



Using PubMed

...for searching the MEDLINE database

Available online at <http://pubmed.gov>

A condensed version of the National Training Center and Clearinghouse's *NLM Training: PubMed*

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- PubMed, developed by the National Center for Biotechnology Information (NCBI) at the National Library of Medicine (NLM), is available on the web. No registration, fees, or subscriptions are required.
- PubMed is one of several databases under NCBI's Entrez retrieval system and provides access and links to the integrated molecular biology databases maintained by NCBI (DNA and protein sequences, genome mapping data, 3-D protein structures, and the Online Mendelian Inheritance in Man).
- PubMed provides access to over 16 million bibliographic citations dating back to the 1950s.
- PubMed also has links to the full-text versions of articles at participating publishers' Web sites, biological data, sequence centers, etc. from third parties through LinkOut.

NOTE: This book is an edited guide to searching the MEDLINE database on PubMed. The full PubMed Manual may be found at http://www.nlm.nih.gov/pubs/web_based.html

Publisher Supplied Citations

- These are citations that are electronically supplied by publishers and sent directly to PubMed. The citations are then forwarded to NLM's Indexing Section to be processed.
- Citations received electronically have the tag: [PubMed - as supplied by publisher].

Sample PubMed citation that has been electronically submitted but processing has not yet begun:

Notice the [PubMed – as supplied by publisher] tag.

[LiCalsi C, Maniaci MJ, Christensen T, Phillips E, Ward GH, Witham C.](#)
 A powder formulation of measles vaccine for aerosol delivery.
 Vaccine. 2001 Mar 21;19(17-19):2629-2636.
 PMID: 11257402 [PubMed - as supplied by publisher]

In Process Citations

- MEDLINE in process records provide basic citation information and abstracts before the citation is indexed with NLM's MeSH headings and NLM's quality assurance staff have checked the records for errors.

Sample of an In Process citation in PubMed:

Notice the
[PubMed – in
process] tag.

[LiCalsi C, Maniaci MJ, Christensen T, Phillips E, Ward GH, Witham C.](#)
A powder formulation of measles vaccine for aerosol delivery.
Vaccine. 2001 Mar 21;19(17-19):2629-36.
PMID: 11257402 [PubMed - in process]

Other Publisher Supplied Citations

- Some of the citations received electronically from publishers may never become MEDLINE citations.
 - These records are assigned PMIDs but are not assigned MeSH terms because they do not go through the indexing process.
 - These records will carry the notation [PubMed] and remain in PubMed.
 - There are 3 sources of these types of records: (1) out of scope articles from selectively indexed journals; (2) citations from back issues of newly-indexed Medline journals; and (3) author manuscripts from non-MEDLINE journals or journals that do not participate in PubMed Central (see next page).

MEDLINE & MEDLINE citations

- MEDLINE is the name applied to the database of all *indexed* citations. PubMed, as a database, contains MEDLINE as well as other citations (non-indexed citations).
- After MeSH terms, Publication Types, and other indexing terms are added, the in process citations graduate to MEDLINE records.
- Fully indexed MEDLINE records are tagged [PubMed – indexed for MEDLINE].

Sample MEDLINE citation in PubMed

Notice the [PubMed
– indexed for
MEDLINE] tag.

[LiCalsi C, Maniaci MJ, Christensen T, Phillips E, Ward GH, Witham C.](#)
A powder formulation of measles vaccine for aerosol delivery.
Vaccine. 2001 Mar 21;19(17-19):2629-36.
PMID: 11257402 [PubMed - indexed for MEDLINE]

OLDMEDLINE CITATIONS

On September 30, 2003, 1.5 million OLDMEDLINE citations were added to PubMed. These citations were taken from print indexes and date back to the 1950s. They are identified by the tag **[PubMed – OLDMEDLINE for pre-1966]**.

Notice the tag following the PMID

| | |
|--|-----------------------------------|
| JONES HW Jr. | Related Articles, |
| <p>CLINICAL SIGNIFICANCE OF ANOMALIES OF THE SEX CHROMOSOMES. Am J Obstet Gynecol. 1965 Oct 1;93:335-42. No abstract available. PMID: 14337371 [PubMed - OLDMEDLINE for Pre1966]</p> | |

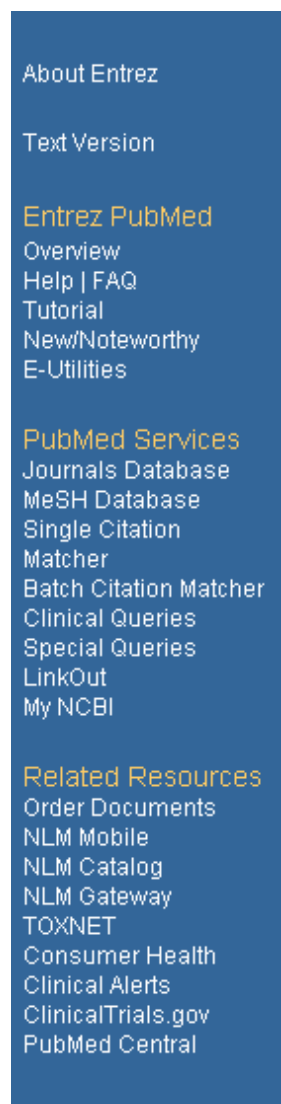
OLDMEDLINE citations vary from the current PubMed records in several important ways :

- *Abstracts*: OLDMEDLINE citations do not have abstracts.
- *Publication Type*: Journal Article is the only publication type used in these citations.
- *Language* : Some citations will indicate « undetermined » because the actual foreign language was not specified in the old print indexes and is, therefore, undetermined.
- *Article titles* : Some are all in caps; over 28,000 citations show ‘Not Available’ as the title because they lack English translations of the title.
- *Other Term* : This field contains the original MeSH terms assigned at the time the records were first established. There are no data in the MeSH Heading [MH] field.
 - Since there is nothing the MeSH Heading field of these records, these citations *cannot* be retrieved by doing a MeSH term search.
 - Search for these citations by using the Text Word [TW] and Other Term [OT] search tags.
 - **NOTE**: NLM has indicated that MeSH headings may be added to the Old Medline records in the near future.

AUTHOR MANUSCRIPT CITATIONS

- The status tag **[PubMed – author manuscript in PMC]** will appear on citations for articles that would not normally be cited in PubMed because they are from journals that are not indexed for MEDLINE or from journals that do not participate in PubMed Central (PMC).
- As these citations are processed, the status tag will change as appropriate and the final designation will be [PubMed].
- To retrieve all citations in PubMed for which author manuscripts are available in PMC, use the search: author manuscript [sb]

PubMed SIDEBAR



Entrez PubMed

- The **Overview** provides a detailed description of the PubMed database including database coverage and PubMed journal information.
- Click on **Help** to get detailed descriptions of all the features and search and retrieval options within PubMed. **FAQs** are frequently asked questions about PubMed.
- Click on **Tutorial** for a Web-based, interactive training program.
- The **New/Noteworthy** link provides information about recent and future PubMed system enhancements.

PubMed Services

- Use the **Journals Database** to search for journals by journal title, title abbreviation, or the International Standard Serial Number (ISSN). The list of journals with links to full-text is also included in the browser.
- The **MeSH Database** allows you to browse the MeSH Vocabulary in a hierarchical structure. Searches can also be built here.
- The **Single Citation Matcher** is a fill-in-the-blank form that allows users to enter journal citation information to locate a specific single article or the contents of an individual issue of a journal.
- The **Batch Citation Matcher** is primarily a tool for publishers. It allows publishers to retrieve the PubMed IDs for many articles all at once. This feature requires that bibliographic information (journal, volume, page) be entered in a specific format.
- The **Clinical Queries** and **Special Queries** pages have built-in search “filters” and limits that focus retrieval in specified topic areas or, as in the case of Clinical Trials, in four study categories: therapy, diagnosis, etiology, and prognosis.
- **LinkOut** provides users with links from PubMed and other Entrez databases to a wide variety of relevant web-accessible online resources including full-text publications. This information is intended for groups who want to provide links that PubMed searchers may be interested in using.
- **My NCBI** stores search strategies that may be updated at any time, and allows users to customize their searching experience using filters.

Related Resources

- **Order Documents** is a link to the Loansome Doc feature that allows users to order full-text copies of articles from a local medical library (local fees and delivery methods may vary).
- **NLM Mobile** is a link to NLM services available for handheld devices
- **NLM Catalog** is a link to the library catalog for NLM
- Click on the **NLM Gateway** to access NLM’s other Web-based service, which also provides access to MEDLINE and additional NLM databases.
- **TOXNET** provides a link to the toxicological & environmental health resources from the Specialized Information Services (SIS) of NLM
- **Consumer Health** is a link to MedlinePlus, NLM’s Web site for consumer health information.
- **Clinical Alerts** expedite the release of findings from the NIH-funded clinical trials where such release could significantly affect morbidity and mortality.
- Click on **ClinicalTrials.gov** to access the NIH/NLM Web site for current information about clinical research studies.
- **PubMed Central** is a link to NLM’s archive of full text and open access journals and articles

PubMed makes use of **cookies** and **JavaScript** from your Web browser for several functions. Please enable cookies and JavaScript from your Web browser. These selections may be found under the Edit menu, and then under references (Netscape), or the Tools menu under Internet Options (Internet Explorer). For more information about cookies, see PubMed’s Help.

Searching With PubMed

PubMed provides a variety of search modes to meet users' individual needs. You can run a simple search by entering a few search terms in the query box or construct complex search strategies using Boolean commands and using the various functions provided by the Features bar that provides additional search options: Limits, Preview/Index, History, Clipboard, and Details. The Features bar will be discussed later in the manual.

How it Works

Subject (keyword) Searching

Search Request: Find citations to articles about having a rash and a fever.

The screenshot shows the PubMed search interface. At the top, there are tabs for different search categories: Entrez, PubMed, Nucleotide, Protein, Genome, Structure, OMIM, PMC, Journals, and Books. Below these tabs is a search box with a dropdown menu set to 'PubMed'. The search terms 'rash fever' are entered in the box. To the right of the search box are buttons for 'Go', 'Clear', and a link for 'Save Search'. Below the search box is a 'Features bar' with buttons for 'Limits', 'Preview/Index', 'History', 'Clipboard', and 'Details'.

Entering Search Terms

- Enter significant terms in the query box (e.g., *rash, fever*). The default connector is “AND” so it is not necessary to type that into the search box.
- Click on the **Go** button.
- Use the **Clear** button to erase the contents of the query box.

What is searched? Automatic Term Mapping

PubMed uses **Automatic Term Mapping**, where unqualified terms that are entered in the query box are matched against (in this order):

1. MeSH (Medical Subject Headings) Translation Table
2. Journals Translation Table
3. Author Index

1. MeSH Translation Table contains:

- MeSH headings (descriptors), subheadings, and entry terms (also known as synonyms)
- Mappings derived from the Unified Medical Language System (UMLS) that have equivalent synonyms or lexical variants in English.
- Names of Substances and synonyms to the Names of Substances.
- Publication Types.

If a match is found in this translation table:

- the term will be mapped to the appropriate MeSH term and searched as MeSH
- the searcher's term will also be searched as a Text Word.

- In the case of Entry Terms, a “mapped to” MeSH term will also be searched in the title and abstract fields in citations that have yet been assigned MeSH terms. For example, here is the PubMed Translation for *rash* (an entry term for the MeSH term, exanthema):

("exanthema"[TIAB] NOT Medline[SB]) OR "exanthema"[MeSH Terms] OR rash[Text Word]

And here is the PubMed Translation for *rash fever*:

((“exanthema”[TIAB] NOT Medline[SB]) OR “exanthema”[MeSH Terms] OR rash[Text Word]) AND (“fever”[MeSH Terms] OR fever[Text Word])

NOTE: When a term is searched as a MeSH Heading, PubMed automatically searches that heading and the more specific headings underneath it in the hierarchy. This is called exploding a term.

2. Journals Translation Table contains:

- Full journal title
- MEDLINE abbreviation
- International Standard Serial Number (ISSN)

Example:

| | | |
|---------------------------------|----|-------|
| new england journal of medicine | Go | Clear |
|---------------------------------|----|-------|

PubMed Translation: ("N Engl J Med" [Journal Name])

A term will not be searched as both a text word/MeSH and journal name!

NOTE: If the journal’s title is a MeSH term (for example, *Brain* or *Chest*), then enter the journal’s name into the search box followed by [journal] for accurate searching.

