

Appendix A

Methodology of the FEED: Food Environment Evidence Directory

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Introduction

Background

The Food Environment Evidence Directory (FEED) is a part of the Lower-Carbon; Healthier Lives project at the London School of Hygiene and Tropical Medicine's Centre for Climate Change and Planetary Health. This project seeks to identify evidence that may produce positive outcomes for both people and the planet. Specifically, the project resulted in two thematic evidence collections: one on diets and one on active travel. These evidence collections are open access for those seeking evidence on policies or interventions to shift diets and modes of travel to be more healthy and sustainable.

The FEED specifically focuses on evidence in the food environment (where people make their decisions about what food to consume) and the policy sphere (where both deliberate and unintended governance affects food and shapes the outcomes of the food environment and individual's dietary behaviour ¹).

The FEED consists of two interactive tools, to map and visualise the underlying FEED database. The publications can be accessed through the FEED Map and FEED Visualiser. To access the FEED Map, open the web link provided, download the file, and open the download using a web browser (should open automatically in your default browser by double clicking). To access the Visualizer, open the web link provided.

- [FEED Map](#): an interactive overview map of the evidence-landscape
- [FEED Visualiser](#): a tool that allows users to explore the evidence more deeply

Focus on food environment and policy levels

The determinants of nutrition and eating (DONE) framework developed by Stok² rated a comprehensive list of individual, interpersonal, environment, and policy determinants by three characteristics: Modifiability (the extent to which it "is possible to change the influence [of the determinant] in a healthful direction"); Relationship strength (the strength of the relation between determinant and outcome as judged by the rater); and Population-level health effect (the expected impact or reach of the determinant on eating behaviour at the population-level, taking into account both association strength between determinant and individual behaviour as well as prevalence of exposure to the determinant in the population). They combined these three ratings into an "Overall priority for research (OPR) score" which rated each determinant as low (1.00–1.49), moderate (1.50–1.99), substantial (2.00–2.49), or high (2.50–3.00) priority based on the three characteristics.

Interventions which target the most modifiable determinants with the highest relationship strength and population-level effect (identified by the highest OPR score) should be prioritised in research and practice. Environmental and policy level determinants were both rated as higher

priority for research (average 2.07 and 2.12) compared to individual and interpersonal determinants (both average 1.95). Subsequently, this evidence collection has focused only on reviews that investigate interventions in the food environment and at the population-level.

Research aim and objectives

The aim of this research was to create an evidence collection of interventions and policies within the food environment or at population level that may shift diets towards being healthier and more environmentally sustainable.

The objectives were to:

1. Systematically categorise consolidated evidence on interventions and policies that may shift diets through changes to the food environment or at the population level;
2. Create an interactive database of evidence that may be used to direct users to the most relevant research; and
3. Create an overview of the evidence landscape

Methods

Literature Review

A comprehensive review of the literature was completed to identify and map reviews of interventions and policies shift diets towards being healthier and more sustainable in all contexts.

Search for literature

Systematic database searches of MEDLINE, Web of Science and Embase were conducted in January 2023. Upon consultation with a LSHTM librarian, a search was developed to capture three sets of key words and MeSH terms: evidence quality, intervention, and outcome. These search strings were created to capture literature that helps identify the highest quality evidence on interventions/policies in the food environment or at the population level, that have reported quantitative changes in intake by the individual. The search strings are found in Box 1:

Box 1: Search strings

Quality of evidence: Highest quality of evidence

((systematic\$ adj2 review\$) or meta-analytic\$ or metanalysis or metaanalysis or meta analysis or meta-synthesis or metasynthesis or meta synthesis or meta-regression or metaregression or meta regression or (synthes\$ adj3 literature) or (synthes\$ adj3 evidence) or integrative review or data synthesis

or (research synthesis or narrative synthesis) or (systematic study or systematic studies) or (systematic comparison\$ or systematic overview\$) or evidence based review or comprehensive review or critical review or quantitative review or structured review or realist review or realist synthesis).mp. or pooled analysis.ti,ab.

