https://libguides.nus.edu.sg/medicine/orientation
http://libguides.nus.edu.sg/skills
WHAT IS PUBMED/MEDLINE

PubMed

• PubMed comprises more than 28 million citations for biomedical literature from MEDLINE, life science journals, and online books.
• MEDLINE, largest component of PubMed (24 million records from 5600 journals)
• Search interface developed by the National Center for Biotechnology Information (NCBI) at National Library of Medicine (NLM)

MEDLINE

• Biomedical literature database covering the fields of medicine, dentistry, nursing and health care system
• Medline records are indexed using MeSH
• Updated daily – in press, ahead of print
• Coverage: US & 80 other countries
HOW TO ACCESS PUBMED

   
   **Benefit:** Seamless access to full-text articles (journals subscribed by NUS Libraries)

   
   **Benefit:** Faster
**Boolean Operators**

**AND** is used to indicate that both terms must be present

*e.g. peanuts AND allergies*

articles containing **both** peanuts and allergies

**OR** is used to indicate that either terms maybe present

*e.g. Singapore OR Malaysia*

articles containing **either** Singapore **or** Malaysia **or both**

**NOT** is used to indicate that specific term should not be present

*e.g. osteoarthritis NOT arthroplasty*

articles containing **only** osteoarthritis **but NOT** arthroplasty
“Block Building”

Question: Is A related to B and C?

Apple
AND
Beetroot
AND
Carrot

A AND B AND C
“Block Building”

Question: Is A related to B and C?

Apple = Green Apples OR Red Apples

Beetroot = Sugar Beets

Carrot = Purple Carrots OR Baby Carrots

A AND B AND C

(Green Apples OR Red Apples) AND Sugar Beets AND (Purple Carrots OR Baby Carrots)
“Block Building”

Question: Is A related to B and C?

Green Apples  OR  Red Apples

AND

Sugar Beets

AND

Purple Carrots  OR  Baby Carrots

=
“Block Building”

Question: Is A related to B and C?

(Green Apples OR Red Apples) AND (Red Beets OR Yellow Beets) AND (Purple Carrots OR Baby Carrots)
“Block Building”

Question: Is $A$ related to $B$ and $C$ and $D$ and $E$ and…

$(A^1 \text{ OR } A^2 \text{ OR } A^3) \text{ AND } (B^1 \text{ OR } B^2) \text{ AND } (C^1 \text{ OR } C^2 \text{ OR } C^3) \text{ AND } (D^1 \text{ OR } D^2) \text{ AND } (E^1 \text{ OR } E^2)…$
PubMed Searching

1. Keyword Search

2. Advanced Search
   - Field Search
   - Combines Searches

3. MeSH Search
   - Major MesH
Keyword Search

PubMed search for "difficulty swallowing"

Clear the search box

PubMed comprises more than 26 million citations for biomedical literature from MEDLINE, life science journals, and online books. Citations may include links to full-text content from PubMed Central and publisher web sites.
Try this out now:

1. Type **difficulty swallowing** in the search box and click search.

2. Clear the search box, type “**difficulty swallowing**” and then click search.

3. Clear the search box, type **difficulty swallowing OR swallowing problems** and then click search.

4. Wait for further instructions – format, sort by, per page.
Advanced Search – Field Search

PubMed Advanced Search Builder

Use the builder below to create your search

Edit

Builder

- All Fields ▼
- AND ▼ All Fields ▼

Search or Add to history

History

<table>
<thead>
<tr>
<th>Search</th>
<th>Add to builder</th>
<th>Query</th>
</tr>
</thead>
<tbody>
<tr>
<td>#3</td>
<td>Add</td>
<td>Search difficulty swallowing OR swallowing problems</td>
</tr>
<tr>
<td>#2</td>
<td>Add</td>
<td>Search “difficulty swallowing”</td>
</tr>
<tr>
<td>#1</td>
<td>Add</td>
<td>Search difficulty swallowing</td>
</tr>
</tbody>
</table>
Advanced Search – Combine Searches

