What Factors Are Associated WithFood Security Among Recently-Arrived Refugees Resettling

in High-Income Countries?

A Scoping Review.

# Scoping Review Protocol 2021

* 1. Introduction
	2. Definitions
	3. Overall Review Objective
	4. Preliminary Searches
	5. Methods
	6. Eligibility Criteria
	7. Search Approach and Justification
	8. Sample Search Strategy
	9. Study Selection Process
	10. How Studies were Selected
	11. How Disagreements were Resolved
	12. Charting
	13. Draft Charting Table for Data Extraction
	14. Explanation of Table
	15. Results
	16. Data Presentation

Appendix 1: Search Record

Appendix 2: Literature Charting Record

# Introduction

* 1. Definitions

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| Term | Definition |
| Food insecurity (FI) | FI exists “whenever the availability of nutritionally adequate and safe foods or the ability to acquire acceptable food in socially acceptable ways is limited or uncertain(1)”. |
| Recently-arrived | Recently arrived is defined as having arrived in the resettlement country within the last five years. This definition is based on the use of the term ‘newly-arrived’ in the literature. |
| Refugee | A person who has a “well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular socialgroup or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it(2)” . |
| High-income country | The World Bank list of high-income countries was used as the reference for determining those countries who did or did not meet the study inclusion criteria(3).  |

* 1. Overall Review Objective

To thematically map the factors which affect food security among recently-arrived refugees resettling in Western societies and identify evidence gaps.

* 1. Preliminary and Final Searches

The review protocol and method were developed to align with the Preferred Reporting for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) (4). A preliminary search for existing scoping reviews on the research topic was conducted in May 2020 on MEDLINE and Scopus. One review which required additional investigation was located. The review was retrieved, reviewed and discussed by the research team. It was concluded that the focus, purpose, and scope

were substantially different from the current review. The rationale for this conclusion is outlined below. The current review is referred to as *the scoping review.*

* + 1. Lawlis T, Islam W, Upton P (2017) Achieving the four dimensions of food security for resettled refugees in Australia: A systematic review. *Nut Diet* **75,** 182-192(5).
			- Resettlement timeframe: This review’s participant resettlement timeframe was not limited. In contrast, the scoping review’s focus is on recently-arrived refugees, defined as refugees who have resettled within the last five years. The literature indicates that the resettlement timeframe affects food security status, with recently- arrived refugees being most vulnerable to food insecurity(6-9).
			- Purpose: The review’s purpose focussed on identifying factors which fitted within the FAO food insecurity pillars model. The scope did not include identifying themes beyond these pillars.
			- Setting: The review’s setting was Australia. In the scoping review, the setting was all high-income countries. As a result, the nineteen studies included in the scoping review represented six different high-income resettlement countries, thereby increasing the international relevance of the scoping review.

A final search was conducted in February 2021. One additional review was located which required investigation and discussion across the research team. It was agreed that the focus and studies included were substantially different from the present scoping review. The rationale may be found below.

* + 1. Mansour RM, Liamputtong P, Arora A (2020). Prevalence, determinants and effects of food insecurity among Middle Eastern and North African migrants in high-income countries: a systematic review. *Int J Environ Res Public Health* **17,** 7262 (10).
* Participants: The review’s participants were all Middle Eastern and North African migrants, not just refugees. The resettlement timeframe was not stipulated in the inclusion criteria. In contrast, the scoping review included only studies whose sample consisted of at least 50% recently-arrived refugees. Refugees’ country of birth was not restricted. The reviews are therefore substantially different as resettlement timeframe, country of birth and migration status are known to impact food security status.
* Setting: The review’s search criteria included all high-income countries, yet the three studies included in the final review were all set in the United States. The scoping review included twenty studies representing six different resettlement countries. The review’s setting is therefore different.

# Methods

* 1. Eligibility Criteria

|  |  |  |
| --- | --- | --- |
| Category | Criteria | Rationale |
| Participants | 50% or more of study participants must be legally- documented refugees | Numerous studies include refugees, asylum seekers and immigrants. To include only refugee studies would have excluded too much of the FI literature for a scoping review. Including ‘legally documented’ separated refugees from asylum seekers (as they are undocumented). For this review, the term refugee did not include asylum seekers or the broader term immigrants, due to differences in the groups’ rights, entitlements andresettlement trajectory. |
| Recently-arrived | Defined as having arrived within the last 5 years,as it is in this timeframe that FI is most prevalent. |
| Any age, gender, marital status or country of origin | No parameters were put on demographics, because in the research question, the population of interest was all refugees resettling in high- income countries. Further, part of the scoping process was to understand if some of these demographics are associated with FI, therefore they needed to be included. |
| Concept | Food insecurity | These were the key words which define the concept being investigated. Aligned key words such as food security, food issues and dietary transition issues, extracted from a search ofliterature terms, were also used. |
| Setting | High-income countries | The setting was high-income countries as FI has been shown to be an issue for refugees in this setting, yet the setting is currently under-represented in the literature. |
| Timeframe | 2000-2020 | Due to the impact of world events on thedynamics of the displacement of people, studies published more than 20 years ago were excluded. |

