The Cochrane Library

Lister Hill Library of the Health Sciences

The Cochrane Library Workbook

This workbook provides you with some basic searches to work through, using Cochrane. Hands-on practice is the best way to get to know your way round the system, so feel free to vary these examples or to try your own searches.

First you need to access the Cochrane Library, by either of the methods below:

1. Go to the Library’s homepage at www.uab.edu/lister
2. Click on the Databases tab at the top of the screen
3. Click on the letter C
4. Scroll down until you find the link for Cochrane Library
Searching

You have a choice of search methods:

**Simple** – for single words or phrases, either anywhere in the records or in a specific field, eg: title or author.

**Advanced** – to build up a more complex search, using AND, OR and NOT, in specific fields if required, and restricting the search to a particular Cochrane database, date range or record status.

**MeSH search** – to search using the Medline Subject Headings (MeSH), which facilitate a more comprehensive search.

**Search history** – to view the steps of your search (which may include any or all of the above search methods) and to combine different search steps.

**Simple search**

A simple search will be run against all databases in The Cochrane Library and you are then able to choose to view results from the database(s) you want.

**Example 1: Search for the word "glucosamine"**

On the home page, click into the SEARCH box at the top of the right hand side of the screen.

Type *glucosamine*. Notice that your search will retrieve records which contain the word glucosamine in the Title, Abstract or Keywords fields. Click on the “Go” button next to the box.

The Search Results screen appears.

Notice that the number of results are given for each database.

The results from the Cochrane Reviews are currently displayed.
Now click **Other Reviews** to see the results from that database

Note that each record shows whether it is a complete review or a protocol.

Click on **Cochrane Reviews** to return to the Reviews

Find the review "**Glucosamine therapy for treating osteoarthritis**"

Click on the title, to see the full text of this review.

It is also possible to search for a phrase in Simple Search mode.

Type "**diet therapy**" into the search box, with quotation marks.

It is best to use quotation marks for all phrase searches, since this finds only records containing the exact phrase. A search without quotation marks would find records with both the individual words occurring anywhere.

**Repeat the search** using the term diet therapy without quotation marks

Note that many more records are found, but that many are irrelevant.
Advanced search

Is used when you want to carry out a more complex search, combining two or more concepts.

Example 2: Find whether there is evidence for the effectiveness of aversive therapy for smoking cessation

Click on Advanced Search

Type *aversion or aversive* in the first "Search for" box

The "In" box alongside it should say "Search all text"

Type *smok* in the next "Search for" box. This will retrieve any of the terms *smoking, smoker, smokers, smoke.*

(Leave the box saying "AND" on its left as it is, but note that you could have changed it to OR or NOT)

Change the "In" box alongside it from "Record Title" to "Search all text"

Note that this means you are searching for all records which contain the words (aversion or
aversive) and the words (smoking or smoker or smokers or smoke).

Scroll down the screen and notice that it is possible to restrict your search to selected databases. You can also restrict the search record status and date. For this search we will not use any of these restrictions.

Click the **Search** button

The Search Results screen appears. How many “Cochrane Reviews” have been found? How many “Other Reviews”? Scroll down to see the Cochrane Reviews

Note that they are completed reviews indicated by the "Review" in a dark blue circle.

Find a relevant record and click on Record to see the abstract and full record

Look at the full text Authors’ Conclusions

**MeSH search**

If you’ve used MeSH before to search Medline or other databases, then this will be straightforward. However, many people find MeSH quite complicated at first, so if you’ve not used it before, take time to explore this section and get to grips with it.

Keywords drawn from the MeSH (Medical Subject Headings) Thesaurus published by the U.S. National Library of Medicine have been attached to many, but not all, records in the Cochrane library. For this reason, it is necessary to do a combination of free-text searching, and MeSH searching to carry out a complete interrogation of the Cochrane library.

The MeSH Thesaurus is organised hierarchically in “trees”, with the smaller branches of the trees containing more specific terms. The MeSH search allows searching of the databases using the MeSH terms and tree structures.

Searching using MeSH enables you to retrieve records with a particular focus even if the text does not use a form of words you would have chosen for free text searching. For example, searching the MeSH term *Family Practice* means you don’t have to think of and enter all possible alternative terms, eg: general practice, community doctor, primary care, etc
Example 3. Find reviews of effectiveness of drug therapies and diet therapy for rheumatoid arthritis.

