

# Drive Thru Data: Using NLM APIs to Access Information Fast

## What is an API?

An API is a set of protocols for contacting a remote system and making requests.

APIs typically include:

- A remote computer (or “server”) which has information for you to access, and
- A set of rules for making requests (or “calls”) to that server.

## Building an API URL: MedlinePlus example

The Base URL (do not click; instead, copy and paste into your browser address bar)

<https://wsearch.nlm.nih.gov/ws/query>

Parameters (add this into your browser address bar after the Base URL)

?db=healthTopics&term=acid+reflux&retmax=5

Putting it all together

<https://wsearch.nlm.nih.gov/ws/query?db=healthTopics&term=acid+reflux&retmax=5>

## More Information about NLM APIs and other resources

### MedlinePlus

MedlinePlus Web Service

<https://medlineplus.gov/about/developers/webservices/>

MedlinePlus Connect

<https://medlineplus.gov/medlineplus-connect/>

### PubMed

E-utilities

<https://www.ncbi.nlm.nih.gov/books/NBK25501/>

Literature Citation Exporter

<https://api.ncbi.nlm.nih.gov/lit/ctxp>

Citation Matcher API

<https://pubmed.ncbi.nlm.nih.gov/help/#citation-matcher-api>

### PMC/Bookshelf

E-utilities

<https://www.ncbi.nlm.nih.gov/books/NBK25501/>

OAI-PMH (PMC)

<https://www.ncbi.nlm.nih.gov/pmc/tools/oai/>

OAI-PMH (Bookshelf)

<https://www.ncbi.nlm.nih.gov/books/about/oai/>

Medical Subject Headings (MeSH)

E-utilities

<https://www.ncbi.nlm.nih.gov/books/NBK25501/>

MeSH RDF

<https://id.nlm.nih.gov/mesh/>

RxNorm

RxNorm API

<https://lhncbc.nlm.nih.gov/RxNav/APIs/RxNormAPIs.html>

RxMix

<https://mor.nlm.nih.gov/RxMix/>

ClinicalTrials.gov

ClinicalTrials.gov API

<https://www.clinicaltrials.gov/api/gui>

NLM Data Distribution

Portal for accessing NLM data downloads

[https://www.nlm.nih.gov/databases/download/data\\_distrib\\_main.html](https://www.nlm.nih.gov/databases/download/data_distrib_main.html)

Data Discovery

Portal for exploring NLM APIs and downloadable datasets

<https://datadiscovery.nlm.nih.gov/>