3. Author Index

If the term is not found in the MeSH or Journal Translation Tables PubMed then checks the Author Index. Authors may be searched by full name or by traditional PubMed format:

- Enter the author’s name in the form of Last Name (space) Initials, using no punctuation :

Example: pogonka t

Example: o'brien j

- If only the first initial is used, PubMed automatically truncates the author’s name to account for varying initials. So, the search below retrieves articles written by o'brien j, o'brien ja, o'brien jz, etc.

Example:

| | | |
|-----------|----|-------|
| o'brien j | Go | Clear |
|-----------|----|-------|

- As of 2002, the author index also includes some full names. It is now possible to search for George W. Bush, for example, as an author. NOTE: this will greatly restrict retrieval.

- If only an author's last name is entered, PubMed will search that name in All Fields (Author field plus all other searchable fields). It will not default to the Author Index because the last name is not followed by one or more initials.

NOTE: If the author's last name is the same as a MeSH term, then enter the name followed by [author] for accurate searching.

If no match is found?

PubMed breaks apart the phrase and repeats the above process until a match is found.

- If there is no match, the individual terms will be combined (ANDed) together and searched in All Fields.
- PubMed breaks apart a long phrase from right to left, dropping the word at the furthest right:

Example:

| | | |
|-------------------|----|-------|
| head lice shampoo | Go | Clear |
|-------------------|----|-------|

| <u>Searches for:</u> | <u>Results:</u> | <u>Action:</u> |
|----------------------|---------------------------------------|--|
| Head lice shampoo | No match found | Removes term on right to re-run Automatic Term Mapping process. |
| Head lice | Match found in MeSH Translation Table | <i>head lice</i> will be searched as <i>("pediculus"[TIAB] NOT Medline[SB]) OR "pediculus"[MeSH Terms] OR head lice[Text Word]</i> |
| Shampoo | No match found in Translation Tables | <i>shampoo</i> will be searched as <i>shampoo[All Fields]</i> |

PubMed then combines (ANDs) the found matches to produce a single search strategy:

(("pediculus"[TIAB] NOT Medline[SB]) OR "pediculus"[MeSH Terms] OR head lice[Text Word]) AND shampoo[All Fields]

Phrase Searching

The use of quotes around a phrase forces PubMed to check PubMed's Index to attempt to find the phrase. The Index contains several million phrases. To search for a specific phrase in the Index, **enter double quotes (“”) around the phrase**. NOTE: Phrase searching turns OFF Automatic Term Mapping.

- Your phrase may actually appear in citation and abstract data, but may *not* be in the PubMed Phrase List. If this is the case, the double quotes are ignored and automatic term mapping applies.

Truncation

Truncation directs PubMed to find all terms that begin with a given text string. Place an asterisk (*) at the end of a term to search for all terms that begin with that word. The asterisk may only be used at the end of a string of characters. PubMed has no single character truncation (wild card in the middle of a term). For example: mimick* will find all terms that begin with the letters mimick; e.g., mimick, mimicked, mimicks, mimicking, etc. NOTE: Truncation will turn *off* Automatic Term Mapping in PubMed.

Search Results Screen

Once you click on **Go** or press the Enter key, PubMed will automatically:

- Run the search
- Retrieve and display citations


The screenshot shows the PubMed search results interface. At the top, the PubMed logo is on the left, and the National Library of Medicine (NLM) logo is on the right. A search bar contains the text 'gallstones pain' with a 'Go' button and a 'Clear' button. Below the search bar are tabs for 'Limits', 'Preview/Index', 'History', 'Clipboard', and 'Details'. The 'Display' dropdown is set to 'Summary', 'Show' is set to '20', and 'Sort by' is set to 'Relevance'. The search results show 'All: 1714' and 'Review: 176'. The first two results are displayed:

- 1: [Marakis G, Ballas K, Rafailidis S, Alatsakis M, Patsiaoura K, Sakadamis A.](#) [Related Articles, Links](#)
Somatostatin-Producing Pancreatic Endocrine Carcinoma Presented as Relapsing Cholangitis - A Case Report.
Pancreatology. 2005 Apr 21;5(2-3):295-299 [Epub ahead of print]
PMID: 15849491 [PubMed - as supplied by publisher]
- 2: [Yang YM, Wan YL, Zhuang Y, Wang WM, Yan ZY, Huang YT.](#) [Related Articles, Links](#)
[Classification and choice of surgical procedures for chronic pancreatitis.]
Zhonghua Wai Ke Za Zhi. 2005 Feb 7;43(3):140-4. Chinese.
PMID: 15842888 [PubMed - in process]

DISPLAY OPTIONS





Summary Format

PubMed citations are initially displayed in the Summary format:

| | |
|---|---|
| <input type="checkbox"/> | 2: Batra Y, Pal S, Dutta U, Desai P, Garg PK, Makharia G, Ahuja V, Pande GK, Sahni P, Chattopadhyay TK, Tandon RK. Related Articles, Links |
|  | Gallbladder cancer in India: A dismal picture. J Gastroenterol Hepatol. 2005 Feb;20(2):309-14. PMID: 15683437 [PubMed - in process] |

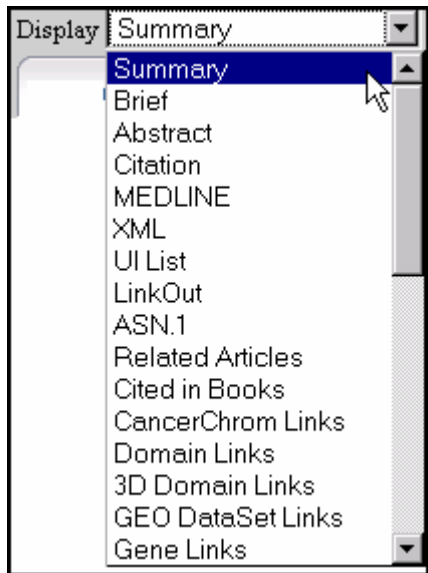
The summary format consists of the following:

- **Author Name(s):** All authors from the record are displayed.
- **Links:** Related articles and Links to other resources and other Entrez databases.
- **Title of the article:** Foreign language titles will be translated into English and placed within brackets.
- **Source:** Provides journal title abbreviation, date of publication, volume, issue, and pagination. Articles without abstracts will display the notation: “No abstract available”.
NOTE: Mouse-over the abbreviated title and the full name of the journal will appear.
- PubMed Unique Identifier (**PMID**).
- Status tag: [PubMed - as supplied by publisher], or [PubMed - in process], or [PubMed - indexed for MEDLINE], or [PubMed – OLDMEDLINE for pre-1966], or [PubMed – Author manuscript in PMC], or [PubMed] tag.
- **Icon** which indicates one of the following:

| | |
|---|---|
|  | No abstract is associated with this citation. |
|  | Abstract: this citation has an abstract. |
|  | Free full text: this citation contains a link to the full text of the article and no payment or subscription is required. |
|  | Free in PMC: Free full text is available from PubMed Central (PMC), NLM’s free digital archive of life sciences journal literature. |

Other Display Formats

The pull-down menu next to the **Display** button allows the user to select available display formats:



Summary, Abstract, Citation, MEDLINE, and Related Articles are the most appropriate display selections for bibliographic information.

Abstract Format

This display format includes information displayed in the Summary Format along with the abstract (if present) and the author affiliation. Note that if an abstract was not provided in the original publication, there will be no abstract in PubMed. NLM indexes articles but does not abstract them.

Display: Abstract Show: 20 Sort by: Send to:

All: 1 Review: 0 ✕

1: [Psychol Rep.](#) 2001 Aug;89(1):175-6. [Related Articles, Links](#)

Comment in:

- ♦ [Psychol Rep.](#) 2001 Dec;89(3):607-8.

Undertakers' sense of humor.

[Thorson JA](#), [Powell FC](#).

Department of Gerontology, University of Nebraska at Omaha, Omaha, NE 68182, USA. jthorson@unomaha.edu

A group of 60 middle-aged morticians at a professional seminar in the midwestern USA who completed a multidimensional sense of humor scale scored significantly lower than another group of 136 men from other occupations. The difference between the two groups appeared almost entirely on scale items having to do with humor generation or creativity.

PMID: 11729539 [PubMed - indexed for MEDLINE]

NOTE: In the Abstract Format, the journal abbreviation and the author names are both search links. Clicking on the journal abbreviation will bring up a menu of options. Clicking on an author's name will automatically run a search for all citations in PubMed by that author.

Citation Format

The Citation Format includes everything seen in the Abstract Format and adds additional information:

- MeSH terms (on indexed citations)
- Grant Support (when available and applicable)
- Substance names (when available and applicable)

Display Citation Show 20 Sort by Send to

All: 1 Review: 0

1: [Psychol Rep.](#) 2001 Aug;89(1):175-6. [Related Articles, Links](#)

Comment in:

- [Psychol Rep.](#) 2001 Dec;89(3):607-8.

Undertakers' sense of humor.

[Thorson JA](#), [Powell FC](#).

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A group of 60 middle-aged morticians at a professional seminar in the midwestern USA who completed a multidimensional sense of humor scale scored significantly lower than another group of 136 men from other occupations. The difference between the two groups appeared almost entirely on scale items having to do with humor generation or creativity.

MeSH Terms:

- [Adult](#)
- [Career Choice](#)
- [Humans](#)
- [Male](#)
- [Middle Aged](#)
- [Mortuary Practice*](#)
- [Personality*](#)
- [Wit and Humor*](#)

PMID: 11729539 [PubMed - indexed for MEDLINE]

MeSH Terms:

- [Adult](#)
- [Career Choice](#)
- [Humans](#)
- [Male](#)
- [Middle Age](#)

Links

- ▶ PubMed
- ▶ MeSH
- ▶ Add to Search

The MeSH terms in the Citation format are search links. Click on any term and a list of links will appear:

- Use the **PubMed** link to search for all citations in PubMed indexed with this MeSH term
- Use the **MeSH** link to see this term's record in the Entrez MeSH database
- Use the **Add to Search** link to add this MeSH term to your search strategy

MEDLINE Format

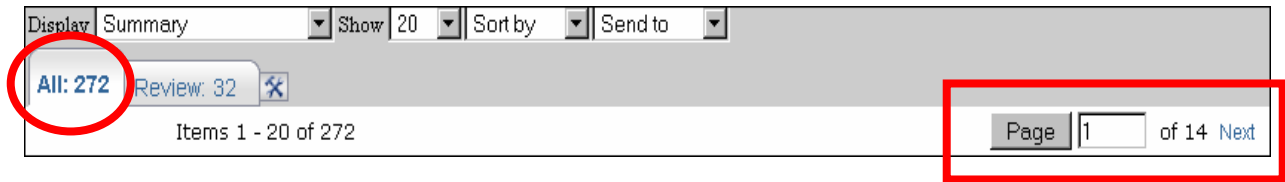
- Two character tagged field format displaying all fields of the MEDLINE record.
- Use this format for downloading records into bibliographic management software.

All: 1 Review: 0 ✕

1: [Thorson JA et al](#) Undertakers' sense of humor....[PMID: 11729539]

PMID- 11729539
OWN - NLM
STAT- MEDLINE
DA - 20011203
DCOM- 20020102
LR - 20041117
PUBM- Print
IS - 0033-2941
VI - 89
IP - 1
DP - 2001 Aug
TI - Undertakers' sense of humor.
PG - 175-6
AB - A group of 60 middle-aged morticians at a professional seminar in the midwestern USA who completed a multidimensional sense of humor scale scored significantly lower than another group of 136 men from other occupations. The difference between the two groups appeared almost entirely on scale items having to do with humor generation or creativity.
AD - Department of Gerontology, University of Nebraska at Omaha, Omaha, NE 68182, USA. jthorson@unomaha.edu
FAU - Thorson, J A
AU - Thorson JA
FAU - Powell, F C
AU - Powell FC
LA - eng
PT - Journal Article
PL - United States
TA - Psychol Rep
JID - 0376475
SB - IM
CIN - Psychol Rep. 2001 Dec;89(3):607-8. PMID: 11824723
MH - Adult
MH - Career Choice
MH - Humans
MH - Male
MH - Middle Aged
MH - *Mortuary Practice
MH - *Personality
MH - *Wit and Humor
EDAT- 2001/12/04 10:00
MHDA- 2002/01/05 10:01
PST - ppublish
SO - Psychol Rep 2001 Aug;89(1):175-6.

