



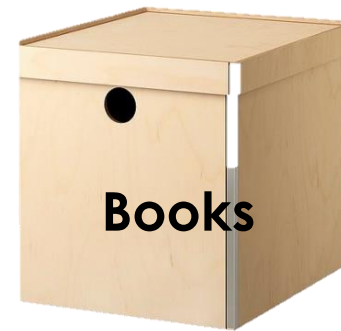
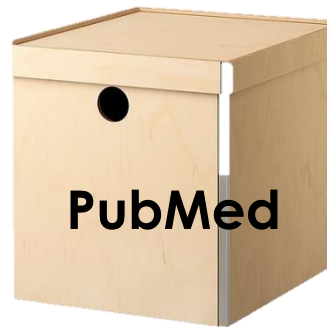
Searching for the Evidence

Nora A.Kalagi, MSc

If u have a
Clinical
Question,
where do you
usually go to
find answers?



If you have limited time where would you search first?



Case

A 64 year old obese male who has tried many ways to lose weight presents with a newspaper article about 'fat-blazer' (chitosan). He asks for your advice.



**In obese patients, does chitosan,
compared to a placebo, decrease
weight?**

Outcome

Weight Loss

**Now convert this PICO question
to a search strategy**



**Burn your
traditional
textbooks**

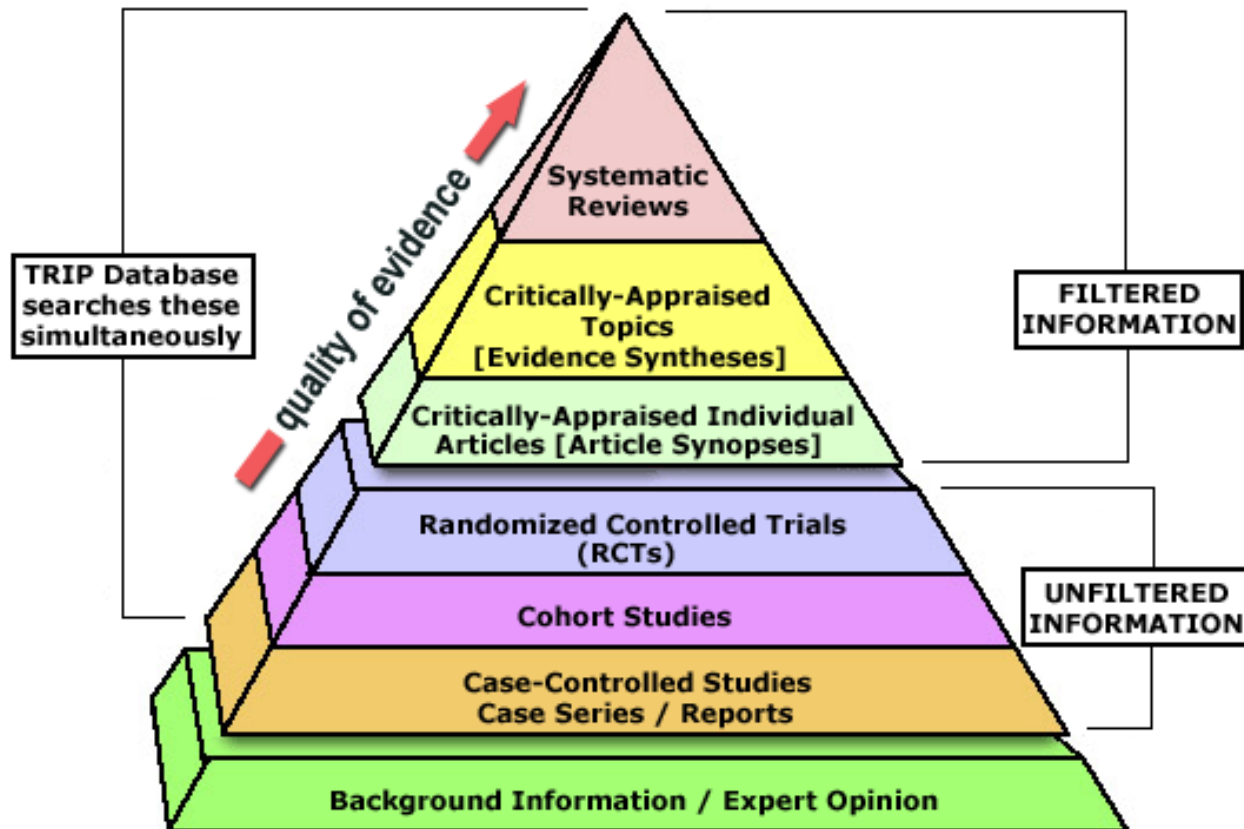


Use EBM databases !

EBM

- **Evidence-based medicine (EBM), Evidence-based health care (EBHC) Evidence-based practice (EBP)**
- “The conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients”.
- “The integration of best research evidence with clinical expertise and patient values”.

EBM Recourses



EBM databases



- ACP Journal Club
- Evidence-based medicine textbooks
- DARE
- Cochrane database of Systematic Review
- PubMed Systematic review (clinical queries)
- TRIP (Turning Research into Practice)



THE COCHRANE LIBRARY

Independent high-quality evidence for health care decision making

March/April 1997
Volume 126 - Number 2

ACP Journal Club
Linking Research to Practice in Internal Medicine

Published Bimonthly by the American College of Physicians

■ THERAPEUTICS	
Lowering LDL cholesterol levels reduced total coronary events in patients with acute MI and average cholesterol levels	29
Aspirin: Did not increase mortality or mortality rates in acute heart failure	30
Meta-analysis: Mortality is reduced when fibrinolytic therapy is started soon after the onset of MI symptoms	31
Heart rate was no more effective than well-tolerated beta rate for acute MI	32
