ACCESS TO PUBMED AT HARVARD

To access PubMed through the Countway Library, you must have either an eCommons username and password or a Harvard University PIN.

Tip: This access provides direct links to online journal articles from your search results.

To obtain a Harvard University PIN, and for information on eligibility, go the Countway home page at www.countway.harvard.edu.

1. Click on Login.

2. Click to obtain a PIN.

3. Click on Request a New Harvard University PIN

4. Enter requested information.

5. Click on Request New PIN

Information on eligibility

University PIN login credentials are available to all Harvard University faculty, students and staff. Note: University PIN login enables personalization features on the Countway Web and authorizes users to access electronic resources that have been licensed for general University access. In addition, PIN login authorizes faculty, students and staff of HMS, HMSM and HSPH to access MDConsult and Ovid's personalization features. For further information on to obtain a PIN, refer to:

http://www.hull.harvard.edu/pin/default.asp.
Connecting to PubMed with Your Harvard Credentials

1. From the Countway Library home page, click on Login.

2. Click on Harvard PIN button.

3. Enter Harvard ID and PIN

4. Click on Authenticate.

5. At Digital Library, click on PubMed with full text.

This will begin your PubMed session.
**WHAT IS PUBMED AND WHY SHOULD YOU USE IT?**

In the biomedical sciences, the most relevant and up-to-date information is published in professional journals.

PubMed is the U.S. National Library of Medicine's (NLM) Web-based interface to **MEDLINE**, the premier bibliographic index to journal articles in the life sciences.

MEDLINE includes **citations** from over 4,600 of the world's leading biomedical journals, from **1966 to the present**. PubMed also includes older citations back to 1951 (OLDMEDLINE).

Use **MEDLINE** to find articles in the following subject areas:

<table>
<thead>
<tr>
<th>MAIN TOPICS COVERED:</th>
<th>clinical medicine</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>basic biomedical sciences</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OTHER TOPICS INCLUDE:</th>
<th>dentistry</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>the health care system</td>
</tr>
<tr>
<td></td>
<td>environmental science</td>
</tr>
<tr>
<td></td>
<td>chemistry</td>
</tr>
<tr>
<td></td>
<td>biophysics</td>
</tr>
</tbody>
</table>

|                            | plant and animal sciences |
|                            | marine biology          |
|                            | pharmacy                |
|                            | nursing                 |
|                            | veterinary medicine     |
WHAT IS MeSH?

MeSH is the acronym for Medical Subject Headings. It is a list of standardized vocabulary used by NLM to describe the content of journal articles indexed in Medline.

Subject specialists read each article, then select the appropriate MeSH terms for the citation.

MeSH imposes uniformity and consistency to the indexing of biomedical literature. It allows you to search for all articles on a particular topic, regardless of the wording used by the author.

For example, all of these articles are indexed under the MeSH heading Diabetes Mellitus, Type II.
In PubMed, if you search for articles without specifying MeSH, you will retrieve some citations to articles that do not primarily concern your topic(s).

For example: you are looking for articles that discuss the role of exercise in the prevention of type 2 diabetes.

Searching the topics **type 2 diabetes** and **exercise** retrieves 1751 citations.

Modulation of adipocyte lipoprotein lipase expression as a strategy for preventing or treating visceral obesity.

suppresses transcription of LPL in adipocytes; this phenomenon may contribute to the favorable impact of exercise training on visceral obesity; conceivably, preadministration of safe drugs that boost catecholamine activity (caffeine, yohimbine) could potentiate this beneficial effect of exercise. Glucocorticoids selectively increase the LPL activity of visceral adipocytes; while there is currently no convincing evidence that psychological stress is a major determinant of visceral adiposity, or that stress management techniques can help to correct visceral obesity, reports that anxiolytic therapy can improve glycemic control in type 2 diabetes should encourage further research along these lines.

...though they may not represent the topics discussed in the article, as shown in the list of MeSH.

Tip: there are times when text words are useful: see SEARCHING WITHOUT MeSH.
PERFORMING A PUBMED SEARCH USING MeSH

Find research studies that discuss the side effects of newer NSAIDs such as Rofecoxib in patients with rheumatoid arthritis

1. From the left side-bar, click on MeSH Database.

2. Type nsaids.

3. Click on Go.

The corresponding MeSH is presented with a definition of the term as it is used in MEDLINE.

4. Click on the MeSH link to view the full MeSH display.

The full MeSH display provides detailed information about the use of this term.

Entry terms are synonymous words or phrases that correspond to this MeSH.