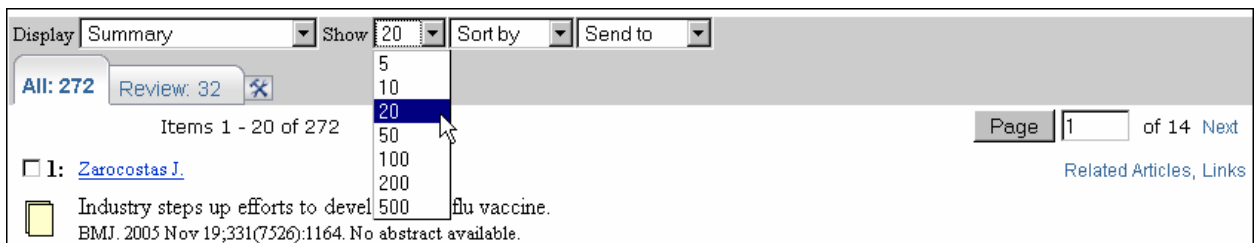
RETRIEVAL SUMMARY



- The retrieval summary line displays the total number of citations retrieved by the current search, and how many pages of citations there are given the selected number of citations per page (default = 20 citations/page). It will also show how many of the retrieved citations are for Review Articles (publication type).

Show pull-down menu

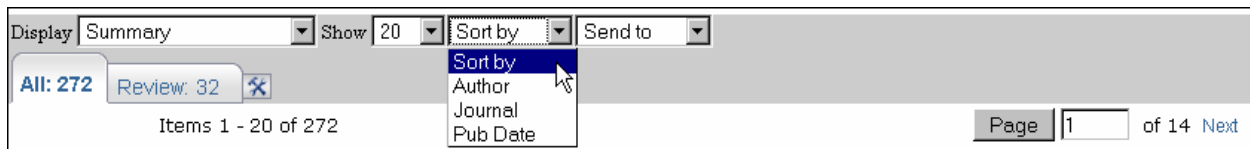
- PubMed displays search results in batches of 20 citations per page (as the default)



- Click on the Show pull-down menu to select a higher/lower number.
- PubMed redisplay the citations based on your selection.

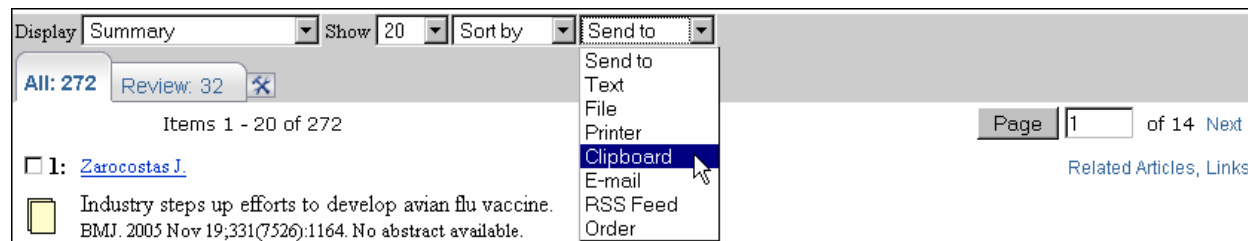
Sort

- To sort items by author, journal, or publication date, click on the Sort pull-down menu and select a sort option. Pub Date sorts by publication date. Select the sort method desired by highlighting that option. PubMed redisplay the citations based on your selection.



Send To: Clipboard

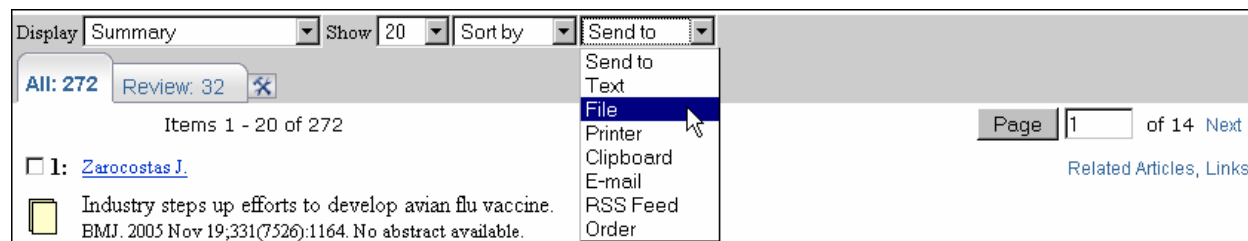
The Clipboard allows you to collect selected citations from one search or several searches that you may want to print, save, email, or order. Clipboard is a cyberspace holding area for citations.



- To place an item in the Clipboard, click on the box to the left of the citation. Then choose **Clipboard** from Send to pull-down menu. When **Clipboard** is highlighted, PubMed will send the chosen citations to the Clipboard.
- Once you have added a citation to the Clipboard, the item number color will change.
- The maximum number of items that can be placed in the Clipboard is **500**.
- The Clipboard will be **lost after eight hours of inactivity** on the computer you are using.

Send To: File

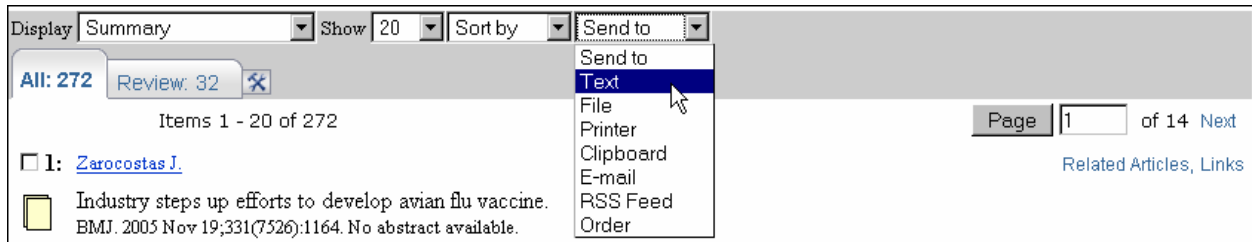
To save your entire set of search results as a computer file, use the **Display** pull-down menu to select the desired format, then highlight **File** in the Send to pull-down menu.



- To mark **selected citations to save**, click on the check-box to the left of the item number as you go through each page of your retrieval. After you select the citations and choose a display format, highlight **File** to save those citations as a computer file.

Send to: Text

Use **Text** to redisplay citations using just the text of records and omitting the graphics. When finished with the text display, use your Web browser's Back button to get back to your results in HTML. [See next page for graphic]



- The text version will display either selected citations, or, if no citations are selected, *all* the citations on the page.
- Before using the Text button, consider using the Show pull-down menu to increase the number of items displayed on each page as PubMed will print one page of citations and then stop, waiting for you to display the next page of citations for printing.
- NOTE: As of 11/28/2005, a **Send to Printer** option is also available and it would be the better choice for printing.

Send to: Email



Limits Preview/Index History Clipboard Details **E-mail**

- Select options, enter recipient's e-mail address, and click Mail.

Search **avian flu vaccine**

Format as

Sorting

Start with item send of 272

Your name or additional text (optional)

E-mail

["SPAM" filtering software notice](#)

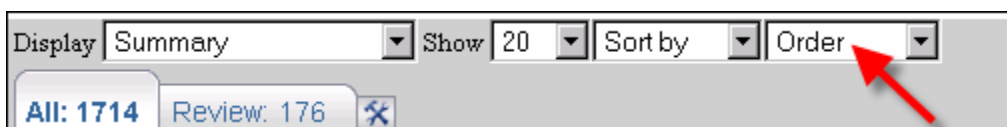
NOTE:
When PubMed sends the email to the recipient, the email inbox will display "Sent by NCBI" as the sender. Consider sending the email to yourself first and then forwarding on to your patron.

Printing



- Using the Send to Printer option will open printer-friendly page. This is the easiest way to print from PubMed.
- Think about using the Show pull-down menu to display all of your citations on one Web page. NOTE: You can only print citations from the displayed page.
- The **Text** option described above is also available for printing.

Order



- Click **Order** to use an automated document ordering program called **Loansome Doc**.
- You can also **Order** directly from the Clipboard.

The **Order Documents** feature allows you to use an automated document ordering program called **Loansome Doc**.

What is Loansome Doc?

The Loansome Doc feature allows you to electronically order the full-text of a citation from a Loansome Doc participating library in your area. Prior to using this feature, you need to establish an agreement with a Loansome Doc participating library. Your Loansome Doc library will provide you with their **Library ID**, which is needed when setting up the service within PubMed.

What does it cost?

The library providing you this service will explain their ordering fees. This service is generally *not* free.

What library can provide me with this kind of service?

Call your Regional Medical Library at 1-800-338-7657 Monday-Friday, 8:30 A.M. – 5:00 P.M. in all time zones to find out which medical library in your area can provide you with Loansome Doc ordering service. Or visit <http://nmlm.gov> to find a library that can help you.

FEATURES TABS



The Features Tabs allows you to select and use several additional functions.

Limits Tab

- Click on Limits from the Feature tabs to bring up the Limits page:

- Use All Fields pull-down menu to specify a field.
- Boolean operators AND, OR, NOT must be in upper case.
- If search fields tags are used enclose in square brackets, e.g., rubella [ti].
- Search [limits](#) may exclude in process and publisher supplied citations.

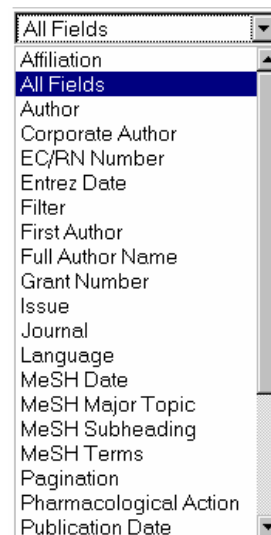
Limited to:

only items with abstracts

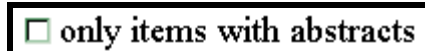
 From To
 Use the format YYYY/MM/DD; month and day are optional.

Field Selection

- You may limit your search terms to a specific search field.
- To select a specific field, click the All Fields pull-down menu and select a search field. Enter multiple terms separated by Boolean operators.
- Example: Select MeSH Terms from the pull-down, enter bed rest AND pain in the query box, click **Go**.

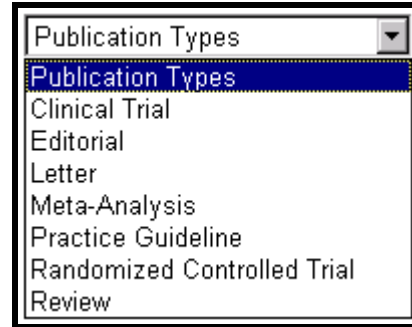


Only items with abstracts: Click in this box to retrieve only citations having an abstract present on the record.



Publication Types

- You may limit your retrieval based on the type of material the article represents.
- The Publications Types pull-down menu contains a list of frequently searched publication types.



Languages

- Journals from approximately forty languages are indexed.
- The Languages pull-down menu contains a list of frequently searched languages.

Ages

To select a specific age group for human studies, click on the Ages pull-down menu.



Gender

To select a gender, click on the Gender pull-down menu.

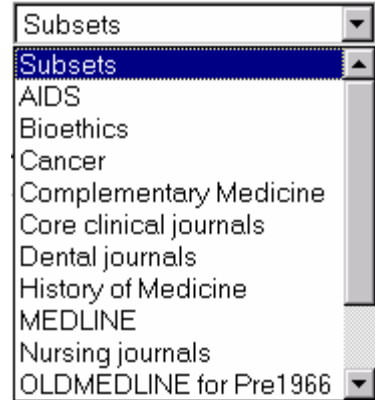


Dates

- PubMed contains citations published back to the 1950s.
- New citations are added Tuesday-Saturday.
- You may restrict to two date fields from the Limits screen:
 - Entrez Date: the date the citation was initially added to PubMed
 - Publication Date: the date the article was published
- When PubMed displays your search results, the citations are displayed in Entrez Date order – last in, first out.

Subsets

Allows you to limit your retrieval to one of the four types of groupings of records:



1. Levels of processing:

- ▶ MEDLINE: [PubMed – indexed for MEDLINE] citations
- ▶ OLDMEDLINE for pre-1966

2. Subject Filters:

- ▶ AIDS
- ▶ Bioethics
- ▶ Cancer
- ▶ Complementary Medicine
- ▶ History of Medicine
- ▶ Space Life Sciences
- ▶ Toxicology

NOTE:
 Many of these Subject Filters and Journal Groupings are now easily accessed via the **Special Queries** page of PubMed.

