The Cochrane Library

Core resource for information on the effectiveness of a wide range of healthcare interventions.

ulster.ac.uk
Collection of 6 databases searched simultaneously

- **Cochrane Database of Systematic Reviews**
  ‘Gold Standard’ systematic reviews of research on the effects of healthcare, carried out by the Cochrane Collaboration.

- **Database of Abstracts of Reviews of Effects (Other Reviews)**
  Structured abstracts of systematic reviews which have been evaluated by the Centre for Reviews and Dissemination (CRD) at the University of York. Covers topics yet to be addressed by Cochrane.

- **The Cochrane Central Register of Controlled Trials (Trials)**
  Referred to as ‘CENTRAL’. Register of all articles reporting clinical trials.
• **Cochrane Methodology Register (Methods Studies)**
  bibliography of publications that report on methods used to carry out controlled trials. **NB. The register is under review. No updates have been added since July 2012**

• **Health Technology Assessment Database**
  information on healthcare technology assessments

• **NHS Economic Evaluation Database**
  register of published economic evaluations of healthcare interventions.
Access and updates

- Freely available online in the United Kingdom [http://www.thecochranelibrary.com/](http://www.thecochranelibrary.com/)

  or

- Access from the A-Z Database List through the Library & ICT tab on the University Portal.

- New records are added daily and the database contents reviewed for currency every 3 months.
What is a Systematic Review?
• A systematic review identifies an intervention for a specific disease or other problem in health and health care and determines whether or not this intervention works.

• The authors of the review locate, appraise and synthesise evidence (including, but not always, meta-analysis) from as many relevant scientific studies as possible.

• They summarise conclusions about effectiveness.

• They differ from other types of review in that they adhere to a strict design.
Example of a Cochrane Systematic Review

Scroll down to view the structured Abstract or click on the Article tab to read the whole review.
The Abstract will give details of the methodology

**Abstract**

**Background**

Calcium channel blockers (CCBs) are a relatively new antihypertensive class. The effect of first-line CCBs on the prevention of cardiovascular events, as compared with other antihypertensive drug classes, is unknown.

**Objectives**

To determine whether CCBs used as first-line therapy for hypertension are different from other first-line drug classes in reducing the incidence of major adverse cardiovascular events.

**Search methods**

Electronic searches of the Cochrane Central Register of Controlled Trials, MEDLINE, EMBASE and the WHO-ISH Collaboration Register (up to May 2009) were performed. We also checked the references of published studies to identify additional trials.

**Selection criteria**

Randomized controlled trial (RCT) comparing first-line CCBs with other antihypertensive classes, with at least 100 randomized hypertensive participants and with a follow-up of at least two years.

**Data collection and analysis**

Two authors independently selected the included trials, evaluated the risk of bias and entered the data for analysis.

**Main results**

Eighteen RCTs (14 dihydropyridines, 4 non-dihydropyridines) with a total of 141,807 participants were included. All-cause mortality was not different between first-line CCBs and any other first-line antihypertensive classes. CCBs reduced the following outcomes as...
From the article tab you can use the drop down menu ‘Jump to’ to navigate through the review. Just click on the part you want to look at.

You will usually find the authors search strategy recorded in the Appendices.
Appendix 1. MEDLINE search strategy

Database: Ovid MEDLINE(R) <2000 to current>

Search Strategy:

1. (calcium channel blockers or amlodipine or amrinone or bencyclane or bepridil or cinnarizine or conotoxins or diltiazem or felodipine or fendiline or flunarizine or gallopamil or isradipine or lidoflazine or magnesium sulfate or mibefradil or nicardipine or nifedipine or nimodipine or nisoldipine or nitrendipine or perhexiline or prenylamine or verapamil or omega-agatoxin iva or omega-conotoxin gvi or omega-conotoxins).mp.
2. calcium adj2 (inhibit$ or agonist? or exogenous or blockader?).tw.
3. 1 or 2
4. hypertension/
5. hypertens$.tw.
Calcium channel blockers versus other classes of drugs for hypertension (Review)

Carrying out a search in the Cochrane Library
From the Cochrane Homepage you can carry out a Basic Search. There is also a link to the online Help.

