboration among healthcare systems, public health agencies, and community organizations. The federal nutrition assistance programs provide an essential basis for improving food access. The studies emphasize that greater benefits are achieved when these programs are integrated into healthcare screening, community-based nutrition services, and referral pathways that address the broader social determinants of health (Pak & Kim, 2019; Heflin et al., 2022; Pooler et al., 2019). This integrated approach aligns with the Gerontological Public Health Framework by acknowledging that healthy aging depends on coordinated efforts across multiple sectors and not in isolation.

Altogether, the evidence synthesized in this review supports the view that food insecurity among older adults is a multifaceted public health problem arising from the

interaction of structural, sociocultural, and health-related factors. The Gerontological Public Health Framework provides a valuable lens for understanding these interwoven influences. It reiterates the need for comprehensive, equity-based interventions that can concurrently improve food access, reduce barriers to healthcare, and promote healthy aging among diverse older adults.

Conclusions

This systematic review shows that food insecurity is linked with chronic disease burden, poor mental health, low nutritional status, and greater socioeconomic disadvantages affecting healthy aging. Viewed through the Gerontological Public Health Framework, these findings suggest that food insecurity reflects broader structural inequities impacting healthcare access, economic stability, and neighborhood food environments.

The synthesis from this systematic review underscores the need to coordinate interventions that go beyond emergency food assistance. Policies that promote culturally appropriate foods and increase access to community-based nutrition services may improve health outcomes for older adults. Moreover, incorporating routine food insecurity screening into healthcare and strengthening nutrition assistance programs can help improve health outcomes among older adults. Strategies addressing social isolation, transportation barriers, and healthcare accessibility should be considered integral to food insecurity interventions.

Future studies would benefit from assessing the effectiveness of multilevel interventions, particularly designed for older adults. Longitudinal studies examining how sociocultural and structural factors affect food insecurity over time would help strengthen the evidence base, especially among racial and ethnic minority communities. Using the Gerontological Public Health Framework in intervention studies may offer important insights into developing sustainable, culturally sensitive, and equitable strategies to alleviate the problem.

In the end, enhancing food security for older adults requires concerted efforts from social services, public health, healthcare, and community organizations. This is essential for promoting healthy aging, reducing health disparities, and improving the overall well-being and quality of life of older adults.

Limitations

First, the literature included only English-language studies published between 2010 and 2025, potentially excluding relevant research from other years and languages. Second, differences in database indexing may have omitted some appropriate studies owing to search terminology. Third, the search excluded grey literature, which may be relevant and could miss government or non-governmental reports. Fourth, the included studies vary in design and methods for measuring food insecurity and health outcomes, thereby limiting direct comparisons across studies. Many studies used self-reported data, which may introduce bias. Lastly, many of the reviewed studies used a cross-sectional design, making it hard to establish causality between food insecurity and health outcomes.

Author Contributions

CIO: Conceptualization, Methodology, Investigation, Data curation, Formal analysis, Writing original draft, Writing review and editing, Visualization, and Project administration. CIO read and approved the final version of the manuscript and its submission and consented to its publication.

Declaration of Generative AI and AI-Assisted Technologies in Scientific Writing

The author used the Grammarly app (AI tool) for grammatical corrections, word refinement, and overall readability improvements. The AI tool was not used to generate, analyze, or alter any research data. The PRISMA flow diagram template was obtained from the official website and manually completed. The author is responsible for the full review and editing of the entire work for accuracy, originality, and integrity.

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Data Availability Statement

All relevant data are available within the manuscript

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Conflict of Interest

The author declares that this work was conducted with no conflict of interest or agreement regarding the publication of this paper.

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