Entry Terms:
- Non Steroidal Anti Inflammatory Agents
- Antiinflammatory Agents, Nonsteroidal
- NSAIDs
- Analgesics, Anti-Inflammatory
- Non-Steroidal Antirheumatic Agents
- Aspirin-Like Agents
USING SUBHEADINGS

You can select subheadings for a MeSH to narrow your search to specific aspects of your topic.

1. Click in the box next to adverse effects to find articles about adverse effects of NSAIDs.

<table>
<thead>
<tr>
<th>Subheadings:</th>
</tr>
</thead>
<tbody>
<tr>
<td>administration and dosage</td>
</tr>
<tr>
<td>blood</td>
</tr>
<tr>
<td>contraindications</td>
</tr>
<tr>
<td>isolation and purification</td>
</tr>
<tr>
<td>pharmacokinetics</td>
</tr>
<tr>
<td>standards</td>
</tr>
<tr>
<td>toxicity</td>
</tr>
</tbody>
</table>

Tip: be cautious about using subheadings. By adding subheadings too often, or adding them too early in the search process, you may miss useful articles.

6. In the "Send to" menu, select Search Box with AND.

Add your next topic, rheumatoid arthritis:

1. Type rheumatoid arthritis.
2. Click on Go.

The first MeSH and subheading appear in the search details box.
3. If a list of related MeSH is provided, use the definitions to determine which is most relevant.

4. Click in the box to select a MeSH.

5. In the “Send to” menu, select Search Box with AND.

The second MeSH, Arthritis, Rheumatoid, is added to the search. The two MeSH are combined with AND: all citations retrieved will include both MeSH.

6. Click on Search PubMed.

A list of citations is displayed.

Tip: Titles in square brackets indicate articles in languages other than English.
LIMITING A SEARCH

You can refine your search by setting limits.

1. Click on Limits.

Menus are available to set limits by a variety of parameters.

2. From the Languages menu, select English for articles with human subjects.

3. Select Human for articles with human subjects.

4. Type 2000 and 2005 to specify articles published in this range of years.

5. Click on Go.
The results of your limited search are displayed.

Tip: Once limits are set, they will persist in subsequent searches unless you remove them. For instructions on removing limits, see SEARCHING WITHOUT MESH below.

For additional limits:

1. Click on Preview/Index.

2. Scroll down to the Fields menu. Here you can select a field (e.g. language, affiliation), and retrieve an alphabetic list (index) of choices to refine your search.

3. Select Publication Type.

4. Click on Index.

5. Select preferred publication type(s).

6. Click on Preview.

Tip: to select more than one publication type, hold down the <Ctrl> key while clicking on selections from the menu.
FOCUS A TOPIC: Continue to narrow your search by adding focus to one of your topics.

In the list of MeSH from a Medline citation, the topics that are starred * represent the focus of the article.

You can specify that a MeSH term in your search is the focus, or MeSH Major topic.

To retrieve articles that focus on adverse effects of NSAIDs:

1. Click on Details.

2. Highlight MeSH after the topic you choose to focus.

3. Type majr to replace it.

4. Click on Search.
Specifying a MeSH as a Major Topic decreases the number of citations retrieved.

Tip: as with subheading, by specifying MeSH as a Major topic you may miss useful articles; avoid doing this too early in the search process.

SEARCHING WITHOUT MESH

Sometimes it is preferable to search using text words (including words from the title or abstract) instead of MeSH (see WHAT IS MESH? above for information about MeSH and text words).

1. To remove limits set in your previous search, click in the box to remove the check mark.
2. Click on Go.
3. Click on Clear to start a new search.

Very current articles (published in the past few weeks) that have not yet been indexed in MEDLINE, can not be retrieved with MeSH.

To search with text words:
1. Type your topic(s) in the search box from the main PubMed screen.
2. Click on Go.

Tip: when searching for articles that are not indexed, do not add limits (e.g. publication types, age groups, human). Language and publication date limits are okay.
Use text words to find articles older than 1966 (OLDMEDLINE)

Tip: OLDMEDLINE citations do not include MeSH or Abstracts, so you can retrieve articles using only words from the title of the article.

Searching for the word **tuberculosis** retrieves pre-1966 articles with tuberculosis in the title.

**McDOUGALL JR.**
Inexpensive buildings in the treatment of tuberculosis.
PMID: 14792278 [PubMed - OLDMEDLINE for Pre1966]

Use text words when searching for articles about a topic that is so **new** or so **specific** that there is no corresponding MeSH term.

Use a text words search to find articles about **alarmone**.

