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# **Beyond PubMed: Maximizing the Web for Evidence-Based Practice**

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# Objectives

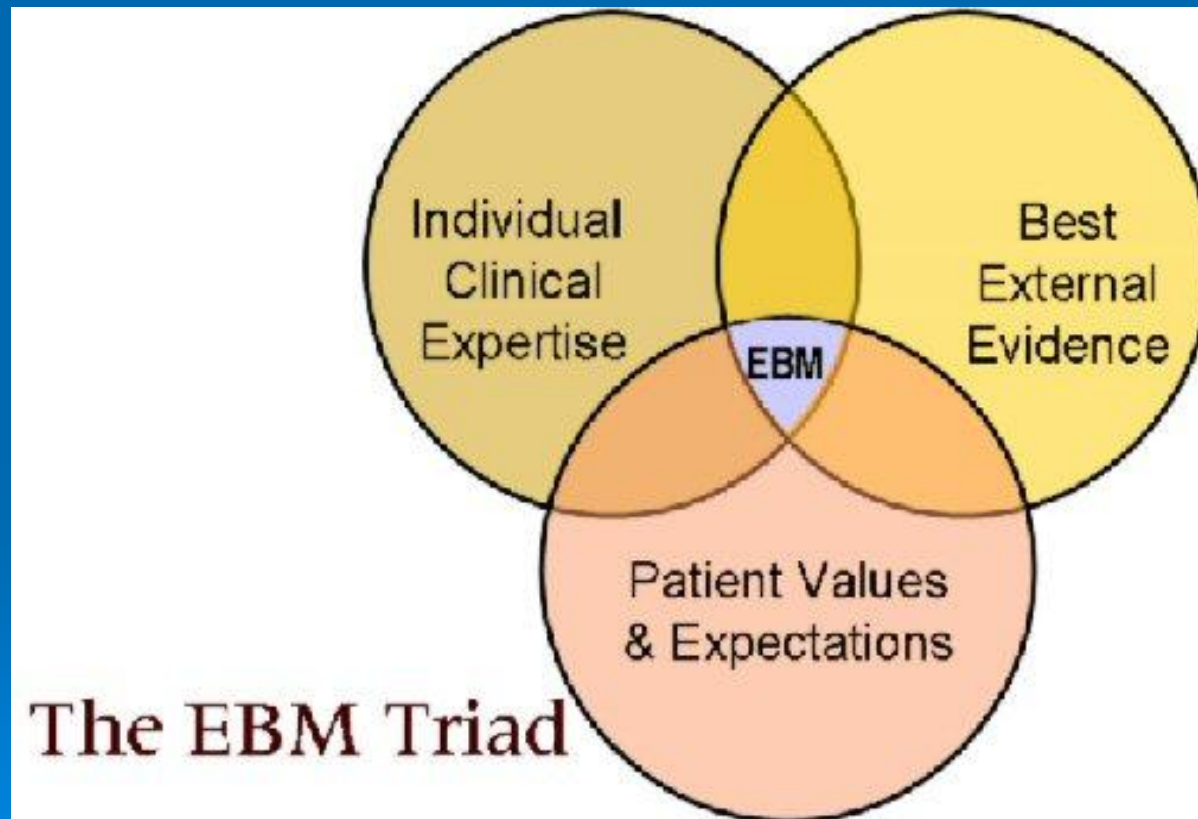
- Describe **web resources** to use for **evidence-based** nursing practice
- Identify **ways to improve web research skills** to search for appropriate evidence
- Perform *PubMed* and *CINAHL* searches to find evidence-based research articles
- Recognize components of the new 2009 **HEAL-WA** portal, providing e-resources for WA nurses and other health practitioners

# What is evidence-based practice?

- Evidence based medicine is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients.
- The practice of evidence based medicine means integrating individual clinical expertise with the best available external clinical evidence from systematic research.

Sackett DL et al. *Evidence based medicine: what it is and what it isn't.* BMJ 1996 Jan 13; 312 (7023): 71-2.

# Evidence-Based Practice



# What makes good evidence?

## *Good*

- Based on scientific research
- RCT
- Systematic review
- Meta-analysis
- Clinical guidelines

## *Shoddy*

- Opinion
- Consensus
- Because it's been done this way for 100 years


# EBP Implications for Nursing

- **Are U.S. nurses ready for evidence-based practice?**
  - Many don't understand or value research
  - Many have little or no training to help find evidence on which to base their practice
  - Pravikoff DS, Tanner AB, Pierce ST. Readiness of U.S. nurses for evidence-based practice. *American Journal of Nursing* 2005 Sep;105(9):40-52.
- **Failure to use evidence results in lower quality, less effective and more expensive care.**
  - Berwick DM. Disseminating innovations in health care. *JAMA* 2003 Apr 16;289(15):1969-75.

# Barriers to Nurses using EBP

- Lack of time
- Lack of value of research in practice
- Lack of understanding of electronic databases
- Lack of computer skills
- Difficulty understanding research articles

# Why do nurses need to do EBP?

- Results in better patient outcomes
  - Keeps practice current and relevant
  - Increases confidence in decision making
  - Essential for Magnet recognition
  - Research gap: takes 17 years for research result to make it into practice
- 

# 5 Steps for EBP

1. Convert need for information into **answerable question**
2. Track down **best evidence** to answer question
3. Critically **appraise evidence** for validity, impact and applicability
4. **Integrate** critical appraisal with your clinical expertise and patient's unique circumstances
5. **Evaluate** effectiveness in executing steps 1-4 and seek ways to improve

# Step #1: Clarify the Topic (convert info to answerable question)

- Is it a background or foreground question?
  - *Background*: can be answered from general knowledge
    - Ex. What are the side effects of ginger?
  - *Foreground*: a comparison question
    - Ex. Is ginger effective in reducing nausea and/or vomiting in pregnancy?
- Consider using a stepwise process, e.g. PICO, to clarify your information needs & create a question that can be answered

# PICO

- **P**atient population: *For which group do you need information?* **P**roblem
- **I** (or Exposure): *What medical event do you need to study the effect of?* **I**ntervention
- **C**omparison: *What is the evidence that the proposed intervention produces better or worse results than no intervention, or a different type of intervention?*
- **O**utcomes: *What is the effect of the intervention?*

# Case

- A 51-year-old woman with a total hysterectomy presents to the NP in a primary health care clinic with signs of menopause. She is having hot flashes and night sweats. She is an active and healthy woman with no family history of breast cancer or cardiovascular disease. She is reluctant to consider HRT because her friend said there is a higher risk of breast cancer, strokes, and heart attacks. However, the menopause symptoms are effecting her QoL and she wants to do something.


**Initial question:**

*Is it safe to prescribe HRT to this woman?*

**Reformulated question using PICO:**

*Among healthy middle-aged women, does estrogen increase the incidence of breast cancer, cardiovascular death, or stroke?*

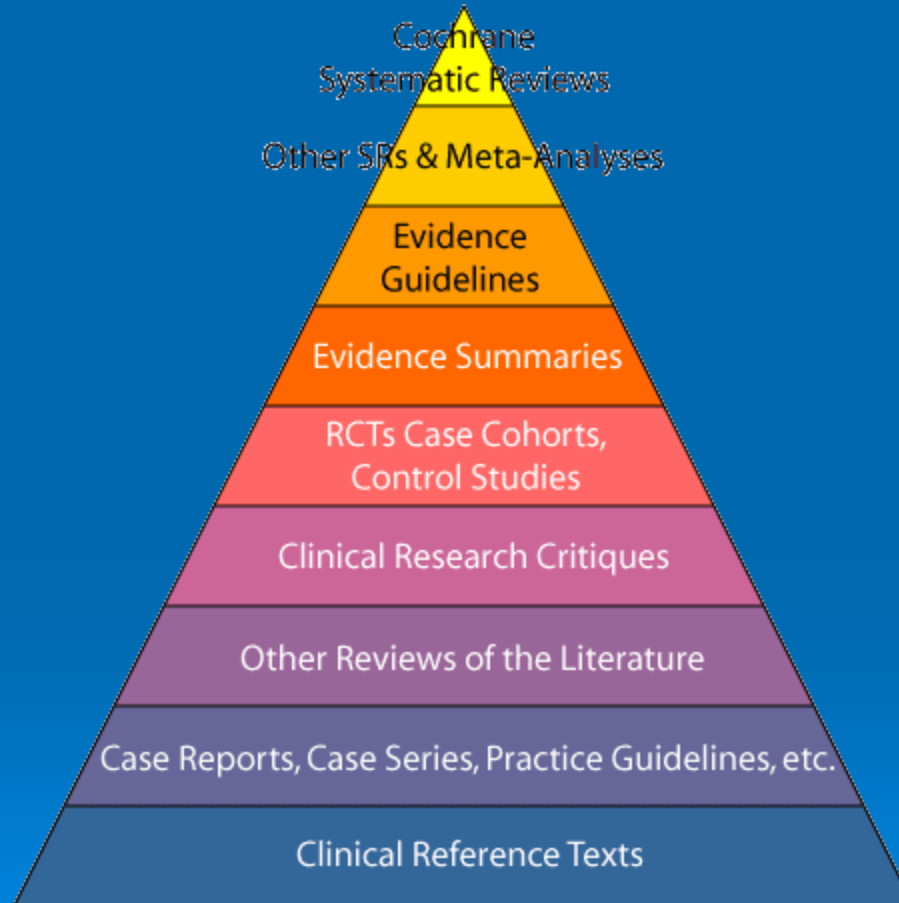
# What kind of question is it?

- Diagnosis
  - Therapy
  - Etiology
  - Prognosis
  - Prevention
  - Qualitative
  - Costs/economics
- 

# Understand what you find

- **Quantitative:** numerical
  - Primary: RCT, cohort study...
  - Secondary: meta-analysis, systematic review practice guideline, consensus report...
- **Qualitative:** narrative; collection of data through observation or in-depth interviews
  - Primary: ethnography, grounded theory...
  - Secondary: meta-analysis, systematic review, practice guideline...

# Rank the Evidence



# Levels and Grades of Evidence

## Levels of Evidence and Grades of Recommendations

Grade of recommendation	Level of evidence	Interventions
A	1a	Systematic review of randomized controlled trials
	1b	Individual randomized controlled trial
B	2a	Systematic review of cohort studies
	2b	Individual cohort study
	3a	Systematic review of case-control studies
	3b	Individual case-control study
C	4	Case series
D	5	Expert opinion without explicit critical appraisal or based on physiology or bench research



Step #2

***Search for the Best Evidence  
to answer the Question***

# Search Databases Efficiently for Research Journal Articles

- PubMed *pubmed.gov*
- NLM Gateway  
*gateway.nlm.nih.gov/gw/Cmd*
- CINAHL or CINAHL Plus(\$)  
*cinahl.com*

# PubMed

*pubmed.gov*

- Includes MEDLINE (late 1940's to date)
- Indexes 5,000 biomedical journals
- Covers all aspects of biosciences and healthcare
- 75%-80% of citations have abstracts
- Updated 5x/week

# 2 *PubMed* Strategies for Finding Evidence-Based Citations

- Use *PubMed* Type of Article limits
  - Randomized Controlled Trial
  - Meta-Analysis
  - Practice Guideline
  - Clinical Trial
  - Consensus Development Conference
- Use the *PubMed* Clinical Queries and Systematic Reviews section

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PubMed National Library of Medicine NLM

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for exercise therapy osteoarthritis hip Go Clear

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*Topics*

- AIDS
- Bioethics
- Cancer
- Complementary Medicine
- History of Medicine
- Space Life Sciences
- Systematic Reviews
- Toxicology

*Journal Groups*

**Type of Article** CLEAR

- Clinical Trial
- Editorial
- Letter
- Meta-Analysis
- Practice Guideline
- Randomized Controlled Trial
- Review

*More Publication Types*

- Addresses
- Bibliography

**Ages** CLEAR

- All Infant: birth-23 months
- All Child: 0-18 years
- All Adult: 19+ years
- Newborn: birth-1 month
- Infant: 1-23 months
- Preschool Child: 2-5 years
- Child: 6-12 years
- Adolescent: 13-18 years
- Adult: 19-44 years
- Middle Aged: 45-64 years

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- 1:** [Wang TJ, Belza B, Elaine Thompson F, Whitney JD, Bennett K.](#) Related Articles, Links  
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Aquatic physical therapy for hip and knee osteoarthritis: results of a single-blind randomized controlled trial.  
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Effectiveness of behavioral graded activity in patients with osteoarthritis of the hip and/or knee: A randomized clinical trial.  
Arthritis Rheum. 2006 Dec 15;55(6):925-34.  
PMID: 17139639 [PubMed - indexed for MEDLINE]
- 4:** [Rooks DS, Huang J, Bierbaum BE, Bolus SA, Rubano J, Connolly CE, Alpert S, Iversen MD, Katz JN.](#) Related Articles, Links  
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1: J Adv Nurs. 2007 Jan;57(2):141-52.