And Intervention level: *Interventions of any type occurring at any level above the individual:*

((Community or macro or population or "food environment" or national or international or "public health" or "whole community") and (campaign\$ or intervention\$ or trial\$ or program\$ or chang\$ or modif\$ or improv\$ or enhanc\$ or polic\$ or policy or regulation\$ or law\$ or tax or taxation or taxes)).mp not (individual or personal) and (campaign\$ or intervention\$ or trial\$ or program\$ or chang\$ or modif\$ or improv\$ or enhanc\$ or polic\$ or policy or regulation\$ or law\$ or tax or taxation or taxes)

And Diet shift outcome: *Shift in any intake or uptake of food or diet in any direction, by the individual:*

(trade or exchange\$ or chang\$ or substitute\$ or replac\$ or switch\$ or swap\$ or shift* or modif\$ or ad\$ or increas\$ or more or decreas\$ or reduc\$ or less\$ or limit\$ or improv\$ or enhanc\$) and (diet\$ or food\$ or fruit\$ or vegetable\$ or dairy or meat\$ or fish\$ or legume\$ or "plant*based" or "animal*based" or "plant*sourced" or "animal*sourced") adj2 (eat\$ or ate or intak\$ or uptak\$ or consum\$ or portion\$ or serving\$ or frequenc\$ or number\$ or amount\$ or quantit\$ or choice\$ or choos\$).mp

Limits

limit to (english language and humans)

Eligibility and inclusion criteria

The following criteria for including and excluding publications was created based on the PICO guideline. This criteria was used to screen publications (Table 1).

Table 1: Population, Inclusion, Comparison, Outcome criteria

	Included	Excluded
Participants	All populations	None
Interventions	Intervention level: interventions trialled in the food environment or at the population-level	Interventions that target individuals (e.g. psycho-socio-cultural-determinants including knowledge, values, beliefs, and preferences) ; Religious dietary law <u>Exclude based on intervention</u>
Comparison	any	
Primary Outcomes	Individual-level food intake or diet uptake outcomes: <i>(Intake through consumption, selection, purchasing of food, or uptake of new diet I.e. vegan/Mediterranean)</i>	Studies that <u>only</u> report attitudes, behavioural intentions, willingness to pay/try, acceptance outcomes, nutrition status, health/environmental outcomes <u>Exclude based on outcome</u>
Secondary Outcomes	Changes in diet-related health outcomes AND/OR Changes in diet-related carbon emissions	
Language	English	Studies not in English
Study designs	Type of study: systematic reviews +/- meta analysis, reviews of primary evidence (of trials/experimental studies)	Status of study: Unpublished evidence; evidence that is not peer reviewed Type of study: Evidence from virtual choice experiments; Determinants/descriptive epidemiology <u>Exclude based on study design</u>
Status of study	Published and peer reviewed	
Year of study	Studies published since 1974	

Screening

EPPI Reviewer software was used for screening and data coding. Duplicates were identified and resolved automatically. Three separate researchers (RJ, RN, ASD) independently screened one-third of the publications in two stages: title/abstract stage and full text. The PICO criteria (above) were used as inclusion and exclusion criteria for each screening stage.

Quality appraisal

Publications were assigned methodological quality rating from Health Evidence³, an online registry of over 9,000 public-health reviews with independent quality assessments. Health Evidence improves upon the AMSTAR quality appraisal tool for systematic reviews. Through their assessment of public health intervention literature, Health Evidence has found that the AMSTAR tool underestimates the proportion of reviews that are 'high methodological quality'.⁴ The Quality Assessment Tool created by Health Evidence Health Evidence features more applicable criteria for judging public health interventions and requires two independent reviewers to assess each review before scores are published on the website.

Where no methodological quality rating was available online through Health Evidence, two researchers (ASD, RN) independently assessed the quality according to the Health Evidence Quality Assessment Tool⁵. Quality was manually appraised for 52 publications and given a rating of 'low', 'moderate', or 'strong' based on the tool's criteria. A third researcher (RJ) completed random audits on 10% of the quality assessments to ensure inter-reviewer reliability.

Data extraction

Both manual and artificial intelligence (AI) methods were used to extract data from the publications. Data on interventions and outcomes were extracted by Elicit AI⁶ and checked for accuracy against a set of manually extracted interventions (n=13) and outcomes by a single researcher (RJ).

A comparison of AI vs manual extracted interventions and outcomes is found in Box 2.