|  |  |  |
| --- | --- | --- |
| Literature Type | Original studies in peer- reviewed literature. | Only peer-reviewed original studies were included to ensure high-quality studies formed part of the scoping review’s results. Review papers were used for background or contextual research but were excluded from the data chartingprocess, as this was a scope of original studies. |
| Language | Published or disseminated inEnglish language. | To minimise cultural or language translationissues. |

* 1. Search Approach and Justification

A three-step search strategy was conducted between May-July 2020(11). The Proquest and PsychArticles databases were additionally searched in February 20201 to ensure a comprehensive investigation of potentially suitable studies. One additional study was located which fulfilled the inclusion criteria. It was included in the charting process.

Key search terms used:

refugee\* OR “displaced person” OR immigrant OR newcomer AND

“food insecurity” OR “food shortage” OR “food deficit” OR “lack of food” OR “food scarcity” OR “food issues” OR “food stress” OR “food access” OR “food sufficient\*” OR “food afford\*” OR “food poverty”

Limits:

Title, English language, peer-reviewed journals, 2000-2020.

|  |  |  |
| --- | --- | --- |
| Timeframe | Database/Source | Justification |
| Search #1 |
| May 2020 | Medline ScopusPeer-reviewed literature | The objective of this search was to retrieve paper titles and abstracts to analyse them for keywords and index terms. These were used to develop a search plan.These databases are aggregators of a broad range of health-based literature and therefore proved an excellent search platform for initial literature scoping. |

|  |
| --- |
| Search #2 |
| May-July 2020 | Medline Scopus Informit EmBasePeer-reviewed literature | The objective was to gather all relevant documents and papers for initial review by the research team for assessment against the inclusion criteria.These databases were chosen in consultation with a research librarian. All of them are well-recognised in the aggregation of health literature. EmBase was included as it is an aggregator of European health literature and therefore enabled a more robust search of high-income countries. Informit was included as it is Australian focussed and aggregates papers and documents from government, publishers and peak bodies.The search plan was iteratively updated during paper retrieval and review, in consultation with the research librarian and research team. Additional keywords and search terms were used to update the plan. |
| Search #3 |
| July 2020 | Reference listsPeer-reviewed literature | The reference lists of retrieved articles and documents were searched. The objective was to capture additional peer-reviewed literature. |
| Additional Search |
| February 2021 | Proquest PsychArticles | These databases were searched to improve the comprehensiveness of the overall search strategy. |

* 1. Sample Search Strategy

For

Peer

The sample search strategy below was used in searching the EmBase database. The same limits and keywords were used for all searches.



# Study Selection Process

* 1. How Studies Were Selected

Duplicate papers were removed. Retrieved papers and document abstracts were screened against the inclusion criteria by the primary author. If further information was required regarding inclusion criteria, the authors of queried studies were contacted directly. Action regarding queried studies was discussed and agreed within the research team.

* 1. How Disagreements Were Resolved

Disagreements were resolved through discussion among research team members. If further information was required for resolution, study authors were contacted and information gained was then fed into the team discussion.

# Charting

* 1. Draft Charting Table for Data Extraction

Data charting used the forms below. These forms were an adaptation of the Joanna Briggs Institute systematic review data extraction forms. The forms were iteratively updated, if required, as retrieved studies were charted and findings recorded.

Literature Data Charting

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| SettingYear | n/COB | Studyfocus | Design/method | ReportedFindings | Author & StudyTitle | SettingYear |
|  |  |  |  |  |  |  |

* 1. Explanation of Table

The primary purpose of the data charting tables was to record key study findings in one location. This allowed the review team to locate commonalities in findings and possibly group them thematically. It also allowed any outlier results to be located and discussed, instigating further research as required.

Study logistics such as setting, sample size and method were included to provide context to discussion regarding findings. Finally, author and study title were included to allow easy identification of studies being discussed if the original paper required further analysis or the author needed to be contacted.