Related Articles

Effects of aquatic exercise on flexibility, strength and aerobic fitness in adults with osteoarthritis of the hip or knee.

Wang TJ, Belza B, Elaine Thompson F, Whitney JD, Bennett K.

Department of Nursing, National Taipei College of Nursing, Taipei, Taiwan. tsaejyy@ntcn.edu.tw

AIM: This paper reports a study of the effects of aquatic exercise on physical fitness (flexibility, strength and aerobic fitness), self-reported physical functioning and pain in adults with osteoarthritis of the hip or knee. BACKGROUND: Osteoarthritis is a common cause of disability and a primary reason for hip and knee joint replacement. Exercise is important for preventing and/or managing the functional limitations associated with joint disease. Aquatic exercise is thought to be beneficial and often recommended for people with osteoarthritis; however, few studies have examined the effects on people with osteoarthritis, and these have yielded inconsistent results. METHODS: A two-group randomized controlled trial with a convenience sample was used. Participants were recruited from community sources and randomly assigned to a 12-week aquatic programme or a non-exercise control condition. Data for 38 participants were collected at baseline, week 6, and week 12 during 2003 and 2004. Instruments were a standard plastic goniometer, a handheld dynamometer, the 6-minute walk test, the multidimensional Health Assessment Questionnaire, and a visual analogue scale for pain. RESULTS: Repeated measures analysis of variance showed that aquatic exercise statistically significantly improved knee and hip flexibility, strength and aerobic fitness, but had no effect on self-reported physical functioning and pain. The exercise adherence rate was 81.7%, and no exercise-related adverse effect was observed or reported. CONCLUSIONS: Beneficial short-term effects of aquatic

## Effects of aquatic exercise on flexibility, strength and aerobic fitness in adults with osteoarthritis of the hip or knee

Tsae-Jyy Wang<sup>1</sup>, Basia Belza<sup>2</sup>, F. Elaine Thompson<sup>3</sup>, Joanne D. Whitney<sup>4</sup> & Kim Bennett<sup>5</sup>

Accepted for publication 2 August 2006

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*Professor*

WANG T.-J., BELZA B., THOMPSON F.E., WHITNEY J.D. & BENNETT K. (2007) Effects of aquatic exercise on flexibility, strength and aerobic fitness in adults with osteoarthritis of the hip or knee. *Journal of Advanced Nursing* 57(2), 141–152  
doi: 10.1111/j.1365-2648.2006.04102.x

### Abstract

**Title.** Effects of aquatic exercise on flexibility, strength and aerobic fitness in adults with osteoarthritis of the hip or knee.

**Aim.** This paper reports a study of the effects of aquatic exercise on physical fitness (flexibility, strength and aerobic fitness), self-reported physical functioning and pain in adults with osteoarthritis of the hip or knee.

**Background.** Osteoarthritis is a common cause of disability and a primary reason for hip and knee joint replacement. Exercise is important for preventing and/or managing the functional limitations associated with joint disease. Aquatic exercise is thought to be beneficial and is often recommended for people with osteoarthritis; however, few studies have examined the effects on people with osteoarthritis, and these have yielded inconsistent results.

**Methods.** A two-group randomized controlled trial with a convenience sample was

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 Zinc lozenges: cold cure or candy? Solution chemistry determinations.


Biosci Rep. 2004 Feb;24(1):23-39.  
PMID: 15499830 [PubMed - indexed for MEDLINE]

8: [Hulisz D.](#)

 Efficacy of zinc against common cold viruses: an overview.


J Am Pharm Assoc (2003). 2004 Sep-Oct;44(5):594-603. Review.  
PMID: 15496046 [PubMed - indexed for MEDLINE]

9: [Jackson JL, Lesho E, Peterson C.](#)

 Zinc and the common cold: a meta-analysis revisited.


J Nutr. 2000 May;130(5S Suppl):1512S-5S.  
PMID: 10801968 [PubMed - indexed for MEDLINE]

10: [Marshall I.](#)

 Zinc for the common cold.

Cochrane Database Syst Rev. 2000;(2):CD001364. Review. Update in: [Cochrane Database Syst Rev. 2006;\(3\):CD001364.](#)  
PMID: 10796643 [PubMed - indexed for MEDLINE]

11: [Marshall S.](#)

 Zinc gluconate and the common cold. Review of randomized controlled trials.

Can Fam Physician. 1998 May;44:1037-42. Review.  
PMID: 9612589 [PubMed - indexed for MEDLINE]

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  - 2. Burkard J. **16th International Nursing Research Congress. A comparison of ondansetron and transdermal scopolamine patches for patients identified to be at high risk for the development of postoperative nausea and vomiting.** *Sigma Theta Tau International* 2005; 1p.  
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  - 3. Chaiyakunapruk N. Kitikannakorn N. Nathisuwan S. Leeprakobboon K. Leelasattagool C. **The efficacy of ginger for the prevention of postoperative nausea and vomiting: a meta-analysis.** *American Journal of Obstetrics and Gynecology.* 2006 Jan; 194(1): 95-9. (29 ref)  
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# NIH Open Access Mandate

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- December 6, 2007 law
- all investigators funded by NIH submit to NLM's PubMed Central an electronic version of their final, peer-reviewed manuscripts upon acceptance for publication to be made publicly available no later than 12 months after the official date of publication

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1: [Circulation](#). 2007 Feb 20;115(7):855-60.

**Prehypertension and cardiovascular disease risk in the Women's Health Initiative.**

[Hsia J](#), [Margolis KL](#), [Eaton CB](#), [Wenger NK](#), [Allison M](#), [Wu L](#), [LaCroix AZ](#), [Black HR](#); [Women's Health Initiative Investigators](#).

Department of Medicine, George Washington University, 2150 Pennsylvania Ave NW, Washington, DC 20037, USA. [jhsia@mfa.gwu.edu](mailto:jhsia@mfa.gwu.edu)

BACKGROUND: Prehypertension is common and is associated with increased vascular mortality. The extent to which it increases risk of nonfatal myocardial infarction, stroke, and congestive heart failure is less clear. METHODS AND RESULTS: We determined the prevalence of prehypertension, its association with other coronary risk factors, and the risk for incident cardiovascular disease events in 60,785 postmenopausal women during 7.7 years of follow-up using Cox regression models that included covariates as time-dependent variables. Prehypertension was present at baseline in 39.5%, 32.1%, 42.6%, 38.7%, and 40.3% of white, black, Hispanic, American Indian, and Asian women, respectively (P<0.0001 across ethnic groups). Age, body mass index, and prevalence of diabetes mellitus and hypercholesterolemia increased across blood pressure categories, whereas smoking decreased (all P<0.0001). Compared with normotensive women (referent), adjusted hazard ratios for women with prehypertension were 1.58 (95% confidence interval [CI] 1.12 to 2.21) for

**Related Links**

- ▶ Breast vascular heart disease, s
- ▶ Prevalence of h persons with p
- ▶ Migraine and ris women.
- ▶ The course of v occurrence of v
- ▶ Is diabetes mel equivalent for f
- ▶ [See all Related](#)

# HEAL-WA

## Health Electronic Resource for Washington

- Evidence-based information portal
- Provides electronic access to resources for practitioners in WA state
- Signed into Washington law May 2007
- Registered nurses one of 14 groups covered
- Funded by license fees
- Goes live January 2009

# What will be included in HEAL-WA?

- Resources such as electronic databases, online texts, and e-journals
- Gives practitioners access to timely, evidence-based answers to patient care Q's
- Includes information resources specific to nurses, such as *CINAHL*
- Other possible examples: *DynaMed*, *Cochrane*

# *Search for Clinical Practice Guidelines*



# Clinical Practice Guidelines

- Systematically developed statements of appropriate care designed to assist the practitioner and patient make decisions about appropriate health care for specific clinical circumstances
- Usually based on the most current available research if from reputable, authoritative organizations
- Developed using widely varying standards
  - *Cost* may be considered as well as *health outcomes* or *politics*

# Practice Guidelines Resources

- National Guideline Clearinghouse [guideline.gov](http://guideline.gov)
- MD Consult (\$) [www.mdconsult.com](http://www.mdconsult.com)
- Nursing Consult (\$) [www.nursingconsult.com](http://www.nursingconsult.com)
- Nursing Reference Center (\$) [ebscohost.com](http://ebscohost.com)
- PubMed [pubmed.gov](http://pubmed.gov)
- CINAHL/CINAHL Plus (\$) [cinahl.com](http://cinahl.com)
- Google or Advanced Google or Google Scholar
  - [google.com](http://google.com)
  - [google.com/advanced\\_search?hl=en](http://google.com/advanced_search?hl=en)
  - [scholar.google.com](http://scholar.google.com)

### Search

adhd

20 Results

Search

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### Browse

- » [Disease / Condition](#)
- » [Treatment / Intervention](#)
- » [Organization](#)

### Compare

- » [View My Collection](#)
- » [Guideline Syntheses](#)

## NGC Search Results

Your search criteria:

**Keyword:** *adhd*

Your search found 7 related guidelines, which are listed below.

To view a guideline summary, click on a title. The default view is the Brief Summary, from which you can view the Full Summary, XML View, Full Text, Palm Download, MS Word, Adobe PDF, or Guideline Synthesis by choosing the appropriate Summary Box on the side menu.

To prepare a Guideline Comparison, add any of the guidelines listed to "My Collection" by selecting that guideline and clicking the "Add to My Collection" button. For additional help, see [Guideline Comparison Help](#).

Remember - Check the box next to a guideline to add it to "My Collection". Then click on the "Add to My Collection" button on the page.

### Search Results:

The following guidelines were retrieved because they are linked to [concepts related to your query](#) or because they are [in your query](#). Search results are listed in order of [relevance](#), unless otherwise specified in a Detailed Search.

Display results 1 to 7 of 7

#### Title

- [Diagnosis and management of attention deficit hyperactivity disorder in primary care for school age children](#)  
Institute for Clinical Systems Improvement - Private Nonprofit Organization. 1997 Oct (revised 2000)
- [Clinical practice guideline: diagnosis and evaluation of the child with attention-deficit/hyperactivity disorder](#)  
Pediatrics - Medical Specialty Society. 2000 May. 13 pages. NGC:001506
- [Clinical practice guideline: treatment of the school-aged child with attention-deficit/hyperactivity disorder](#)  
Pediatrics - Medical Specialty Society. 2001 Oct. 12 pages. NGC:002298
- [Practice parameters for the assessment and treatment of children, adolescents, and adults with mental disorders](#).  
American Academy of Child and Adolescent Psychiatry - Medical Specialty Society

## Brief Summary

### GUIDELINE TITLE

Clinical practice guideline: diagnosis and evaluation of the child with attention-deficit/hyperactivity disorder.