Box 2: Discussions on Elicit AI's accuracy in extracting interventions and outcomes

Discussion on Elicit AI's extraction of interventions vs manually extracted interventions:

Elicit is good at picking up discrete 'forms' of interventions (i.e. labelling). Compared to outcome extractions, Elicit captures less granularity and has lower accuracy for interventions. The main 'failure' of Elicit is that it doesn't pick up the additional interventions arising from literature (AKA picks up 'methodological focus' but not 'results focus'). However, it does capture PICO interventions (overarching intervention categories), with good accuracy.

Good at picking up overarching intervention categories akin to PICO

OK at providing granularity in overarching intervention categories

Bad at providing additional interventions arising from the literature

Discussion on Elicit AI's extraction of outcomes vs manually extracted outcomes:

Overall, Elicit identified the main outcomes themes well. This is likely due to common/predictable language in dietary intervention outcomes (i.e. "fruit and vegetable intake", "BMI", "Physical Activity")

One third of outcomes extracted had slightly mismatched information. Where a difference was observed, Elicit was generally more granular in detail, though in some occasions, it reported excess information such as the direction of effect (i.e. "improvement" to outcome). In some cases where Elicit failed to produce the same themes as the manual extraction, multiple simultaneous failings were observed (such as lack of granularity + excess information), indicating the failing may have been due to the publication's content (being too complex or poorly written).

Two researchers (ASD, RN) manually extracted data on publication type and year, data on secondary interventions and outcomes, and data on subpopulations reviewed within the literature.

Coding using EPPI Reviewer

Three researchers (ASD, RJ, RN) independently each coded a third of the included publications.

Each publication was coded for publication (type, year, and quality), intervention (to indicate the function(s) of the interventions reviewed and the existence of any secondary interventions), subpopulation (to indicate if the review had a methodological focus on any subpopulation), and outcome (to indicate whether a secondary outcome was reviewed).

Each publication was coded once for 'Publication Type', 'Publication Year', and 'Methodological Quality'. All remaining codes were applied as needed to describe the interventions, subpopulations, and outcomes reviewed in the literature.

Sub-Appendix A provides additional methods used to build the coding structure and details the coding structure itself.

Creating the FEED Map and Visualizer

The EPPI Reviewer software was chosen as it provided additional features to create two interactive tools to map and visualise the underlying database of publications. The EPPI Map feature was used to translate the FEED database into a map structure that provides users an overview of the landscape of the publications, categorised by key elements of the publication. The EPPI Visualizer feature was used to create the FEED Visualizer, which enables users to conduct deeper explorations of the underlying FEED database.

A draft of the Map was created and shared with stakeholders for external review. These stakeholders each had expertise in sustainable diets, food policy, and interventions for climate and health. The feedback provided was integrated into subsequent drafts of both the FEED Map and Visualizer.

Box 3 defines the terminology of the FEED and indicates which element each code corresponds to in the FEED Map.

Box 3: Definitions of FEED terminology

General definitions

Intervention: Refers both to food environment and policy interventions

Methodological focus: Review specified a focus on intervention function or subpopulation within the methods of the review (as identified in the research question, search strategy, or inclusion criteria)

Table headings and subheadings

Tab level corresponds to table heading level

Intervention function: Review had a methodological focus on a specific intervention function

Affordability*: Review focused on interventions that changed the relative or absolute price of food items

Availability*: Review focused on interventions that changed whether a food item was present in a physical space

Sustainability properties*: Review focused on interventions that changed the environmental or social impact of a food item

Promotion*: Review focused on interventions that changed how a food item is designed to influence its desirability, such as how it is presented, marketed, promoted, and front-of-pack labelled

Quality*: Review focused on interventions that changed the external characteristics of the food item itself, such as freshness, integrity, safety, nutrient, phytochemical profile, objective sensory attributes

Multi-function intervention: Review focused on interventions that changed multiple functions simultaneously (i.e. a new locally produced salad is added to the menu as a “planetary pick”)

Function Not Specified: Review had no predefined focus area by function, rather looks broadly across the literature to see “what works”, usually guided by outcomes

Food environment: The review focused on interventions within the built environment, in which consumers make decisions about which foods to acquire and consume