Statins reduced death in MI more than beta-blockers or ACE inhibitors but not in 30 days	33
Meta-analysis: Beta-blockers improve prognosis in dilated cardiomyopathy	34
Meta-analysis: Thrombolytic therapy increases the risk for early death and intracranial hemorrhage after acute ischemic stroke	35
Meta-analysis: Intracranial hemorrhage associated with intravenous tissue plasminogen activator	36
Meta-analysis: Intravenous streptokinase superior to intravenous alteplase in acute myocardial infarction	37
Review: Aspirin is an effective for acute heart failure	38
Immunohistochemical study: Improved quality of life in NIDDM	39
Value-at-risk accelerated testing in transient ischaemic attacks	40
Subcutaneous insulin: reduced adverse outcome rates in elderly ill patients	42
■ DIAGNOSIS	
2-hour levels detected DVT in patients hospitalized for stroke rehabilitation	43
CRP proteins 150 and 171 were specific for diagnosing Crohn's disease	44
Brain masses: 48.7% were a meningioma for Cranioblastoma	45
Meta-analysis: Unruptured aneurysm levels are useful for diagnosing diabetes	46
■ PROGNOSIS	
Ischemic stroke with accompanying atrial fibrillation was associated with reduced survival and functional status	47
■ ETIOLOGY	
LDL particle size was smaller in CAD, but other lipid parameters were stronger predictors of CAD	48
High waist level but not LDL particle size was an independent risk factor for MI in men	49
Low cholesterol levels were associated with stroke in men	50
■ ECONOMICS	
Low-dose aspirin might be more cost-effective for peroperative prevention of DVT	51
Cost effectiveness of prevention in the secondary prevention of CAD in men varied with the risk profile of the patient	52
Intensive therapy extended life and was cost-effective for BDM	53
Other Articles Noted	
Obesity	54
Continents	55
Purpose and Procedure	A-13
Editorial: Translating evidence into practice	A-14
Developing evidence-based clinical policy	A-14

