# All I Need Are a Few Good Articles: Using Sorting and Relevance Ranking Features

Your goal is to scan some abstracts, read 2-3 articles, and then move on. What do you do, then, if your keyword search turns up 10,000 search results? If you just need a few good articles, one strategy is to take advantage of **sorting and relevance ranking** features - to try to move "good" articles closer to the top of the list. A challenge is that each database defines "good" (relevance) differently, and none of them can read your mind (yet).

Here's an overview of sorting and relevance ranking features in PubMed, Google Scholar, and Web of Science, followed by a search example showing how they compare.

**PubMed**: "<u>Best Match</u>" sorts search results according to where your search terms appear and how frequently they appear in the reference. (By default, results are sorted so the most recent references are first.)

**Google Scholar**: Automatically ranks search results according to a <u>proprietary</u> <u>algorithm</u> which considers how frequently an article has been cited, where your search terms appear, and other factors.

**Web of Science**: Offers multiple sorting options. Can sort search results by <u>relevance</u>, <u>times cited</u>, or <u>usage count</u>. Like PubMed, "relevance" is based on where the search terms appear and how frequently they appear.

Resource	Content Searched	Factors Considered in Relevance Ranking	Sorting Options
PubMed	Titles, abstracts, author keywords, and MeSH terms of journal articles.	Location and frequency of search terms in the reference.	Publication Date ( <i>default</i> ); Best Match; First Author; Last Author; Journal; Title
Google Scholar	Full text of journal articles, dissertations, books, and other scholarly publications.	Number of times cited; location of search terms in reference; journal; "other."	No options. Ranking & sorting are automatic.
Web of Science	Titles, abstracts, and keywords of journal articles, conference abstracts, & book chapters.	Location and frequency of search terms in reference.	Date ( <i>default</i> ); Relevance; Times Cited; Usage Count; First Author; Journal Title

## PubMed

By default PubMed displays **ALL** results that match your search terms, with the most recent references listed first. If you change the display so that it sorts by "<u>Best Match</u>," PubMed reruns your search using a machine learning algorithm that ranks the references, with the best matches listed first.

"Relevant" in PubMed relates to how well a reference matches your search terms - where the terms appear and how frequently they appear. For example, an article that contains your search terms in the title and that includes several occurrences of your search terms in the abstract will be considered a good match.

Another benefit of PubMed is that it searches for preferred terms (MeSH terms) in addition to the terms that you typed. This helps you capture a broader set of relevant references before the results are ranked. For example, if I search for *microbiome obesity*, PubMed will also look for *microbiota and obesity*.

Pub Med.gov	PubMed -	microbiome obesity	
US National Library of Medicine National Institutes of Health		Create RSS Create alert	Advanced
Article types Clinical Trial Review	Format: Summary -	Sort by: Most Recent - Per	page: 50 – Send to –
Systematic Reviews Customize	Search resul	Best Match Publication Date	
Text availability Abstract Erec full text	Items: 1 to 50 c	Last Author Journal Title	ev Page 1 of 57 Next > Last >>
Full text	<ul> <li>Metagenonics</li> <li>1. Obesity Moust</li> </ul>	e Model Fed with (-)-Epigal	in a High Fat Diet-Induced locatechin 3-O-(3-O-Methyl)

# Google Scholar

Google Scholar automatically ranks your search results according to a proprietary algorithm. The search does **NOT** retrieve all results that match your search terms. Whereas PubMed's Best Match algorithm focuses exclusively on search terms, Google Scholar's algorithm incorporates <u>several different factors</u>. Important factors in the ranking include the number of times the article has been cited, the journal that published it, and whether your search terms appear in the title.

The top hits in a Google Scholar search are often highly cited articles with a title that includes your search terms.

Google Scholar does not search for synonyms, so if you search for *microbiome obesity*, you will NOT find articles that discuss microbiota (but not microbiome) in relation to obesity.

#### Web of Science

Like PubMed, by default Web of Sciences displays **ALL** results that match your search terms, with the most recent references listed first. You can then choose to sort those results by relevance, times cited, or usage count.

"Relevance" in Web of Science relates to how well a reference matches your search terms – where the terms appear and how frequently they appear. For example, an article that contains your search terms in the title and in the keywords field will be considered a better match than an article that contains your search terms only in the abstract.

Alternatively, you can sort the results so that the most cited references are listed first.

Ranking by **usage count** shows you which references have been used by Web of Science searchers at institutions around the world. "Usage" is indicated by a user following a link to the full-text article or by downloading the reference to a citation manager.

Like Google Scholar, Web of Science does not search for synonyms of your search terms, so if you want to find articles on obesity and either microbiome or microbiota, type **obesity AND** *(microbiome OR microbiota)*.

Web of Science			
Search			
Results: 1,571 (from Web of Science Core Collection)	Sort by: Date Times Cited Usage Count Relevance More 🗸		
You searched for: TOPIC: (microbiome obesity)More	Select Page 5K Save to EndNote online Add to Marked List		
Create Alert	1. The Impact of Obesity on Breast Cancer		
Refine Results	By: Argolo, Daniel F.; Hudis, Clifford A.; Iyengar, Neil M. CURRENT ONCOLOGY REPORTS Volume: 20 Issue: 6 Article Number: 47 Published: JUN 2018		

# Search Example: The relationship of obesity to the microbiome.

Search Terms: microbiome obesity

Resource	Interpretation of Search	Number of Results (June 2018)	Article from the Top 5 Results Ranked by Relevance (or Best Match)
PubMed	Titles, abstracts, author keywords, and MeSH terms of journal articles	2,926	"Looking for a signal in the noise: revisiting obesity and the microbiome" – <i>MBio</i> , 2016.
Google Scholar	Full text of journal articles, dissertations, books, and other scholarly publications.	"About 46,900"	"An obesity-associated gut microbiome with increased capacity for energy harvest" – <i>Nature</i> , 2006.
Web of Science	Titles, abstracts, and keywords of journal articles, conference abstracts, & book chapters.	1,609	"Obesity: Gut microbiome and serum metabolome changes" – editorial – <i>Nature Reviews</i> <i>Endocrinology</i> , 2017.

## Still Not Finding What You Need?

What's best for you might not be a highly cited article or an article with your search terms in the title! Consider looking for recent review articles, articles by a known expert in the field, or <u>contact your librarian</u> for assistance!