Policy: The review focused on the higher sphere of governance which influences the food environment

Subpopulation: Review had a methodological focus on a specific demographic group

Non-specific Population: Review did not focus on any specific subpopulation

Age: Review focused on a specific age group

Region: Review focused on a geographic region, region-income, or region population density

Setting - Retail: Review focused on the retail setting

Setting - Community: Review focused on the community setting

Setting - Workplace: Review focused on workplace setting

Setting - Educational Facility: Review focused on educational facilities

Vulnerability: Review focused on vulnerable groups by ethnicity, gender, or SES

Filters

Secondary Intervention: Review focused on a non-diet intervention or an intervention targeting individual factors, alongside a food environment or policy intervention

ONLY food environment or policy intervention

Intervention targeting individual factors

Non-diet intervention

Secondary Outcome: Review focused on a non-consumption based outcome

ONLY consumption/sales outcomes - any outcome that measures or indicates an actual change in consumption behaviour (such as frequency, quantity, diversity, or quality of food consumed or changes to dietary patterns).

Environmental outcome - outcomes that measure, indicate, or influence changes to environment and climate (such as greenhouse gas emissions and food/plate waste)

Health-influencing behaviour- outcomes that are likely to impact health (such as physical (in)activity, alcohol use, tobacco use)

Health outcomes and metrics - physical or mental health outcomes or metrics, indicators, tests of health (such as BMI, life expectancy, nutritional status, cardio-vascular disease, etc.)

Knowledge and attitudes - knowledge, attitudes, perceptions, and intended actions that precede consumption behaviours (such as increased vegetable acceptance, consumer use of nutrition labels, intended consumption of meat, etc.)

Adherence/effectiveness of intervention - outcomes that measure or indicate the success or failure of an intervention or policy such as, the effectiveness in making a permanent change to the food environment or food policy (for example, the price of meat in a grocery store after the implementation of a taxation scheme) or the adherence of consumers to the intervention/policy (such as consumer's participation in social food program). Includes "adverse effects", as an indicator of potential *in*-effectiveness.

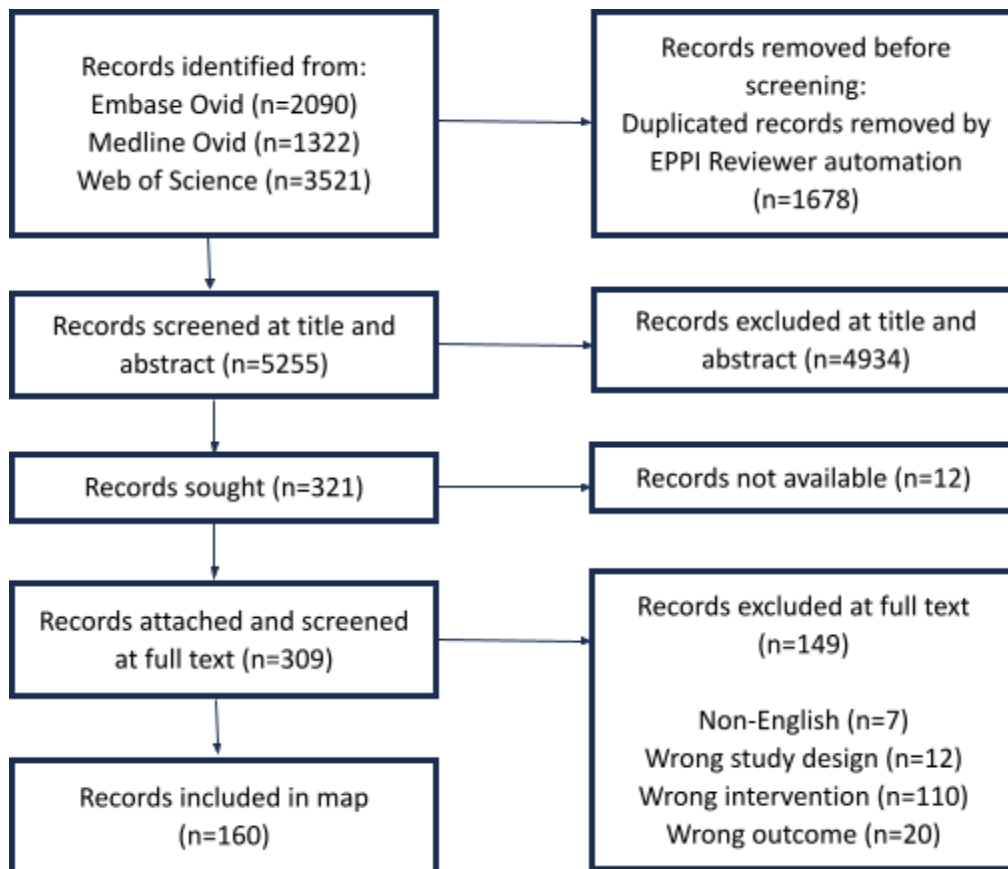
Educational outcome - academic performance and attendance

