PubMed Advanced Search Features

What is PubMed?
- An Internet search engine developed by the U.S. National Library of Medicine
- Searches the MEDLINE database including some specialized subsets (e.g. AIDSLINE, BIOETHICS)
- Subject coverage includes medicine, nursing, allied health, dentistry, veterinary medicine, the health care system (emphasis on U.S.) and preclinical sciences
- Searches 5000+ high quality, peer-reviewed journals from 1950 to present. Emphasis is North American but includes key international journals.

What is Keyword Mapping?
PubMed “maps” any search terms you enter to its own controlled vocabulary, as well as simply looking for the text in all the fields of each of its 20+ million records. Search terms are mapped to each respective Medical Subject Heading (MeSH) heading (indicated by the tag [MeSH Terms]). The Search details box at the right of the results window, shows how PubMed works with search terms to group them in a logical way.

Why use Medical Subject Headings (MeSH)?
Most general keyword searches produce far too many results. A basic search in PubMed will retrieve many irrelevant citations because all occurrences of the search terms can appear anywhere in titles, abstracts, or subject headings of citations. Searching with Medical Subject Headings (MeSH) improves the quality and limits the quantity of search results.

Searching MeSH
To search on MeSH terms, enter your term into the search box and select MeSH on the Search pull-down menu. Click Search or press Enter. PubMed maps your term to the MeSH database. The database provides a definition, a set of subheadings, a list of alternative terms, and situates the term in the hierarchy of medical terminology (i.e., the MeSH tree).

To search on a MeSH term click on Add to search builder in the box to the far right of the screen. Click Search PubMed to see the matching citations.

To add more specificity, click on the checkbox next to Restrict to MeSH Major Topic and then click Add to search builder. Restrict to MeSH Major Topic retrieves articles where the term is a main topic or focus of articles.

PubMed can be found at:
- College of Nursing Subject Guide: http://libguides.lib.umanitoba.ca/collegeofnursing
- University of Manitoba Libraries: http://umanitoba.ca/libraries > Databases A-Z
**Advanced Search**

MeSH terms and other keywords for more complex searches can most easily be combined using **Advanced Search**.

**Advanced Search** will provide you with a Search History that shows all of the keywords or MeSH terms that you have searched.

Use the **PubMed Advanced Search Builder** to combine numbered search statements in the Search History using Boolean AND/OR operators.

![PubMed Advanced Search Builder](image)

**Filters**

Reduce the number of citations retrieved in a search by adding **Filters**. After running a search, click the **Filter** selection on the left side of the search page. A checkmark will appear next to the activated filters. Subsequent searches will be filtered until the selected filters are cleared. To add additional filter categories to the sidebar, click **Show additional filters**, select the additional categories, and then click **Show**. To activate the additional filters, click the filter selection.

To turn off filters, click either the **Clear all** link to remove all the filters, the clear link next to a filter category to clear the selections within that category, or the individual filter.

**Saving a Search**

A search strategy can be saved to be run for future updates or as a regular search alert. After a search has been run, click **Save Search**. This feature is available with a free My NCBI account.

Need more search tips? See **Help** on the main search screen for PubMed tutorials and guides.