©ACCP/ACP/JGIM 1997



- Evidence based clinical practice guidelines
- Evidence based text books
- ACP PIER (physician information and education resources)
- First consult
- Clinical Evidence
- UpToDate
- DynaMed

CMA INFOBASE
clinical practice guidelines

*Clinical
Practice
Guidelines*



National Guideline Clearinghouse
www.guideline.gov

PubMed

- A free resource that is developed and maintained by the National Center for Biotechnology Information (NCBI), at the U.S. National Library of Medicine (NLM), located at the National Institutes of Health
- PubMed comprises over 21 million citations for biomedical literature from MEDLINE, life science journals, and online books



What is special about?


- Updated annually to reflect current terminology usage.
- Using MeSH database to search easily and Limits
- Provides Clinical Query tool for systematic review searching
- Boolean operators can be used to gather, differentiate and specify information
- Provides Original articles published about a particular focused question
- Available for your smartphones



PubMed

PubMed comprises more than 21 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.

Using PubMed

[PubMed Quick Start Guide](#)[Full Text Articles](#)[PubMed FAQs](#)[PubMed Tutorials](#)[New and Noteworthy](#) 

PubMed Tools

[PubMed Mobile](#)[Single Citation Matcher](#)[Batch Citation Matcher](#)[Clinical Queries](#)[Topic-Specific Queries](#)

More Resources

[MeSH Database](#)[Journals in NCBI Databases](#)[Clinical Trials](#)[E-Utilities](#)[LinkOut](#)

PubMed Clinical Queries

Results of searches on this page are limited to specific clinical research areas. For comprehensive searches, use [PubMed](#) directly.

Clinical Study Categories

Display citations filtered to a specific clinical study category and scope. These search filters were developed by [Haynes RB et al.](#) See more [filter information](#).

Systematic Reviews

Display citations for systematic reviews, meta-analyses, reviews of clinical trials, evidence-based medicine, consensus development conferences, and guidelines. See [filter information](#) or additional [related sources](#).

Medical Genetics

Display citations pertaining to topics in medical genetics. See more [filter information](#).



You are here: [NCBI](#) > [Literature](#) > [PubMed](#)

Write to

GETTING STARTED

- [NCBI Education](#)
- [NCBI Help Manual](#)
- [NCBI Handbook](#)
- [Training & Tutorials](#)

RESOURCES

- [Chemicals & Bioassays](#)
- [Data & Software](#)
- [DNA & RNA](#)
- [Domains & Structures](#)
- [Genes & Expression](#)
- [Genetics & Medicine](#)
- [Genomes & Maps](#)
- [Homology](#)
- [Literature](#)
- [Proteins](#)
- [Sequence Analysis](#)
- [Taxonomy](#)
- [Training & Tutorials](#)
- ...

POPULAR

- [PubMed](#)
- [Nucleotide](#)
- [BLAST](#)
- [PubMed Central](#)
- [Gene](#)
- [Bookshelf](#)
- [Protein](#)
- [OMIM](#)
- [Genome](#)
- [SNP](#)
- [Structure](#)

FEATURED

- [GenBank](#)
- [Reference Sequences](#)
- [Map Viewer](#)
- [Genome Projects](#)
- [Human Genome](#)
- [Mouse Genome](#)
- [Influenza Virus](#)
- [Primer-BLAST](#)
- [Sequence Read Archive](#)

NCBI INFORMATION

- [About NCBI](#)
- [Research at NCBI](#)
- [NCBI Newsletter](#)
- [NCBI FTP Site](#)
- [NCBI on Facebook](#)
- [NCBI on Twitter](#)
- [NCBI on YouTube](#)

Trip Database

- ***Turning Research Into Practice***
- Trip is a clinical search engine designed to allow users to quickly and easily find and use high-quality research evidence to support their practice and/or care.
- Has been online since 1997
- 70% of users are clinicians and 30% non-clinicians



What is Special about ?