### BIBLIOGRAPHIC SOURCE(S)

American Academy of Pediatrics. Clinical practice guideline: diagnosis and evaluation of the child with attention-deficit/hyperactivity disorder. *Pediatrics* 2000 May; 105(5):1158-70. [60 references]

## BRIEF SUMMARY CONTENT

[RECOMMENDATIONS](#)

[EVIDENCE SUPPORTING THE RECOMMENDATIONS](#)

[IDENTIFYING INFORMATION AND AVAILABILITY](#)

[Go to the Complete Summary](#)

## RECOMMENDATIONS

### MAJOR RECOMMENDATIONS

*Excerpted by the National Guideline Clearinghouse:*

**RECOMMENDATION 1:** In a child 6 to 12 years old who presents with inattention, hyperactivity, impulsivity, academic underachievement, or behavior problems, primary care clinicians should initiate an evaluation for attention-deficit/hyperactivity disorder (**ADHD**) (*strength of evidence: good; strength of recommendation: strong*).

Presentations of **ADHD** in clinical practice vary. Symptoms may not be apparent in a structured clinical setting that is free from demands and distraction of the home and school. The following general questions may be useful at all visits for school-aged children to heighten attention about **ADHD** and as an initial screening for school performance:

1. How is your child doing in school?
2. Are there any problems with learning that you or the teacher has seen?
3. Is your child happy in school?
4. Are you concerned with any behavioral problems in school, at home, or when your child is playing with friends?
5. Is your child having problems completing classwork or homework?

Alternatively, a previsit questionnaire may be sent to parents or given while the family is waiting in the reception area.

**RECOMMENDATION 2:** The diagnosis of **ADHD** requires that a child meet *Diagnostic and Statistical Manual of Mental Disorders*

Search NGC:

[Search Help](#)[Detailed Search](#)

Browse NGC:

[Disease/Condition](#)[Treatment/Intervention](#)[Organization](#)

Compare Guidelines

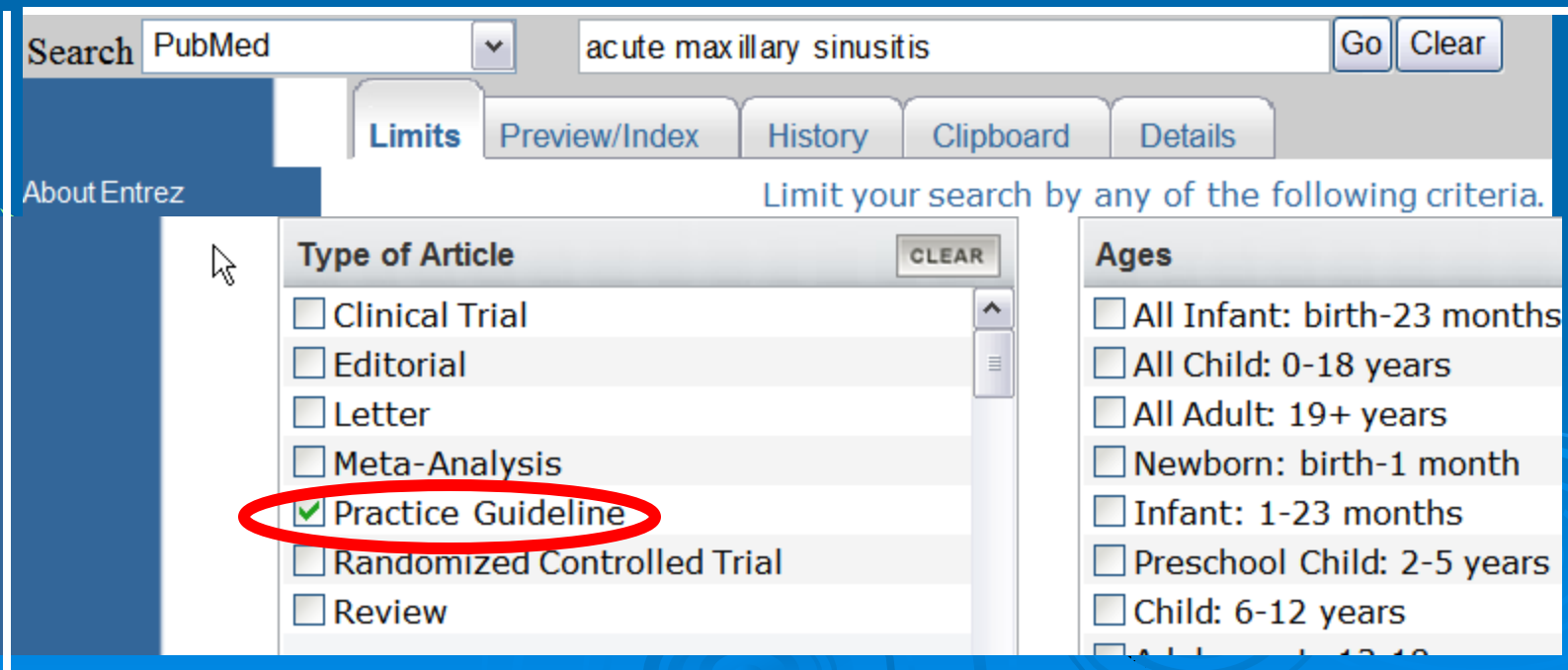
[View Guideline Collection](#)

## Guideline Comparison

	Am Acad Child Adolesc Psychiatr 1997 Feb 14	Am Acad Pediatr 2000 May
<b>TITLE:</b>	<a href="#">Practice parameters for the assessment and treatment of children, adolescents, and adults with attention-deficit/hyperactivity disorder.</a>	<a href="#">Clinical practice guideline: Diagnosis and evaluation of the child with attention-deficit/hyperactivity disorder.</a>
<b>ADAPTATION:</b>	Not applicable: The guideline was not adapted from another source.	Not applicable: Guideline was not adapted from another source.
<b>LENGTH:</b>	37 pages	13 pages
<b>DEVELOPER(S):</b>	American Academy of Child and Adolescent Psychiatry - Medical Specialty Society	American Academy of Pediatrics - Medical Specialty Society
<b>FUNDING SOURCE:</b>	Not stated	American Academy of Pediatrics (AAP)
<b>RATING SCHEME:</b>	The validity of scientific findings was judged by design, sample selection and size, inclusion of comparison groups, generalizability, and agreement with other studies.	Not applicable
<b>METHODS TO ANALYZE EVIDENCE:</b>	Review	Systematic Review with Evidence Tables
<b>VIEW MAJOR RECOMMENDATIONS:</b>	<a href="#">View Major Recommendations</a>	<a href="#">View Major Recommendations</a>
<b>AVAILABILITY OF FULL TEXT:</b>	<a href="#">View Availability Information</a>	<a href="#">View Full-text Guideline</a>

# Searching for Practice Guidelines in *PubMed*

Limit to **Practice Guideline** under  
Type of Article



The screenshot shows the PubMed search interface. At the top, the search box contains 'acute maxillary sinusitis' and the 'PubMed' database is selected. Below the search box, there are tabs for 'Limits', 'Preview/Index', 'History', 'Clipboard', and 'Details'. The 'Limits' tab is active, and the text 'Limit your search by any of the following criteria.' is displayed. Under the 'Type of Article' section, the 'Practice Guideline' option is selected with a checkmark and is circled in red. Other options include Clinical Trial, Editorial, Letter, Meta-Analysis, Randomized Controlled Trial, and Review. To the right, the 'Ages' section lists various age groups with checkboxes, such as 'All Infant: birth-23 months', 'All Child: 0-18 years', 'All Adult: 19+ years', 'Newborn: birth-1 month', 'Infant: 1-23 months', 'Preschool Child: 2-5 years', and 'Child: 6-12 years'.

Search PubMed

**Limits** Preview/Index History Clipboard Details

About Entrez Limit your search by any of the following criteria.

**Type of Article**

- Clinical Trial
- Editorial
- Letter
- Meta-Analysis
- Practice Guideline
- Randomized Controlled Trial
- Review

**Ages**


- All Infant: birth-23 months
- All Child: 0-18 years
- All Adult: 19+ years
- Newborn: birth-1 month
- Infant: 1-23 months
- Preschool Child: 2-5 years
- Child: 6-12 years

# Searching for Practice Guidelines in *CINAHL PLUS*

## Limit to **Practice Guidelines** as a Publication Type

Keyword | Publications | CINAHL Headings | Evidence-Based Care Sheets | More ▾  
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 sinusitis in Select a Field (optional) Search  
and practice guidelines in PT Publication Type Clear  
and in Select a Field (optional) Add Row

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### Search Options

Search modes ?	<input checked="" type="radio"/> <b>Boolean/Phrase</b>	Apply related words <input type="checkbox"/>
	<input type="radio"/> <b>Find all my search terms</b>	Also search within the full text of the articles <input type="checkbox"/>
	<input type="radio"/> <b>Find any of my search terms</b>	

Limit your results

***Navigate the Web  
Beyond Basic Google  
To Find Evidence?***



# Navigation Difficulties

- Size of the Web
- Lack of control or review
- Lack of quality standards



# Navigating the Web Beyond Google

## ➤ Google [google.com](http://google.com)

- Largest search engine: over *11.5 billion* pages
- *Relevance ranking* based on link analysis

## ➤ Google Advanced Search

[www.google.com/advanced\\_search?hl=en](http://www.google.com/advanced_search?hl=en)

## ➤ Google Scholar [scholar.google.com](http://scholar.google.com)

# Searching Google for Guideline/Guidelines



Web

Results

## [Clinical Practice \*\*Guideline\*\*: Management of \*\*Sinusitis\*\*](#)

This clinical practice **guideline** is not intended as a sole source of guidance in the diagnosis and management of acute bacterial **sinusitis** in children. ...

[www.aap.org/policy/0106.html](http://www.aap.org/policy/0106.html) - 70k - [Cached](#) - [Similar pages](#)

## [Updated \*\*Guidelines\*\* for Diagnosis and Management of \*\*Sinusitis\*\*](#)

The American Academy of Allergy, Asthma, and Immunology and the American College of Allergy, Asthma, & Immunology have jointly updated their practice ...

[www.medscape.com/viewarticle/518379](http://www.medscape.com/viewarticle/518379) - [Similar pages](#)

## [\[PDF\] \*\*ADULT ACUTE SINUSITIS GUIDELINE\*\*](#)

File Format: PDF/Adobe Acrobat - [View as HTML](#)

**ADULT ACUTE SINUSITIS GUIDELINE**. This **guideline** is to be used to assist in clinical efficiency, but is not a substitute for clinical judgement. ...

[health.ucsd.edu/ClinicalResources/sinusitisadult.pdf](http://health.ucsd.edu/ClinicalResources/sinusitisadult.pdf) - [Similar pages](#)

# Google Advanced Search Features

[www.google.com/advanced\\_search?hl=en](http://www.google.com/advanced_search?hl=en)

- **File Format**, *i.e.* pdf
- **Date**, *i.e.* pages updated in last 3 months
- **Occurrences**, *i.e.* terms appear in title
- **Domain**, *i.e.* .gov, .edu
- **Links**, *i.e.* pages that link to the page



## Advanced Search

sinusitis guideline filetype: pdf site: .gov

### Find web pages that have...

all these words:

sinusitis guideline

this exact wording or phrase:

one or more of these words:

 OR 

### But don't show pages that have...

any of these unwanted words:

### Need more tools?

Results per page:

10 results

Language:

English

File type:

Adobe Acrobat PDF (.pdf)

Search within a site or domain:

.gov

(e.g. youtube.com, .edu)

[+ Date, usage rights, numeric range, and more](#)

[Advanced Search](#)  
[Preferences](#)

Web

Results 1 - 10 of about 202,000 for sinusitis g

## [\[PDF\] ADULT ACUTE SINUSITIS GUIDELINE](#)

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ADULT ACUTE **SINUSITIS GUIDELINE**. This **guideline** is to be used to assist in clinical efficiency, but is not a substitute for clinical judgement. ...

[health.ucsd.edu/ClinicalResources/sinusitisadult.pdf](http://health.ucsd.edu/ClinicalResources/sinusitisadult.pdf) - [Similar pages](#)

## [\[PDF\] Sinusitis Guideline: General Comments](#)

File Format: PDF/Adobe Acrobat - [View as HTML](#)

Related National **Guidelines**. The UMHHC Clinical **Guideline** on Rhinosinusitis is consistent with Diagnosis and Treatment of Acute Bacterial. **Sinusitis** (1999) ...