# Results

* 1. Data Presentation

The presentation of results was iteratively agreed as the search strategy and charting process developed. It was anticipated that there would be an initial table reporting the characteristics of the included studies. This would provide context by giving an insight into the representation of high- income countries and also the refugee countries of birth.

|  |  |  |
| --- | --- | --- |
| Receiving country | Refugee country of birth | Number of studies |
|  |  |  |

A second table was planned to report the details of each of the included studies (including their countries of origin) to provide the specific food insecurity issues reported in each of the studies. This provided transparency regarding the source of the review team’s thematic findings. The studies were sorted by their country of setting (i.e., studies set in Canada were collected within a table section clearly marked Canada) and by their chronological order, with the earliest studies appearing highest in a country’s section of the table. The code column was used to provide a simple way to refer to individual studies in the review text. The coding system used the first letter of the study setting (for the United Kingdom the initials were used) and then sequential numbering depending on the study’s placement on the table. For example, the earliest Canadian study was coded as C1.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Code | Author andyear | Participants (includingcountry of birth) | Study focus | Design andmethod | FI issueidentified |
|  |  |  |  |  |  |

Charting and analysis of included study findings determined additional reporting methods. It was anticipated that thematic findings would provide opportunity for the development of a visual representation of findings in an original figure. Decisions regarding such were made following the completion of charting and thematic analysis.

# Appendix 1: Search Record

Terms:

refugee\* OR “displaced person” OR immigrant OR newcomer AND

“food security” OR “food shortage” OR “food deficit” OR “lack of food” OR “food scarcity” OR “food issues” OR “food stress” OR “food access” OR “food sufficient\*” OR “food afford\*” OR “food poverty”

Limits:

Title, English language, reports, academic journals

Databases:

Search 1: MEDLINE Complete, CINAHL, Scopus, Social Sciences Citation Index Result:

219 records located.

37 duplicates.

182 records reviewed by title and abstract. 25 selected for review of full text.

Search 2: Informit Result:

62 records located.

1 duplicate

60 records reviewed by title and abstract

All excluded - not Western setting or not refugee focused

Search 3: EmBase Result:

24 records located.

3 duplicates

22 records reviewed by title and abstract 4 selected for review of full text.

Search 4: Proquest, PsychArticles Result:

27 records located.

26 duplicates

1 record reviewed by title and abstract 1 selected for review of full text.

Synthesis of search:

Total of 332 records located from searches 1-4 inclusive. 67 duplicates.

265 records reviewed by title and abstract.

28 selected for full-text review from all sources. 8 excluded (see rationale table below).

20 met all inclusion criteria. Total of 20 studies included.

Exclusion Rationale:

|  |  |  |  |
| --- | --- | --- | --- |
| Author | Year | Study title | Reason for exclusion |
| Delavari et al | 2015 | Migration, acculturation andenvironment: determinants of obesity among Iranian immigrants in Australia. | Focus not on food insecurity or food security issues |
| Wahlqvist | 2002 | Asian migration to Australia: food andhealth consequences | Not primary study |
| Setiloane andMukaz | 2019 | HH FI among African Immigrants ofthe US | 68.4% of sample in US longer than10 years. |
| Wang et al | 2016 | A systematic examination of food intake and adaptation of the foodenvironment by refugees in the US | Review |
| Kamimura et al | 2017 | FI associated with self-efficacy andacculturation | Not >50% refugees |
| Dhokarh et al | 2011 | FI is associated with acculturation andsocial networks in Puerto Rican HH | Refugees not newly arrived |
| Greenwald et al | 2017 | FI and food resource in an urban immigrant community | Conferred with team. Emailed author.Did not screen refugees for timespent in resettlement country. |

|  |  |  |  |
| --- | --- | --- | --- |
| Rodriguez et al | 2016 | Exploring experiences of the food environment among immigrants livingin Region of Waterloo, Ontario | Conferred with team.Did not screen refugees for time spent in resettlement country. |

# Appendix 2: Data Charting Record

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| SettingYear | n/ COB | Studyfocus | Design/method | Reported Findings | Author & StudyTitle |
| Australia 2000 | n=33.Refugees from Somalia | Food and nutrition issues of Somali refugees | Cross-sectionalGroup interviews, followed by individual interviews and nutritional analysis of seven women | * Impact of historical factors
* Reduced access to halal food
* Difficulties finding affordable traditional, familiar foods
* Local foods considered not fresh/altered taste Unfamiliar with some local foods
* Reluctant to access food emergency services
* Changes in HH responsibility for food preparation
* Changes in social network
 | Vincenzo, Crotty and Burns(12) |
| Australia 2008 | n=51Refugees from 14 cultural backgrounds | Prevalence and issues related to FI among refugees in Perth | Cross sectional Questionnaire | * Lack of access to transport
* HH finances issues including priorities, budgeting skills, sending money home, late welfare payments Cultural difference in how/when FI disclosed
* FI increases complexity of