Click on Advanced Search to open up the main search page.
Example question

We are going to search for information on: Benefits of the Mediterranean diet for the prevention of heart disease.

Think about the main keywords and if they have any alternative terms, for example;

heart disease OR cardiovascular disease
We are going to begin the search by using MeSH Subject Headings (as used in Medline Ovid)

Open up the Advanced Search screen and click on the Medical Terms (MeSH) tab.
Enter your first search term – mediterranean diet and click on Lookup
The indexing page opens and a match has been found. Using MeSH puts a search term into a specific context and gives it a clear definition. Cochrane will retrieve all material that meets this definition.
Click on Add to Search Manager to start to build the search strategy.

The Search Results box also breaks down the results within each of the 7 databases.
Next repeat using a free text search. By searching this way, using the term Mediterranean we will catch all the material missed by the indexing - this will widen a search.
Combine the searches with OR to give a final number for the first set of keywords.

Combine searches in Cochrane using the prefix # e.g. #1 OR #2 and then click on GO.
To search for another term using the Subject Headings, click on the m button at the end of the search box.
Repeat the search with heart disease
The term heart disease is part of the wider subject tree cardiovascular disease. Click on this term to select.
Update Search Manager
Combine the two sets of terms with AND
Click on the results number to view.

<table>
<thead>
<tr>
<th>#</th>
<th>Description</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>MeSH descriptor: [Diet, Mediterranean] explode all trees</td>
<td>200</td>
</tr>
<tr>
<td>#2</td>
<td>mediterranean</td>
<td>947</td>
</tr>
<tr>
<td>#3</td>
<td>#1 or #2</td>
<td>947</td>
</tr>
<tr>
<td>#4</td>
<td>MeSH descriptor: [Cardiovascular Diseases] explode all trees</td>
<td>77237</td>
</tr>
<tr>
<td>#5</td>
<td>#3 and #4</td>
<td>166</td>
</tr>
</tbody>
</table>
The Cochrane Systematic Reviews are displayed, results from the other databases that make up Cochrane are shown down the left hand side of the screen. Click into the relevant database to view.

<table>
<thead>
<tr>
<th>All Results (166)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Cochrane Reviews (12)</td>
</tr>
<tr>
<td>All Other Reviews (9)</td>
</tr>
<tr>
<td>All Trials (139)</td>
</tr>
<tr>
<td>All Methods Studies (0)</td>
</tr>
<tr>
<td>All Technology Assessments (3)</td>
</tr>
<tr>
<td>All Economic Evaluations (3)</td>
</tr>
<tr>
<td>All Cochrane Groups (0)</td>
</tr>
</tbody>
</table>

**Cochrane Database of Systematic Reviews: Issue 7 of 12, July 2015**

Issue *updated daily* throughout month

There are 12 results from 8990 records for your search on #5 - #3 and #4 in Cochrane Reviews in the strategy currently being edited

Sort by **Relevance: high to low**

- **Mediterranean** dietary pattern for the primary prevention of cardiovascular disease
  - Karen Rees, Louise Harley, Nadine Flowers, Aileen Clarke, Lee Hooper, Margaret Thorogood and Saverio Stranges
  - Online Publication Date: August 2013

- **Non-pharmacological interventions for preventing secondary vascular events**
  - Marilyn MacKay-Lyons, Merienne Thornton, Tim Ruggles and Marion Chester
  - Online Publication Date: March 2013

- **Reduced or modified dietary fat for preventing cardiovascular disease**
  - Lee Hooper, Carolyn D Summerbell, Rachel Thompson, Deirdre Sills, Felicity Gray, Davey Smith
  - Online Publication Date: May 2012

- **Dietary advice for reducing cardiovascular risk**
  - Karen Rees, Mariana Dyakova, Nicola Wilson, Kirsten Ward, Margaret Thorogood and Eric Brunner
  - Online Publication Date: December 2013

- **Prolonged thromboprophylaxis with Low Molecular Weight heparin for abdominal or pelvic surgery**
The structured abstract is displayed.

