What are these heading things?

Indexers produce database records

- Indexing staff add records to databases, like PsycInfo, CINAHL and Embase. Each record will tell you about an individual article, book, conference paper or other type of information.
- The indexers add basic information like the titles of articles and the abstract that the author has written about their work.
- This information goes into fields within the article record, for example TI field for Title, AB field for Abstract.
Authors can use different terms and spelling for the same subject, for example ‘myocardial infarction’ and ‘heart attack’ or ‘behaviour’ and ‘behavior’.

To overcome the problems this causes with regard to information retrieval the indexers put words into a ‘Subject Headings’ field and keep these words consistent no matter what terms or spellings the original authors have used.

How do they help?

Advantages of using Subject Headings

- Using these words to search for information on your topic means you’ll find all the relevant information even if the author has used words you would never think to search for.
- Subject headings are only put into records if the subject they describe is an important part of the research being described by the article - good relevance
- Some databases let you run a subject search and then limit further by some aspect of the research, for example subject DrugA then aspect Side Effects - highly specific search
- They show you alternative terms that you can use in databases that don’t have Subject Headings - increase search sensitivity

Challenges

- Subject Headings may differ between databases
- Can be hard to find the right term in some databases, others suggest them for you
- New terms may not be there yet, for example Cloud Computing

Which databases have them?

- Start at your subject page to see suggested databases http://bit.ly/1zj12tp
- If you run a quick search look at a record and see if it has a MeSH, Subject or other field with highlighted terms in it, these are often hyperlinked so you can run a search on that term
- Look for a link that has something like, ‘Map to Subject Heading’, ‘Thesaurus’ or ‘Headings’.

Build Your Search

- Search databases individually - don’t select more than one at once, otherwise you lose access to this subject headings function
- See if you can map or look up your term in a thesaurus or headings search function
- Run a quick search for each concept
- Combine the searches using OR and AND
- Review the results
- Click on any other subjects that look helpful and add them into your search

Where do Subject Headings appear?

A record within a database for a journal article may look something like this:

**Authors:** Gornicka M; Pierzynowska J; Kaniewska E; Kossakowska K; Wozniak A.

**Title:** School pupils and university students surveyed for drinking beverages containing caffeine.

**Source:** Roczniki Panstwowego Zakladu Higieny. 65(2):113-7, 2014.

**Abbreviated Source:** Rocz Panstw Zakl Hig. 65(2):113-7, 2014.
**Country of Publication:** Poland

**MeSH Subject Headings:**

Adolescent
Adolescent Behavior
*Caffeine
*Carbonated Beverages / ut [Utilization]
*Coffee
*Eating / px [Psychology]
*Energy Drinks / ut [Utilization]
Humans
Schools / sn [Statistics & Numerical Data]
*Students / px [Psychology]
Universities / sn [Statistics & Numerical Data]

**Abstract:** BACKGROUND: Caffeine is a commonly found ingredient in many beverages. Its main dietary source is coffee, cola drinks and in recent years, energy drinks...

Note that the words the indexer has added as they typed the journal record into the database appear in the Medical Subject Headings (MeSH) field of the record. Some of these appear as words in the abstract but some don’t.

**Subject Headings form a Thesaurus**

**How does the indexer know what headings to add to a record?**
Each system has its own thesaurus of terms, this thesaurus gives lists of words together with a main heading followed by subheadings. An extract might look like this:

- Chemicals and Drugs (Non MeSH)
  + Inorganic Chemicals
  + Organic Chemicals
  - Heterocyclic Compounds
    + Acids, Heterocyclic
    [...] 
  - Alkaloids
    - 1-Deoxynojirimycin
    [...] 
  - Xanthines 
    - Caffeine
    - Theobromine
    - Theophylline

This example shows that caffeine is a type of xanthine which is a type of alkaloid and so on. The + symbols show there’s more subheadings beneath the word, in an electronic system clicking on the words, ‘inorganic chemicals’ for example would show you another full list of words, all of which would be inorganic chemicals. The – symbol shows you that you’re at the end of word list.
An indexer would see a phrase or term that the author has written in an abstract, for example *fizzy drinks*, they would then look that up in the thesaurus and it would say the accepted heading was *carbonated beverages* so they would put *carbonated beverages* in the Headings field of the record.

**Widening and Narrowing your Headings Search**

**Explode**
If you want to find information that has a heading assigned to it along with all records that might have subheadings attached to them look for a box to select in a column which has the heading ‘Explode’. If you click this for Xanthines you’ll be shown all records that have that word plus all the records that have caffeine, theobromine or theophylline added to them.

This will increase the number of records you are shown, widening it out.

**Focus/ Major Concept**
If you want to only be shown information where your subject is the major or primary focus of the report or article look for a box to select in a column which has the heading Focus or Major Concept.

This will narrow your research results down and can be helpful at undergraduate level but should be with caution at postgraduate level as you may miss results which would be useful for you.