**Structural basis for transcription regulation by alarmone ppGpp.**
PMID: 15169491 [PubMed - indexed for MEDLINE]

Tip: a star * ("truncation symbol) after a word will search variant endings.

**Davies AJ, Maillard JY.**
Bacterial adaptation to biocides: the possible role of alarmones.
PMID: 11740385 [PubMed - indexed for MEDLINE]

**Kuhar I, van Putten JP, Zgur-Bertok D, Gastra W, Jordi BJ.**

Tip: a star * ("truncation symbol) after a word will search variant endings.

Use text words to find articles on **non-medical topics**, for which there is no MeSH.

**Roller coaster headaches revisited.**
PMID: 14572959 [PubMed - indexed for MEDLINE]

**What the new Medicare prescription drug bill may mean for providers and patients.**
In November 2003 President Bush signed the Medicare prescription drug bill, which will usher in the largest change in the Medicare program in terms of money and number of people affected since the program's creation in 1965. The final version of the bill was controversial, passing by a

For a very **thorough** search, use text words in addition to MeSH; combine similar terms with **OR**.
VIEWING SEARCH RESULTS to select relevant articles.

To return to the results from the PUBMED SEARCH USING MeSH:

1. Click on History.
2. To view results of a search, click on the results number.

Results are displayed in order by date; items added to PubMed most recently appear first. 20 citations are displayed on each page.

Tip: to view all items on a single screen:

From the “Show” menu, select a number greater than the total number of items.

All citations will be displayed on one screen.

Abstract Display includes a descriptive summary of the article, if available.

Click on the author link from the results list to view the abstract display.

Tip: this symbol indicates an abstract is available

This symbol indicates free full text is available online.

Use your browser’s button to return to the list of results.
VIEW THE FULL CITATION

1. Click in the check box for a selected citation.
2. From the display menu, choose Citation.

Citation Display provides information about the article to assist you in determining its relevance.

The safety profile, tolerability, and effective dose range of rofecoxib in the treatment of rheumatoid arthritis. Phase II Rofecoxib Rheumatoid Arthritis Study Group.

Schnitzer TJ, Truitt K, Fleischmann R, Dalgan P, Block J, Zeng Q, Bolognese J, Seidenberg B, Ehrich FW.

Office of Clinical Research and Training, Northwestern University School of Medicine, Chicago, Illinois, USA.

Nonsteroidal anti-inflammatory drugs (NSAIDs) inhibit both cyclooxygenase (COX)-1 and COX-2 isoenzymes and are effective in the treatment of inflammatory disorders. This 8-week, double-blind, placebo-controlled trial was undertaken to assess the safety profile, tolerability, and effective dose range of once-daily rofecoxib, a COX-2-specific inhibitor, in the treatment of rheumatoid arthritis (RA). After a 3- to 15-day washout of prior NSAID therapy, 658 patients were randomized to receive 50 mg of rofecoxib daily or placebo. In an intent-to-treat analysis, there were no significant differences between rofecoxib and placebo in terms of adverse events, gastrointestinal problems, or other systemic side effects. Patients receiving 50 mg of rofecoxib had a smaller increase in blood pressure than those receiving placebo (p = 0.04), and fewer patients treated with rofecoxib required antihypertensive therapy (p = 0.001). The reduction in blood pressure was consistent with the known isoenzyme selectivity of rofecoxib and consistent with its use in patients with cardiovascular disease. The incidence of major adverse cardiac events was low and similar in the rofecoxib and placebo groups. Both the rofecoxib and placebo groups showed significant improvements in the rheumatologic scores over the 8 weeks of therapy. The results support the use of rofecoxib in the treatment of RA.

MeSH Terms:
- Adult
- Aged
- Aged, 80 and over
- Arthritis, Rheumatoid/drug therapy*
- Cyclooxygenase Inhibitors/adverse effects*
- Double-Blind Method
- Enzyme Inhibitors/adverse effects*
- Female
- Human
- Lactones/adverse effects*
- Male
- Middle Aged

Tip: Viewing MeSH can lead you to other useful headings for future searches.

Use the Back button on your browser to return to the results list.
FINDING ARTICLES FROM YOUR SEARCH RESULTS

Direct links to online full text from Harvard are available in the Abstract Display and the Citation Display. These links also provide information about journals at the Countway Library.

You must log in with an eCommons password or Harvard University PIN to connect to Harvard Online journals through PubMed. See ACCESS TO PUBMED AT HARVARD above.

Click on find it @ Harvard.

Click on the link at Get Full text...

Tip: look for a link to the PDF to view the article.

