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E-Resources for Point-of-Care Decision-Making

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Objectives

- Identify current E-Resources for clinical decision-making in nursing
- Recognize clinical application of E-Resources in practice
- Describe several point-of-care mobile apps to use for evidence-based practice

List of E-Resources for Point-of-Care Decision-Making

E-Resources for Point-of-Care Decision-Making

Janet G. Schnall, MS, AHIP
University of Washington Health Sciences Libraries
schnall@uw.edu
http://libguides.hsl.washington.edu/schnall

This list includes selected point-of-care E-Resources to help clinicians in decision-making.

Key
$=Fee required (or contact your local library)Type equation here.
M=Mobile (includes mobile applications and interfaces optimized for mobile access)
O=Online
H=HEAL-WA (Online access to evidence-based health information resources for Washington State nurses and other health professionals; registration required) http://heal-wa.org/
*=E-Resource discussed in the presentation

General Medical Information

ACCESSSS http://plus.mcmaster.ca/accessss/
Metasearch engine that simultaneously searches evidence-driven medical publications and high quality clinical literature. Need to register. **O***

CINAHL Cumulative Index to Nursing and Allied Health Literature
http://www.ebscohost.com/biomedical-libraries/the-cinahl-database
Indexes the literature of nursing, biomedicine, health sciences librarianship, alternative/complementary medicine, consumer health and 17 allied health disciplines. **$HMO**

Cochrane Database of Systematic Reviews http://www.cochrane.org/
Systematic reviews of primary research in human health care and health policy that investigate the effects of interventions for prevention, treatment, and rehabilitation. Internationally recognized as the highest standard in evidence-based health care. **$HMO**

Diagnosaurus http://www.unboundmedicine.com/uguides/diag/diagnosaurus/diagnosaurus.htm
Differential diagnosis tool searching over 1,000 differential diagnoses by organ system, symptom, disease, or browse all entries to help you reach an accurate diagnosis. Free or minimal fee. **$MO**

DynaMed http://ebscohost.com/dynamed/
Evidence-based summaries for over 3,500 topics that answer clinical questions occurring during practice. Updated daily; monitors the content of more than 500 medical journals and systematic evidence review databases. Includes drug and disease information. **$HMO***

List of E-Resources for Point-of-Care Decision-Making

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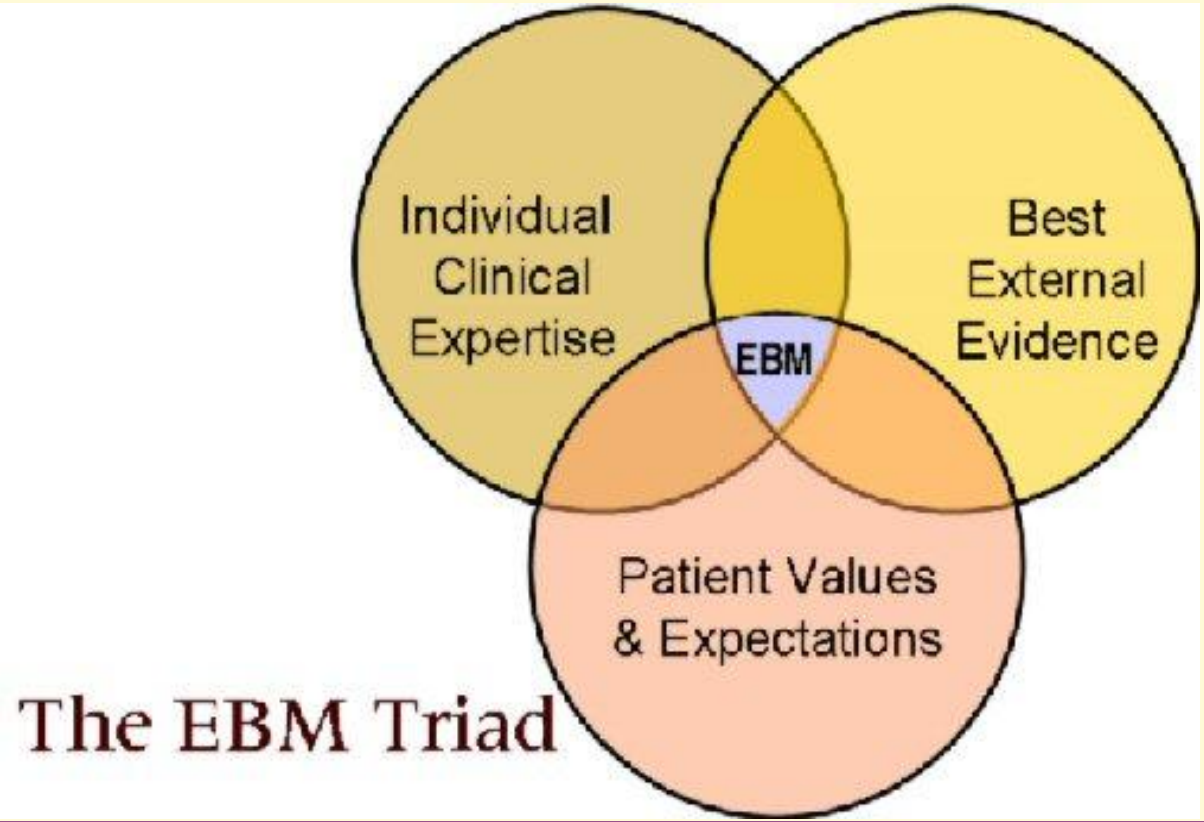
What is evidence-based practice?

