Supplementary file 1. Detailed Search Strategy Including Full Electronic Search Strategy for at Least One Database.

This supplementary document details the search strategy for a systematic review conducted as part of a comprehensive scoping study \(^1\), the results of which were used to reclassify and analyse nutrition policy actions against the World Cancer Research Fund’s NOURISHING framework \(^2\).

Search for national food and nutrition policies (in scope countries)

Systematic review methods

The project team aimed to use methods which were systematic, transparent and potentially replicable. The process was based upon the principles of robust systematic summary outlined in the Cochrane Handbook for Systematic Reviews \(^3\) and pragmatically tailored for this project as detailed in the report of the scoping study \(^1\). Each team member was trained in the process and quality governance measures were implemented.

The overarching process is summarised in Figure 1.

Figure 1 Overarching process

| Step 1 | • Searching  
|        | • Removing duplicates  |
| Step 2 | • Initial screening  
|        | • Retain and retrieve full text of potentially relevant "keepers"  |
| Step 3 | • Review full text  
|        | • Retain relevant "inclusions"  |
| Step 4 | • Assess quality and "trustworthiness"  |
| Step 5 | • Extract data  |
| Step 6 | • Summarise in tables  |
| Step 7 | • Synthesise  |

Development of search strategy

The search strategy was developed by Dr Alison Weightman and Dr Helen Morgan of the Support Unit for Research Evidence (SURE) at Cardiff University, Wales, UK and Professor Philip Baker and Professor Amanda Lee of the Queensland University of Technology (QUT) using standard methods \(^4,5\).
Development of the search strategy involved:

- Articulation of searchable question/s and sub-questions, and development of the PICO-T components of each research question (see below).
- Identification and definition of search terms;
- Identification of potential databases, websites and receipt of proffered documents by the Department of Health and Ageing (DoHA) for consideration for inclusion.
- Testing of the search strategy in Medline (Ovid), which was then adapted to other databases.
- Approval of the literature search strategy by the DoHA (22 March 2013).

A series of searchable, answerable questions were derived from the main, over-arching research questions before designing the review, as post-hoc questions are more susceptible to bias than those determined a priori.

Each searchable, answerable question followed the PICO–T concept. The acronym translates to:

P – Populations/People/Patients/Problem
I – Interventions(s)/Issues
C – Comparison
O – Outcome
and additionally
T – Type of study design appropriate for the question

After developing the PICO – T structure, each question was also restated in ‘plain language’.

Other than where identified as being conducted by the QUT team, the SURE team ran the searches, de-duplicated outputs and supplied a full set of results as EndNote libraries or table format as a word document to the QUT team. For each research question the QUT team developed screening tools, quality assessment tools and data extraction tools. These are included in the scoping study report (sections A2.2.5).

For each research question, the QUT team screened the titles and abstracts of all returns, identified documents of potential relevance, retrieved full versions of these papers and reports and conducted a second screen to identify relevant documents, included these in final Endnote libraries and completed PRISMA flow diagrams.

For each research question data was then extracted from the included documents and entered into data extraction tables.

**Overview of Research Question**

Plain language question: Which in scope (OECD) countries have food and nutrition polices?

Sub-questions:

a) What are the scope, issues, recommendations, inclusions and format of these (quality) food and nutrition policies in OECD countries?

b) What approaches and information have been used to determine the scope, issues, recommendations, inclusions and format of these food and nutrition policies?

**Detailed search strategy**
**Search for:** Existence of any OECD countries’ (national) food and nutrition policies and component strategies (identifying the most current)

**Study type:** Food and Nutrition: policies, policy, strategy, plan, report, monitoring, surveillance, guideline, guidance, legislation, program, project, intervention, initiative, regulation, law, directive, evaluation.

**Identification and definition of search terms:**

Search terms for each PICO–T element were identified through reference to the simple logic model in accordance with best-practice for systematic reviews 7. The search terms were subsequently refined by the SURE expert information specialists and trialled on Medline biographic dataset as standard practice with the application of the appropriate Boolean operators to expand (or) and join (and) the elements. A specialty OECD-countries filter was integrated to exclude non-OECD countries. The search strategy was then adapted to all specified databases.

For each question, the search strategies were initially constructed, trialled, discussed, refined and then agreed upon by the DoHA. All aspects of the searching process were documented to ensure transparency and reproducibility.