[cme.med.umich.edu/pdf/guideline/rhino05.pdf](http://cme.med.umich.edu/pdf/guideline/rhino05.pdf) - [Similar pages](#)

## [\[PDF\] CPG - Sinusitis](#)

File Format: PDF/Adobe Acrobat - [View as HTML](#)

Clinical Practice **Guideline** for. **Sinusitis** Treatment (Rhinosinusitis). Acute bacterial **sinusitis** is an infection of the paranasal **sinuses** with inflammation ...

[www.mahealthcare.com/practice\\_guidelines/Sinusitis.pdf](http://www.mahealthcare.com/practice_guidelines/Sinusitis.pdf) - [Similar pages](#)

## [\[PDF\] AMERICAN ACADEMY OF PEDIATRICS Clinical Practice Guideline](#)

File Format: PDF/Adobe Acrobat - [View as HTML](#)

erbatons of chronic **sinusitis** are not included in this. **guideline**. .... CLINICAL PRACTICE **GUIDELINE**: MANAGEMENT OF **SINUSITIS** ...

[www.antibioticos.msc.es/PDF/AAP\\_management\\_of\\_sinusitis.pdf](http://www.antibioticos.msc.es/PDF/AAP_management_of_sinusitis.pdf) - [Similar pages](#)

# Google Scholar (beta)

*[scholar.google.com](http://scholar.google.com)*

- Searches for **scholarly literature**, including peer-reviewed papers, theses, books, abstracts and technical reports
- Finds articles from academic publishers, professional societies, universities, etc. as well as scholarly articles on the web
- "**Cited by**" link identifies # that have cited the original
- Access to full text only available with subscription
- **Caution:** Not a reliable sole source for searching scholarly literature

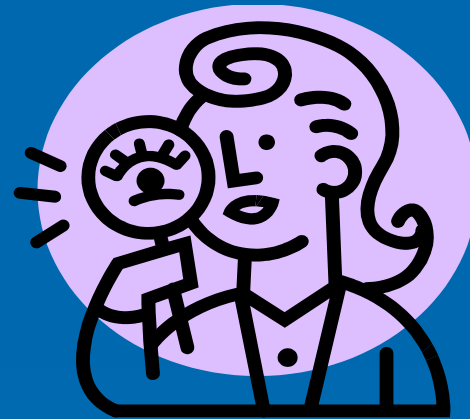
# Must Evaluate Web Resources: Evaluation Strategies

- Evaluate using **Criteria for Evaluating Web Resources**
- Determine the type of site by analyzing **Web Site Addresses**
- A User's Guide to Finding and Evaluating Health Information on the Web  
*[www.mlanet.org/resources/userguide.html](http://www.mlanet.org/resources/userguide.html)*

# Criteria for Evaluating Web Sites

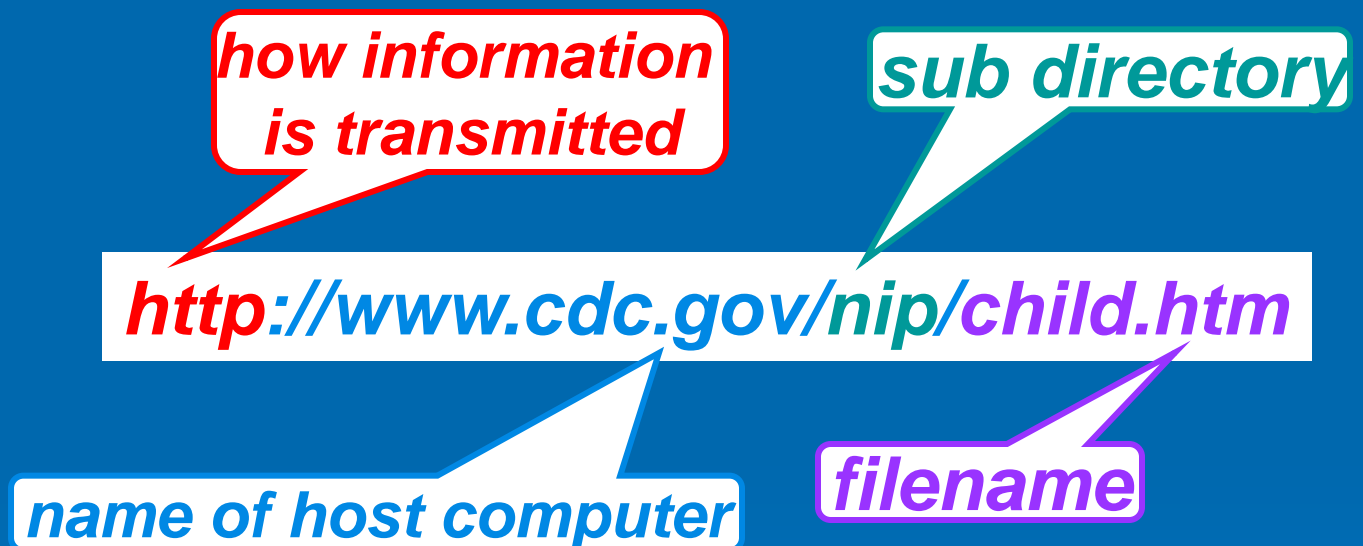
[healthlinks.washington.edu/howto/navigating/criteria.pdf](http://healthlinks.washington.edu/howto/navigating/criteria.pdf)

- Authority
- Accuracy
- Objectivity
- Currency
- Coverage
- Design



# Web Site Address: URL (Uniform Resource Locator)

- edu
- org
- com
- gov
- net



The URL includes the name of the host computer which can indicate the purpose of the web site.

*Search for  
Structured Abstracts and  
Evidence Summaries*



# Evidence Summaries/Synopses and Structured Abstract Resources

- Clinical Evidence (\$) [clinicalevidence.bmj.com](http://clinicalevidence.bmj.com)
- Evidence Based Nursing (\$) [www.evidencebasednursing.com](http://www.evidencebasednursing.com)
- ACP Journal Club [www.acpjc.org](http://www.acpjc.org)
- Bandolier [www.ebandolier.com](http://www.ebandolier.com)

Child health

## Asthma and other wheezing disorders in children

Duncan Keeley and Michael McKean

[Interventions](#)
[Key points](#)
[About this condition](#)
[Updates \(19\)](#)
[Guidelines \(14\)](#)
[References](#)

You may prefer to [read the key points](#) of this review.

 [Print page](#)

We have searched the evidence for systematic and rigorous answers to the clinical questions and situations below, focusing on the outcomes that matter most to patients and clinicians. We have then categorised each treatment or intervention according to its harms and benefits in those situations.




### Updates

We provide updates on this review evidence.

### Respond

Remember to respond to comments. We have not done this yet.

### What are the effects of treatments for acute asthma in children?

Beneficial		<ul style="list-style-type: none"> <li>* <a href="#">Beta<sub>2</sub> agonists (high dose nebulised)</a> *</li></ul>
Likely to be beneficial		<ul style="list-style-type: none"> <li>* <a href="#">Theophylline (intravenous)</a></li> </ul>
Unknown effectiveness		<ul style="list-style-type: none"> <li>* <a href="#">Ipratropium bromide (inhaled) added to salbutamol (after initial stabilisation)</a></li> <li>* <a href="#">Single dose ipratropium bromide (inhaled) added to beta<sub>2</sub> agonists (in emergency room)</a></li> </ul>

### High dose inhaled corticosteroids versus oral corticosteroids:

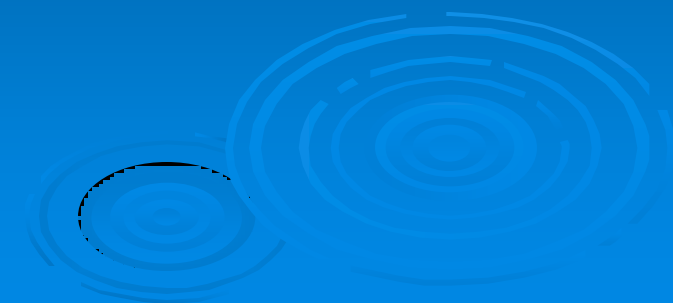
We found one systematic review (search date 2003, 4 RCTs, [13], one subsequent RCT, [14] and one additional RCT. [15] The systematic review compared the effects of initial treatment with high dose inhaled corticosteroids versus oral corticosteroids in hospital emergency departments on admission rates. [13] The review did not pool results from the RCTs because of marked heterogeneity among the studies. One RCT (103 children with moderate to severe asthma, aged 5–16 years, mean initial forced expiratory volume in 1 second [FEV<sub>1</sub>], 45%) compared fluticasone (2 mg through metered dose inhaler with spacer) versus prednisolone 2 mg/kg orally. [16] It found that prednisolone reduced hospital admission (31% with inhaled fluticasone v 10% with oral prednisolone; P = 0.01) and increased mean FEV<sub>1</sub> at 4 hours (9% with inhaled fluticasone v 19% with oral prednisolone; P = 0.001). [16] The second RCT (128 children with mild to moderate asthma, aged 1–17 years) in the review compared dexamethasone (1.5 mg/kg through nebuliser) versus prednisolone 2 mg orally. [17] It found no significant difference between nebulised dexamethasone and oral prednisolone in rates of hospital admission (12/56 [21%] with nebulised dexamethasone v 17/55 [31%] with oral prednisolone; ARR +9.5%, 95% CI –8.0% to +21.0%; RR 0.69, 95% CI 0.36 to 1.27), but found fewer relapses with nebulised dexamethasone within 48 hours after discharge (0/44 [0%] with nebulised dexamethasone v 6/38 [16%] with oral prednisolone; ARR 16.0%, 95% CI 27.0% to 4.5%); however, all children in the RCT received a 5 day course of prednisolone (2 mg/kg/day) on discharge. [17] In the remaining two RCTs (104 children with mild to moderate asthma, budesonide (800 µg through nebuliser at 1, 30, and 60 minutes; [18] 1600 µg through turbohaler [19]) was compared with prednisolone 2 mg/kg orally. [18] [19] One RCT found no significant difference between treatments in hospital admission (1/41 [2.4%] with inhaled corticosteroids v 5/39 [12.8%] with oral corticosteroids; OR 0.17, 95% CI 0.02 to 1.53). [18] The other RCT reported no admissions. [19] The subsequent RCT (321 children aged 4–16 years, peak expiratory flow rate 40–75% predicted) compared nebulised fluticasone (1 mg twice daily for 7 days) versus oral prednisolone (2 mg/kg for 4 days then 1 mg/kg for 3 days). It found that nebulised fluticasone significantly improved mean morning peak expiratory flow rate over 7 days compared with oral prednisolone (difference 9.5 L/minute, 95% CI 2.0 L/minute to 17.0 L/minute). No significant differences were found in symptom scores or withdrawals. [14] The additional RCT (46 children, aged 5–16 years, admitted to hospital with severe exacerbations of asthma) compared nebulised budesonide (2 mg/hour) versus oral prednisolone 2 mg/kg at admission and after 24 hours. [15] It found no significant difference between groups in FEV<sub>1</sub> at 24 hours, or at 3 and 24 days after admission. All children in this trial were treated with budesonide 800 µg daily after discharge from hospital.

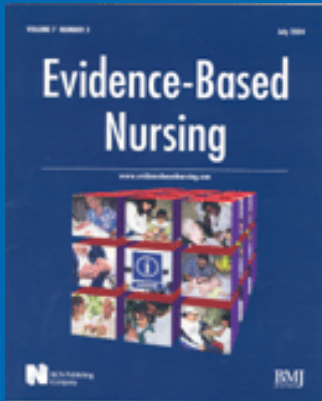
### Harms

The systematic review found no significant adverse effects with inhaled corticosteroids. [13] The subsequent RCT found no significant difference in the profile of adverse events between inhaled fluticasone and oral prednisolone, except

Top

## Clinical Evidence





# *Evidence Based Nursing*

- Surveys a wide range of international medical journals applying strict criteria for the quality and validity of research
- Practicing clinicians assess the clinical relevance of the best studies
- Key details of these essential studies are presented in a succinct, informative **abstract** with an **expert commentary** on its clinical application

# Evidence Based Nursing review

## Review: soft drink consumption is associated with increased energy intake and body weight

Vartanian LR, Schwartz MB, Brownell KD. Effects of soft drink consumption on nutrition and health: a systematic review and meta-analysis. *Am J Public Health* 2007;97:667-75.