PubMed Advanced Search Builder

=((difficulty swallowing OR swallowing problems)) AND articulation

Search or Add to history

Search | Add to builder | Query
--- | --- | ---
#4 | Add | Search articulation
#3 | Add | Search difficulty swallowing OR swallowing problems
#2 | Add | Search “difficulty swallowing”
#1 | Add | Search difficulty swallowing
Truncation

Vaccine* - vaccine, vaccines…

Vaccin* - vaccination, vaccinations, vaccinator, vaccinating…

Vac* - vacation, vaccine… vacuum, vacuole…

Take Note: PubMed only searches the first 600 variations
Medical Subject Heading (MeSH)

- Medicine's controlled vocabulary used for indexing articles for MEDLINE/PubMed
- Provides a consistent way to retrieve information
Medical Subject Heading (MeSH)

Deglutition Disorders

Difficulty in SWALLOWING which may result from neuromuscular disorder or mechanical obstruction. Dysphagia oropharyngeal dysphagia due to malfunction of the PHARYNX and UPPER ESOPHAGEAL SPHINCTER; and esophageal dysphagia due to malfunction of the ESOPHAGUS.
MeSH – Tips: Subheadings & Major MeSH

PubMed search builder options

- Subheadings
  - analysis
  - anatomy and histology
  - blood
  - chemically induced
  - chemistry
  - classification
  - complications
  - congenital
  - diagnosis
  - diagnostic imaging
  - diet therapy
  - drug therapy
  - economics
  - embryology

- enzymology
- epidemiology
- ethnology
- etiology
- genetics
- history
- immunology
- metabolism
- microbiology
- mortality
- nursing
- organization and administration
- parasitology
- pathology

- Restrict to MeSH Major Topic
Entry Terms in MeSH Database

Entry Terms:

- Deglutition Disorder
- Disorders, Deglutition
- Swallowing Disorders
- Swallowing Disorder
- Dysphagia
- Oropharyngeal Dysphagia
- Dysphagia, Oropharyngeal
- Esophageal Dysphagia
- Dysphagia, Esophageal

If you need to expand your search, consider these synonyms in keyword search.
Comparing Keyword, MeSH and Major MeSH Searches

- **Keyword**: broadest, least precise, current
- **MeSH**: narrowest, most precise, slightly dated
- **Major MeSH**: in between, slightly current

Diagram:
- **Keyword** is the outermost circle.
- **MeSH** is the middle circle, slightly larger than the **Major MeSH**.
- **Major MeSH** is the innermost circle.

The diagram illustrates the relationship between the different types of searches, with **Keyword** being the broadest and **MeSH** being the narrowest.
Medical Subject Heading (MeSH)

• If you cannot find a MeSH term, try other variations of your keyword

• It is possible there is no equivalent MeSH term for your keyword – if so then do a keyword search

• A search strategy can have a mix of keywords and MeSH terms
Refine a Search using Filters

- Located at the left side of the search results
- Choose suitable filters depending on what you are looking for
- Select additional filters if necessary
- Most commonly used: Article Types, Language
In Summary

1. Use MeSH terms
2. If there are no MeSH term then use keywords
3. A mixture of keywords and MeSH terms is ok
4. Use “AND” or “OR” to either narrow or widen your search
5. Filter your results:
   • Language
   • Article type
Locate Full-text Articles

If you accessed PubMed from the Library Portal, click on publisher icon
Other methods to locate full-text articles?

- Search in Google Scholar
- Library proxy bookmarklet
- FindMore@NUSL
  - Other resources
  - Alternatively
- Only if proxy failed
  - Only if FindMore@NUSL failed
- LINC

How to install the proxy bookmarklet in the browser?
http://libguides.nus.edu.sg/proxybookmarklet
Saving your searches

https://www.youtube.com/watch?v=hYkXheN_6c8
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Telephone : 65162046
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