- **“Find evidence fast”**
- searching across other content types including images, videos, patient information leaflets, educational courses and news.
- Provide brief summaries of results and implications of single high quality studies
- Updated once per month (typically around the middle of the month).
- Provides **“PICO easy to use searching “**

Trip

[Login](#) or [Sign up](#)

You can also:

[Login with Facebook](#)

[Login with Twitter](#)

Search

[Advanced search](#)

[PICO search](#)

Advanced search

All of these words:

Title only Anywhere in the document

Proximity

This exact phrase:

Title only Anywhere in the document

Start year:

Any of these words:

Title only Anywhere in the document

Excluding these words:

Title only Anywhere in the document

End year:

Search

Trip

⚡ Login

or

> Sign up

You can also:

 Login with Facebook

 Login with Twitter



Search

 Advanced search

 PICO search

⚡ PICO Search

PICO is a novel approach of allowing users to conduct a focussed search based on a structured clinical question [Learn more at cebm.net](#)

There are 4 elements and not all are compulsory, but the more you use the more focussed the results. We use a contingency search to reduce information overload, [click here](#) for further details.

Population:

Type of patient eg. diabetics

Comparison:

Comparing your intervention with another treatment or test?

Intervention:

Any intervention eg. treatment, diagnostic test

Outcome:

Outcome interest eg. reduced mortality, fewer exacerbations

Search

Medscape

- Medscape from WebMD offers specialists, primary care physicians, and other health professionals the Web's most integrated medical information and educational tools.
- More than 125 medical journals and textbooks
- The result is a medical Web site rich in content, broad in appeal, and high in quality.



Features

- Free registration,
- Specialty specific
- Provides Original, professional medical content, including
 - Review articles
 - Journal commentary
 - Expert columns,
 - Patient education articles
 - Book reviews, Conference Coverage
- Free subscription to Medscape's *MedPulse*, a weekly email newsletter that highlights what's new in your specialty on Medscape from WebMD
- Available for your smartphones

Medscape

News

SEARCH

Username

Password

Log In

 REMEMBER MENew Users: **FREE Registration!**[Forgot username?](#) [Forgot password?](#)

Join Medscape for Free
The leading medical resource used by healthcare professionals

[Register Now >](#)


News, Perspectives & Full-text Journal Articles

Specialty Sites

Allergy & Clinical Immunology
Anesthesiology
Cardiology
Critical Care
Dermatology
Diabetes & Endocrinology
Emergency Medicine
Family Medicine
Gastroenterology
General Surgery
Hematology-Oncology
HIV/AIDS
Infectious Diseases



Tragedy in Boston: Nursing Students Get Unexpected Education
Medscape Medical News, April 19, 2013



New Concussion Guidelines: An Analysis
Medscape Neurology, April 17, 2013



Medication Nonadherence: It's Not Limited to Psychiatry
Medscape Psychiatry, April 15, 2013

News

Perspectives

Medscape Education

Continuing Medical Education & Learning

Clinical Briefs (0.25 Credits)
Journal CME/CE
Multimedia Learning Programs

ADVERTISEMENT

edscape
Leading
al
ce for
care



WebMD

Search


[My WebMD](#) [Sign in](#) | [Sign Up](#) | [Why WebMD?](#)

Health A-Z

Drugs & Supplements

Living Healthy

Family & Pregnancy

News & Experts


[WebMD Home >](#)
[Save](#)
[Email a Friend](#)

Why should I sign up for WebMD?