- 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



Steps for EBN Practice

0. Cultivate a spirit of inquiry.
1. Convert your information into an answerable question (PICO)
2. Search the literature for the best available evidence
3. Critically appraise the evidence for validity and usefulness
4. Apply the findings to your clinical practice along with clinical expertise and patient's perspective to plan care
5. Evaluate the outcomes of your practice decisions or changes based on evidence
6. Disseminate EBP results

Melnyk BM, Fineout-Overholt E, Stillwell SB, Williamson KM. Evidence-based practice: step by step: the seven steps of evidence-based practice. *Am J Nurs* 2010 Jan;110(1):51-3

What makes good evidence?

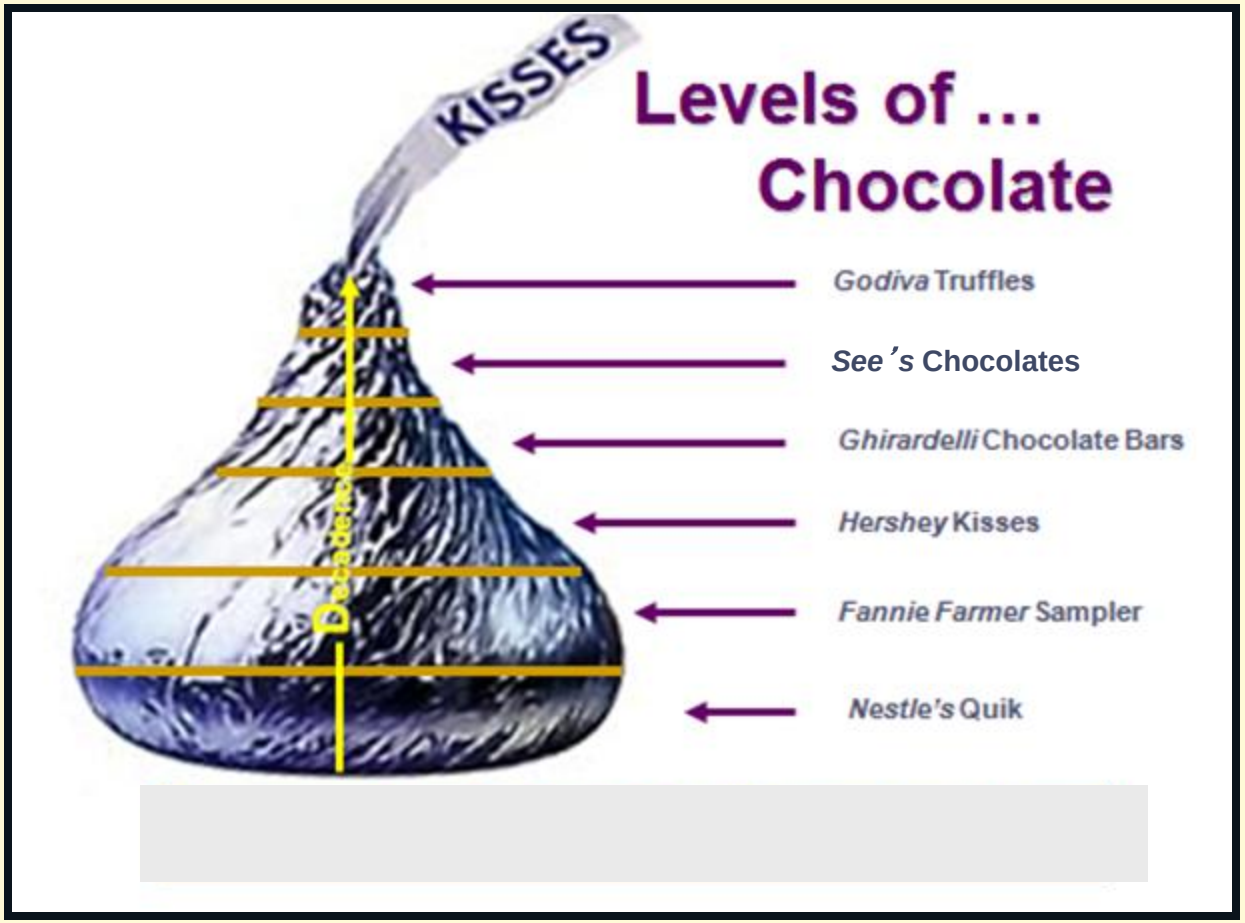
Good

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

Shoddy

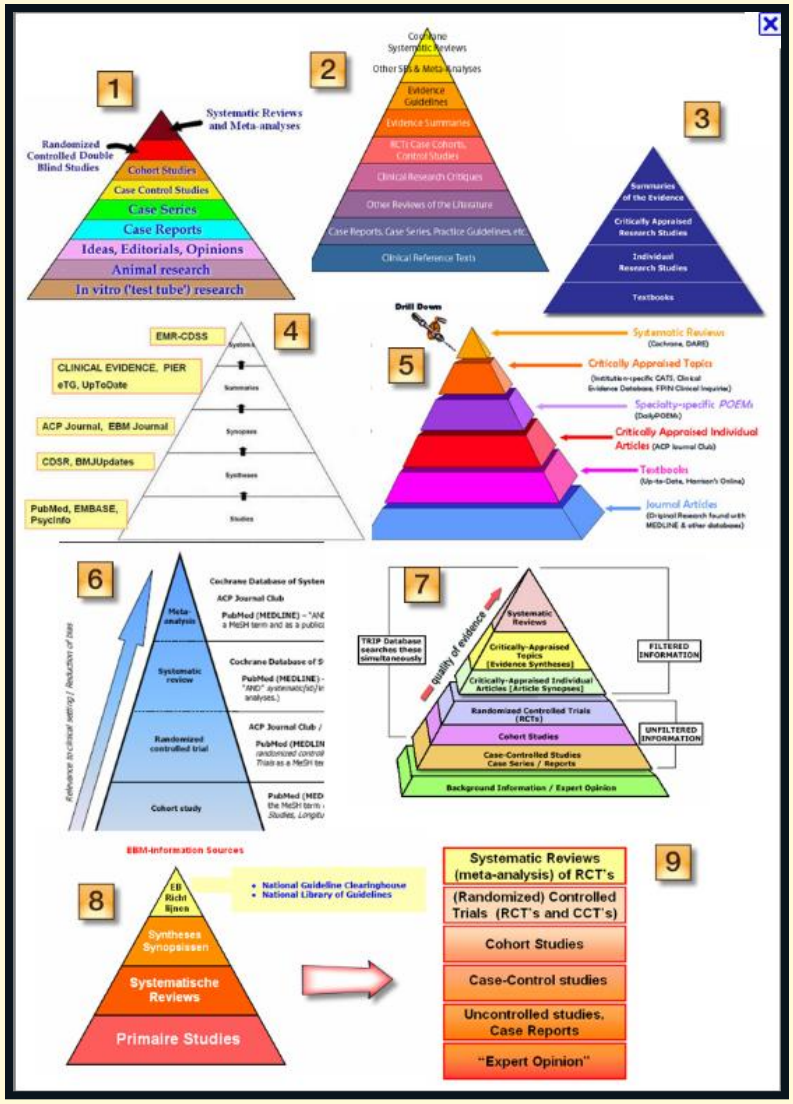
- Opinion
- Consensus
- Because it's been done this way for 100 years