Q Is soft drink consumption associated with increased energy intake, increased body weight, displacement of nutrients, and an increased risk of chronic disease?

### METHODS



**Data sources:** Medline, PsycINFO, Web of Science database, bibliographies of identified articles, and authors of included articles.



**Study selection and assessment:** articles that assessed the relation between soft drink consumption and the 4 primary outcomes listed below. 88 articles (cross-sectional studies, longitudinal studies, and randomised controlled trials) were included in the analysis



**Outcomes:** milk intake nutrition or as follows: medium, a

### CONCLUSION

Soft drink consumption is associated with increased energy intake and body weight and reduced milk and calcium intake.

### MAIN RESULTS

Only the results of the longitudinal studies associated with increased energy intake and reduced milk and calcium intake.

For correspondence: Dr K D Brownell, Yale University, New Haven, CT, USA. [kelly.brownell@yale.edu](mailto:kelly.brownell@yale.edu)

Source of funding: Rudd Foundation.

### Commentary

The review by Vartanian *et al* adds to our knowledge of the negative effects of soft drink consumption on nutrition and health. Overall, this review of 88 randomised controlled trials, longitudinal, and cross-sectional studies was strong. The authors considered variables such as funding sources, and the results of the review are strengthened by greater associations found across these studies with more robust designs.

review: the greater the soft drink consumption, the greater the energy intake. Using clinical expertise, most practitioners would agree that the benefits of limiting soft drink consumption outweigh the risks. Thus, the review by Vartanian *et al* provides practitioners with evidence to recommend limiting soft drink consumption to their clients.

Jennifer  
New York University College of  
New York

### Associations between soft drink consumption and various outcomes\*

Outcomes	Number and type of studies	Mean effect size (p)
Energy intake	5 longitudinal studies	0.24 (p < 0.001)

# Evidence-Based Nursing

## Contents

<b>Purpose and procedure</b> .....	98	A care management intervention improved depression after stroke .....	11
<b>EBN notebook</b>		<b>Assessment (screening or diagnosis)</b>	
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Thanks to our commentators who contributed to <i>Evidence-Based Nursing</i> in 2007 .....	104	<b>Causation</b>	
<b>Treatment</b>		Review: bed sharing between parents and infants exposed to smoke may increase the risk of sudden infant death syndrome.....	11
A cognitive–behavioural parenting intervention reduced problem behaviours in at-risk preschool children and improved parenting skills in socially disadvantaged families .....	105	Review: soft drink consumption is associated with increased energy intake and body weight .....	12
Review: advance provision of emergency contraception increases its use but does not reduce unplanned pregnancies.....	106	<b>Quality improvement</b>	
Review: partner notification interventions can reduce persistent or recurrent sexually transmitted infections	107	Use of a treatment algorithm did not improve blood pressure control in primary care patients with type 2 diabetes.....	12
Duct tape was not effective for common warts in adults	108	<b>Clinical prediction guide</b>	
Review: inhaled corticosteroids increase risk of oral candidiasis, dysphonia, and pharyngitis in persistent	108	A severity score comprising patient age, ulcer chronicity, and venous refill time predicted venous leg ulcer healing at 24 weeks .....	12

# Point of Care Evidence-Based Resources: have *some* level of evidence-based information (\$)

- DiseaseDex [www.micromedex.com/products/diseasedexgeneral](http://www.micromedex.com/products/diseasedexgeneral)
- DynaMed [www.ebscohost.com/dynamed](http://www.ebscohost.com/dynamed)
- Essential Evidence Plus [essentialevidenceplus.com](http://essentialevidenceplus.com)
- Evidence Matters [evidencematters.com](http://evidencematters.com)
- FIRST Consult [firstconsult.com](http://firstconsult.com)
- PEPID [pepid.com](http://pepid.com)
- UptoDate [uptodate.com](http://uptodate.com)

# UpToDate

*uptodate.com*

## ➤ UpToDate (\$)

- Concise comprehensive uptodate reviews of clinical topics in multiple specialties
- Most heavily used clinical e-resource at the UW Health Sciences Libraries

## Overview of the management of osteoporosis in women

- ▶ [INTRODUCTION](#)
- ▶ [NONPHARMACOLOGIC THERAPY](#)
  - [Calcium/Vitamin D](#)
  - [Diet](#)
  - [Exercise](#)
    - [Intensity of exercise](#)
  - [Cessation of smoking](#)
- ▶ [DRUG THERAPY](#)
  - [Monitoring the response to therapy](#)
    - [Option 1](#)
    - [Option 2](#)
    - [Option 3](#)
    - [Option 4](#)
  - [Bisphosphonates](#)
  - [Selective estrogen receptor modulators](#)
  - [Estrogen/progestin therapy](#)
    - [Premenopausal women with hypothalamic amenorrhea](#)
  - [Parathyroid hormone](#)
    - [PTH plus bisphosphonate therapy](#)
  - [Calcitonin](#)
  - [Calcitriol](#)
  - [Sodium fluoride](#)
  - [Combination therapy](#)
  - [Isoflavones](#)
  - [Thiazide diuretics](#)
  - [Tibolone](#)
  - [Recommendations](#)
- ▶ [MEDICAL INTERVENTION AFTER FRACTURE](#)
- ▶ [OTHER POTENTIAL THERAPIES](#)
  - [Androgens](#)
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  - [Statins](#)
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  - [CT and osteoporotic bone pain](#)
  - [Estrogen plus CT osteoporosis](#)
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  - [Cost of Rx of osteoporosis](#)

### RELATED TOPICS

- ▶ [Overview of osteoporosis in men](#)
- ▶ [Epidemiology and causes of osteoporosis](#)

## Overview of the management of osteoporosis in women

[Hillel N Rosen, MD](#)  
[Marc K Drezner, MD](#)

*UpToDate performs a continuous review of over 330 journals and other resources. Updates are added as important new information is published. The literature review for version 13.3 is current through August 2005; this topic was last changed on September 13, 2005. The next version of UpToDate (14.1) will be released in February 2006.*

**INTRODUCTION** — Prevention and treatment of osteoporosis consists of non-drug and drug or hormonal therapy [1,2]. This topic review will provide an overview of the approach to therapy of osteoporosis in postmenopausal women. The treatment of osteoporosis in men, and the pathogenesis, causes, and diagnosis of osteoporosis are discussed separately. (See "[Overview of osteoporosis in men](#)", see "[Epidemiology and causes of osteoporosis](#)", and see "[Pathogenesis of osteoporosis](#)" and see "[Clinical manifestations and diagnosis of osteoporosis](#)", section on Suggested approach to exclude secondary causes).

In the past, estrogen replacement was considered a primary therapy for the prevention of postmenopausal osteoporosis. Estrogen had the additional advantages of controlling menopausal symptoms and presumptive prevention or delay of cardiovascular disease. However, data from the Women's Health Initiative (WHI) revealed that estrogen-progestin therapy does not reduce the risk of coronary heart disease, and increases the risk of breast cancer, stroke, and venous thromboembolic events [3]. (See "[Postmenopausal hormone therapy: Benefits and risks](#)").

As a result of these findings, other antiresorptive agents are now the drugs of choice, and are prescribed more frequently for the prevention and treatment of osteoporosis in postmenopausal women [4].

**NONPHARMACOLOGIC THERAPY** — There are three components to the nondrug therapy of osteoporosis: diet, exercise, and cessation of smoking. In addition, affected patients should avoid, if possible, drugs that increase bone loss, such as glucocorticoids. (See "[Glucocorticoids and osteoporosis: Pathogenesis and clinical features](#)" and see "[Drugs that affect bone metabolism](#)").

**Calcium/Vitamin D** — An optimal diet for treatment (or prevention) of osteoporosis includes an adequate intake of calories (to avoid malnutrition), calcium, and [vitamin D](#).

Postmenopausal women (and older men) should take adequate supplemental elemental calcium (generally 500 to 1000 mg/day), in divided doses, at mealtime, such that their total calcium intake, inclusive of food calcium, approximates 1500 mg/day [5]. (See "[Calcium supplementation in osteoporosis](#)"). In addition to its beneficial effects on the skeleton, calcium supplementation may favorably affect serum lipids [6]. Furthermore, there is some evidence that calcium intake is inversely associated with cardiovascular disease in postmenopausal women. (See "[Lipid lowering with diet or dietary supplements](#)", section on Calcium).

Women should also ingest a total of 800 IU of [vitamin D](#) daily. Higher doses are required if they have malabsorption or rapid metabolism of vitamin D due to concomitant anticonvulsant drug therapy. Data on the efficacy of vitamin D replacement for osteoporosis are discussed in detail elsewhere. (See "[Vitamin D therapy in osteoporosis](#)", section on Recommendations).

**Diet** — When celiac disease is a major contributor to osteopenia, a gluten-free diet will result in improvement in bone mineral density [7]. (See "[Management of celiac disease in adults](#)").

Protein intake may be an important component of the diet, particularly in women who already have osteoporotic fractures. This was

# DynaMed (\$)

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General Information (including ICD-9/-10 Codes)
Causes and Risk Factors
Complications and Associated Conditions
History
Physical
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Prognosis
Treatment
Prevention and Screening

**Carpal tunnel syndrome**

Updated 2007 Sep 21 03:37 PM: review article commentary (BMJ 2007 Sep 1)  
Work Loss Data Institute disability guideline for carpal tunnel syndrome (National Guideline Clearinghouse 2007 Sep 3)  
continued peer review

- ▶ [General Information \(including ICD-9/-10 Codes\)](#)
- ▶ [Causes and Risk Factors](#)
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- ▶ [Patient Information](#)
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## Treatment overview:

# DynaMed

Level 1  
evidence

- treat any underlying disorder
- avoid, reduce or modify exacerbating activities (including ergonomic changes)
- **treatments with randomized trial evidence for short-term efficacy**
  - local corticosteroid injection - systematic review of 12 trials (level 1 [likely reliable] evidence)
  - oral corticosteroids - 2 trials (level 1 [likely reliable] evidence)
  - yoga - 1 trial (level 2 [mid-level] evidence)
  - continuous low-level heat wrap therapy - 1 trial (level 2 [mid-level] evidence)
  - carpal bone mobilization - 1 trial (level 2 [mid-level] evidence)
  - lidocaine patch 5% - 1 trial compared to injection (level 2 [mid-level] evidence)
  - local insulin injection - 1 trial in patients with diabetes (level 2 [mid-level] evidence)
- **treatments with inconsistent evidence for short-term efficacy**
  - splinting (hand brace) (level 2 [mid-level] evidence)
  - exercises (level 2 [mid-level] evidence)
  - pyridoxine (vitamin B6) - likely ineffective (level 2 [mid-level] evidence)
  - therapeutic ultrasound (level 2 [mid-level] evidence)
  - ergonomic keyboards (level 2 [mid-level] evidence)
  - topical steroids via iontophoresis/phonophoresis (level 2 [mid-level] evidence)
- **treatments unlikely to be beneficial** - ineffective in randomized trials
  - NSAIDs (level 2 [mid-level] evidence)
  - diuretics (level 2 [mid-level] evidence)
  - magnet therapy (level 2 [mid-level] evidence)
  - chiropractic care (level 2 [mid-level] evidence)
  - internal neurolysis in conjunction with open carpal tunnel release

# Point of Care EBP Nursing Resources: have some level of evidence-based information (\$)

- Nursing Consult (\$) *nursingconsult.com*
  - includes evidence-based nursing monographs
  - full-text journals and texts
  - practice guidelines
- Nursing Reference Center (\$) *ebscohost.com*
  - includes evidence-based care sheets
  - full-text journals and texts
  - practice guidelines

## Evidence-Based Nursing Monographs

### Cerebrovascular Accident (CVA)

October 28, 2007

Contributed by Cynthia Saver, RN, MS

**Clinical Question:** *Based on advances in the management of **cerebrovascular accident** (CVA), what nursing implications can be derived for the provision of effective quality patient care?*

### Hemorrhagic Stroke<sup>5</sup>

- Rapidly evaluate the patient and promptly treat.
- A lumbar puncture may show bloody cerebrospinal fluid.
- The overall approach to treatment is stopping or slowing the bleeding, removing blood from the parenchyma or ventricles as indicated, managing complications such as increased intracranial pressure (ICP) and decreased cerebral perfusion, and providing general supportive measures such as oxygen, elevation of the head of the bed by 30 degrees, and management of blood glucose levels and hypertension.
- Help prevent DVT and pulmonary embolism (PE) with intermittent pneumatic compression.
- Patients with ruptured aneurysms should be taken to the OR for repair.
- Patients with larger hemorrhages who are deteriorating neurologically should be taken to surgery for evacuation of the hemorrhage. Use of minimally invasive devices or endoscopy still needs further testing to determine usefulness.
- More information on treatment of **stroke** can be found from [Get with the Guidelines-Stroke](#) and the [Acute Stroke Treatment Program](#).