Find it @ Harvard citation linker

Caffeine strengthens action monitoring: evidence from the error-related negativity.

Tieges Z, Richard Ridderinkhof K, Snel J, Kok A.

Department of Psychology, University of Amsterdam, Roetersstraat 15, 101

Find it @ Harvard citation linker

Get full text via Elsevier ScienceDirect (HTML & PDF)

• SummaryPlus
• Full Text + Links
• Full Size Images
• PDF (133 K)

External Links
FINDING ARTICLES IN HARD COPY, IN THE COUNTWAY LIBRARY

Many journal articles that are not available online through Harvard can be found in hard copy at the Countway Library. Links to HOLLIS, Harvard’s online catalog, show you whether the issue containing your article is available in the library.

Click the link to HOLLIS Catalog.

This will initiate a search for the journal in Harvard’s online catalog.

Click the Holdings link to find out whether the Countway owns the volume containing your article.
If the article is not available at the Countway Library, other options for finding the article include:

1. Finding the journal at another Harvard Library (these will be listed in the HOLLIS Catalog)

2. Using the CountwayDoc system to request the article from another library (go to http://countwaydoc.med.harvard.edu/ for information)

3. Requesting articles via interlibrary loan through your hospital's library

4. Clicking on vendor icons in PubMed (abstract or citation display) to obtain direct online access, usually requiring payment.

5. Finding the journal at another non-Harvard library in the Boston area.
MANAGING SEARCH RESULTS: PRINTING AND E-MAILING

While viewing the results of your search, you can select the citations that are relevant to you, and print or e-mail a list.

PRINT SEARCH RESULTS

1. From your list of citations, click in the check boxes to select articles.

   1: Kremer JM, Cannon GW.
   Benefit/risk of leflunomide in rheumatoid arthritis.
   PMID: 15332321 [PubMed - indexed for MEDLINE]

   2: Hodner T, Samolsson O, Wahlberg F, Wadenvik H, Ung KA, Elbom A.
   Nabumetone: therapeutic use and safety profile in the management of osteoarthritis.
   Drugs. 2003;64(22):2315-43; discussion 2344-5. Review.
   PMID: 14363239 [PubMed - indexed for MEDLINE]

   Safety of conventional drugs and biologic agents for Rheumatoid Arthritis.

2. From the Send to menu, select Clipboard.

   Display Summary ▼ Show 50 ▼ Sort by ▼ Send to ▼
   Send to Text File E-mail Order
   All: 40 hullb: 33
   Items 1 - 40 of 40
   1: Kremer JM, Cannon GW.
   Benefit/risk of leflunomide in rheumatoid arthritis.

Tip: If viewing a citation or abstract display, you can click in the check box then send to Clipboard.

Click on Clipboard to print selected citations.

Limits: Publication Date from 2000 to 2005, English, Humans
4 items were added to Clipboard.
Clipboard items will be lost after eight hours of inactivity.
The maximum number of Clipboard items is 500.
Tip: select a number larger than total to print all citations continuously.

Tip: sorting by Journal is helpful when retrieving articles.

Tip: for the most compact printout, send to Text.

Summary

Show: 20

Items 1-20 of 27

key CJ, Laine L, Simon T, Quan H, this Endoscopy Study Group,

Tip: for the most compact printout, send to Text.

Text format is free of Web graphics (more citations fit on each page).

User your browser's print command to print a list of citations.

Complementary studies of the gastrointestinal safety of the
cyclo-oxygenase-2-selective inhibitor etoricoxib.
PMID: 12534404 [PubMed - indexed for MEDLINE]

2: Bianchi Porro G, Lazzaroni M, Petriello M, Ardizzone S, Mr I, Montrone F.
Peptic ulcer therapy with cimetidine versus tripotassium dicitrato bismuth.
PMID: 18237207 [PubMed - indexed for MEDLINE]

Use your browser's button to return to the list of results.

You can send citations from multiple searches to the clipboard to print a single list.

Tip: if you prefer to clear the clipboard between searches:

Send to

Select

Clip Remove.

File

Clip Remove

E-mail

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June 2005

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E-MAIL SEARCH RESULTS

1. Follow the instructions for printing, above.
2. Select E-mail (instead of Text).
3. Select desired format. Tip: select Abstract or Citation as HTML to include "Find it @ Harvard" links in your email message!
4. Type your email address.
5. Click on Mail.

MANAGING SEARCH RESULTS: SAVING A SEARCH

You can save a PubMed search strategy in My NCBI, then view it again later, with full PubMed functionality (e.g. ability to connect to full text online).