Socio-/structural-outcomes - outcomes that are embedded in the social structure of society and influence consumer's consumption behaviours (such as food security, social capital, population-level inequality in diet)

Economic outcome - Macro-economic outcomes (such as price elasticity) and micro-economic outcomes (such as health care savings)

Included studies

The final FEED database contains 160 publications that review food policies or interventions in the food environment, and report at least one outcome related to diet. This database underlies both the FEED Map and FEED Visualiser. A list of all included publications can be found in Sub-Appendix B.



Appendices

Sub- Appendix A: Detailed methods: coding structure

The coding structure was created by one researcher (RJ) and reviewed by the rest of the research team for comprehensiveness and to establish a shared understanding of the coding structure.

The intervention functions were defined by the Food environment typology from Downs⁷ (Figure 1). We added two additional function categories ('function not specified' and 'multi-function intervention') for publications that did not target any specific category or that targeted multiple functions. Secondary interventions were coded based as 'intervention targeting individual factors' according to the individual factors noted in Downs⁷ (Preferences, knowledge, etc.) (Figure 1) or as non-diet interventions, occurring alongside diet interventions (i.e. physical activity interventions).

Figure 1: Functions of food environment interventions and individual factors targeted by



The subpopulation categories were defined by the research team. The categories were identified from the literature and codes were created using 'in-vivo' thematic analysis (where possible) to maintain the original language from the reviews.

The outcomes were defined using

The coding structure used up to three levels to code each publication's elements in increasingly granular detail, for example, a publication that has a methodological focus (having either an explicit research question, search strategy, or inclusion criteria) on primary school settings would be coded across all three levels as 'Subpopulation > Setting - Educational Facility > Primary school'.

The following coding structure was used to code each individual publication. 'Tab' level one refers to coding level one, 'tab' level two refers to coding level two, which is nested within level one, and so on.

Publication Type

- Systematic review with meta analysis
- Systematic review without meta analysis
- Review of interventions
- Review of policies
- Umbrella review
- Scoping review

Publication Year

- 2021 to 2023
- 2016 to 2020
- 2011 to 2015
- 2006 to 2010
- 2001 to 2005

Methodological quality of the publication

- Strong
- Moderate
- Weak

Intervention Function

- Function Not Specified
 - FNS - Food environment
 - FNS - Policy
- Affordability
 - Affordability - Food environment
 - Affordability - Policy
- Availability
 - Availability - Food environment
 - Availability - Policy
- Sustainability Properties
 - Sustainability properties - Food environment
 - Sustainability properties - Policy

Promotion

- Promotion - Food environment

- Promotion - Policy

Quality

- Quality - Food environment

- Quality - Policy

Multi-Function Intervention

- Multi-component - Food environment

- Multi-component - Policy

Secondary Intervention

- ONLY food environment or policy intervention

- Intervention targeting individual factors

- Non-diet intervention

Subpopulation

Non-Specific Population

- Non-Specific Population

Age

- Infants (≤ 1 year)

- Children (> 1 to 12 years)

- Adolescents (>12 to >18 years)

- Adults (18 years to 65 years)

- Elderly (>65 years)