## Synopsis of Current Literature

### Rapid Evaluation

<p><i>Description:</i> A systematic review of the literature to identify areas of delay in seeking care for ischemic <b>stroke</b>.</p> <p><i>Findings:</i> Early recognition is important so that eligible patients can benefit from TT. Treatment with TT within 3 hours is beneficial; greater benefit is gained the sooner treatment is received. The median time for delay in treatment in patients with ischemic <b>stroke</b> is 3 to 6 hours. Hemorrhagic <b>stroke</b> is associated with shorter delay times. Delay among patients with ischemic <b>stroke</b> include social factors such as living alone or being alone at the time of symptom onset and taking time to consult with a physician, family member, or nonrelative. More research is needed to determine the types of programs that would be effective in reducing delay.</p>	<p>Moser DK, Kimble LP, Alberts MJ, et al. <a href="#">Reducing delay in seeking treatment by patients with acute coronary syndrome and stroke: a scientific statement from the American Heart Association Council on Cardiovascular Nursing and Stroke Council</a>. <i>Circulation</i>. 2006;114:168-182.</p>
	<p style="text-align: right;">Level of Evidence I</p>

### Risk Reduction

<p><i>Description:</i> Prospective cohort study of 37,636 women 45 years or older who are participating in the Women's Health Study. A healthy lifestyle was defined as never smoking; alcohol consumption of 4 to 10.5 drinks per week; exercise 4 or more times a week; body mass index less than 22; and diet high in cereal, fiber, folate, and omega-3 fatty acids with a high ratio of polyunsaturated to saturated fat and low in trans fat and glycemic load. These factors were self-reported.</p> <p><i>Findings:</i> A healthy lifestyle reduced risk of ischemic, but not hemorrhagic <b>stroke</b>.</p>	<p>Kurth T, Moore SC, Gaziano JM, et al. <a href="#">Healthy lifestyle and the risk of stroke in women</a>. <i>Arch Intern Med</i>. 2006;166:1403-1409.</p>
	<p style="text-align: right;">Level of Evidence VI</p>

# Nursing Consult Levels of Evidence

Levels Of Evidence																																							
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z														
All Levels												I	II	III	IV	V	VI	VII																					
<a href="#">Acute Bronchitis</a>													✓					✓																					
<a href="#">Acute Coronary Syndrome/Myocardial Infarction</a>												✓	✓			✓	✓																						
<a href="#">Acute Pain</a>												✓																										✓	
<a href="#">Acute Renal Failure</a>																																							✓
<a href="#">Adult Dehydration</a>																																						✓	
<a href="#">Amyotrophic Lateral Sclerosis</a>												✓																										✓	
<a href="#">Appendicitis</a>												✓																		✓								✓	
<a href="#">Asthma</a>												✓	✓																	✓									

**Ranking Levels of Evidence**

**Levels of Evidence**  
Studies are ranked according to the following criteria:

**Level I** All relevant randomized controlled trials (RCTs)

**Level II** At least one well-designed RCT

**Level III** Well-designed controlled trials without randomization

**Level IV** Well-designed case-controlled or cohort studies

**Level V** Descriptive or qualitative studies

**Level VI** Single descriptive or qualitative study

**Level VII** Authority opinion or expert committee reports

[Click here for more information](#)

# Nursing Reference Center

## EVIDENCE-BASED CARE SHEET

I

### Stroke and Hormone Replacement Therapy

#### What We Know

- ▶ Stroke (see series of *Quick Lessons* and *Evidence-Based Care Sheets* on stroke) is a **medical emergency** that occurs as a result of cerebral ischemia (ischemic stroke) or cerebral hemorrhage (hemorrhagic stroke), reducing the flow of blood and oxygen to the brain and resulting in permanent damage.<sup>(10)</sup>
- ▶ Risk factors for stroke include older age, high blood pressure, high cholesterol, cigarette smoking, heart disease, diabetes, history of transient ischemic attack (TIA), family history of stroke, and alcohol abuse.<sup>(1, 6, 10, 11)</sup>
- ▶ **Facts and figures**
  - Approximately 3 million American women suffered a stroke in 2003<sup>(1)</sup>
  - In the United States, stroke occurs more often in Black women than in White women<sup>(1, 9, 10)</sup>
  - Worldwide, more women than men die from stroke. In 2003, stroke was the third leading cause of death among American women; in 2003, strokes killed 96,000 American women<sup>(1, 4, 6)</sup>
  - Stroke is a leading cause of disability among women<sup>(1)</sup>
- ▶ Menopause (see series of *Quick Lessons* and *Evidence-Based Care Sheets* on menopause) usually occurs between the ages of 45 and 54. Surgery (e.g., hysterectomy) can also result in menopause<sup>(5, 11)</sup>
  - Symptoms of menopause include hot flashes, night sweats, insomnia, vaginal dryness, mood swings, impaired memory, and bone density loss (osteoporosis)
  - Hormone Replacement Therapy (HRT) is the primary treatment used to relieve symptoms of menopause and improve quality-of-life
    - HRT consists of the use of estrogen alone (e.g., conjugated equine estrogen, micronized estradiol, estropipate, or esterified estrogens) or estrogen with progesterone (e.g., medroxyprogesterone acetate) or progestin (e.g., megestrol)
    - HRT drugs comes in oral form, as a transdermal skin patch, and as a vaginal cream/gel, ring, and tablet
    - HRT is usually taken daily or cyclically and often taken for less than 5 years
- ▶ Because of its ability to lower cholesterol, estrogen was once believed to decrease the risk of cardiovascular disease. However, **research in the past 2 decades has shown that estrogen may increase the risk of stroke.**<sup>(8)</sup> **The exact mechanism by which estrogen increases this risk is unclear**

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# Use Meta-Search Engines

Allow you to search multiple other search engines simultaneously and combines the results



# Special Meta -Search Engines that find evidence sites

TRIP

*[tripdatabase.com](http://tripdatabase.com)*



Prime Evidence

*[primeanswers.org/primeanswers/search/evidence](http://primeanswers.org/primeanswers/search/evidence)*



SUMSearch

*[sumsearch.uthscsa.edu](http://sumsearch.uthscsa.edu)*

# TRIP Database

[www.tripdatabase.com](http://www.tripdatabase.com)

- Meta-search engine
- Performs a simple search of more than 75 databases
- Finds evidence-based resources
- Searches *Cochrane*, *National Guideline Clearinghouse*, *Bandolier*, etc.

# TRIP search

The screenshot shows the TRIP database search results for the query 'pressure ulcers prevention'. The page features a navigation bar with tabs for 'Evidence Based Medicine', 'Medical Images', and 'Patient Information Leaflets'. A search bar at the top right contains the query and a 'Search' button. Below the search bar, there are navigation links: 'Home', 'About Us', 'EBM Links', 'My Trip', 'Trip Blog', and 'Contact Us'. The main content area displays search results, including a list of records with titles and publication details. A 'Filter by:' section on the right side of the page is circled in red, showing counts for various categories such as Evidence Based Synopses, Clinical Questions, Systematic Reviews, Guidelines, Core Primary Research, E-Textbooks, Clinical Calculators, and Medline Articles.

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Turning Research Into Practice

pressure ulcers prevention  [Advanced Search](#)

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**Search Results**  
1266 records  
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**Randomised, controlled trial of alternating pressure mattresses compared with alternating pressure overlays for the prevention of pressure ulcers: PRESSURE (pressure relieving support surfaces) trial.**  
BMJ, 2006

**Pressure ulcer prevention**  
NHS Quality Improvement Scotland, 2005

**Support surfaces for pressure ulcer prevention**  
Cochrane Database of Systematic Reviews, 2004

**Prevention of pressure ulcers.**  
National Guideline Clearinghouse (USA), 2002

**Prediction and prevention of pressure ulcers in adults.**  
National Guideline Clearinghouse (USA), 2001

**Filter by:**

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<a href="#">Clinical Questions</a>	10
<a href="#">Systematic Reviews</a>	91
Guidelines	
- <a href="#">North America</a>	90
- <a href="#">Europe</a>	96
- <a href="#">Other</a>	14
<a href="#">Core Primary Research</a>	11
<a href="#">E-Textbooks</a>	906
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<a href="#">Diagnosis</a>	24
<a href="#">Systematic Reviews</a>	172
<a href="#">Prognosis</a>	46
<a href="#">Etiology</a>	74

# SUMSearch

[sumsearch.uthscsa.edu](http://sumsearch.uthscsa.edu)

## SUMSearch - Documents found

Search for **PRESSURE ULCERS**  
(Focus: NOFOCUS, ages: all, subjects: HUMAN)

[New Online EBP calculator](#)

For broad discussions that are easy to read, but not as up-to-date

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 Wikipedia 276 documents.

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### Practice Guidelines *([some guidelines are systematic reviews](#))*

 National Guideline Clearinghouse™ 29 documents.

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Additional guidelines for your topic may be available from:  
[AHRQ-Practice Guidelines](#)

 PubMed (possible guidelines) 30 documents.

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For more up-to-date answers to specific questions, but are harder to read

### Systematic reviews *([what is so good about systematic reviews?](#))*

 DARE (includes [Cochrane abstracts](#)) 33 documents.

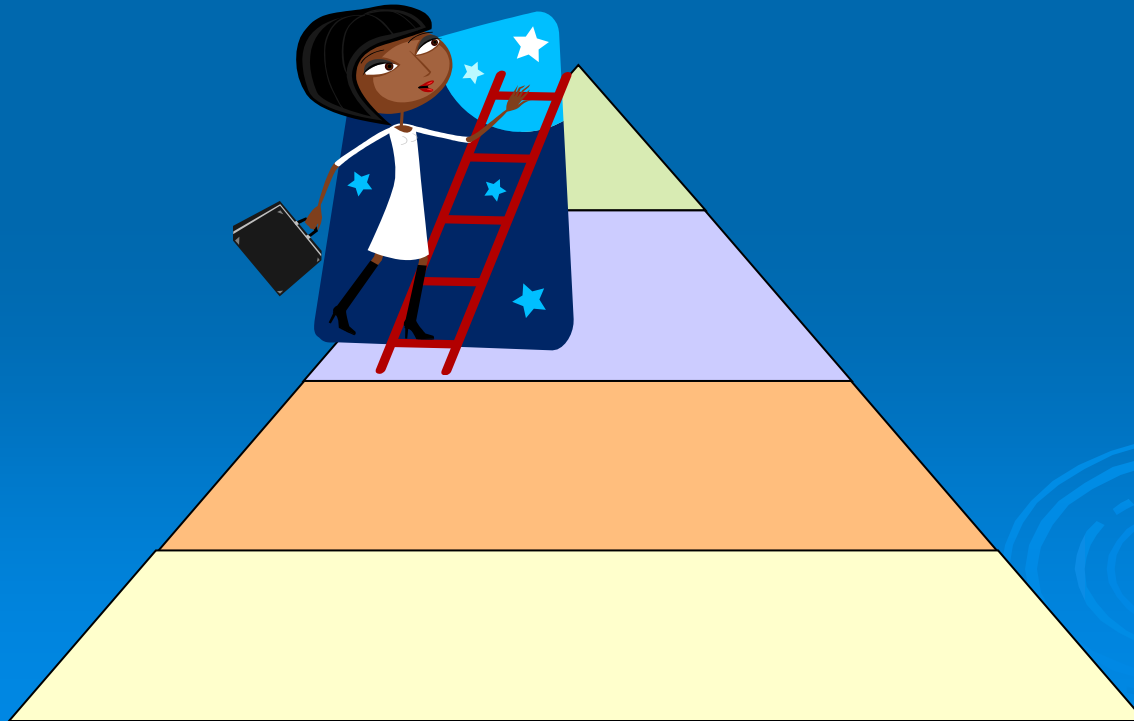
*Scroll down or [Click here to view first 20](#)*

 PubMed (possible systematic reviews) 284 documents.