resettlement process | Gallegos, Ellies and Wright(13) |
| USA 2006 | n=33Liberian refugees resettling the USA less than 5 years | Food security and child hunger among Liberians resettling in US | Cross sectionalFace-to-face interviews | * ‘Chemicals’ in locally available food
* Preference for in-home family meals
* Primary shopper unfamiliar with shopping environment Low income
* Difficulties with local language
 | Hadley and Sellen(8) |
| Australia 2006 | n=139 HHSub-Saharan migrants and 54% were refugees | Food habits of migrants and refugees resettling in Victoria | Cross-sectionalFace-to-face interviews | * Difficulty in locating traditional staple foods
* Nutritional implications of substituting nutritionally inferior local foods for traditional foods
* ‘Forced’ acculturation through high prohibitive cost of some culturally desired foods
* Taste of some familiar foods

perceived as poor | Renzaho and Burns(14) |
| Canada 2010 | n=70Refugees from Latin America, | Food insecurity issues among Latino | Cross-sectionalSelf-completed survey | * Food banks lacked perishables regularly used
* Canned goods at food banks

unfamiliar | Vahabi et al(15)  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | resettling in Canada for less than fiveyears | American refugees resettling inToronto |  |  |  |
| Canada 2013 | n=506Recently resettled immigrants and refugees | Social and nutritional issues related to food insecurity among immigrants resettling in Montreal | Cross-sectionalQuestionnaire including4 items related to FI | * Determining FI prevalence can be impeded by cultural bias or shame
* Low level of education impacts access
* Marked decline in some nutrient- dense foods, such as fruit and fish.
 | Girard and Sercia(6) |
| Australia 2015 | n=71 HH(383 people). Refugees from Burundi, Congo, Rwanda | Relationship between FI, social support and vegetable intake among African refugees inQueensland | Cross-sectionalUSDA 18-item Food Security Module and food frequency questionnaire | * Poor language proficiency
* Lack of social network for emotional and material support
 | Gichunge et al(16) |
| Canada 2017 | n= 24.Multi- country sample of immigrants (50%refugees)n=22.refugee service providers | interaction between food insecurity and culture among immigrants living in Hamilton, Ontario | Cross-sectionalImmigrant perspectives captured through focus groups.Individual interviews with service providers. | * Poor access to culturally-specific foodways/food
* Incongruence between refugee and service provider perspectives
* Concerns about safety of local foods
* Local food taste and unfamiliarity
* Difficulties in sourcing halal and related trust issues
* Different storage and packaging of foods
* Language barrier
* Poor label reading literacy
* Loss of FI cultural mechanisms
* Food banks rarely used
* Absence of social capital
 | Moffat, Mohammed and Newbold(17) |
| USA 2014 | n=49Refugees from Sudan resettling in Atlanta | To test if HH FI is reduced by social support, increased income and attitudes to traditionalfoods | Cross-sectional10 item survey administered by trained Sudanese interviewers during interview sessions | * Cultural food priorities may impact food budgeting
* FI response and coping mechanisms may be culturally based
 | Anderson et al(18) |
| Australia | N=10. | Food accesschallenges for | Cross-sectional | * Health and other issues related to