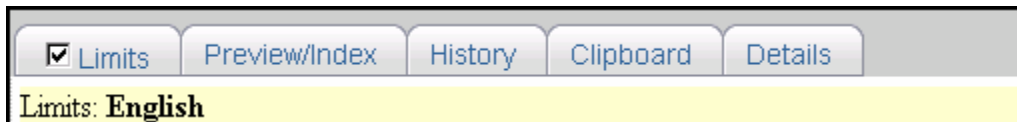
3. Journal groupings:

- ▶ Core clinical journals: 120 English-language journals from the formerly published *Abridged Index Medicus* (a list of these titles is available in Help)
- ▶ Dental
- ▶ Nursing

4. Other:

- ▶ PubMed Central

Limits Indicator



- Once you have selected Limits, a check box appears next to the Limits on the Features Tab.
- If you run a search, the limits in effect will appear in the yellow bar above the Display button:

Limits: Child: 6-12 years, English

Preview/Index Tab



This page is home to two functions: Preview and Index

Use Preview/Index to:

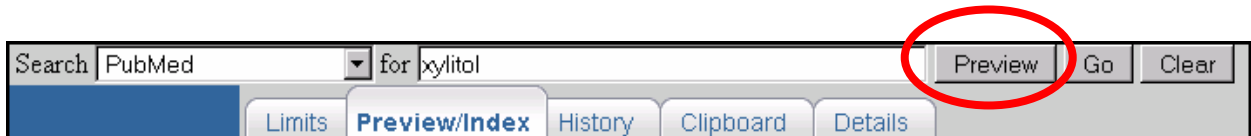
- Preview the number of search results before displaying the citations.
- Refine search strategies by adding one or more terms, one at a time.
- Add terms to a strategy from specific search fields.
- View and select terms from the Index to develop search strategies.
- View your search strategy as you continue to refine your search.

Preview

Previewing the number of search results before displaying the citations

Search Request: *Find citations on how xylitol prevents tooth decay in children. Xylitol is a sugar substitute used in sugar-free gum, etc.*

- Enter terms in the query box and click Preview.



- PubMed returns the number of citations but not the actual results.

| Search | Most Recent Queries | Time | Result |
|--------|---------------------|----------|----------------------|
| #10 | Search xylitol | 15:46:45 | 1916 |

Result shows the number of citations.

Refining search strategies by adding one or more terms at a time

- Add another term (e.g., tooth decay) to the query box and click **Preview**.
- Continue adding terms (e.g., children) and clicking **Preview** until your strategy is complete.
- View your search strategy and number of results as you continue to refine your search.

for children tooth decay xylitol Preview Go Clear [Save Search](#)

Limits **Preview/Index** History Clipboard Details

- Enter terms and click Preview to see only the number of search results.
- To combine searches use # before search number, e.g., (#2 OR #3) AND asthma.
- Click on query # to add to strategy

| Search | Most Recent Queries | Time | Result |
|---------------------|--|----------|----------------------|
| #12 | Search children tooth decay xylitol | 15:49:03 | 94 |
| #11 | Search tooth decay xylitol | 15:48:48 | 250 |
| #10 | Search xylitol | 15:46:45 | 1916 |

Preview shows search strategy and number of results as each term is added.

Index: Viewing and selecting terms from the Index to develop search strategies

- Use the Index button to view and select terms from the Index of a specific field and to add them to your search strategy.
- The Index allows you to view a listing of terms within a search field.
- You may also select terms to build a search strategy using Boolean operators.

Selecting a field and entering a term to look up in the Index

Search request: Find citations on *employee strikes*.

Select **MeSH Terms** from the pull-down menu, type in the term, **strikes** and click on **Index**.

PubMed displays a portion of the alphabetical list of available terms for the selected search field. Scroll up and down this window using the scroll bar.

The number of citations that contain the term appears in parentheses to the right of the term.

To scroll up or down the entire Index for the field, click the **Up** or **Down** buttons.

MeSH Terms strikes Preview Index

Click AND OR NOT to add terms selected from Index to the query box.

strikes, employee(935) Up

strikes, employee/economics(22)

strikes, employee/ethics(8)

strikes, employee/history(14)

strikes, employee/legislation and jurisprudence(63)

strikes, employee/manpower(2)

strikes, employee/methods(1)

strikes, employee/organization and administration(117)

strikes, employee/standards(2)

strikes, employee/statistics and numerical data(15) Down

Selecting a term from the Index

- Click on the term to highlight it.
- Multiple terms may be selected from the Index. Do this by holding down the Ctrl (control) key on a PC or the apple key on a Mac as you highlight terms. When multiple terms are selected from the Index, the terms will be ORed together.

Add Term(s) to Query or View Index:

- Enter a term in the text box; use the pull-down menu to specify a search field.
- Click Preview to add terms to the query box and see the number of search results, or click Index to view terms within a field.
- Multiple terms selected from Index will be ORed; click AND to add to search.

MeSH Terms Preview Index

Click **AND** **OR** **NOT** to add terms selected from Index to the query box.

- strikes, employee(935) Up
- strikes, employee/economics(22)
- strikes, employee/ethics(8)
- strikes, employee/history(14)
- strikes, employee/legislation and jurisprudence(63)
- strikes, employee/manpower(2)
- strikes, employee/methods(1)
- strikes, employee/organization and administration(117)
- strikes, employee/standards(2)
- strikes, employee/statistics and numerical data(15) Down

- Click on **Preview**.
- Continue viewing, selecting, and previewing search terms until your strategy is complete.

Query box shows the search term and the search field.

for "strikes, employee"[MeSH Terms] Preview Go Clear [Save Search](#)

Limits **Preview/Index** History Clipboard Details

- Enter terms and click Preview to see only the number of search results.
- To combine searches use # before search number, e.g., (#2 OR #3) AND asthma.
- Click on query # to add to strategy

| Search | Most Recent Queries | Time | Result |
|---------------------|--|----------|---------------------|
| #13 | Search "strikes, employee"[MeSH Terms] | 15:51:41 | 918 |
| #12 | Search children tooth decay xylitol | 15:49:03 | 94 |
| #11 | Search tooth decay xylitol | 15:48:48 | 250 |

Result shows the number of citations.

Note: **Preview** automatically ANDs together search terms and indicates the number of results. Use the **Boolean operators** to combine search terms as needed. If you use the Boolean operators, your search terms are added to the PubMed query box and you must click Preview to see the number of results.

Note: To **OR** together multiple terms from an Index display and then add (i.e., **AND**) them to your search, click on each term while holding down the Ctrl-key (PC) or the Command-key (Mac). When all the terms you want are highlighted, click the connector AND to add the terms (OR'ed together) to the query.

Continuing with the Search example: Find citations about employee strikes.

- Click to highlight, **strikes, employee** used with the subheading of **legislation and jurisprudence** as well as **strikes, employee** used with the subheading **statistics and numerical data** in the display.
- Click the **AND** button to select and add the terms to the query.

- Multiple selections are automatically OR'ed together.

Holding down the Ctrl or Command key; click to highlight the terms.

Click on the AND button.

Multiple selections are automatically OR'ed together.

Add Term(s) to Query or View Index:

- Enter a term in the text box; use the pull-down menu to specify a search field.
- Click Preview to add terms to the query box and see the number of search results
- Multiple terms selected from Index will be ORed; click AND to add to search.

MeSH Terms

Preview
Index

Click
AND
OR
NOT
to add terms selected from Index to the query box.

- strikes, employee(935)
- strikes, employee/economics(22)
- strikes, employee/ethics(8)
- strikes, employee/history(14)
- strikes, employee/legislation and jurisprudence(63)
- strikes, employee/manpower(2)
- strikes, employee/methods(1)
- strikes, employee/organization and administration(117)
- strikes, employee/standards(2)
- strikes, employee/statistics and numerical data(15)

Up
Down

The following search is added to PubMed's query box: (**“strikes, employee/legislation and jurisprudence” [MeSH Terms] OR “strikes, employee/statistical and numerical data” [MeSH Terms]**). To run this search in PubMed, click the **Go** button.

Author Field Index: PubMed automatically truncates on the author's name to account for varying initials, e.g., smith j will retrieve smith ja, smith, jb, smith j jr, etc. In the Author Field Index, when an author's name is displayed with the @ symbol after the first initial, this indicates occurrences of the author name without a middle initial. Selecting smith j@ from the index will retrieve smith j only.

History Tab



- History holds up to 100 search strategies and results from this search session.
- The History screen displays:
 - Your search query
 - The time of the search
 - The number of citations in your search results

for children tooth decay xylitol [Save Search](#)

[Limits](#) [Preview/Index](#) **History** [Clipboard](#) [Details](#)

- Search History will be lost after eight hours of inactivity.
- To combine searches use # before search number, e.g., #2 AND #6.
- Search numbers may not be continuous; all searches are represented.
- Click on query # to add to strategy

| Search | Most Recent Queries | Time | Result |
|--------------------|-------------------------------------|----------|----------------------|
| #6 | Search children tooth decay xylitol | 15:58:24 | 94 |
| #5 | Search tooth decay xylitol | 15:58:14 | 250 |
| #4 | Search xylitol | 15:58:04 | 1916 |
| #3 | Search mercury exposure | 15:57:40 | 2642 |
| #2 | Search chocolate | 15:57:29 | 2063 |
| #1 | Search gallstones pain | 15:57:24 | 1697 |

Using History

- You can use the search statement numbers shown in history in search strategies.

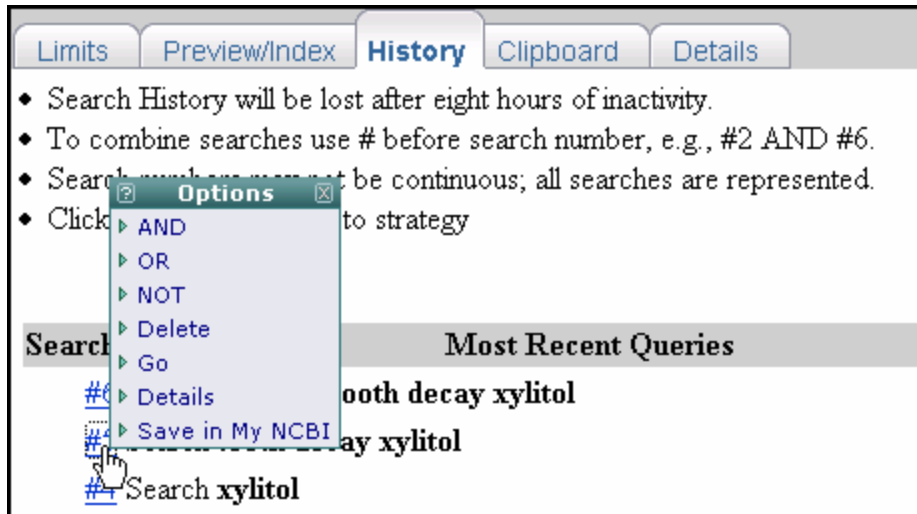
Example:

Boolean operators must be typed in **all caps** as shown in the example above.

- You can also use History to Preview search results, just like with the Preview/Index feature.

Search Statement Number Menu

- Click on the search statement number to open an Options menu:



Use the Options Menu to:

- Construct searches
- Delete a single search statement from History
- Rerun the search
- See the Details of a given search
- Save the search in your My NCBI account

History Tips:

- The search history will be deleted after 8 hours of inactivity on the computer in use.
- PubMed will move a search statement number to the top of the History if a new search is the same as a previous search.
- A separate Search History will be kept for each of the Entrez databases although the search statement number will be assigned sequentially for all databases.
- The Clear History button will delete ALL the searches in the History.