Chocolate Decadence Pyramid

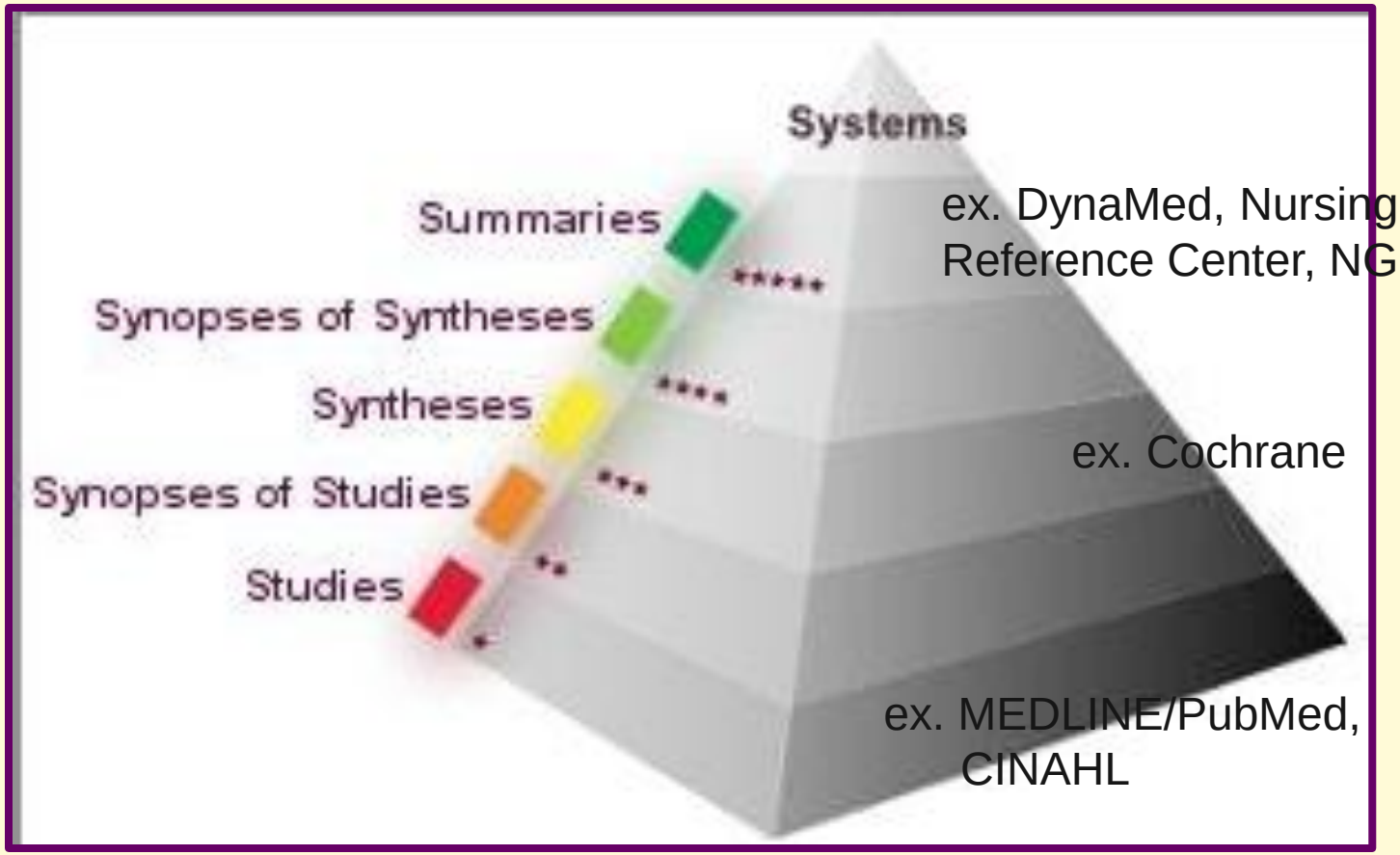


Slide adapted from Edward G. Miner Library, University of Rochester School of Medicine and Dentistry

Lots of Evidence Pyramids!