transition country | Kavian et al(19) |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 2020 | Female refugees from Afghanistan | Afghan women refugees resettling in Adelaide | Semi-structured face-to-face interviews | * Navigating new food environment
* Unfamiliar food culture
* Challenges accessing halal food
* Finding culturally appropriate and desired food
 |  |
| USA 2007 | n=101Refugees from Liberia with a child under 5 years. Resettled in US less than 4 years. | Prevalence and severity of FI of Liberian refugees recently resettling in the USA | Mixed methodsParticipant observation and structured in-depth interviews at baseline and 6- month follow-up | * Language difficulties
* Difficulty navigating shopping environment
* Poor budgeting skills
* HH finance allocations (e.g., bills and family obligations)
* Low income and education
* Low dietary acculturation
* Unemployment
 | Hadley, Zodhiates and Sellen(9) |
| USA 2013 | n=195.Refugee mothers from Somalia | Relationship between FI, dietary intake and body weight of Somali women resettling inUSA | Cross-sectionalSurvey administered in interview process. Height and weight measured and recorded by interviewer | * Cultural food traditions may outrank nutrition priorities and negatively impact meal choices and food security.
 | Dharod, Croom and Sady(20) |
| Canada 2019 | n=300.Immigrant and refugee children aged 3-13 yearsn=23 service providers | Using data from the Healthy Immigrant Children study to investigate FI and nutritional risk | Cross sectional Mixed-methodsSelf-completed food security and 24-hour dietary recall questionnaireInterviews with newcomers and service providers | * Financial priorities competing with food purchase including prescription medication and transport loans
* Very few accessed food banks
 | Lane, Nisbet and Vatanparast(21) |
| USA 2010 | n=281Refugees from various COBs, 64%female. Staff from resettlement agency(n=39) | Prevalence and correlates of FI in recently resettled refugees in Midwestern USA | Cross-sectionalQuestionnaire administered in face-to-face interviews | * Food environment challenges including unfamiliar foods and unknown shop locations
* Lack of knowledge in how to cook American foods
* Difficulties finding desired foods
 | Hadley, Patil and Nahayo(22) |
| Switzerland 2017 | n=25.Afghani refugees living in | Impact of socio- economic and cultural | Cross-sectional.Face-to-face interviews. | * Cultural differences
* Lack of social connection and interaction
* Language difficulties
 | Khakpour et al(23) |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Swiss refugee camp. | factors on refugee FI. |  | * Financial struggles
* Lack of access to culturally appropriate food
* Lack of knowledge in utilisation

of local food |  |
| USA 2015 | n=33Refugee Liberian caregivers | To examine FI and budgeting practices among Liberian caregivers resettling in the USA | Cross-sectionalSemi-structured face-to-face interviews | * Unstable pre-settlement experiences
* Socio-cultural differences in receiving country
* Difficulty navigating grocery stores
* Unfamiliar food choices compromises food management and budgeting practices
* Length of stay does not always reduce FI
* Budgeting not just income can be a key factor in some sub-

groups | Nunnery et al(7) |
| USA 2019 | n=18Female refugees from Burundi and Congo | To understand the FI barriers and facilitators among Burundian and Congolese refugees resettling in the USA. | Cross-sectionalSemi-structured face-to-face interviews | * Low level of dietary acculturation
* Poor language proficiency
* Unfamiliar with local cooking methods/equipment
* Unfamiliar with preparing local ingredients/ dishes
* Difficulties using local currency
* Access to private transportation
* Level of social support
* Challenges using public transport
* Limited access to food gardening space
* Limited access to culturally

appropriate foods | McElrone et al(24) |
| UK 2002 | n=30.Refugees from various COBs, with children under 5 years of age, resettling in the UK less than 2 years. | Prevalence and issues related to FI among recently- arrived refugees resettling in the UK. | Cross-sectional.Face-to-face interviews. | * High cost of fresh foods
* Lack of access to quality fresh produce
* Lack of prep time due to work commitments
* Easy access to fast food and snacks
* Lack of access to garden
 | Sellen, Tedstone and Frize(25) |
| Norway 2014 | n=21.Refugees from various COBs. | Early phase food habits and dietary acculturation. | Cross-sectional.Face-to-face interviews. | * Challenging to be in ‘first wave’ of refugees
* Access to transport improves

food access | Terragni et al(26) |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  | * Will frequent ethnic shops even if distant from home
* Lunch affected by Western foodways: no commensality, often cold, lunchboxes unfamiliar
* Distrust of labelling and shops in regard to halal
* Halal limits food choice and restricted diet short-term
* Lack of confidence in new food culture lead to poorer diets
* Food prices are a barrier to access
* Rapid changes to diet as a result of new foods and foodways
* Challenges reproducing social

norms and culinary codes in new environment |  |
| Canada 2015 | n= 54.Syrian refugees resettling in Canada since 2015.n=15.Refugee resettlement and support agency providers. | An exploration of food security issues among Syrian refugees resettling in Canada. | Cross-sectionalFace-to-face semi- structured interviews with refugees.Face-to-face or telephone semi- structured interviews with service providers. | * High cost of accessing Arabic/Syrian food
* Financial priorities competing with food budget, including transport and household fixed bills
* Transport issues, related to language barriers, cost and geographic location, impact food access
* Neighbourhood location affecting access and availability of food
* Difficulties related to language, transport, and income negatively impacting access to halal food
* Social networks assist in navigation of food systems and halal food location and choice, and development of food quality and value perceptions
* Food security management remains gendered with women carrying the majority of the burden
* Food banks accessed but limited

halal options and food waste an issue | Vatanparast et al(27) |

Legend: HH= households; FI= food insecurity; ME= Middle East; USDA= United States Department of Agriculture; COBs= countries of birth.

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