Getting More Out of Your Database Searches
Keyword Searching : Less is More

For those of us who don’t care to remember life before internet search engines, the idea of keyword searching can be foreign. Internet search engines like Google, Bing and Yahoo use natural language searching. This means that we can search using any terms we choose and get more results than we can use. The databases that index journal literature usually provide a search interface that looks like an internet search engine, but they don’t employ natural language searching. These databases use what is referred to as a “controlled vocabulary.” Choosing search terms from the controlled vocabulary gives the best search results for these sources.

To bridge the gap between the ease of natural language searching and the power of searching with a controlled vocabulary database developers have created tools like PubMed’s Automated Term Mapping (ATM). ATM takes your search terms and matches them to the controlled vocabulary of PubMed. ATM allows the user to input a term like “inoculation” and PubMed interprets the search as “vaccination”[MeSH Terms] OR “vaccination”[All Fields] OR “inoculation”[All Fields].

Whether you are searching using an internet search engine or a literature database, keyword searching is your friend. The librarian frequently gets requests to assist with a search that is yielding unsatisfactory results. Sitting down with the searcher, she asks about keyword searching and finds that everyone knows what it is and that it’s advantageous. She then asks to see a sample search. What’s typed into the search box often looks something like:

What are the medical implications of soy consumption during the first trimester of human gestation?

This turns back
- 729,000 items in Google
- 1,580 items in Google Scholar
- 59,230 items from a simultaneous search across our EBSCO databases
- Zero items in PubMed

The searched phrase could be an article title or the thesis statement for a PhD dissertation, but it is not a keyword search. What can be done to improve it?

Take out the “stop words.” Stop words are called stop words because in the bad old days of command line searching, including them in your search would cause the database to cease processing your search. Today most databases ignore them as too common or irrelevant. Common stop words are articles, prepositions, adverbs and adjectives. In the search statement above, PubMed excluded “what, are, the, of, during.”

This leaves the following:

medical implications soy consumption first trimester human gestation

It still doesn’t work. Why?

CONTINUED ON PAGE 2

CRDAMC Contributes to Professional Knowledge


PubMed and our EBSCO databases are medical databases. Every item indexed will have something to do with medical implications of something; these are unneeded terms. That leaves us with:

soy consumption first trimester human gestation

Which returns one item in PubMed, 45,244 in EBSCO, 35 in Google Scholar and a whopping 1,550,000 in Google. What else can be removed from the remaining words?

Although soy is used in a number of ways we generally eat it. Consumption of soy is the most common context for the word soy to be used in medical literature. We don’t need to reference consuming the soy. Now our search terms are down to:

soy first trimester human gestation

This results in two articles in PubMed, and a browsable 35 items in Google Scholar which at first glance appear mostly relevant. The EBSCO search is only marginally improved by this refinement of the search statement while the Google search is predictably broadened by removing “medical” as a qualifier. Google’s result set ballooned to 1,680,000 items.

Depending on why I’m searching, I may end my search here by using the two items from PubMed and reviewing the 35 items found in Google Scholar for supplementary information.

<table>
<thead>
<tr>
<th>Search statement</th>
<th>Google</th>
<th>Google Scholar</th>
<th>PubMed</th>
<th>EBSCO simultaneous search</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the medical implications of soy consumption during the first trimester of human gestation?</td>
<td>729,000</td>
<td>1,580</td>
<td>0</td>
<td>59,230</td>
</tr>
<tr>
<td>soy consumption first trimester human gestation</td>
<td>1,550,000</td>
<td>35</td>
<td>1</td>
<td>44,244</td>
</tr>
<tr>
<td>soy first trimester human gestation</td>
<td>1,680,000</td>
<td>2,430</td>
<td>2</td>
<td>43,560</td>
</tr>
</tbody>
</table>

Guides to Free Resources for CE/CNE/CME

The library’s guides to free continuing education resources have been revised and updated for 2013. Get yours at the library.

Library Catalog

The bad news is that the Library’s catalog server at Ft Sam went down on March 1. The good news is that the new system due to go live next month is already online.

You can find our new online catalog at http://crdamclib.worldcat.org

Skills Fair Prep

CRDAMC’s 2nd Annual Skills/Knowledge Fair will take place Wednesday, 24 April 2013 0700-1900, in the classrooms above the Emergency Room. If you would like to back up your Skills Fair presentation with relevant information resources, we can help. From books like “ABC of Tubes, Lines, Drains and Frames” to our procedure databases, Mosby’s Nursing Skills and Procedures Consult, the CRDAMC Medical Library can support your learning needs.

March is Brain Injury Awareness Month

In recognition of National Brain Injury Awareness Month, the CRDAMC Medical Library wishes to call to your attention a number of relevant information resources.

For patient education, MedlinePlus provides a well-rounded overview of TBI in layman’s terms. The TBI entry features an interactive tutorial which can also be played as a video or printed. Medline Plus is a service of the US National Library of Medicine and the NIH. The entry for TBI is available in English and Spanish and provides related information in Korean, Japanese, French, Russian, Somali and Ukrainian. www.nlm.nih.gov/medlineplus/traumaticbraininjury.html

The VA/DoD Evidence Based Practice Clinical Practice Guideline for the Management of Concussion/Mild TBI is a 122 page document aiming to “Reduce current practice variation and provide facilities with a structured framework to help improve patient outcomes, provide evidence-based recommendations to assist providers and their patients in the decision-making process related to the patient health care problems and identify outcome measures to support the development of practice-based evidence that can ultimately be used to improve clinical guidelines” (introduction page 1). The full guideline, a summary and a printable pocket card are downloadable at www.healthquality.va.gov/management_of_concussion_mti.asp

The CDC web page for TBI, www.cdc.gov/traumaticbraininjury/, is a good source of statistical data. This concise resource covers a spectrum of causes of TBI from shaken baby syndrome through falls by the elderly. Includes cost data associated with TBI.

Your Medical Library also offers you a variety of print resources on TBI. Speech pathology, visual disorders, surgery, mental health and nutritional care are just a few of the caregiver perspectives represented in our collection. You can find these books and others by using our online catalog located at http://crdamclib.worldcat.org.

A bibliography of resources for TBI with clickable links can be found on the library’s Additional Resources web page.
SimJunior is the newest addition to our family of simulators, representing the child/adolescent demographic. Whether training to reinforce communication skills or new procedural tasks SimJunior provides the opportunity to train on:

- Intubation
- ECG rhythm monitoring
- Transcutaneous pacing
- Defibrillation
- IV cannulation
- IV drug administration
- Intraosseous infusion

This is a partial listing of features; contact the Simulation Center for a tour and demonstration of SimJunior.

Trainees are able to visualize the direct impact of their treatments by not only reassessing SimJunior, but by reviewing the patient monitor. The touch enabled monitor displays:

- ECGs
- Arterial blood pressure
- Respiratory rate
- Pulse rate
- Pulse oximetry
- Train of four response

“Trained, Competent and Ready”
The SimPad provides ease of access to the control of vital signs and vocal sounds for SimJunior.

SimPad allows the instructor to build custom scenarios for their training specifications. Another option is to utilize the SimPad with no previous settings and manipulate vital signs based on trainees treatment choices. This is known as, “On The Fly Training.”

Rapid upgrades in medical equipment and procedures, can present challenges to safe practice. The opportunity to practice new technologies in a simulated environment compliments patient safety initiatives.

Use the services of the Simulation Center to assist you in your training objectives.

Contact the Simulation Lab at 254-553-2070 for scheduling your next event.

“Trained, Competent and Ready”