**Databases and websites searched**

The choice of databases was tailored to the questions and the selection extended beyond the area of health and included other relevant areas such as agriculture, environment and transport.

**Databases** searched included:
- Cochrane Public Health Group Specialised Register
- The Cochrane Library
- MEDLINE, MEDLINE In-Process
- EMBASE
- CINAHL
- PsycINFO
- LILACS
- ASSIA
- British Nursing Index
- EPPI Centre
  - DoPHER
  - TRoPHI
- ERIC
- Sociological Abstracts
- Transport Database TRIS
- Web of Science:
  - Science Citation Index, Social Sciences Citation Index and Conference Proceedings Citation Index
- Agricola
- Agris
- AANRO (Australian agriculture and natural resources online)
- HEED
- NEED

**Websites** searched included:
• EU Platform on Diet, Physical Activity and Health
  http://ec.europa.eu/health/ph_determinants/life_style/nutrition/platform/database/
• Health-evidence.ca (now Health EvidenceTM)
  o http://health-evidence.ca (now www.healthevidence.org)
• International Union for Health Promotion and Education
  o http://www.iuhpe.org
• Health Technology and Assessment Programme
  o http://www.nectha.org
• NICE guidelines
  o http://www.nice.org.uk
• SIGN guidelines
  o http://www.sign.ac.uk
• US Centres for Disease Control and Prevention
  o http://www.cdc.gov/
• World Health Organization
  o http://www.who.int/en/
• Food and Agricultural Organisation
• Country-specific (international) government websites.

**Time:** 2002 to 2013. Literature was searched for the previous 12 years to ensure that the policies and evaluations located reflect contemporary issues and practice such as prevention of chronic disease and obesity. For example, several countries had nutrition strategies that focused on ameliorating nutrient deficiencies and undernutrition before then. It is also important to ensure that identification of multiple duplicates and superseded policies in some countries is minimised. Where an identified country may have more than one relevant policy during this period, the most recent was assessed.

**Population:**

• In scope countries defined as those with similar socio-economic/political conditions as Australia and members of the OECD.

<table>
<thead>
<tr>
<th>Australia</th>
<th>France</th>
<th>Korea</th>
<th>Slovenia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>Germany</td>
<td>Luxembourg</td>
<td>Spain</td>
</tr>
<tr>
<td>Belgium</td>
<td>Greece</td>
<td>Mexico</td>
<td>Sweden</td>
</tr>
<tr>
<td>Canada</td>
<td>Hungary</td>
<td>Netherlands</td>
<td>Switzerland</td>
</tr>
<tr>
<td>Chile</td>
<td>Iceland</td>
<td>New Zealand</td>
<td>Turkey</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Ireland</td>
<td>Norway</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>Denmark</td>
<td>Israël</td>
<td>Poland</td>
<td>United States</td>
</tr>
<tr>
<td>Estonia</td>
<td>Italy</td>
<td>Portugal</td>
<td></td>
</tr>
<tr>
<td>Finland</td>
<td>Japan</td>
<td>Slovak Republic</td>
<td></td>
</tr>
</tbody>
</table>

• **Inclusions:**
• Policies targeting all component population groups in these countries.

- **Exclusions:**
  - Policies targeting those with serious medical conditions; elite athletes; frail elderly in institutions

- **Intervention:** Development of food and nutrition policy

- **Comparator:** Lack of food and nutrition policy

- **Outcomes:**
  - The existence of country food and nutrition policies and policy actions that sit under this policy framework.

**Sample search strategy and returns**

The sample search strategy is included below in Table 1.