Region

- Europe

- North America

- Latin America and the Caribbean

- Oceania

- High-Income Countries

- Middle-income Countries

- Low-income Countries

- Urban

- Rural

Vulnerability

- Ethnicity

- Gender
- Socioeconomic status
- Setting - Retail
 - Non-specific retail
 - Restaurant
 - Cafeteria / canteen
 - Grocery store
 - Online vendor
 - Vending machine
- Setting - Community
 - Non-specific community
 - Garden
 - Childcare service
 - Youth programme
 - Church
- Setting - Workplace
 - Non-specific workplace
 - Healthcare facility
 - Government facility
- Setting - Educational Facility
 - Non-specific Educational facility
 - Pre-school
 - Primary school
 - Secondary school
 - University

Secondary Outcome

- ONLY consumption/sales outcomes
- Environmental outcome
- Health-influencing behaviour
- Health outcomes and metrics
- Knowledge and attitudes
- Adherence/effectiveness of intervention
- Educational outcome
- Socio-/structural-outcomes
- Economic outcome

Sub-Appendix B: Full list of included texts in FEED

Short title	Title	Year
Abeykoon (2017)	Health-related outcomes of new grocery store interventions: a systematic review	2017
Abril (2019)	Outcomes of Healthy Eating Ad Campaigns: A Systematic Review	2019
Afshin (2017)	The prospective impact of food pricing on improving dietary consumption: A systematic review and meta-analysis	2017
Agarwal (2022)	The effect of energy and fat content labeling on food consumption pattern: a systematic review and meta-analysis	2022
Al-Khudairy (2019)	Choice architecture interventions to improve diet and/or dietary behaviour by healthcare staff in high-income countries: A systematic review	2019
Alston (2020)	Retail initiatives to improve the healthiness of food environments in rural, regional and remote communities	2020
An (2013)	Effectiveness of subsidies in promoting healthy food purchases and consumption: a review of field experiments	2013
Anastasiou (2019)	The relationship between food label use and dietary intake in adults: A systematic review	2019
Andreyeva (2022)	Outcomes Following Taxation of Sugar-Sweetened Beverages: A Systematic Review and Meta-analysis	2022
Andreyeva (2022)	Evaluation of Economic and Health Outcomes Associated With Food Taxes and Subsidies A Systematic Review and Meta-analysis	2022
Andueza (2022)	Effectiveness of Nutritional Strategies on Improving the Quality of Diet of Children from 6 to 12 Years Old: A Systematic Review	2022
Appleton (2016)	Increasing vegetable intakes: rationale and systematic review of published interventions	2016
Atanasova (2022)	The impact of the consumer and neighbourhood food environment on dietary intake and obesity-related outcomes: A systematic review of causal impact studies	2022
Avery (2015)	A systematic review investigating interventions that can help reduce consumption of sugar-sweetened beverages in children leading to changes in body fatness	2015
Backholer (2016)	The impact of a tax on sugar-sweetened beverages according to socio-economic position: a systematic review of the evidence	2016

Barberio (2017)	Population-level interventions in government jurisdictions for dietary sodium reduction: a Cochrane Review	2017
Bianchi (2018)	Restructuring physical micro-environments to reduce the demand for meat: a systematic review and qualitative comparative analysis	2018
Black (2012)	Food subsidy programs and the health and nutritional status of disadvantaged families in high income countries: a systematic review	2012
Black (2017)	How effective are family-based and institutional nutrition interventions in improving children's diet and health? A systematic review	2017
Bleich (2013)	Systematic Review of Community-Based Childhood Obesity Prevention Studies	2013
Bleich (2017)	A Systematic Review of Calorie Labeling and Modified Calorie Labeling Interventions: Impact on Consumer and Restaurant Behavior	2017
Blekkenhorst (2022)	Healthy lifestyle initiatives for increasing fruit and vegetable intake among Aboriginal and Torres Strait Islander peoples	2022
Boyland (2016)	Advertising as a cue to consume: a systematic review and meta-analysis of the effects of acute exposure to unhealthy food and nonalcoholic beverage advertising on intake in children and adults	2016
Browne (2020)	Effects of food policy actions on Indigenous Peoples' nutrition-related outcomes: a 2020 systematic review.	
Brunner (2022)	Interventions to optimise nutrition in older people in hospitals and long-term care:2022 Umbrella review	
Buchanan (2022)	A Community Guide Systematic Review: School Dietary and Physical Activity Interventions	2022
Burt (2021)	A systematic, mixed studies review of the outcomes of community garden participation related to food justice	2021
Cadario (2020)	Which Healthy Eating Nudges Work Best? A Meta-Analysis of Field Experiments	2020
Calancie (2015)	Nutrition-related policy and environmental strategies to prevent obesity in rural communities: a systematic review of the literature, 2002-2013	2015
Campos (2011)	Nutrition labels on pre-packaged foods: a systematic review	2011
Chan (2021)	Point-of-sale nutrition information interventions in food retail stores to promote healthier food purchase and intake: A systematic review	2021