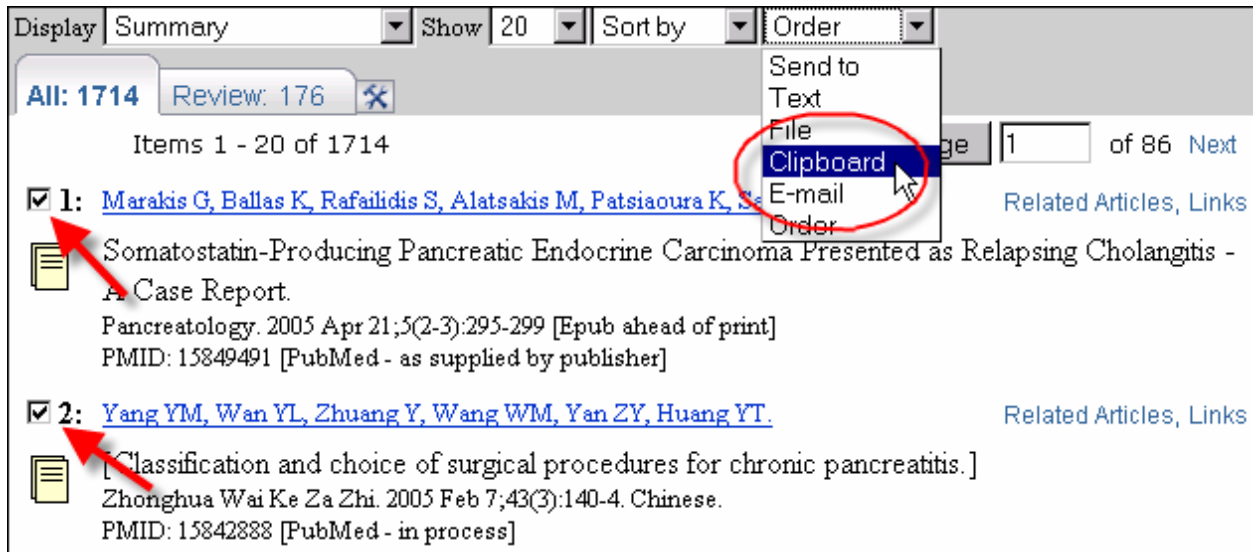
Clipboard Tab



Allows you to save or view selected citations – search *results* -- from one search or several searches.

NOTE:

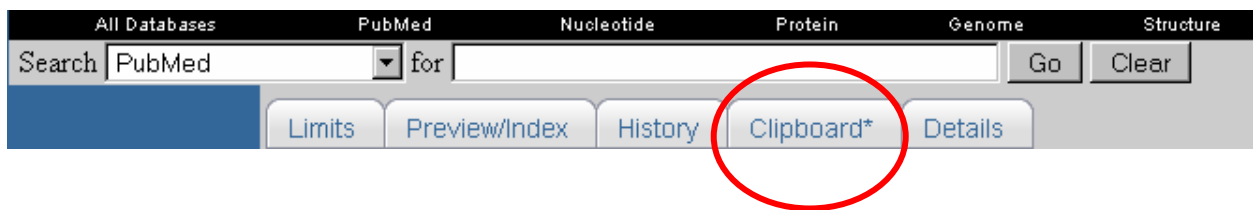
- The maximum number of items the clipboard can hold is 500.
- If you click **Send to: Clipboard** *without* selecting citations using the check-box, PubMed will add all the citations in your result set to the clipboard (up to 500 citations).
- The clipboard will be lost after eight hours of inactivity.
- You can **sort, print, save, email or order** the citations on the Clipboard.



- To place items on the clipboard, click on the check-box to the left of the citation.
- Then select **Clipboard** from the **Send to** drop down menu. Click “Send to”. A confirmation message states the number of items added to the Clipboard:

2 items were added to Clipboard.
Clipboard items will be lost after eight hours of inactivity.
The maximum number of Clipboard items is 500.

- Once the citations are added to the Clipboard, that citation’s item number color changes from black to green.
- The Clipboard tab will display an asterisk when citations have been successfully added:



Using the Clipboard

- To view the contents of your clipboard, click on the Clipboard tab.

[Graphic on next page]

for [] Go Clear

Limits Preview/Index History **Clipboard** Details

- The Clipboard will hold a maximum of 500 items.
- Clipboard items will be lost after eight hours of inactivity.

Display Summary Show 20 Sort by Send to

All: 2 Review: 0

Items 1 - 2 of 2 One page.

1: [Marakis G, Ballas K, Rafailidis S, Alatsakis M, Patsiaoura K, Sakadamis A.](#) Related Articles, Links

Somatostatin-Producing Pancreatic Endocrine Carcinoma Presented as Relapsing Cholangitis - A Case Report.
Pancreatology. 2005 Apr 21;5(2-3):295-299 [Epub ahead of print]
PMID: 15849491 [PubMed - as supplied by publisher]

2: [Yang YM, Wan YL, Zhuang Y, Wang WM, Yan ZY, Huang YT.](#) Related Articles, Links

[Classification and choice of surgical procedures for chronic pancreatitis.]
Zhonghua Wai Ke Za Zhi. 2005 Feb 7;43(3):140-4. Chinese.
PMID: 15842888 [PubMed - in process]

- To delete selected citations, click on the box to the left of the item number and then select **Clip Remove** from the drop down menu adjacent to “Send to.” Click **Send to**.
- Caution: If you follow this procedure *without* selecting individual citations, ALL citations will be removed from the clipboard.

Details Tab



- Clicking on Details displays your search strategy as it was translated by PubMed.
- Error messages (e.g., stopwords, truncation warnings, and misspellings) are also displayed.
- The PubMed Query box in Details allows you to edit a search strategy and resubmit it.
- Details also allows you to save a search strategy using the URL button provided.

Here's a closer look at Details:

You can modify the Search strategy if you wish and then click on the **Search** button.

Click on the **URL** Button to create a URL that allows you to save this search strategy.

Click on the **Result** Number hyperlink to return to the current search results.

PubMed Translations

for food allergies infants Go Clear Save Search

Limits Preview/Index History Clipboard Details

Query Translation:

```
{("food hypersensitivity"[TIAB] NOT Medline[SB]) OR "food hypersensitivity"[MeSH Terms] OR food allergies[Text Word]) AND ("infant"[TIAB] NOT Medline[SB]) OR "infant"[MeSH Terms] OR infants[Text Word]}
```

Search URL

Result:
2672

Translations:

| | |
|----------------|---|
| food allergies | ("food hypersensitivity"[TIAB] NOT Medline[SB]) OR "food hypersensitivity"[MeSH Terms] OR food allergies[Text Word] |
| infants | ("infant"[TIAB] NOT Medline[SB]) OR "infant"[MeSH Terms] OR infants[Text Word] |

Database:
PubMed

User query:
food allergies infants

Related Articles

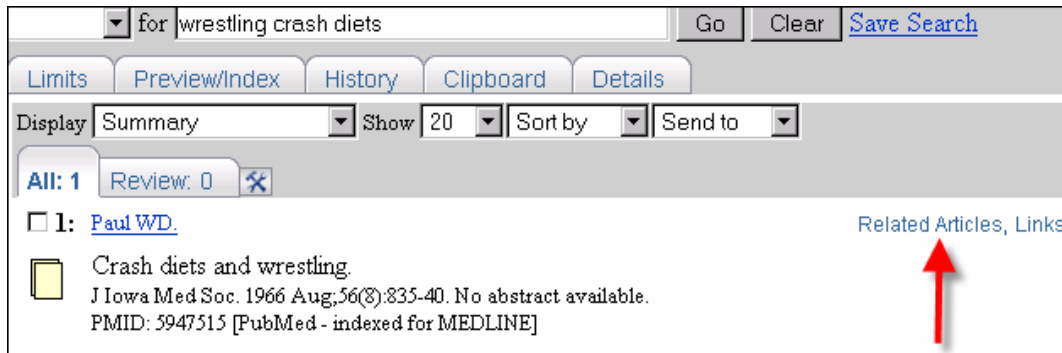
- Citations in PubMed have a **Related Articles** link. Clicking on this link will access the citations in PubMed that are most closely related to the original citation.
- The Related Articles citations display is in rank order from most to least relevant. The citation you linked from is displayed first.
- To create this list of Related Articles PubMed compares words from the Title and Abstract of each citation, as well as the MeSH headings assigned, using a powerful word-weighted algorithm.



A detailed explanation of the Related Articles algorithm is available in the PubMed Help or access the article directly at:

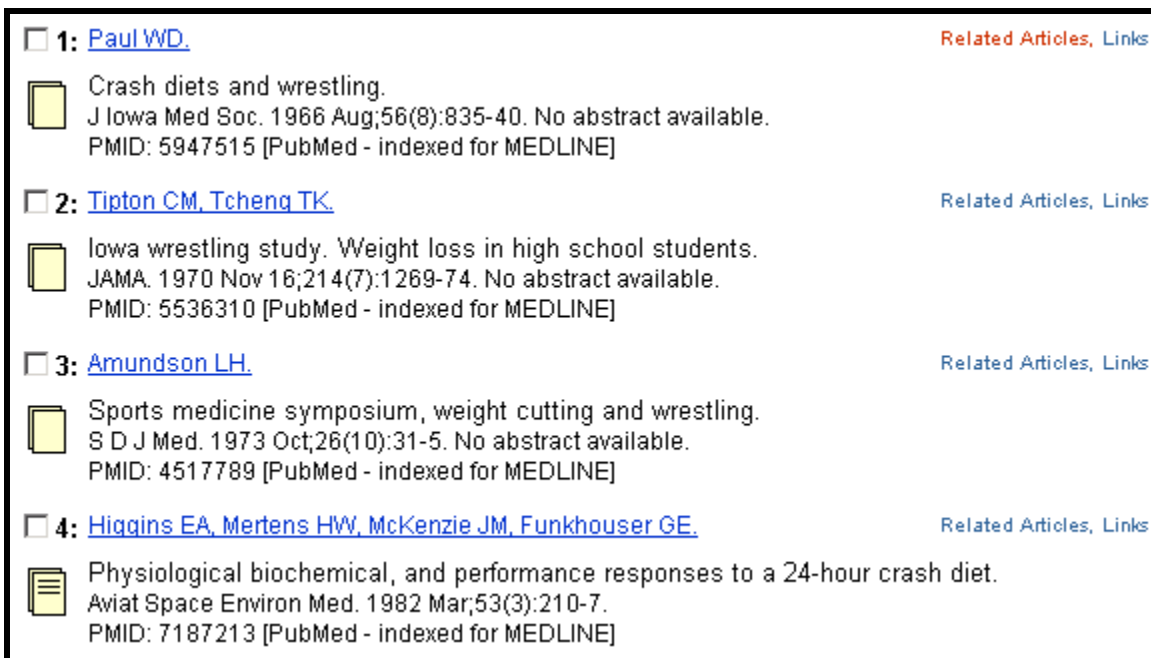
<http://www.ncbi.nlm.nih.gov/entrez/query/static/computation.html>

Example: Find citations to articles about wrestling and crash diets.



Related Articles Link

- This search retrieves only 1 citation. Now click on the Related Articles link and PubMed will display a list of related citations:



Refining your Related Articles retrieval set:

- Click History
- The Related Articles link is represented as: Related Articles for PubMed (Select 5947515), where 5947515 is the PMID in this example.

| | | | | |
|--------|---------------|----------------|-----------|---------|
| Limits | Preview/Index | History | Clipboard | Details |
|--------|---------------|----------------|-----------|---------|

- Search History will be lost after eight hours of inactivity.
- To combine searches use # before search number, e.g., #2 AND #6.
- Search numbers may not be continuous; all searches are represented.
- Click on query # to add to strategy

| Search | Most Recent Queries | Time | Result |
|--------|--|----------|---------------------|
| #11 | Related Articles for PubMed (Select 5947515) | 17:39:14 | 104 |

- Use the search statement number (here, it's #11) and type it in the search box. Then use Limits or combine with another concept:

Example: #11 AND english [la]



Refining will remove the ranking by relevancy.

Searching with MeSH: The MeSH Database

The MeSH Database allows you to:

- Locate and select MeSH terms (Headings, Subheadings, & Publication Types)
- See the definition and other helpful information for a MeSH term.
- Build a PubMed search strategy.
- Display MeSH terms in the hierarchy.
- Limit MeSH terms to a major concept for a search.
- Attach subheadings for a search.
- Link to the NLM MeSH Section's MeSH Browser



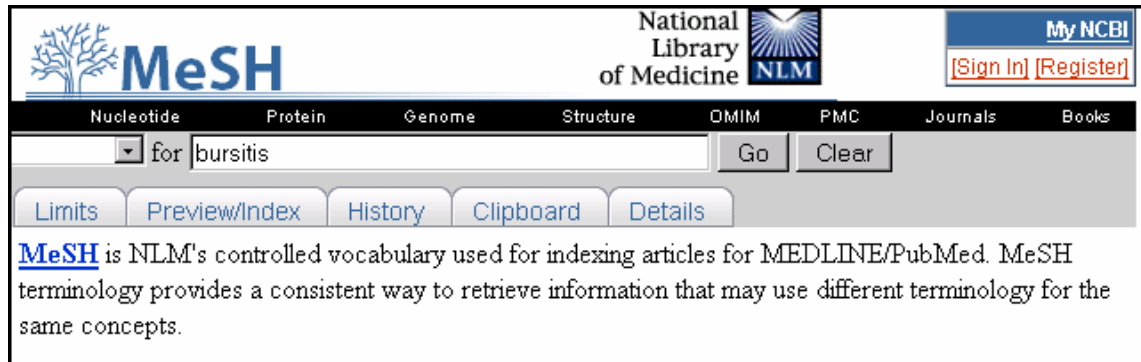
Searching with just MeSH terms will search only indexed citations. This means that the following types of citations will NOT be retrieved:

As supplied by publisher
 In process
 Oldmedline
 PubMed

How to Get There

- Click on MeSH Database on the blue sidebar on the left hand side of the PubMed page. Use the MeSH Database to build a search strategy for a search for citations about the *diagnosis of bursitis*.

