

Internet Search Tools

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Types of search tools

- Directories
- Search Engines (General/Medical)
- Meta-search Engines
- Evaluated subject directories
- Specialized search tools

Other retrieval options

- Mailing lists
- Alert services
- RSS feeds

Types of resources that need special search tools

- Articles (full-text)
- Images
- Video
- MP3/audio
- News
- Web-logs
- DBs

Medical Subject Directories

- **Martindale Health Science Guide**
- *<http://www.martindalecenter.com/HSGuide.html>*
- **MedBioWorld**
- *<http://www.medbioworld.com/>*
- **Hardin Meta Directory of Internet Health Resources**
- *<http://www.lib.uiowa.edu/hardin/md/index.html>*

General Search Engines

- **Google**
- *<http://www.google.com>*

- **Altavista**
- *<http://www.altavista.com/>*

How to choose search engine

- **Volume and depth**

- **Uptodate**
- **Search quality**
- **Search speed**
- **Search options**
- **Additional utilities**

Google

<http://www.google.com/>

Videos

Similar Pages

Site Search

Spell Checker

Who links to you?

Web Page Translation

Google – basics

- default “AND”
- stop-words (+)
- upper/low register doesn't matter
- different forms of words - stemming
- phrase search
- meaning you want to avoid (-)

Google Directory

Google – search results

- Language of interface
- translation into English
- language of search
- number per page (10/20/50/100)
- SafeSearch Filter

Google – Advanced Search

Usage of Search Engines

- Combination of keywords
- Boolean operators
- Phrase search
- Specific terms
- Basic/ advanced search mode
- Truncation
- Synonyms

- Display of results

To narrow your search

- add keywords
- use specific terminology
- use Boolean operator AND, +
- search the specific part of a Web-site (title, first page)
- use Boolean operator NOT, -

To widen your search

- delete less important keywords
- use more general terminology
- add synonyms/alternative spelling (Boolean operator OR)
- use option - related documents

Meta-search Engines

- **Ixquick**

<http://ixquick.com/>

Usage of meta-search sites

- Your topic is not precisely formulated
- You have not found anything with other search engines
- Search strategy is not complicated
- You need relatively few but relevant results

Medical Search Engines

- **Med Hunt**
- *<http://www.hon.ch/MedHunt/>*
- **Kosmix RightHealth** (Beta)
<http://www.righthealth.com/>
- **BioMeta Cluster**
- *<http://www.biometacluster.com/>*
- **OmniMedicalSearch.com**

<http://www.omnimedicalsearch.com/>

Kosmix

BioMetaCluster

Evaluated Subject Directories

- **Intute: Health and Life Sciences**

<http://www.intute.ac.uk/healthandlifesciences/>

Search for Articles

- **FindArticles**

- <http://www.findarticles.com>
- **MagPortal**
- <http://www.magportal.com>
- **Google Scholar**
- <http://scholar.google.com/>
- **Scirus**
- <http://www.scirus.com/>

Search for free full-text materials

- **OAIster** 19,500,000
- <http://www.oaister.org/>
- **Registry of Open Access Repositories (ROAR)** 1239
- <http://archives.eprints.org/eprints.php>
- **Directory of Open Access Journals**
<http://www.doaj.org>

Search Strategy Tips

- use specialized search tools
- read search service documentation (help)
- use Boolean operators correctly
- formulate your query correctly
- use new search services
- use several search services
- use meta-search engines with caution

Internet Search Mistakes

- problems of stop-words
- wrong use of Boolean operators
- general keywords
- small/capital letters
- same spelling – different meaning
- proximity operators (close, NEAR)
- inappropriate search tool
- zero result - check your spelling!

Internet Search Strategy

- write down your question/keywords
- choose search tools
- execute your search
- evaluate search results
- further planning

Question/ Keywords

- question
- split it into main concepts
- write down main concepts
- find synonyms for each concept

- combine them with Boolean operators (OR, AND)
- write down 3-4 combinations
- think about broader context - write it down
- think about and write down names of people, organizations who can have information on your topic

Choose search tools

- Search engines
- Directories
- Data bases

Executing search

- Connect with search engine or directory
- Try basic, then advanced search
- Write down notes about the results
- Try the same search with another search tool

Search methods

- Traditional data base searching
- Use of **search filters**
- **Citation pearl growing** (identifying synonyms) - start with one key reference
- **Snowball searching** - (identifying synonyms) - start with one key reference
- **Cited references searching** - who cited this author/article
- **Author searching**
- **Hand searching** (browsing) useful journals

Search styles

- **Brief search** (1-2 concepts)
- **Building blocks**
- **Successive fractions** (adding additional concepts after each individual search)
- **Drop a concept** (operator NOT)

Was your search effective?

- How many documents you found
- Are your keywords in titles of most of these documents
- Did you find the most useful document in the first ten retrieved
- Write down your ideas for further refinement of your search

Information quality

- **Authorship** - authors and contributors, their affiliations, and relevant credentials should be provided
- **Attribution** - references and sources for all content should be listed clearly, and all relevant copyright information noted
- **Disclosure** - sponsorship, advertising, underwriting, commercial funding arrangements or support, or potential conflicts of interest
- **Currency** - dates when content was posted and updated