Your WebMD Account is:

- Always Safe & Secure
- Free! Quick & Easy to Create

With a WebMD Account you can:

- Track your way to weight loss success
- Manage your family's vaccinations
- Join the conversation
- Choose from 50+ health and wellness newsletters
- Access WebMD the Magazine

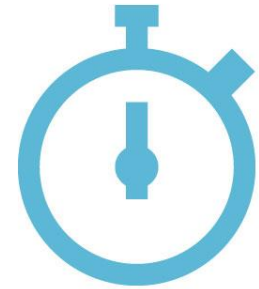


SUMsearch

- Simultaneously searches for original studies, systematic reviews, and practice guidelines from multiple sources.
- Searches for studies are revised up to 6 times as needed, while guidelines and systematic reviews may be revised once each.
- Results from PubMed, Dare, and NGC are merged and sorted
- "Medical SmartSearch" in 1998, moved to SUMSearch 2 in 2010

SUMSearch
Medical search

SUMSearch is *always up-to-date*



- Fast
- Search strategies are validated
- Automated summaries and markers of article quality are provided
- Guidelines from PubMed and National Guidelines Clearinghouse are merged into one list sorted by year of publication
- Systematic reviews from DARE and PubMed are merged into one list and sorted by year of publication.

Search MEDLINE, DARE, and NGC for:

Aspirin AND Clopidogrel x

Connect search terms with 'AND'.

Focus: Intervention Diagnosis None
 Age: Adult Pediatrics Either
 Human only: English only: Require abstracts:
 Max # iterations: 5 6 [Explain](#)
 Target # of original studies: 20 50 [Explain](#)

MeSH - - Please click once.

Keep up:

Physician's First Watch (free access)

- [Genital Warts Decline After National HPV V](#)
18T15:48:50-07:00)
- [Antibiotic Development 'Alarmingly Slow'](#) (p
- [Newborn Pulse Oximetry Screening: A Tale](#)
07:00)
- [Featured in Journal Watch: Continuing Statin](#)
[Sepsis](#) (posted 2013-04-18T15:48:50-07:00)

Original studies

Systematic reviews

Guidelines

21 found after 6 searches:

1. **Use of clopidogrel with or without aspirin in patients taking oral anticoagulant therapy and undergoing percutaneous coronary intervention: an open-label, randomised, controlled trial.**

Lancet 2013;381:9872. PMID: [23415013](#) , doi: [10.1016/S0140-6736\(12\)62177-1](#). [Cite](#)

Conclusion: 11 (3·9%) patients receiving double therapy required at least one blood transfusion, compared with 27 (9·5%) patients in the triple-therapy group (odds ratio from Kaplan-Meier curve 0·39, 95% CI 0·17-0·84, p=0·011).

Impact/quality: Accompanied by [editorial](#); *

2. **Effects of clopidogrel added to aspirin in patients with recent lacunar stroke.**

N Engl J Med 2012;367:9. PMID: [22931315](#) , doi: [10.1056/NEJMoa1204133](#). [Cite](#)

Conclusion: Among patients with recent lacunar strokes, the addition of clopidogrel to aspirin did not significantly reduce the risk of recurrent stroke and did significantly increase the risk of bleeding and death. (Funded by the National Institute of Neurological Disorders and Stroke and others; SPS3 ClinicalTrials.gov number, NCT00059306.).

[Show evidence search details](#)

(access to earlier iterations If results displayed are too restrictive)

UpToDate

- evidence-based, physician-authored clinical decision support resource which clinicians trust to make the right point-of-care decisions.
- Provide an outline of management options for a given health issue.
- Summaries incorporate the highest quality and most synthesized sources of research evidence.



Why UpToDate?

- Topics are viewed more than 18 million times per month
- 90% success to find your answer
- Provides drugs monograph by Searching through *Lexicomp*®
- Access via Academic digital library (KSU)
- Available for your smartphones

Search Results for "aspirin"

Click related term for **aspirin**: [antiplatelet agents](#), [nonselective nonsteroidal antiinflammatory drugs](#)

 All Topics

 Adult

 Pediatric

 Patient

 Graphics [↔](#)