Enter the term, **bursitis**, in the query box and click the **Go** button.



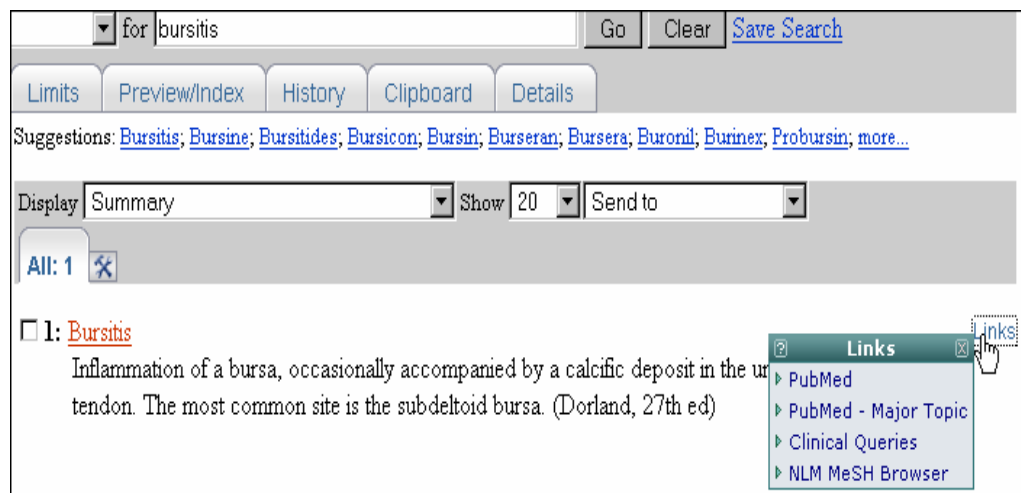
PubMed displays retrieval from this database in the Summary format:

Suggestions are MeSH or Entry terms generated by an algorithm that compares letter combinations.

Links allows you to run a PubMed search or link to MeSH Section MeSH Browser.

Scope Note (meaning for this concept) is displayed.

Click on the term to see the Full display.



The **Full** Display provides more information about the term:

[See next page]

Use the check boxes to select subheadings. Click on the **Subheadings** link to see a list of subheading definitions.

Use these checkboxes to restrict to major topic or to not explode a term.

Entry Terms (synonyms) are provided.

MeSH hierarchy is displayed with searched term in boldface.

[Links](#)

1: Bursitis

Inflammation of a bursa, occasionally accompanied by a calcific deposit in the underlying supraspinatus tendon. The most common site is the subdeltoid bursa. (Dorland, 27th ed)

Subheadings: This list includes those paired at least once with this heading in MEDLINE and may not reflect current rules for allowable combinations.

blood chemically induced classification complications diagnosis diet therapy drug therapy economics enzymology epidemiology etiology genetics immunology metabolism microbiology nursing pathology physiopathology prevention and control psychology radiography radionuclide imaging radiotherapy rehabilitation surgery therapy ultrasonography urine veterinary virology

Restrict Search to Major Topic headings only
 Do Not Explode this term (i.e., do not include MeSH terms found below this term in the MeSH tree).

Entry Terms:

- ◆ Bursitides
- ◆ Adhesive Capsulitis
- ◆ Adhesive Capsulitides
- ◆ Capsulitides, Adhesive
- ◆ Capsulitis, Adhesive

[All MeSH Categories](#)
[Diseases Category](#)
[Musculoskeletal Diseases](#)
[Joint Diseases](#)
Bursitis
[Periarthritis](#)

Send to Search Box

To specify a search for:

Citations about the diagnosis of bursitis

1. Select the diagnosis subheading from the Full display screen.
2. Select **Search Box with AND** from the **Send to** pull-down menu.

The screenshot shows the PubMed search results page for 'Bursitis'. At the top, there are tabs for 'Limits', 'Preview/Index', 'History', 'Clipboard', and 'Details'. Below these, there are dropdown menus for 'Display' (set to 'Full'), 'Show' (set to '20'), and 'Send to'. A 'Send to' dropdown menu is open, showing options: 'Send to Text', 'File', 'Printer', 'Clipboard', 'Search Box with AND' (highlighted), 'Search Box with OR', and 'Search Box with NOT'. Below the menu, there are instructions: 'If making selections (e.g., Subheadings, etc.), use the Send to Search Box with AND', 'Select PubMed under the Links menu to retrieve all records', and 'Select NLM MeSH Browser under the Links menu for additional options'. The main content area shows '1: Bursitis' with a description: 'Inflammation of a bursa, occasionally accompanied by a calcific deposit in the underlying supraspinatus tendon. The most common site is the subdeltoid bursa. (Dorland, 27th ed)'. Below this is a 'Subheadings' section with a list of checkboxes: 'blood', 'chemically induced', 'classification', 'complications', 'diagnosis' (checked and circled in red), 'diet therapy', 'drug therapy', 'economics', 'enzymology', 'epidemiology', 'etiology', 'genetics', 'immunology', 'metabolism', 'microbiology', 'nursing', 'pathology', 'physiopathology', 'prevention and control', 'psychology', 'radiography', 'radionuclide imaging', 'radiotherapy', 'rehabilitation', 'surgery', 'therapy', 'ultrasonography', 'urine', 'veterinary', and 'virology'. A 'Links' section is partially visible on the right.

The term with any specifications will appear in the Search Box:



To add additional terms to this strategy, continue searching the database and add terms to the Search Box using the Send to Search Box feature. Click Search PubMed to run the search.

NOTE: The MeSH browser allows terms to be saved to the Clipboard. This is NOT the same Clipboard that you see when in the PubMed Database. This is the MeSH Database Clipboard.

Learn more about using the MeSH database with these Quick Tours on the MeSH database home page

- ◆ Searching with the MeSH Database
Quick Tour
- ◆ Combining MeSH Terms
Quick Tour
- ◆ Applying Subheadings and other features of the MeSH Database
Quick Tour

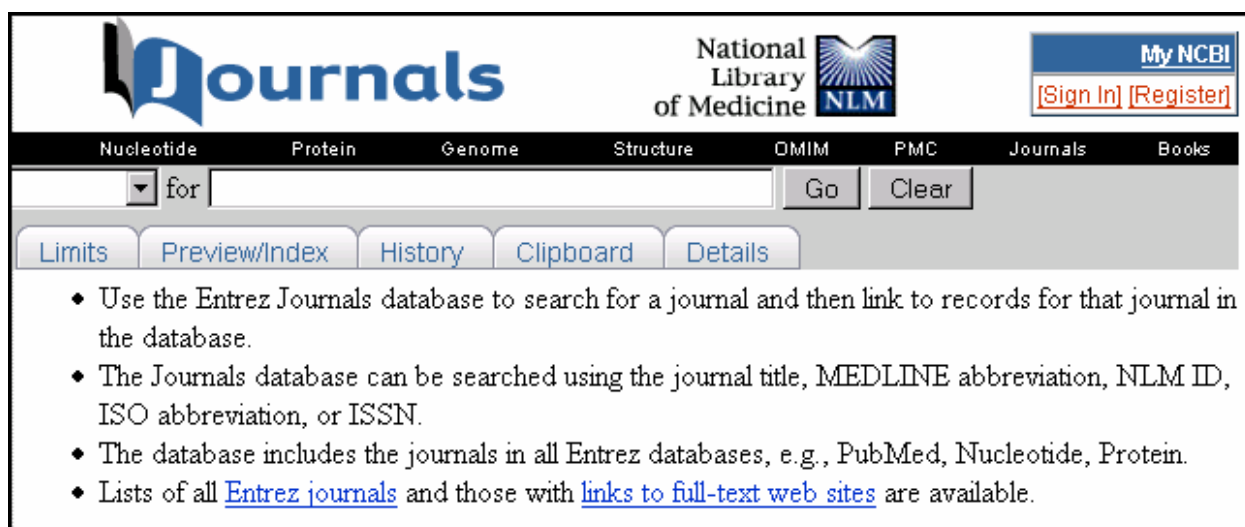
JOURNALS DATABASE

The PubMed Journals Database allows you to look up information about a journal in PubMed and search for citations from that journal. You can locate a journal using:

- Title
- ISSN (International Standard Serial Number)
- MEDLINE journal title abbreviations

How to get there:

- Clicking on the Journals Database link from the PubMed homepage sidebar takes you to Journal Browser screen:



Journals National Library of Medicine NLM My NCBI [Sign In] [Register]

Nucleotide Protein Genome Structure OMIM PMC Journals Books

for [Go] [Clear]

Limits Preview/Index History Clipboard Details

- Use the Entrez Journals database to search for a journal and then link to records for that journal in the database.
- The Journals database can be searched using the journal title, MEDLINE abbreviation, NLM ID, ISO abbreviation, or ISSN.
- The database includes the journals in all Entrez databases, e.g., PubMed, Nucleotide, Protein.
- Lists of all [Entrez journals](#) and those with [links to full-text web sites](#) are available.

Journals Database screen:

- Enter the journal information.
- Click on the **Go** button to run the search.

Example: Journal of the National Cancer Institute

Result:

[see graphic next page]

All: 3

Items 1 - 3 of 3 One page.

- 1:** [Journal of the National Cancer Institute.](#) Links
 pISSN: 0027-8874
 eISSN: 1460-2105
 MEDLINE Abbr: J Natl Cancer Inst
 ISO Abbr: J. Natl. Cancer Inst.
 NLM ID: [7503089](#)
- 2:** [Journal of the Egyptian National Cancer Institute.](#) Links
 pISSN: 1110-0362
 MEDLINE Abbr: J Egypt Natl Canc Inst
 NLM ID: [9424566](#)
- 3:** [Journal of the National Cancer Institute. Monographs.](#) Links
 pISSN: 1052-6773
 MEDLINE Abbr: J Natl Cancer Inst Monogr
 ISO Abbr: J. Natl. Cancer Inst. Monographs
 NLM ID: [9011255](#)

- Clicking on the title will display a more detailed record for the journal. Clicking on the NLM ID will display the record from *Locatorplus*, the NLM catalog.
- Clicking on **Links** at the right hand side of the page will display a drop down menu. Select PubMed from this menu if you wish to do a search for all citations from this journal in PubMed.

SINGLE CITATION MATCHER

The **Single Citation Matcher** allows you to find a single citation using bibliographic information such as a journal name, volume, issue, page number, publication date, and title words.

The **Single Citation Matcher** can also be used to get a "Table of Contents" listing of items indexed from a particular issue of a journal. Caution: Remember some MEDLINE journals are selectively indexed and there are indexing policies which may mean that not every item from every journal will be in the database.

How to Get There

- Clicking on **Single Citation Matcher** on the PubMed homepage sidebar takes you to the Citation Matcher for Single Articles screen :

Example: Biometals, 2001, one author is Shuhama

- Enter as much information as you know. Only one field is required. Then, click Search.

PubMed Single Citation Matcher

Nucleotide Protein Genome Structure OMIM

- Use this tool to find PubMed citations. You may omit any field.
- Journal may be the full title or the title abbreviation.
- For first author searching, use smith jc format.

Journal:

Date: (month and day are optional)

Volume: Issue: First page:

Author name (see [help](#)) Only as first author

Title words:

Result:


for [Save Search](#)

[Limits](#) [Preview/Index](#) [History](#) [Clipboard](#) [Details](#)

Display Show Sort by Send to

All: 1 Review: 0

1: [Brandao-Neto J, Silva CA, Shuhama T, Silva JA, Oba L.](#) [Related Articles, Links](#)

 Renal handling of zinc in insulin-dependent diabetes mellitus patients.
Biometals. 2001 Mar;14(1):75-80.
PMID: 11368278 [PubMed - indexed for MEDLINE]

If you know four or more significant words from the title that is often all that is needed to locate a reference.

CLINICAL QUERIES

This page provides specialized search filters intended for use by clinicians and researchers.

How to get there

- Click on Clinical Queries on the PubMed homepage sidebar to access this search feature.