**Table 1 Sample search strategy**

**Database(s):** Ovid MEDLINE(R) without Revisions 1996 to February Week 4 2013 **Search Strategy:**

<table>
<thead>
<tr>
<th>#</th>
<th>Searches</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>((food or beverage* or drink* or water or nutrition* or nutrient* or diet* or obesity or agricultur* or land-use) adj3 (policies or policy or stratg* or plan* or report* or surveillance or guideline* or guidance or legislation or program* or intervention* or initiative* or regulat* or law* or directive*) adj5 (nation* or government* or country* or federal)).ti,ab.</td>
<td>959</td>
</tr>
<tr>
<td>2</td>
<td>Nutrition Policy/</td>
<td>5283</td>
</tr>
<tr>
<td>3</td>
<td>Food Supply/</td>
<td>4494</td>
</tr>
<tr>
<td>4</td>
<td>Food Assistance/</td>
<td>16</td>
</tr>
<tr>
<td>5</td>
<td>exp Food Handling/</td>
<td>21766</td>
</tr>
<tr>
<td>6</td>
<td>food packaging/ or food labeling/</td>
<td>3895</td>
</tr>
<tr>
<td>7</td>
<td>exp food quality/</td>
<td>38306</td>
</tr>
<tr>
<td>8</td>
<td>Legislation, Food/</td>
<td>1282</td>
</tr>
<tr>
<td>9</td>
<td>exp Agriculture/</td>
<td>40603</td>
</tr>
<tr>
<td>10</td>
<td>exp beverages/ or exp food/</td>
<td>524230</td>
</tr>
<tr>
<td>11</td>
<td>Food Services/</td>
<td>2264</td>
</tr>
<tr>
<td>12</td>
<td>dietetics/</td>
<td>2316</td>
</tr>
<tr>
<td>13</td>
<td>exp Diet/</td>
<td>94688</td>
</tr>
<tr>
<td>14</td>
<td>Obesity/</td>
<td>77197</td>
</tr>
<tr>
<td>15</td>
<td>or/3-14</td>
<td>686655</td>
</tr>
</tbody>
</table>
The returns were screened in two stages to identify relevant National nutrition policies, strategies and related interventions. The screening tools are included in Box A and Box B below. The first screening tool was applied to returned titled and abstracts to identify all those returns that appeared to be national nutrition policies. The full documents of these “keepers” were retrieved by web searches, and the second screening tool was applied to full documents to identify all those “keepers” that were national nutrition policies.

The PRISMA flow diagram has been supplied separately.
Box A Initial screening tool

**Initial Screening Tool Question Bils:**

**Aims:** To identify documents that appear to be national level (food and) nutrition policies (KEEPERS)

**Definitions:**

- **Policy:** written statement of commitment (generally written in broad terms) by a nation state. Strategy may be similar to a policy.
- **Action plan:** (National plans of action on nutrition, NPANS) arise from policy, providing more detailed operational plans of action, include budgets and specific goals and targets that are specific, measurable, attainable, relevant and time bound (SMART).
- **Programme:** provides the detail of the implementation of the action plan; with specific projects defined within
- **National:** country level (Should only here country level returns for Bill)

**Does the Title or Abstract states:**

<table>
<thead>
<tr>
<th>National focus: Name of in scope country (use attached list)</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutrition policy or Nutrition strategy</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Food and health policy or strategy</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Diet and health policy or strategy</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Food Policy or Food Strategy or Food Plan</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>(but may include section on health or nutrition)</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Focus on determinant of population level diet-related health issue affecting supply and demand of food; Food production, Food processing, Distribution &amp;Marketing, Food supply, Retail, Catering/food services, Consumer demand, nutrition education and/or diet or food monitoring and surveillance</td>
<td></td>
<td>No</td>
</tr>
</tbody>
</table>

**X Exclude**

- If Australian state/territory send to Bill reviewer

**✓ Include as Keeper**

**GET FULL PAPER/PDF**
Box B Second screening tool

Second stage screening tool question 8:

Aim: To identify national level (food and) nutrition policies

SEARCH OF FULL TEXT DOCUMENTS: Contents; Summary; full text

Definitions:
- Policy: written statement of commitment (generally written in broad terms) by a nation state. Strategy may be similar to a policy.
- Action plans: (National plans of action on nutrition, NPHAN) arise from policy, providing more detailed operational plans of action, include budgets and specific goals and targets that are specific, measurable, attainable, relevant and time bound (SMART).
- Programme: provides the detail of the implementation of the action plan, with specific projects defined within

National: country level (Should only have country level returns for 8)

Does the Content, Summary, Full text document include:

- National focus: National focus: Name of in scope country [attached]
  - Yes
  - Nutrition policy
    - No
    - Food and health policy
      - Yes
      - X Exclude
        - (If Australian state/territory refer to 8)
      - No
      - Food industry or economic development policy/strategy or plan (NO mention of nutrition at all)
        - No
        - Food, diet, nutrition programmes or projects that are not at policy level
          - Yes
          - X Exclude
          - No
          - Focus on serious medical conditions, elite athletes, or food safety in institutions
            - Yes
            - X Exclude
            - No

Note: Leave aside for other opinion on any nutrition-related component of food policy/strategy/plan (as per Australian food plan)
References