Chan (2022)	Evaluating the impacts of school garden-based programmes on diet and nutrition-related knowledge, attitudes and practices among the school children: a systematic review	2022
Charlton (2015)	Innovative and Collaborative Strategies to Reduce Population-Wide Sodium Intake	2015
Chaudhary (2020)	Promoting healthy eating among young people-a review of the evidence of the impact of school-based interventions	2020
Christoforou (2016)	State-level and community-level salt reduction initiatives: a systematic review of global programmes and their impact	2016
Cohen (2021)	Universal School Meals and Associations with Student Participation, Attendance, Academic Performance, Diet Quality, Food Security, and Body Mass Index: A Systematic Review	2021
Colley (2019)	The Impact of Canadian School Food Programs on Children's Nutrition and Health: A Systematic Review	2019
De Marchis (2019)	Interventions Addressing Food Insecurity in Health Care Settings: A Systematic Review	2019
de Sa (2008)	Will European agricultural policy for school fruit and vegetables improve public health A review of school fruit and vegetable programmes	2008
Delgado (2022)	Unhealthy food advertising. A position paper by the AEP Committee on Nutrition and Breastfeeding	2022
Delgado-Noguera (2011)	Primary school interventions to promote fruit and vegetable consumption: A systematic review and meta-analysis	2011
Deliens (2016)	Dietary interventions among university students: A systematic review	2016
Della (2022)	Impact of Measures Aiming to Reduce Sugars Intake in the General Population and Their Implementation in Europe: A Scoping Review	2022
Dixon (2021)	Associations between the built environment and dietary intake, physical activity, and obesity: A scoping review of reviews	2021
Dodd (2020)	Effectiveness and Feasibility of Taxing Salt and Foods High in Sodium: A Systematic Review of the Evidence	2020
Downs (2013)	The effectiveness of policies for reducing dietary trans fat: a systematic review of the evidence.	2013
Driessen (2014)	Effect of changes to the school food environment on eating behaviours and/or body weight in children: A systematic review	2014

Engbers (2005)	Worksite health promotion programs with environmental changes: A systematic review	2005
Engel (2020)	Fruit and Vegetable Incentive Programs for Supplemental Nutrition Assistance Program (SNAP) Participants: A Scoping Review of Program Structure	2020
Escaron (2013)	Supermarket and Grocery Store-Based Interventions to Promote Healthful Food Choices and Eating Practices: A Systematic Review	2013
Espino (2015)	Community-Based Restaurant Interventions to Promote Healthy Eating: A Systematic Review	2015
Evans (2012)	Systematic review and meta-analysis of school-based interventions to improve daily fruit and vegetable intake in children aged 5 to 12 y	2012
Everson-Hock (2013)	Community-based dietary and physical activity interventions in low socioeconomic groups in the UK: A mixed methods systematic review	2013
Faith (2007)	Toward the reduction of population obesity: Macrolevel environmental approaches to the problems of food, eating, and obesity	2007
Fergus (2021)	Nutrition Interventions in Low-Income Rural and Urban Retail Environments: A Systematic Review	2021
Fernandes (2016)	Influence of menu labeling on food choices in real-life settings: a systematic review	2016
Freudenberg (2015)	The State of Evaluation Research on Food Policies to Reduce Obesity and Diabetes Among Adults in the United States, 2000-2011	2015
Ganann (2012)	Community-based interventions for enhancing access to or consumption of fruit and vegetables among five to 18-year olds: a scoping review	2012
Garcia (2018)	The impact of urban gardens on adequate and healthy food: a systematic review	2018
Gittelsohn (2012)	Interventions in Small Food Stores to Change the Food Environment, Improve Diet, and Reduce Risk of Chronic Disease	2012
Gittelsohn (2017)	Pricing Strategies to Encourage Availability, Purchase, and Consumption of Healthy Foods and Beverages: A Systematic Review	2017
Glanz (2012)	Retail grocery store marketing strategies and obesity: an integrative review.	2012
Grech (2015)	A systematic literature review of nutrition interventions in vending machines that encourage consumers to make healthier choices	2015
Gressier (2021)	What is the impact of food reformulation on individuals' behaviour, nutrient intakes and health status? A systematic review of empirical evidence.	2021