Search by Clinical Study Category

This specialized search query has built-in search ‘filters’ that search for research-based citations.

| | |
|---|--|
| <p>Four study categories or filters are provided:</p> <ul style="list-style-type: none"> • therapy • diagnosis • etiology • prognosis • clinical prediction guides | <p>Two emphasis categories or filters are provided:</p> <ul style="list-style-type: none"> • narrow, specific search • broad, sensitive search |
|---|--|

- Retrieval can be further refined using Limits.

Find Systematic Reviews

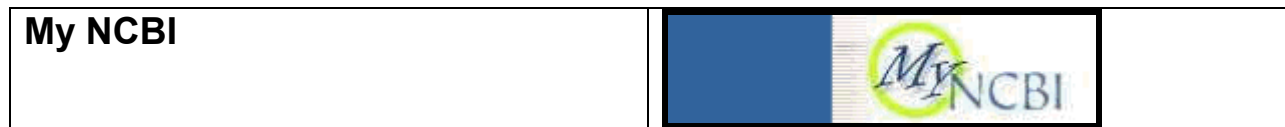
For your topic(s) of interest, this search finds citations for systematic reviews, meta-analyses, reviews of clinical trials, evidence-based medicine, consensus development conferences, and guidelines.

Medical Genetics Searches

This search finds citations and abstracts related to various topics in medical genetics.

NOTE : The default here is to have **ALL** categories selected. When using this option, it may be best to *uncheck* the **ALL** box and select the specific area you wish to search.

| Category |
|--|
| <input checked="" type="checkbox"/> All |
| <input checked="" type="checkbox"/> Diagnosis |
| <input checked="" type="checkbox"/> Differential Diagnosis |
| <input checked="" type="checkbox"/> Clinical Description |
| <input checked="" type="checkbox"/> Management |
| <input checked="" type="checkbox"/> Genetic Counseling |
| <input checked="" type="checkbox"/> Molecular Genetics |
| <input checked="" type="checkbox"/> Genetic Testing |



My NCBI Features

- Saved Searches: save search strategies to get updates - including automatic e-mailed updates.
- Filters: Group your retrieval by topics of interest to you
- Highlighting of search terms

Getting to My NCBI

| | |
|--|---|
| <ul style="list-style-type: none"> • PubMed's banner will display links to My NCBI. • The My NCBI link goes to your list of saved searches. • Sign In links to the Sign In page. • Register links to the My NCBI registration page. | A screenshot of a button bar. It features a blue background with the text "My NCBI" in white. Below this, there are two white buttons with blue text: "Sign In" and "Register". |
|--|---|

Registering for My NCBI


- To use My NCBI you need to register for an account.

- **Sign In: Session-Only or Automatic**

| | |
|--|--|
| <p><i>The check box, "Keep me signed in unless I sign out" is un-checked as the default.</i></p> <p><i>This means that My NCBI features will be available for your current session.</i></p> <p><i>Check the box if you want My NCBI features to be available from that computer without signing in again. This is done by use of a permanent cookie which remains on the computer.</i></p> <p><i>Click About automatic sign in for more information about this feature.</i></p> | A screenshot of the "My NCBI: Sign In" form. The title "My NCBI: Sign In" is at the top. Below it is a yellow box with the text "Sign in here or register for an account ." There are two input fields: "User Name" and "Password". Below the password field is a checkbox labeled "Keep me signed in unless I sign out" with the text "Leave unchecked on public computers" underneath. A "Sign In" button is on the right. At the bottom, there are two links: " I forgot my password " and " About automatic sign in ". |
|--|--|

Important Facts about the E-mail for My NCBI Account

- Each My NCBI account can have **only one** e-mail address that will be used for all automatic e-mail updates saved in that account.
- If, at a later time, you change the e-mail address for your account, the new e-mail address will be used for **all** automatic updates following confirmation (see below).
- To change the e-mail address on an account, go to **User Preferences** on the My NCBI sidebar.

| | |
|---|---|
|  <p>Take Note:</p> | <p>Watch for a CONFIRMATION email sent to you from NCBI and respond to it!</p> <p>My NCBI will NOT send emails to addresses that have not been confirmed.</p> |
|---|---|

The Confirmation E-mail

- The first time an automatic e-mail update is created for an account, or if the e-mail is changed in User Preferences, a confirmation e-mail will be sent to that address.
- No automatic updates will be sent to an address until it has been confirmed.

Saving Searches

- Run your PubMed search.
- From the Results page, click on the **Save Search** link to the right of the query box.

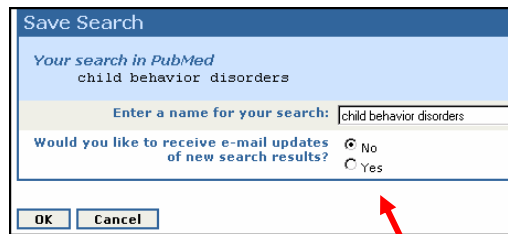


PubMed uses the search as it is stored in the History, so it is important to run a search in order for it to appear in the History.

- PubMed will open a separate window in your browser to start the saving process. (If you are not already signed into My NCBI, you will be prompted to do so.)

You may edit the name of the search

This name will be part of the subject line of automatic email updates.



- Next, indicate whether or not you want to have the updates automatically e-mailed.
- If you leave the setting as No, the search is saved and you can update it at your convenience.
- If you select the Yes button, the window will extend to display additional options for customizing the update:

[see graphic next page]

Save Search

Your search in PubMed
child behavior disorders

Enter a name for your search:

Would you like to receive e-mail updates of new search results? No Yes

E-mail to:

How often? The of each month
 Every
 Every day

Format: as

Maximum number of items to send

Send e-mail even when there are no new results Yes

Additional text (optional)

Setting up automatic updating

Searches saved for automatic updating require that additional details be supplied.

- If the e-mail box is blank, enter an **e-mail address** for the account. *All* automatic updates will be sent to that address following confirmation
- Select **How often** you want to get updates - monthly, weekly, or daily.
- Select the **format** (Summary, Abstract, etc.), and either an HTML or text e-mail.
- Select the **maximum number of items to be sent** with each update. Don't worry about picking a number that is too low. You can use a link in the e-mail that takes you to the total update results in PubMed.
- If you want to know when an update retrieved no citations, select, **Send e-mail when there are no new results**.
- The **Additional text** box will default to the search name. You can replace this text, keeping in mind that this text will display on each e-mail update as "Sender's message" and the strategy is also displayed in the e-mail message. Many users will prefer not to include additional text.

Click on the word, "here" to view the complete results. For this example, to see all 10 citations.

This message contains My NCBI what's new results from the National Center for Biotechnology Information (NCBI) at the U.S. National Library of Medicine (NLM).

Do not reply directly to this message.

Sender's message: Search: child behavior disorders

Sent on Saturday, 2005 Feb 12

Search **child behavior disorders**

Click [here](#) to view complete results in pubmed. (Results may change over time.)

To unsubscribe from these e-mail updates click [here](#).

Entrez pubmed Results

Items 1 - 5 of 10

1: [Stein A, Krebs G, Richter L, Tomkins A, Rochat T, Bennish ML](#) [Related Articles](#), [Books](#), [LinkOut](#)



Babies of a pandemic.

Arch Dis Child. 2005 Feb;90(2):116-8. No abstract available.

PMID: 15665160 [PubMed - indexed for MEDLINE]

2: [Dery M, Toupin J, Pauze R, Verlaan P](#) [Related Articles](#), [Books](#), [LinkOut](#)



Frequency of mental health disorders in a sample of elementary school students receiving special educational services for behavioural difficulties.

Can J Psychiatry. 2004 Nov;49(11):769-75.

PMID: 15633855 [PubMed - indexed for MEDLINE]

Partial e-mail update results

Manually Updating Searches

- To manually update a search, go to your saved searches in My NCBI.
- Check the box to the left of the search to be updated and click **What's New for Selected** at the bottom of the page.
- My NCBI will indicate if there are any new citations retrieved by the strategy since your last update.
- If you link to the results, i.e., complete the update, your saved search list will reflect the date and time of the update.

Additional Functions available from My Saved Searches page

In the **Details** column click on the frequency (Daily, Weekly, Monthly) to go to the Search Details page where you can make changes.

Hold your cursor over the data in the **Last Updated** column to show the date the next e-mail update will be sent, or in the case of No Schedule, you will see the date you last manually generated new citations.

Saved searches can be run to retrieve total results, i.e., not limited to new citations. Click on the name of the search. (This will not affect future updates.)

| <input type="checkbox"/> | Search PubMed | Last Updated | Details |
|--------------------------|--|--------------|-----------------------------|
| <input type="checkbox"/> | sunscreen hypersensitivity | today | Daily |
| <input type="checkbox"/> | vitamin k diet | today | Monthly |
| <input type="checkbox"/> | chronic fatigue syndrome | today | Weekly |
| <input type="checkbox"/> | Arthritis Pain | 2 months ago | No Schedule |

Modifying a Strategy: Save a New One -- Delete the Old

- Saved search strategies cannot be edited. To modify a strategy, re-save it with your changes.
- To delete a search, select the search using the check box and click on the **Delete Selected** button at the bottom of the page.

Changing the E-mail Address for an Account

- User Preferences is accessible via a link on the My NCBI sidebar. You can change the e-mail address for your My NCBI account here.
- Keep in mind, anytime you change the e-mail for an account, all automatic updates will be sent to that address following confirmation.

Search Statement Numbers in Saved Searches

- My NCBI allows you to save searches with search statement numbers.
- Be aware that the default search name does not include any Boolean operators and search tags, if entered.
 - Example: History shows:

| Search | Most Recent Queries |
|--------------------|---------------------------|
| #3 | Search arthroscopy |
| #2 | Search shoulder |
| #1 | Search wrist |

- Search: (#1 OR #2) AND #3
- Click Save Search

Save Search

Your search in PubMed
(wrist OR shoulder) AND arthroscopy

Enter a name for your search:

Would you like to receive e-mail updates of new search results?

No
 Yes

- This name does not affect the strategy, so it is advisable to edit it to something short, yet meaningful.
- Be sure to run your search before saving it, in order for it to appear in the History and be successfully saved.

About the Updates

- The update strategies used for My NCBI are detailed in PubMed's Help.
- New or modified searches can be generated no sooner than the next day. For example, this morning, you changed the frequency for an update from Monthly to Daily. The first update will be sent tomorrow.

Filters

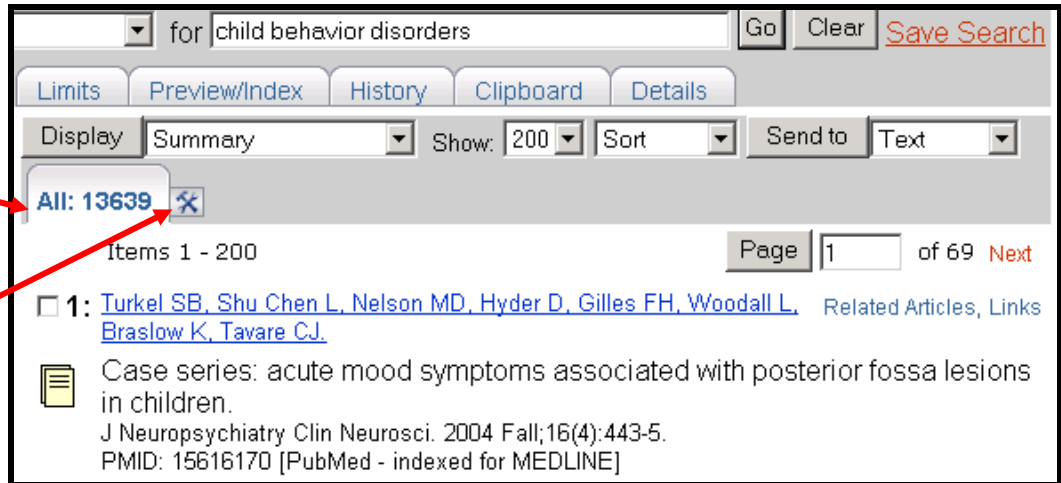
- My NCBI includes a Filters feature which groups search results by areas of interest.
- You can have up to **five** active filters using My NCBI.

The Tabs

- “All” tab shows the total retrieval for the search.

The *All* tab which shows the total retrieval for the search.

To the right of the “All” tab, the hammer and wrench icon links you to My NCBI where you can add or modify your filter choices.



Adding Filters

- Use the  icon to link to the **Quick Pick** list of commonly-requested filters:

Click in the checkboxes to select or deselect filters.