6S Pyramid



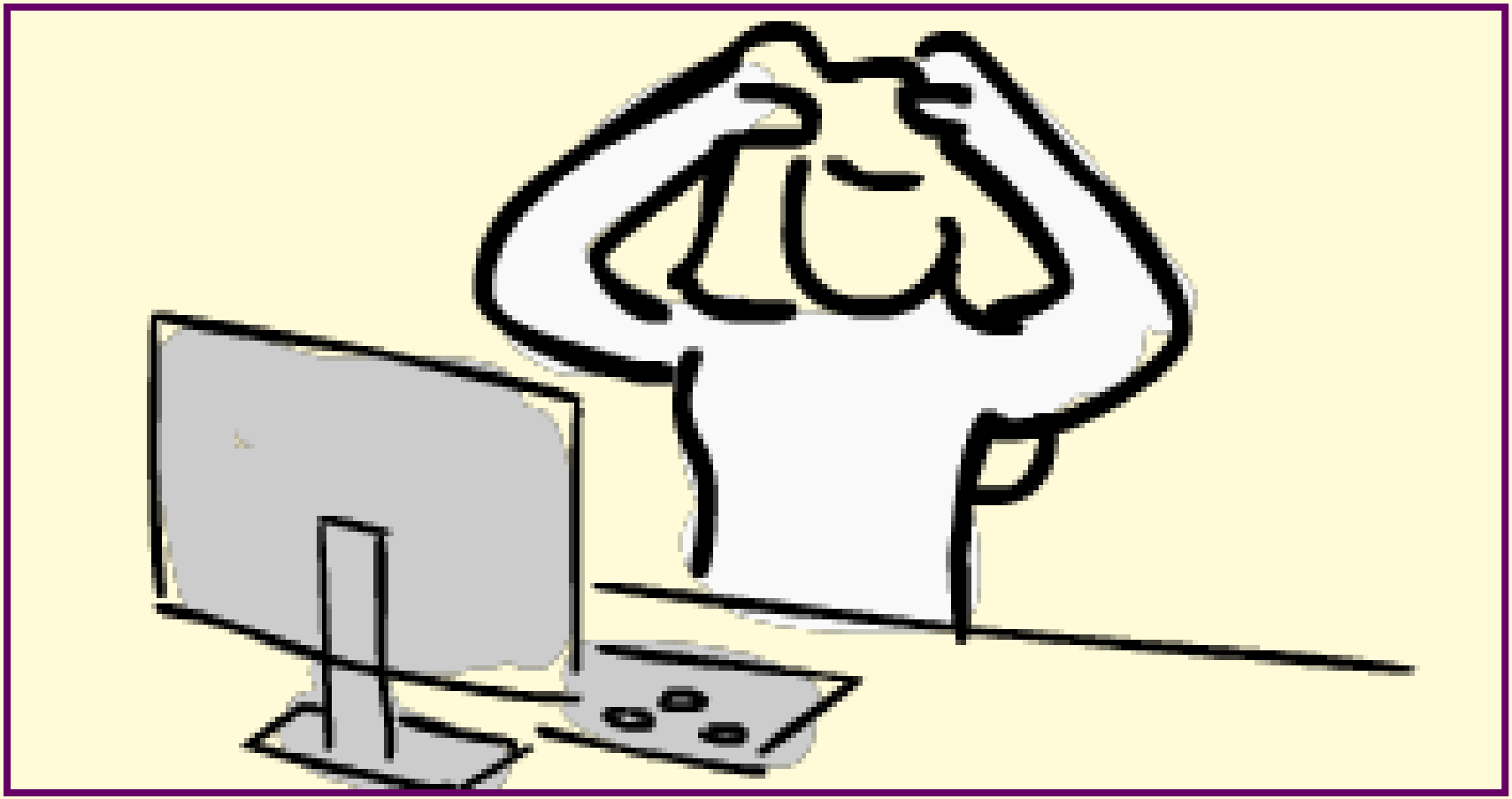
Background Information: ex.Textbooks, UptoDate

Case Scenario

Mrs. Hernandez, a 45 year-old Spanish speaking woman, has been recently diagnosed with Diabetes Type 2.

- She presents in your clinic with uncontrolled hypertension.
- Prescribed medications include Lisinopril, Clonidine, and Metformin.
- She takes fenugreek.
- Her friend is taking an aspirin daily to prevent a stroke. Should she?
- You notice a suspicious rash on her arms.

Where to look for evidence-based information at point-of-care?



DynaMed

- Provides summaries of the best evidence for over 3,500 clinical topics
- Can quickly browse and find key recommendations
- Updated daily
- Monitors content of over 500 journals and systematic review databases
- **M**: Available on mobile devices

DynaMed

Need: Current evidence-based information on treating hypertension in diabetic patients

- Provides summaries of the best evidence for over 3,500 clinical topics
- Can quickly browse and find key recommendations
- Updated daily
- Monitors content of over 500 journals and systematic review databases
- **M**: Available on mobile devices

Send Comment to Editor

Hypertension treatment in patients with diabetes

Updated 2013 Oct 07 01:56:00 PM: ADA position statement on standards of medical care in diabetes (National Guideline Clearinghouse 2013 Oct 7) view update | Show more updates

Related Summaries:

- Hypertension (list of topics)
- Diabetes (list of topics)
- Diabetes mellitus type 2
- Diabetic nephropathy
- Hypertension
  - Antihypertensive medications overview
  - First-line therapy for hypertension
- Cardiovascular risk prediction
- DASH diet

Overview:

- lifestyle modifications which may lower blood pressure are recommended for patients with diabetes and blood pressure > 120/80 mm Hg and include (ADA Grade B)
  - weight reduction
  - Dietary Approaches to Stop Hypertension (DASH) diet (fruits, vegetables, low-fat dairy, reduced fat)
  - dietary sodium restriction
  - aerobic physical activity
  - moderate alcohol consumption
- target blood pressure in patients with diabetes
  - American Diabetes Association (ADA) recommends goal blood pressure < 140/80 mm Hg (ADA Grade B) but