- Aspirin: Drug information
- Aspirin: Pediatric drug information
- Aspirin: Patient drug information
- Launch Lexi-Interact™ Drug Interactions Program
- Nonresponse and resistance to aspirin
- Benefits and risks of aspirin in secondary and primary prevention of cardiovascular disease
- Aspirin in the primary prevention of cardiovascular disease and cancer
- Salicylate (aspirin) poisoning in adults
- Aspirin: Mechanism of action, major toxicities, and use in rheumatic diseases
- Salicylate poisoning in children and adolescents
- Aspirin exacerbated respiratory disease
- Aspirin exacerbated respiratory disease: NSAID challenge and desensitization
- Approach to the long-term survivor of colorectal cancer
- Antiplatelet therapy for secondary prevention of stroke

TOPIC OUTLINE

Brand Names: U.S.

Brand Names: Canada

Pharmacologic Category

Dosing: Adult

Dosing: Pediatric

Dosing: Geriatric

Dosing: Renal Impairment

Dosing: Hepatic Impairment

Dosage Forms: U.S.

Generic Equivalent Available: U.S.

Administration

Use

Use - Unlabeled

Medication Safety Issues

Adverse Reactions Significant

Contraindications

Warnings/Precautions

Metabolism/Transport Effects

Drug Interactions

Ethanol/Nutrition/Herb Interactions

Pregnancy Implications

Aspirin: Drug information Lexicomp®

Copyright 1978-2013 Lexicomp, Inc. All rights reserved.

(For additional information see "[Aspirin: Patient drug information](#)" and see "[Aspirin: Pediatric drug information](#)")

For abbreviations and symbols that may be used in Lexicomp ([show table](#))

Brand Names: U.S. Ascriptin® Maximum Strength [OTC]; Ascriptin® Regular Strength [OTC]; Aspercin [OTC]; Aspergum® [OTC]; Aspir-low [OTC]; Aspirtab [OTC]; Bayer® Aspirin Extra Strength [OTC]; Bayer® Aspirin Regimen Adult Low Strength [OTC]; Bayer® Aspirin Regimen Children's [OTC]; Bayer® Aspirin Regimen Regular Strength [OTC]; Bayer® Genuine Aspirin [OTC]; Bayer® Plus Extra Strength [OTC]; Bayer® Women's Low Dose Aspirin [OTC]; Buffasal [OTC]; Bufferin® Extra Strength [OTC]; Bufferin® [OTC]; Buffinol [OTC]; Ecotrin® Arthritis Strength [OTC]; Ecotrin® Low Strength [OTC]; Ecotrin® [OTC]; Halfprin® [OTC]; St Joseph® Adult Aspirin [OTC]; Tri-Buffered Aspirin [OTC]

Brand Names: Canada Asaphen; Asaphen E.C.; Entrophen®; Novasen; Praxis ASA EC 81 Mg Daily Dose

Pharmacologic Category Antiplatelet Agent; Salicylate

Dosing: Adult **Note:** For most cardiovascular uses, typical maintenance dosing of aspirin is 81 mg once daily.

Acute coronary syndrome (ST-segment elevation myocardial infarction [STEMI], unstable angina (UA)/non-ST-segment elevation myocardial infarction [NSTEMI]): Oral: Initial: 162-325 mg given on presentation (patient should chew nonenteric-coated aspirin especially if not taking before presentation); for patients unable to take oral, may use rectal suppository (300 mg). Maintenance (secondary prevention): 75-162 mg once daily indefinitely (Anderson, 2007; Antman, 2004). **Note:** When aspirin is used with ticagrelor, the recommended maintenance dose of aspirin is 81 mg/day (Jneid, 2012).

UA/NSTEMI: Concomitant antiplatelet therapy (Jneid, 2012):

If invasive strategy chosen: Aspirin is recommended in combination with either clopidogrel, ticagrelor, (or prasugrel if at the time of PCI) or an I.V. GP IIb/IIIa inhibitor (if given before PCI, eptifibatid and tirofiban are preferred agents).

If noninvasive strategy chosen: Aspirin is recommended in combination with clopidogrel or ticagrelor.