Gupta (2020)	The effect of front-of-package labels or point-of-sale signage on consumer knowledge, attitudes and behavior regarding sugar-sweetened beverages: a systematic review	2020
Gwynn (2019)	Effect of nutrition interventions on diet-related and health outcomes of Aboriginal and Torres Strait Islander Australians: A systematic review	2019
Hansen (2022)	Effectiveness of food environment policies in improving population diets: a review of systematic reviews	2022
Harris (2021)	A systematic review of interventions to increase breakfast consumption: a socio-cognitive perspective	2021
Harrison (2022)	Effects of public-private partnership on diet-related obesity risk factors among school-aged children: A systematic literature review	2022
Hartmann-Boyce (2018)	Grocery store interventions to change food purchasing behaviors: a systematic review of randomized controlled trials	2018
Hillier-Brown (2017)	The impact of interventions to promote healthier ready-to-eat meals (to eat in, to take away or to be delivered) sold by specific food outlets open to the general public: a systematic review	2017
Hodder (2020)	Interventions for increasing fruit and vegetable consumption in children aged five years and under	2020
Hodges (2023)	A Systematic Review of Marketing Practices Used in Online Grocery Shopping: Implications for WIC Online Ordering	2023
Hollands (2019)	Altering the availability or proximity of food, alcohol, and tobacco products to change their selection and consumption	2019
Hsiao (2019)	A Systematic Review of Mobile Produce Markets: Facilitators and Barriers to Use, and Associations with Reported Fruit and Vegetable Intake	2019
Hua (2016)	Vending Machines: A Narrative Review of Factors Influencing Items Purchased	2016
Hume (2022)	Community gardens and their effects on diet, health, psychosocial and community outcomes: a systematic review	2022
Ikonen (2020)	Consumer effects of front-of-package nutrition labeling: an interdisciplinary meta-analysis	2020
Ismail (2021)	Outcome evaluation of fruits and vegetables distribution interventions in schools: a systematic review and meta-analysis	2021
Jaime (2009)	Do school based food and nutrition policies improve diet and reduce obesity?	2009

Jensen (2011)	Economic incentives and nutritional behavior of children in the school setting: A systematic review	2011
Johnson (2016)	Reducing discretionary food and beverage intake in early childhood: a systematic review within an ecological framework	2016
Karuranga (2020)	Effective strategies for childhood obesity prevention via school based, family involved interventions: A critical review for the development of the Feel4Diabetes-study school based component	2020
Kirkland (2018)	School-based nutrition and garden programs and parental dietary changes in low-income settings: a review	2018
Kirkpatrick (2018)	Gaps in the Evidence on Population Interventions to Reduce Consumption of Sugars: A Review of Reviews	2018
Kiszko (2014)	The influence of calorie labeling on food orders and consumption: a review of the literature	2014
Kothe (2011)	Increasing the frequency of breakfast consumption	2011
Li (2021)	Grocery store access and childhood obesity: A systematic review and meta-analysis	2021
Little (2022)	Promoting Healthy Food Access and Nutrition in Primary Care: A Systematic Scoping Review of Food Prescription Programs	2022
Littlewood (2016)	Menu labelling is effective in reducing energy ordered and consumed: a systematic review and meta-analysis of recent studies	2016
Liu (2022)	The Effect of Downsizing Packages of Energy-Dense, Nutrient-Poor Snacks and Drinks on Consumption, Intentions, and Perceptions-A Scoping Review	2022
Long (2015)	Systematic Review and Meta-analysis of the Impact of Restaurant Menu Calorie Labeling	2015
Mah (2019)	A Systematic Review of the Effect of Retail Food Environment Interventions on Diet and Health with a Focus on the Enabling Role of Public Policies	2019
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