Result List 2 of 666
Expand All | Collapse All
A A A
Search Within Text

Hypertension treatment in patients with diabetes

Target Blood Pressure Goals

Choice of Antihypertensive Agents

Section overview:

- guidelines vary but generally recommend angiotensin-converting enzyme (ACE) inhibitor as part of initial therapy
- most patients will require 2 or more drugs to achieve target blood pressure
- 4 major antihypertensive classes (diuretics, beta blockers, ACE inhibitors, calcium channel blockers) appear to reduce cardiovascular mortality and morbidity in hypertensive patients with diabetes (level 2 [mid-level] evidence)
- angiotensin receptor blockers (ARBs) may not reduce cardiovascular morbidity and mortality (level 2 [mid-level] evidence) but reduce risk for end-stage renal disease (level 1 [likely reliable] evidence)
- all major antihypertensive regimens (ACE inhibitors, ARBs, calcium channel blockers, diuretics, beta blockers) appear to have similar short-term and medium-term effects on major cardiovascular events (level 2 [mid-level] evidence)
- insufficient evidence to establish role for beta blockers as first-line therapy for hypertension in patients with diabetes
- significant differences in specific cardiovascular outcomes reported in some randomized trials
  - ACE inhibitors may reduce risk for myocardial infarction more than calcium channel blockers in patients with diabetes (level 2 [mid-level] evidence)
  - ramipril (an ACE inhibitor) 10 mg/day (but not 1.25 mg/day) decreases mortality and cardiovascular outcomes in patients with diabetes (level 1 [likely reliable] evidence)
  - losartan (an ARB) reduces strokes (and total cardiovascular events) compared to atenolol (a beta blocker) as first-line therapy in high-risk patients (level 1 [likely reliable] evidence), but atenolol may be less effective than other antihypertensives
  - combination of perindopril plus indapamide (Preterax) reduces mortality in patients with type 2 diabetes (level 1 [likely reliable] evidence)
  - benazepril-amlodipine (Lotrel) reduces cardiovascular morbidity compared to benazepril-hydrochlorothiazide (Lotensin HCT) in high-risk patients with hypertension (level 1 [likely reliable] evidence)
- in patients with diabetic nephropathy
  - ACE inhibitors may reduce risk for end-stage kidney disease (level 2 [mid-level] evidence), and ACE inhibitors at maximum tolerable dose (but not at lower doses) may reduce all-cause mortality (level 2 [mid-level] evidence)
  - ARBs may reduce risk for end-stage kidney disease in hypertensive patients with type 2 diabetes (level 2 [mid-level] evidence)
- combination ACE inhibitor plus ARB does not reduce mortality or cardiovascular morbidity compared to ACE inhibitor alone (level 1 [likely reliable] evidence) and may worsen renal impairment despite greater efficacy for reducing blood pressure and urinary albumin excretion (level 3 [lacking direct] evidence)

Level of Evidence

Guideline recommendations:

- **Seventh Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC 7)**[2]
  - most patients will require 2 medications to reach goal (< 130/80 mm Hg)
  - initial drug choices

Level of Evidence

Hypertension treatment in patients with diabetes

Angiotensin-converting enzyme (ACE) inhibitors:

- **ramipril has cardiovascular benefits for patients with diabetes at 10 mg/day but not with 1.25 mg/day (level 1 [likely reliable] evidence)**
  - **ramipril 10 mg/day decreases mortality and cardiovascular outcomes in patients with diabetes and ≥ 1 additional cardiovascular risk factor (level 1 [likely reliable] evidence)**
    - based on randomized trial (HOPE trial) and substudy (MICRO-HOPE)
    - 3,577 patients with diabetes with at least 1 other cardiovascular risk factor randomized to ramipril 10 mg/day vs. placebo for 5 years
    - trials stopped after 4.5 years due to benefits found in ramipril group
    - MICRO-HOPE substudy was preplanned evaluation within HOPE trial assessing development of overt nephropathy
    - comparing ramipril vs. placebo
      - 15.3% vs. 19.8% combined primary outcome (myocardial infarction, stroke, or cardiovascular death) (p = 0.0004, NNT 23)
      - 10.2% vs. 12.9% myocardial infarction (p = 0.01, NNT 37)
      - 4.2% vs. 6.1% stroke (p = 0.0074, NNT 53)
      - 6.2% vs. 9.7% cardiovascular death (p = 0.0001, NNT 29)
      - 10.8% vs. 14% total mortality (p = 0.004, NNT 32)
      - 9.4% vs. 10.5% laser therapy for retinopathy (not significant)
      - 0.5% vs. 0.5% dialysis (not significant)
      - 15.1% vs. 17.6% overt nephropathy based on proteinuria (p = 0.036, NNT 40)
      - 37% vs. 37% stopped drug at any time
      - 7% vs. 2% stopped drug due to cough (NNH 20)
    - Reference - HOPE and MICRO-HOPE trials (Lancet 2000 Jan 22;355(9200):253 **EBSCO*host* Full Text**), correction can be found in Lancet 2000 Sep 2;356(9232):860, editorial can be found in Lancet 2000 Jan 22;355(9200):246 **EBSCO*host* Full Text**, considerable commentary can be found in Lancet 2000 Apr 1;355(9210):1181
    - see HOPE trial for additional details
  - **ramipril 1.25 mg/day not effective for preventing cardiovascular outcomes or progression to end-stage renal disease (level 1 [likely reliable] evidence)**
    - based on randomized trial
    - 4,912 patients > 50 years old with type 2 diabetes and urinary albumin excretion at least 20 mg/L on 2 consecutive samples and serum creatinine < 150 mcmol/L (1.7 mg/dL) were randomized to ramipril 1.25 mg vs. placebo orally once daily for 3-6 years
    - no significant difference in combined outcome of cardiovascular death, nonfatal myocardial infarction, stroke, hospital admission for heart failure, and end-stage renal failure
    - no significant differences in any of these outcomes individually
    - Reference - BMJ 2004 Feb 28;328(7438):495 full-text, correction can be found in BMJ 2004 Mar 20;328(7441):686, commentary can be found in BMJ 2004 Apr 24;328(7446):1016 full-text

Level of Evidence

- **ACE inhibitors may reduce risk for myocardial infarction more than calcium channel blockers in patients with diabetes (level 2 [mid-level] evidence)**
  - based on 2 randomized trials with limitations
  - **calcium channel blocker nisoldipine associated with increased risk of myocardial infarction compared to angiotensin-converting enzyme (ACE) inhibitor enalapril in patients with hypertension and type 2 diabetes (level 2 [mid-level] evidence)**
    - based on randomized trial with difference in use of supplemental antihypertensive agents
    - 470 patients aged 40-74 years with type 2 diabetes, diastolic blood pressure > 90 mm Hg, and no antihypertensive medications were randomized to intensive vs.

Hypertension treatment in patients with diabetes

Guidelines:

- see Hypertension for full list of guidelines

United States guidelines:

- American Diabetes Association (ADA) position statement on standards of medical care in diabetes can be found in Diabetes Care 2013 Jan;36 Suppl 1:S11 full-text, executive summary can be found in Diabetes Care 2013 Jan;36 Suppl 1:S4 full-text
- National Kidney Foundation Kidney Disease Outcomes Quality Initiative (NKF KDOQI) clinical practice recommendations for diabetes and chronic kidney disease can be found at NKF KDOQI 2007 (unchanged in KDOQI 2012 update PDF)
- American Society of Hypertension (ASH) position on treatment of hypertension in patients with diabetes can be found in J Clin Hypertens (Greenwich) 2008 Sep;10(9):707 **EBSCO*host* Full Text**
- Cincinnati Children's Hospital Medical Center (CCHMC) Best evidence statement (BESt) on screening of hypertension in pediatric patients with diabetes can be found at CCHMC or at National Guideline Clearinghouse 2011 Nov 7:33572, National Guideline Clearinghouse 2012 :34038
- American Association of Clinical Endocrinologists (AACE) medical guideline on developing diabetes mellitus comprehensive care plan can be found in Endocr Pract 2011 Mar-Apr;17 Suppl 2:1 or at National Guideline Clearinghouse 2011 Nov 14:34038, commentary can be found in Endocr Pract 2011 Sep 1;17(5):829
- American Heart Association/American Diabetes Association (AHA/ADA) statement on primary prevention of cardiovascular diseases in people with diabetes can be found in Circulation 2007 Jan 2;115(1):114 full-text
- American Heart Association/American College of Cardiology Foundation (AHA/ACCF) guideline on secondary prevention and risk reduction therapy for patients with coronary and other atherosclerotic vascular disease can be found in Circulation 2011 Nov 29;124(22):2458 full-text, J Am Coll Cardiol 2011 Nov 29;58(23):2432, previous version can be found in Circulation 2006 May 16;113(19):2363 full-text
- American College of Physicians (ACP) guideline on treatment of hypertension in patients with type 2 diabetes can be found in Ann Intern Med 2003 Apr 1;138(7):587 **EBSCO*host* Full Text**, supporting evidence-based review in Ann Intern Med 2003 Apr 1;138(7):593 **EBSCO*host* Full Text**, commentary can be found in Ann Intern Med 2004 Mar 16;140(6):487 **EBSCO*host* Full Text**
- Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure seventh report (JNC7) can be found in Hypertension 2003 Dec;42(6):1206 full-text, JNC 7 report 2004 Aug PDF, Reference Card, Express Report
  - summary can be found in JAMA 2003 May 21;289(19):2560, correction can be found in JAMA 2003 Jul 9;290(2):197, considerable commentary can be found in JAMA 2003 Sep 10;290(10):1312
  - summary can be found in Am Fam Physician 2003 Jul 15;68(2):376, editorial can be found in Am Fam Physician 2003 Jul 15;68(2):228