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# *Search for Systematic Reviews and Meta-Analyses*

*Top of the evidence pyramid*



# Systematic review vs Meta-analysis

A **Systematic review**: is a literature review focused on a single question which tries to identify, appraise, select and synthesize all high quality research evidence relevant to that question.

**Meta-analyses**: are systematic reviews that combine the results of several studies using quantitative statistics.

# Systematic Review/Meta-Analyses Resources

- Cochrane Database of Systematic Reviews (CDSR) (\$) [www.cochrane.org](http://www.cochrane.org)
- Database of Abstracts of Reviews of Effects (DARE) [www.crd.york.ac.uk/crdweb](http://www.crd.york.ac.uk/crdweb)
- PubMed Systematic Reviews [pubmed.gov](http://pubmed.gov)
- CINAHL/CINAHL Plus (\$) [cinahl.com](http://cinahl.com)



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## SEARCH

**Pressure ulcers beds**

Title, Abstract or

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### [Review] Support surfaces for pressure ulcer prevention

[PDF](#) (Size 366K)

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- [Methods of the review](#)
- [Description of studies](#)
- [Methodological quality](#)
- [Results](#)
- [Discussion](#)
- [Authors' conclusions](#)
- [Potential conflict of interest](#)
- [Acknowledgements](#)
- [Characteristics of included studies](#)
- [Characteristics of excluded studies](#)

### [Review] Support surfaces for pressure ulcer prevention

N Cullum, E McInnes, SEM Bell-Syer, R Legood

*Cochrane Database of Systematic Reviews* 2007 Issue 1

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DOI: 10.1002/14651858.CD001735.pub2 This version first published online: 19 July 2004 in Issue 3, 2004

Date of Most Recent Substantive Amendment: 20 May 2004

This record should be cited as: Cullum N, McInnes E, Bell-Syer SEM, Legood R. Support surfaces for pressure ulcer prevention. *Cochrane Database* No.: CD001735. DOI: 10.1002/14651858.CD001735.pub2.

## Abstract

### Background

Pressure ulcers (also known as bedsores, pressure sores, decubitus ulcers) are areas of localised damage to the skin and underlying tissue caused by prolonged pressure and friction. They are common in the elderly and immobile and costly in financial and human terms. Pressure-relieving beds, mattresses and overlays are used to prevent pressure ulcers. This review assesses the effectiveness of pressure-relieving beds, mattresses and overlays in preventing pressure ulcers in both institutional and non-institutional settings.

### Objectives

This systematic review seeks to answer the following questions:

- to what extent do pressure-relieving cushions, beds, mattress overlays and mattress replacements reduce the incidence of pressure ulcers on support surfaces?
- how effective are different pressure-relieving surfaces in preventing pressure ulcers, compared to one another?

### Search strategy

The Specialised Trials Register of the Cochrane Wounds Group (compiled from regular searches of many electronic databases including

# Finding Systematic Reviews and Meta-Analyses in *PubMed*

- Use Clinical Queries Section: Systematic Reviews

## Find Systematic Reviews

For your topic(s) of interest, this search finds citations for systematic reviews, meta-analyses, clinical trials, evidence-based medicine, consensus development conferences, and guidelines.

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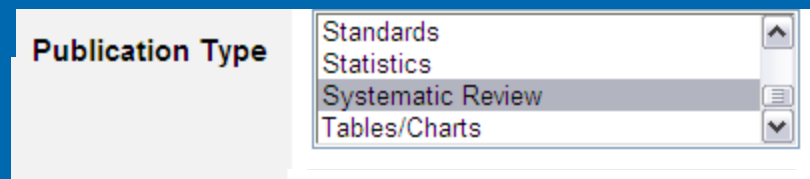
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# Finding Systematic Reviews and Meta-Analyses in *CINAHL Plus*

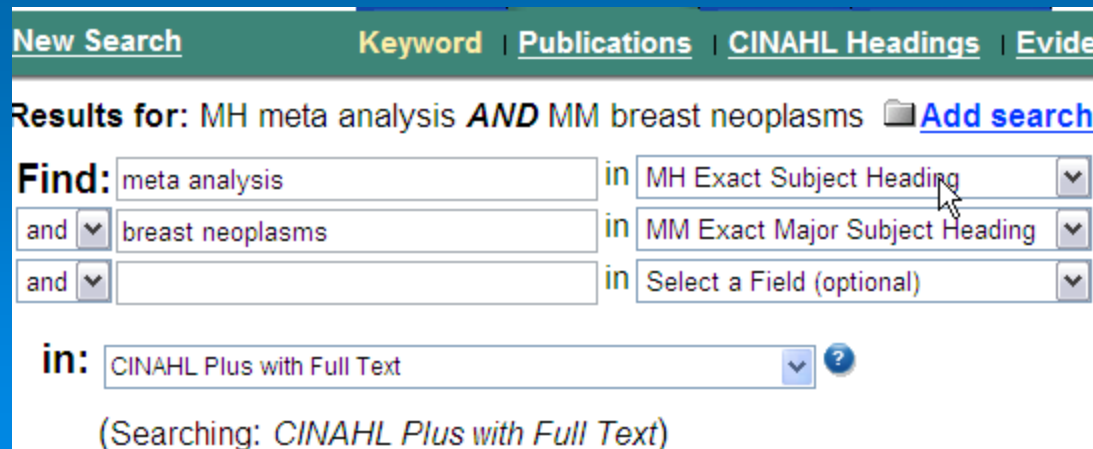
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Publication Type

- Standards
- Statistics
- Systematic Review
- Tables/Charts

- Search for Meta Analysis as a Subject Heading



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and breast neoplasms in MM Exact Major Subject Heading

and in Select a Field (optional)

in: CINAHL Plus with Full Text

(Searching: CINAHL Plus with Full Text)

# Search for Evidence in Drug and Natural Medicines Databases

- Micromedex (\$) [www.micromedex.com](http://www.micromedex.com)
- Natural Medicines Comprehensive Database (\$)
  - [www.naturaldatabase.com](http://www.naturaldatabase.com)
- Natural Standard Online
  - Available through MedlinePlus
  - [www.nlm.nih.gov/medlineplus/druginformation.html](http://www.nlm.nih.gov/medlineplus/druginformation.html)

# Micromedex (\$)

[www.micromedex.com](http://www.micromedex.com)


- Clinical information on toxicology, drugs, drug interactions, and reproductive risks
- Provides evidence-based medical information: *DiseaseDex*
- Provides evidence-based drug information
- Available at most hospitals and on the UW HealthLinks Care Provider Toolkit



# Natural Medicines Comprehensive Database (\$)

Search:

[Advanced Search](#)

**NATURAL MEDICINES**  
COMPREHENSIVE DATABASE 

Scientific Gold Standard for Evidence-Based, Clinical Information on Natural Medicines

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Search Results > FENUGREEK

## FENUGREEK

**Quick Links:**

<a href="#">Full Monograph</a>	<a href="#">Interactions with Drugs</a>	<a href="#">Also Known As</a>
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<a href="#">Adverse Reactions</a>	<a href="#">Interactions with Lab Tests</a>	<a href="#">Editor's Comments</a>
<a href="#">Dosage/Administration</a>	<a href="#">Interactions with Diseases</a>	<a href="#">References</a>
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**Also Known As:** [Alholva](#), [Bird's Foot](#), [Bockshornklee](#), [Bockshornsame](#), [Chandrika](#), [Egypt Fenugreek](#), [Foenugraeci Semen](#), [Foenugreek](#), [Greek Clover](#), [Greek Hay](#), [Greek Hay Seed](#), [Hu Lu Ba](#), [Methi](#), [Methika](#), [Medhika](#), [Trigonella](#).

**Scientific Name:** [Trigonella foenum-graecum](#); [Trigonella foenugraecum](#).  
Family: [Fabaceae/Leguminosae](#).

**People Use This For:** Orally, fenugreek is used for lowering blood glucose in people with diabetes, loss of appetite, dyspepsia, gastritis, constipation, atherosclerosis, high serum cholesterol and triglycerides, and for promoting lactation.

and flatulence (622,12534). V  
ctions including nasal con  
ck (719). The paste of fenu  
ness, facial swelling, and w  
may cause the neonate to  
does not appear to cause l  
fenugreek tea. Loss of  
consciousness may also occur in children drinking tea made from fenugreek (9782).

## Interactions with Herbs & Supplements:

**HERBS WITH ANTICOAGULANT/ANTIPLATELET POTENTIAL:** Concomitant use of herbs that have co  
that might affect platelet aggregation could theoretically increase the risk of bleeding in some people  
(5191,7162,7389). These herbs include angelica, clove, danshen, garlic, ginger, ginkgo, red clover, tur

# Drugs, Supplements & Herbal Information page

[www.nlm.nih.gov/medlineplus/druginformation.html](http://www.nlm.nih.gov/medlineplus/druginformation.html)

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## Drug Information

Browse by first letter of generic or brand name drug:

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#) [0-9](#)

Information on thousands of prescription and over-the-counter medications is provided through two drug resources

- MedMaster™†, a product of the [American Society of Health-System Pharmacists \(ASHP\)](#)
- USP DI® Advice for the Patient® ‡, a product of the [United States Pharmacopeia \(USP\)](#).

For additional drug information, see the MedlinePlus [drug therapy](#) topic pages.

## Herbs and Supplements

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Natural Standard is an international research collaboration that aggregates and synthesizes data on complementary and alternative therapies.

- Using a comprehensive methodology and reproducible grading scales, information is created that is evidence-based, consensus-based, and peer-reviewed
- Tapping into the collective expertise of a multidisciplinary Editorial Board.

For additional herb and supplement information, see the MedlinePlus [herbal medicine](#) topic page.

# 105 Herbs and Supplements Monographs in English & Spanish Peppermint oil

## Peppermint oil (*Mentha x piperita* L.)

Natural Standard Bottom Line Monograph, Copyright © 2005 ([www.naturalstandard.com](http://www.naturalstandard.com)).  
Commercial distribution prohibited. This monograph is intended for informational purposes only, and should not be interpreted as specific medical advice. You should consult with a qualified healthcare provider before making decisions about therapies and/or health conditions.



While some complementary and alternative techniques have been studied scientifically, high-quality data regarding safety, effectiveness, and mechanism of action are limited or controversial for most therapies. Whenever possible, it is recommended that practitioners be licensed by a recognized professional organization that adheres to clearly published standards. In addition, before starting a new technique or engaging a practitioner, it is recommended that patients speak with their primary healthcare provider(s). Potential benefits, risks (including financial costs), and alternatives should be carefully considered. The below monograph is designed to provide historical background and an overview of clinically-oriented research, and neither advocates for or against the use of a particular therapy.