Click on **MeSH Search**

Scroll through the Search Tips on the right hand side and read about the options for searching using MeSH

Return to the top of the screen and click into the “Enter MeSH term” box

Type *rheumatoid arthritis*

Click on the **Thesaurus** button immediately below

Scroll down the next screen and you will see a list of MeSH descriptors to choose from:

Click on **Arthritis, Rheumatoid** which seems to be the appropriate MeSH term for this search

If you wish to see the definition of a Mesh term, you need to type it into the “Enter MeSH term” box, and click the **Definition** button

Scroll down the screen to see the MeSH trees which include the MeSH term **Arthritis, rheumatoid**
Notice that it is part of 4 different trees:

- Musculoskeletal diseases – joint diseases,
- Musculoskeletal diseases – rheumatic diseases,
- Skin and connective tissue diseases
- Immune System Diseases.

In other words, Arthritis, Rheumatoid falls under all 4 of these broader headings.

Note also that the term Arthritis, Rheumatoid has a number of narrower terms listed underneath it.

(At this point, if you wanted to change your search to one of these narrower terms or a broader term instead, you would click on it and the trees for that term would appear with it highlighted in red.)

Scroll up the screen to the section headed “Search the Cochrane Library content.” Leave the boxes for “Explode” and all 4 trees selected. This means that you will be searching for Arthritis, Rheumatoid and all 7 narrower terms.
(If you wanted to search only on the exact term, you would check the lower box instead.)
In the Qualifier box, click the drop-down arrow and select “Drug therapy” from the list. Notice that “DT”, the code for Drug therapy appears in the box alongside. Click on the View results button.

The search results screen appears.

Notice that the search you have done is summarised – “MeSH descriptor Arthritis, Rheumatoid explode all trees with qualifier: DT”

You should now be familiar with the Results screen, so look through the results in each database.

Now see if you can find reviews on diet therapy for rheumatoid arthritis.

You can either start from scratch, if you would like to reinforce your knowledge of the MeSH search process -

- or alternatively, click the back arrow to return to the previous screen, and this time select the diet therapy qualifier instead.

When you have carried out the search, you also should have retrieved results in the “Other Reviews” database.

Look at the second one by clicking on the title. Compare the author’s conclusions to the CRD commentary.
This is a good illustration of the value of a critically appraised review.

**Search History**

This allows you to view all the searches you have done in a session, which may include any or all of the above search methods. It also lets you combine different searches. This allows you to build up a more complex search and try different combinations if one does not work well.

You can add search steps while in Search History mode and thus continue searching. It is particularly useful if you want to combine a MeSH search with a free text search.

In many ways it provides a step-by-step alternative to Advanced Search mode.

**Example 4. What is the effectiveness of nabumetone in the treatment of rheumatoid arthritis?**

Click on **Search History** in the top right hand pane

Scroll down to see “**Current search history**”

Notice that all the searches you have done in this session are listed in order, each with its own statement number preceded by a #

You have already searched for drug therapy for Rheumatoid Arthritis as a MeSH search (look for that in the list of search statements)

Now you need to add a search for nabumetone and combine the 2 searches together.

Assume you have found out elsewhere that alternative terms (brand names) for nabumetone are relifex and relafen. You will include these terms in your search.

Scroll up to the **Search For** box

Type nabumetone or relifex or relafen in the “Search For” box

Click on the **Go** button

Notice that this search appears in the Search History below
Combine the nabumetone search and the rheumatoind arthritis drug therapy search statements.

Clinck on the underlined search to see the results.

**Saving searches and articles**

You can save your searches or individual articles. To do so, you need to click on Log in, see far top right corner and click on Register Now (also top, right) and follow the instructions to register to use the facility.

**Congratulations!**

**You have made it to the end of the Work Book!**

If you have time left, you could:

- Try some searching of your own
- Explore other features of Cochrane
- Repeat any sections you feel unsure about

*The best way to become proficient at searching is more practice….*

Text adapted from:

1. L.Walton and C. Lobb, COCHRANE Workbook, East Lancashire PCTs Library
2. G. Mynott, An introduction to the Cochrane Library, Stockport NHS Trust
3. Sue Steele, The Cochrane Library, Pennine Acute Hospitals NHS Trust
Handy hints

Entering free-text search terms:

**AND**  finds both terms  e.g. nausea and pregnancy

**OR**  finds either or both terms  e.g. kidney or renal

**NOT**  finds the first term but not the other  e.g. breast cancer not female

**NEAR** acts like AND, but the words must be within 6 words of each other  e.g. cancer near liver

**Child***  Finds child, children, childhood, etc

**natal**  Finds prenatal, antenatal, postnatal, etc

Phrases: use quotation marks  e.g. “acute pain”

Plurals: are found automatically, e.g. *hand* finds hand or hands

British/American spellings: some are found automatically, e.g. *tumour* finds tumour or tumor. To be on the safe side use an asterisk e.g. tumo*r

Apostrophes: you need to search both ways:

“parkinson’s disease” or “parkinsons disease”