### Abstract

**Background**

The Seven Countries study in the 1960s showed that populations in the Mediterranean region experienced lower cardiovascular disease (CVD) mortality probably as a result of different dietary patterns. Later observational studies have confirmed the benefits of adherence to a Mediterranean dietary pattern on CVD risk factors. Clinical trial evidence is limited, and is mostly in secondary prevention.

**Objectives**

To determine the effectiveness of a Mediterranean dietary pattern for the primary prevention of CVD.

**Search methods**

We searched the following electronic databases: the Cochrane Central Register of Controlled Trials (CENTRAL, Issue 9 of 12, September 2012); MEDLINE (Ovid, 1946 to October week 1 2012); EMBASE (Ovid, 1980 to 2012 week 41); ISI Web of Science (1970 to 16 October 2012); Database of Abstracts of Reviews of Effects (DARE), Health Technology Assessment Database and Health Economics Evaluation Database (Issue 3 of 12, September 2012). We searched trial registers and reference lists of reviews and applied no language restrictions.

**Selection criteria**

We selected randomised controlled trials in healthy adults and adults at high risk of CVD. A Mediterranean dietary pattern was defined as comprising at least two of the following components: (1) high monounsaturated/saturated fat ratio, (2) low to moderate red wine consumption, (3) high consumption of legumes, (4) high consumption of grains and cereals, (5) high consumption of fruits and vegetables, (6) low consumption of meat and meat products and increased consumption of fish, and (7) moderate consumption of milk and dairy products. The comparison group received either no intervention or minimal intervention. Outcomes included clinical events and CVD risk factors.

**Data collection and analysis**

Two review authors independently extracted data and contacted chief investigators to request additional relevant information.

**Main results**

We included 11 trials (15 papers) (52,044 participants randomised). Trials were heterogeneous in the participants recruited, in the number of dietary components and follow-up periods. Seven trials described the intervention as a Mediterranean diet. Clinical events were reported in only one trial (Women's Health Initiative 48,835 postmenopausal women, intervention not described as a Mediterranean diet but increased fruit and vegetable and cereal intake) where no statistically significant effects of the intervention were seen on fatal and non-fatal endpoints at eight years. Small reductions in total cholesterol (-0.16 mmol/L, 95% confidence interval (CI) -0.26 to -0.06; random-effects model) and low-density lipoprotein (LDL) cholesterol (-0.07 mmol/L, 95% CI -0.13 to -0.01) were seen with the intervention. Subgroup analyses revealed statistically significant greater reductions in total cholesterol in those trials describing the intervention as a Mediterranean diet (-0.23 mmol/L, 95% CI -0.27 to -0.2) compared with control (-0.06 mmol/L, 95% CI -0.13 to 0.01). Heterogeneity precluded meta-analyses for other
Open the article tab to read/save/download the full text
Use the drop down menu under Jump to… to go specific parts of the review. You will usually find the search strategy under Appendices.
Sample search strategy

**MEDLINE Ovid (1946 to October week 1 2012)**


1. exp Fruit/
2. fruit*.tw.
3. exp Vegetables/
4. Vegetable Proteins/
5. vegetable*.tw.
6. exp Fabaceae/
7. fabaceae.tw.
8. bean*.tw.
9. legume*.tw.
10. Lycopersicon esculentum/
11. lycopersicon esculent*.tw.
12. tomato*.tw.
13. solanum lycopersicum.tw.
14. Nuts/
15. (nut or nuts).tw.
16. Bread/
17. bread*.tw.
18. exp Cereals/
19. cereal*.tw.
20. grain*.tw.
21. Solanum tuberosum/
22. solanum tuberosum.tw.
23. potato*.tw.
24. Carrots
Help

• Use your Subject Guide, select from the A-Z list

• All databases have their own excellent online Help, find the link along the top of the webpage

  ▶ Ask the [Librarians](#) for help