### Related Terms:

- Balm mint, black peppermint, brandy mint, curled mint, Feullis de menthe, Japanese peppermint, Katzenkraut (German), lamb mint, *Mentha arvensis* L. var *piperascens*, menta prima (Italian), *Menthae piperitae aetheroleum* (peppermint oil), *Menthae piperita* var *officinalis*, *Menthae piperitae folium* (peppermint leaf), *Menthe anglaise*, *Menthe poivre*, *Menthe poivree*, *Mentha piperita* var *vulgaris*, Our Lady's mint, pebermynte (Danish), Pfefferminz (German), Porminzen, Schmecker, spearmint (*Mentha spicata* L.), water mint (*Mentha aquatica*), white peppermint, WS(R) 1340.
- **Essential oil constituents:** Cineol, isomenthone, liminene, menthofuran, menthol, menthone, menthyl acetate, terpenoids.
- **Leaf constituents:** Caffeic acid, chlorogenic acid, luteolin, hesperidin, rutin, "volatile" oil.
- **Selected brand names:** Ben-Gay®, Colpermin®, China Maze, Cholaktol, Citaethol, Enteroplant® (contains peppermint and caraway oil), Kiminto, Mentacur, Mentholatum, Mintec, Rhuli Gel®, Robitussin® cough drops, SX Mentha®, Vicks VapoRub®.
- **Combination products:** Absorbine Jr.®, Iberogast®, Listerine®.

## Aceite de menta (*menta piperita*)

Natural Standard Bottom Line Monograph, Copyright © 2005 ([www.naturalstandard.com](http://www.naturalstandard.com)).  
Se prohíbe su distribución comercial. Esta monografía tiene la intención de servir para fines informativos únicamente, por lo cual no se debe interpretar como un consejo médico específico. Usted deberá consultar con un proveedor médico calificado antes de tomar decisiones respecto a terapias y/o afecciones de salud.



No obstante se han estudiado de forma científica ciertas técnicas complementarias y alternas, para la mayoría de las terapias hay limitación o controversia sobre los datos de alta calidad respecto a la seguridad, eficacia y mecanismo de acción. Se recomienda, al máximo posible, que los practicantes cuenten con licencias expedidas por una organización profesional reconocida que se adhiera a normas claramente publicadas. Además, antes de iniciar una nueva técnica o contratar a un practicante, se recomienda que los pacientes consulten con su(s) proveedor(es) médico(s) principal(es). Se deben considerar atentamente los beneficios y riesgos potenciales (incluye los costos financieros) así como las alternativas. La siguiente monografía está diseñada para ofrecer una historia y un resumen de la investigación con orientación clínica, y la misma ni defiende ni se opone al uso de una terapia en particular.

### Términos relacionados:

- Bálsamo de menta, menta negra, menta de brandy, menta crespá, Feullis de menthe, menta japonesa, Katzenkraut (alemán), menta de cordero, menta arvenis, L. var *piperascens*, menta prima (italiano), *Menthae piperitae aetheroleum* (aceite de menta) *Menthae piperita* var *officinalis*, *Menthae piperitae folium* (hoja de menta), *Menthe anglaise*, *Menthe poivree*, *Mentha piperita* var *vulgaris*, Our Lady's mint, pebermynte (danés), Pfefferminz (alemán), Porminzen, Schmecker, hierbabuena (*Mentha spicata*), menta acuática (*Mentha aquatica*), menta blanca, WS (R) 1340.
- **Elementos constituyentes esenciales del aceite:** Cineol, isomentona, limoneno, mentofurano, mentol, mentona, acetato de mentilo, terpenoides.
- **Elementos constituyentes de la hoja:** Ácido cafeico, ácido clorogénico, luteolina, hesperidina, rutin, aceite "volátil".
- **Selección de marcas registradas:** BenGay®, Colpermin®, China Maze, Cholaktol, Citaethol, Enteroplant® (contiene aceite de menta y alcaravea), Kiminto, Mentacur, Mentholatum, Mintec, Rhuli Gel®, Robitussin® cough drops (pastillas para la tos), SX Mentha®, Vicks VapoRub®.

## Evidence [Return to top](#)

*These uses have been tested in humans or animals. Safety and effectiveness have not always been proven. Some of these conditions should be evaluated by a qualified healthcare provider.*

<b>Uses based on scientific evidence</b>	<b>Grade*</b>
<b>Indigestion (non-ulcer dyspepsia)</b> <p>There is preliminary evidence from a small number of controlled trials that a combination of peppermint oil and caraway oil may be beneficial for dyspepsia (heartburn) symptoms. However, most studies have been poorly designed (methodologically weak with small sample sizes, inadequate use of control or placebo groups, unclear descriptions of blinding and randomization, and lack of use of standardized scales for identifying subjects or assessing endpoints). It is not clear which constituent(s) may be beneficial. Nonetheless, the existing evidence does suggest efficacy of this combination. It should be noted that heartburn can actually be a side effect of taking oral peppermint oil, which has been reported by patients in several controlled trials of peppermint oil. Patients with chronic heartburn should be evaluated by a qualified healthcare provider and may be advised to undergo a diagnostic endoscopy prior to initiating any treatment for heartburn.</p>	<b>B</b>
<b>Irritable bowel syndrome (IBS)</b> <p>Multiple randomized controlled trials of peppermint suggest significant improvements in irritable bowel syndrome (IBS) symptoms. Although the mechanism of action is not clear, pre-clinical studies suggest smooth muscle relaxing properties of peppermint (calcium antagonism may play a role). Enteric-coated peppermint preparations are generally recommended. Overall, studies have been brief with small sample sizes and methodological weaknesses (unclear diagnostic criteria, lack of validated measurement scales, unclear blinding and randomization procedures). Well-designed large trials are necessary before a strong recommendation can be made. Future studies should use standardized symptom scales and established diagnostic criteria to classify patients prior to enrollment (such as Rome II Diagnostic Criteria), uniform dosing and standardization, and longer duration.</p>	<b>B</b>
<b>Antispasmodic (gastric spasm)</b> <p>One study reports that peppermint oil solution administered intraluminally can be used as an antispasmodic agent with superior efficacy and fewer side effects than hyoscine-N-butylbromide administered by intramuscular injection during upper endoscopy.</p>	<b>C</b>
<b>Tension headache</b> <p>Application of diluted peppermint oil to the forehead and temples has been tested in people with headache. Studies have not been well conducted, and it is not clear if this is an effective treatment.</p>	<b>C</b>

# MedlinePlus

*medlineplus.gov*

- **#1 SOURCE** for basic quality consumer/patient information
- Includes drug information
- Medical Encyclopedia – full-text with illustrations
- Spanish version
- Preformulated *PubMed* searches
- Interactive tutorials
- Current health news

# MedlinePlus Content

Interactive tutorials:  
**175 total (soon)**

ClinicalTrials links on display:  
**640 (today)**

NIH-Seniorhealth  
**22 topics**

OR-Live surgery videos:  
**73**

Announcement listservs:  
**11 daily & weekly**



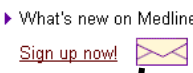
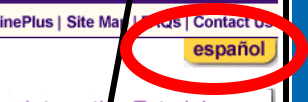
Health topics (today):  
**750 English**  
**657 Spanish**

3 drug and herbal databases:  
**approx 1700 monographs**

ADAM.com encyclopedia:  
**approx 4000 monographs**

Health news:  
**Approx 15-20 new stories added per day**

Directories:  
**Over 100 directories covering doctors, hospitals, clinics and libraries.**




***Keep Current with  
Alerting Services***



# Information Overload!

- 2 million articles published in biomedical journals each year
- considering everything of potential biomedical importance would require perusing about 6,000 articles per day...
- If you only read 2 articles a day, at the end of year you would be 60 centuries behind.

# What are Email Alert Services?

- Deliver current citations into your email
  - Based on a search strategy you create
  - In most cases, abstracts of the articles are provided
  - May provide links to *PubMed* and full-text articles
- 

# PubMed: MY NCBI

- Your personal space on the NLM computer system for **storing search strategies** to generate updates
- **Free** registration required
- Recent *PubMed* citations sent **automatically** to your email

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*Leave unchecked on public computers*

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My NCBI  
Go to: [pubmed.gov](http://pubmed.gov)  
And click on My NCBI

### What is My NCBI?

My NCBI is a central place to customize NCBI Web services. To use it, you must first [register](#), and your browser must accept [cookies](#).

You can use My NCBI to:

- Save searches
- Set up e-mail alerts for new content
- Display links to Web resources (LinkOut)
- Choose filters that group search results

Like all NCBI resources, My NCBI is free.

# Alerting Services

*[healthlinks.washington.edu/howto/alerts.html](http://healthlinks.washington.edu/howto/alerts.html)*

Alert Service	Database Coverage	RSS
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My NCBI	PubMed	yes
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Alerts	CINAHL CINAHLPlus	yes
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Science Direct Search	Science Direct Journals	yes
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*Step #3:  
Evaluate the Literature*



# Resource Table and Tips for Evaluating the Literature

- **Table:** Brockoff DY, Hastings-Tolsma MT. *Fundamentals of nursing research*. 3<sup>rd</sup> ed. Sudbury, MA: Jones and Bartlett, 2003. p. 64-9
- **Tip sheets** on how to evaluate different kinds of studies:  
[www.mclibrary.duke.edu/training/pdaformat](http://www.mclibrary.duke.edu/training/pdaformat)

# *Evidence Based Nursing* evaluation articles

- Cullum N. Evaluation of studies of treatment or prevention interventions. *Evid Based Nurs* 2000 Oct;3(4):100-2. and Part 2: applying the results of studies to your patients. *Evid Based Nurs* 2001 Jan;4(1):7-8.
- Ciliska D, Cullum N, Marks S. Evaluation of systematic reviews of treatment or prevention interventions. *Evid Based Nurs* 2001 Oct;4(4):100-4.
- Jull A. Evaluation of studies of assessment and screening tools, and diagnostic tests. *Evid Based Nurs* 2002 Jul;5(3):68-72.
- Russell CK, Gregory DM. Evaluation of qualitative research studies. *Evid Based Nurs* 2003 Apr;6(2):36-40.

# *Evidence Based Nursing* evaluation articles, continued

- Fineout-Overholt E, Melnyk BM. **Evaluation of studies of prognosis.** *Evid Based Nurs* 2004 Jan;7(1):4-8.
- Adamson J. **Evaluation of studies of causation (aetiology).** *Evid Based Nurs* 2004 Apr;7(2):36-40.
- Graham ID, Harrison MB. **Evaluation and adaption of clinical practice guidelines.** *Evid Based Nurs* 2005 Jul;8(3):68-72.
- Marks S, Ciliska D, Jull. **Evaluation of studies of treatment harm.** *Evid Based Nurs* 2006 Oct;9(4):100-4.
- Haynes B. **Of studies, syntheses, synopses, summaries, and systems: the "5S" evolution of information services for evidence-based healthcare decisions.** *Evid Based Nurs* 2007 Jan;10(1):6-7.

# 5 Steps for EBP

1. Convert need for information into **answerable question**
2. Track down **best evidence** to answer question
3. Critically **appraise evidence** for validity, impact and applicability
4. **Integrate** critical appraisal with your clinical expertise and patient's unique circumstances
5. **Evaluate** effectiveness in executing steps 1-4 and seek ways to improve

# Final Thoughts

Contact Your **Ultimate Search Engine...**  
*a librarian!*

Watch for **HEAL-WA** e-resources starting  
in January 2009.



# For more UW information...

If you are **affiliated with the UW**, contact the *nursing library liaison*:

Janet G. Schnall, MS, AHIP

206.543.7474

[schnall@u.washington.edu](mailto:schnall@u.washington.edu)



# For more information...

- For non- UW affiliates, contact the **National Network of Libraries of Medicine (NN/LM)** for exhibits, workshops, classes, and project collaborations

NN/LM                      800.338.7657

Linda Milgrom            206.221.3400

[lmilgrom@u.washington.edu](mailto:lmilgrom@u.washington.edu)



Health Sciences Libraries  
UNIVERSITY OF WASHINGTON

# Beyond PubMed: Maximizing the Web for Evidence-Based Practice

PowerPoint presentation:

[healthlinks.washington.edu/hsl/liaisons/schnall/ebpoc2008.ppt](http://healthlinks.washington.edu/hsl/liaisons/schnall/ebpoc2008.ppt)

Handout:

[healthlinks.washington.edu/hsl/liaisons/schnall/ebpoc2008.doc](http://healthlinks.washington.edu/hsl/liaisons/schnall/ebpoc2008.doc)