1. To save a search strategy, click on Save Search.
2. Click on register for an account.

3. Enter a User Name and Password of your choice.

4. Enter security information.

5. Click on Register.

6. Enter a name to identify your search. Tip: a brief name is helpful if you save several searches.

7. Click on OK.
Tip: to save a different search from your current session,

1. Click on History.

2. Click on the Result number for the search you want to save.

3. Click on Save Search (Step 1 above).

VIEW A SAVED SEARCH

1. Click on My NCBI.

2. Type your User Name and Password.

3. Click on Sign In.
To view all results for a search, click on the search name. Your search will be run. The results will include new citations that match your search criteria.

To view new results only (citations added to PubMed since you saved the search, or since the last time you updated the search in "My NCBI"):

1. Click in the box to select a search.
2. Click on What's New...

To delete a saved search:

1. Click in the box to select a search.
2. Click on Delete Selected.

MANAGING SEARCH RESULTS: SETTING UP EMAIL ALERTS

In My NCBI you can request email alerts for new citations in PubMed that match your search criteria.

See SAVING A SEARCH above for account registration instructions.
2. Sign in to “My NCBI” if you have not already done so.

3. For a previously saved search, click on No Schedule.

<table>
<thead>
<tr>
<th>My Saved Searches</th>
<th>Last Updated</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>nsaid and RA</td>
<td>14 days ago</td>
<td>No Schedule</td>
</tr>
<tr>
<td>Diabetes AND exercise II</td>
<td>22 days ago</td>
<td>Monthly</td>
</tr>
<tr>
<td>colon cancer and alcohol</td>
<td>3 months ago</td>
<td>No Schedule</td>
</tr>
</tbody>
</table>

5. Select your email preferences

6. Click on OK.

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**SETTING UP A LINKOUT FILTER IN MY NCBI**

1. Sign in to “My NCBI” (see VIEW A SAVED SEARCH above)

<table>
<thead>
<tr>
<th>2. Click on <strong>Filters</strong> in left side-bar.</th>
<th>3. Select PubMed.</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="NCBI Filters" /></td>
<td><img src="image2" alt="PubMed Selection" /></td>
</tr>
</tbody>
</table>

4. Select **Browse**.  
5. From “Linkout” category, select **Libraries**.

6. Click on **Harvard**…

<table>
<thead>
<tr>
<th><strong>Filter Selection:</strong></th>
<th><strong>Configure &gt; PubMed</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image3" alt="Filter Selection" /></td>
<td><img src="image4" alt="Configure" /></td>
</tr>
</tbody>
</table>

7. Make selections:

<table>
<thead>
<tr>
<th><strong>Selections</strong></th>
<th><strong>To view a subset of all results available at Harvard (HULIB) when logged in to My NCBI</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image5" alt="Selections" /></td>
<td><img src="image6" alt="Subset" /></td>
</tr>
</tbody>
</table>

**To see <Find it @ Harvard> icons in email alerts**

- ![Add result tab](image7)
- ![Add link icon](image8)
SAVING CITATIONS IN ENDNOTE

To easily save PubMed citations in EndNote 7 (or lower), download the new PubMed filter: [http://www.endnote.com](http://www.endnote.com)

1. Click on the date link at PubMed News Alert.

2. Scroll down, click on Windows or Macintosh.

3. Click on Save.

4. Click on Save (in the EndNote Filters folder).

5. Click on Yes to replace the PubMed filter.

Tip: to use the new PubMed filter, you must first exit EndNote, then reopen it.
IMPORT CITATIONS INTO ENDO NOTE WITH THE PUBMED FILTER

Perform your search in PubMed and send selected citations to the Clipboard (see PRINT SEARCH RESULTS above).

1. Click on Clipboard.

2. Select MEDLINE display.

3. Select Text.

4. Save in a temporary location, e.g. your desktop.

5. Save as a Text File

6. Click on Save.

7. Open your EndNote library.

8. From the File menu select Import…
9. From the Import dialog box, click on **Choose File**.

10. Locate your saved text file.

11. Double click to select.

12. For Import Option, select **Other Filters**…

   *Tip: next time, PubMed will appear on this menu for selection.*

13. Click on **PubMed**.

14. Click on **Choose**.

15. Click on **Import**.
The PubMed citations will be imported into your EndNote library.

**Tip:** After this import process, only the citations you just added to your library will appear in the library window. To view all of the items in your library, from the References menu choose Show All References.

All citations will display in your library window.

If you have comments about this PubMed guide, or if you have questions about using PubMed at Harvard, contact the Countway Library Reference & Education Services Department: countref@hms.harvard.edu