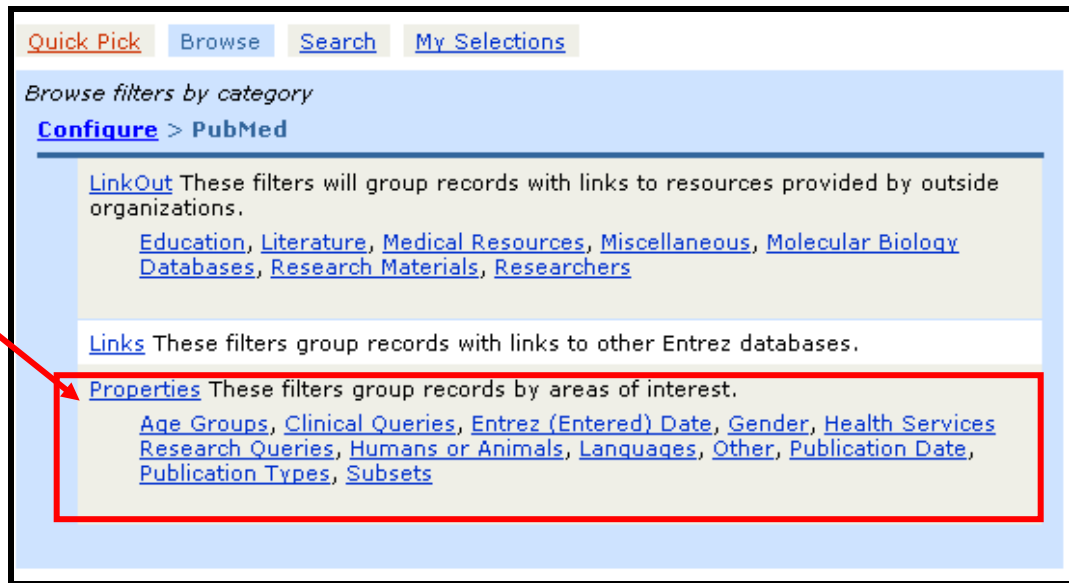


Browse

- Click on Browse to see additional options for PubMed filters.
- On the Browse page there are three categories:
 - LinkOut
 - Links
 - Properties

Users interested in **subject related filters** for their searches should look at Properties.

There are over 70 filter options under Properties.



Under Properties, use the links to see the available filters for each sub-category. Here's the one for Publication Types:

Use the link for the desired filter to go to a page where you can select that filter.



Click in the checkbox to select the filter.



LinkOut Filters

- Filters in this category group results by full text providers, libraries, and other outside resources.

Adding your library’s holdings as a filter:

- From the Browse page – click on Libraries:



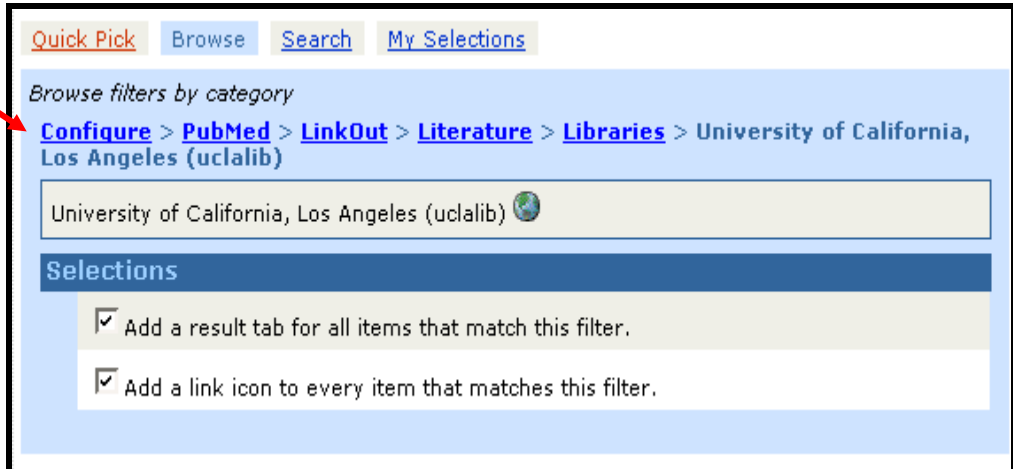
This will bring up a page with all of the LinkOut-participating libraries.

- Use your browser’s Find feature or scroll down to locate your library.
- Click on the desired library link. (Not the globe, the name of the library.)
- Then click on the checkboxes to add a result tab and/or display the library’s icon:

Notice the use of “breadcrumbs” on the Filters pages.

Each breadcrumb for a higher level is a link to that page.

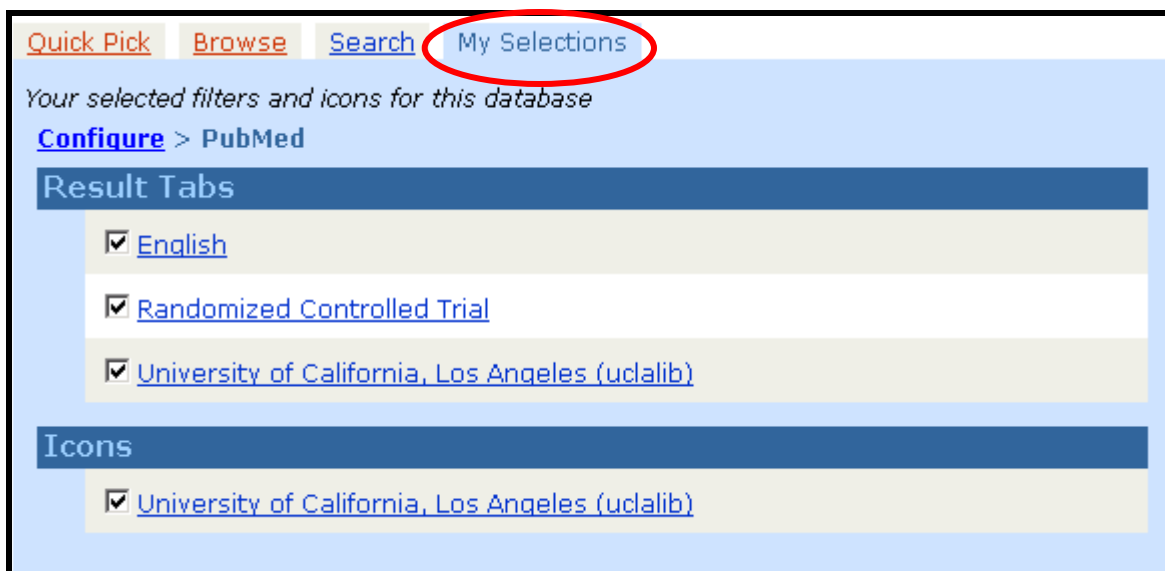
Click in the checkboxes to add these selections.



- Results tabs for LinkOut providers display the LinkOut user name.
- Place your cursor over this ID to see the name of the provider.
- Users who connect to PubMed with a URL that includes a library's holdings parameter will continue to see their library icon even if they do not select their library in My NCBI. Users should select their library filter if they want to see a **filter tab** for their library in the search results.


My Selections

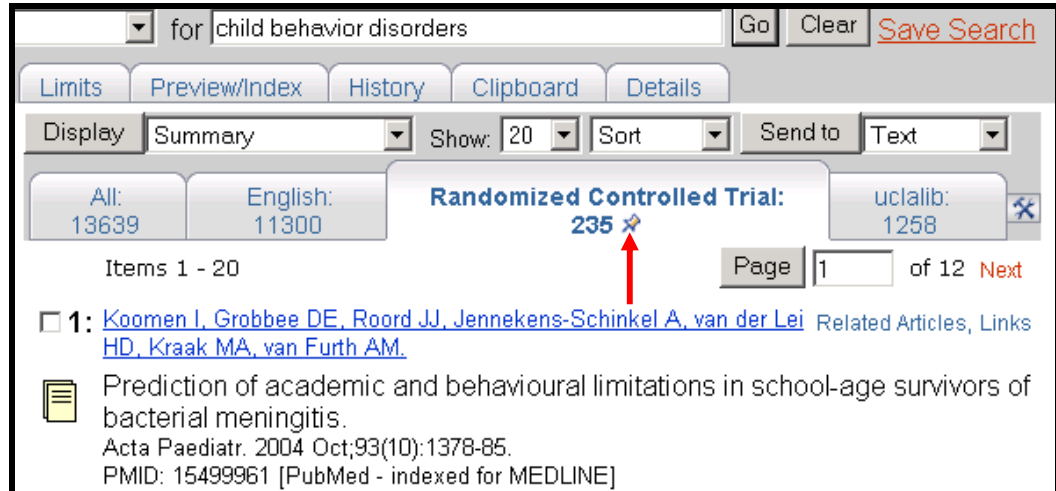
- Click on My Selections at any time to check on the filters selected:



Using the Filter Tabs

- Click on a filter tab to go to the citations for a particular filter. Select any display format you wish.
- When you click on the filter name (tab) to see the results for a filter, a tack symbol will appear in the tab. Use it to “tack” the filter onto the search query.

Clicking on the  icon “tacks” that filter onto the search query.



- Filters added this way will display in the query box with the [Filter] tag.
- If you want to save this search, click on Save Search.
- Many filter topics can be added to the search via the Limits page. Either way will yield the same results.

Some additional comments about filters, saving searches, and My NCBI

- Filters “float” along the top of a search. They are NOT part of the search *strategy*.
 - To add a filter to your search *strategy*, the filter needs to be “tacked” onto the search strategy, as noted above.



Limits applied to a search are a part of the search query itself.

Filters sort of “float” along on top of a search and allow users to see, at a glance, a specific group of citations. Filters are NOT attached to the search query.

- Each filter is independent. There is no way to click on all the active filters simultaneously. Think of Filters as Boolean ORs, not ANDs.

- What this means:
 - A searcher has set the following filters in her My NCBI account: English language, human, and Review article.
 - After she runs a search, she can easily see the group of results that are in English OR those that had human subjects, OR those that are Review Articles.
 - What she cannot see, using Filters, are those results which are English AND human AND review articles.



In order to see the group of results that are
English AND human AND Review articles:

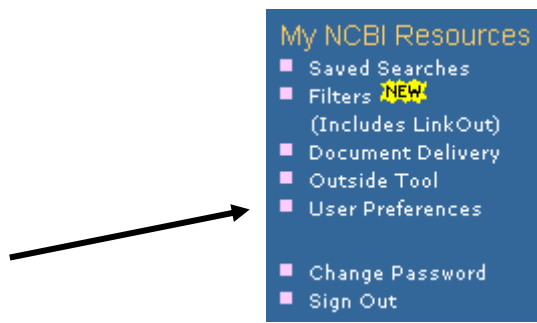
Those filters must be tacked onto the search

or

Those specific Limits must be chosen and the search re-run

Highlighting Search Terms in PubMed Results

- To turn on the highlighting feature in My NCBI, access the User Preferences section from the blue side bar on the left hand side of the page:



User Preferences

- ◆ Change the display format for the Links menu on your search results screen.
- ◆ Save an e-mail address for Send to E-mail as well as automatic e-mail updates.
- ◆ Auto e-mail updates go to a single address. Enter one address for this account.
- ◆ Highlight PubMed search words in your retrieval, or not.

Links display:

E-mail address:
[Notice to My NCBI users using e-mail filtering "SPAM" software](#)

Highlighting: Off Yellow Green Plum Aqua

- Select the highlighting color you'd like and then click OK. The highlighting feature will stay ON in your My NCBI account until you turn it off.

[Save Search](#)


Limits Preview/Index History Clipboard Details

Display Show Sort by Send to


All: 150 English: 132 Free full text: 22 Items with Abstracts: 140 umasslib: 70

Items 1 - 20 of 150

1: [Kidd P, Head K.](#)

 A review of the bioavailability and clinical efficacy of **milk thistle** phytosome: a silybin-phosphatidylcholine
Altern Med Rev. 2005 Sep;10(3):193-203.
PMID: 16164374 [PubMed - in process]

2: [Karimi G, Ramezani M, Tahoonian Z.](#)

 Cisplatin nephrotoxicity and protection by **milk thistle** extract in rats.
Evid Based Complement Alternat Med. 2005 Sep;2(3):383-6. Epub 2005 Jul 26.
PMID: 16136217 [PubMed - in process]

NOTE: See the using My NCBI section in the PubMed Help for additional information regarding setting up and using a My NCBI account.

http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=helppubmed.section.pubmedhelp.My_NCBI

Or, see the PowerPoint "Using My NCBI" available on the NER website at

<http://nmlm.gov/ner/OnlineResources.html#databases>

NOTES