- target blood pressure in patients with diabetes
  - American Diabetes Association (ADA) recommends goal blood pressure < 140/80 mm Hg (ADA Grade B) but

Top
Related
Overvie
Lifestyl
Target Goals
Choice Antihyp
Additio
Quality
Guideli Resour
Patient
Referer
Send Comment to Editor

UpToDate

Treatment of hypertension in patients with diabetes mellitus

Treatment of hypertension in patients with diabetes mellitus

Treatment of hypertension in patients with diabetes mellitus

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Disclosures

All topics are updated as new evidence becomes available and our peer review process is complete.
Literature review current through: Aug 2013. | **This topic last updated:** Jan 22, 2013.

INTRODUCTION AND PREVALENCE — Hypertension is a common problem in patients with both type 1 and type 2 diabetes but the time course in relation to the duration of diabetes is different [1-3]. Among those with type 1 diabetes, the incidence of hypertension rises from 5 percent at 10 years, to 33 percent at 20 years, and 70 percent at 40 years [2]. There is a **close relation** between the prevalence of hypertension and increasing albuminuria. The blood pressure typically begins to rise within the normal range at or within a few years after the onset of moderately increased albuminuria (the new term for what was previously called "microalbuminuria" [4]) and increases progressively as the renal disease progresses. (See "Moderately increased albuminuria (microalbuminuria) in type 1 diabetes mellitus", section on 'Risk factors'.)

These features were illustrated in a study of 981 patients who had type 1 diabetes for five or more years [3]. Hypertension was present in 19 percent of patients with normoalbuminuria, 30 percent with high albuminuria, and 65 percent with severely increased albuminuria (the new term for what was previously called "macroalbuminuria" [4]). The incidence of hypertension eventually reaches 75 to 85 percent in patients with progressive diabetic nephropathy [5]. The risk of hypertension is highest in blacks, who are also at much greater risk for renal failure due to diabetic nephropathy. (See "Overview of diabetic nephropathy".)

The findings are different in patients with type 2 diabetes. In a series of over 3500 newly diagnosed patients, 39 percent were already hypertensive [6]. In approximately one-half of these patients, the elevation in blood pressure (BP) occurred **before** the onset of moderately increased albuminuria. Hypertension was strongly associated with obesity and, not surprisingly, the hypertensive patients were at increased risk for cardiovascular morbidity and mortality. (See "Moderately increased albuminuria (microalbuminuria) in type 2 diabetes mellitus".)

This topic will review the pathogenesis of hypertension in patients with diabetes mellitus and the three major treatment issues:

- The evidence supporting benefit from the treatment of hypertension
- The choice of antihypertensive drugs
- The goal blood pressure

PATHOGENESIS — In addition to the development of diabetic nephropathy, at least three other factors have been proposed to contribute to hypertension in diabetes: hyperinsulinemia, extracellular fluid volume expansion, and increased arterial stiffness.

Hyperinsulinemia — Hyperinsulinemia, due to insulin resistance in type 2 diabetes or to insulin administration, may increase systemic blood pressure. In one report of 80 type 2 diabetic patients begun on insulin, the blood pressure rose from 132/81 to 148/89 mmHg [7]. This hypertensive response,

UpToDate

SUMMARY AND RECOMMENDATIONS — The prevalence and time of development of hypertension in patients with diabetes mellitus varies with the type of diabetes. (See 'Introduction and prevalence' above.)

- Among patients with type 1 diabetes, the incidence of hypertension rises from 5 percent at 10 years' duration, to 33 percent at 20 years, and 70 percent at 40 years. The blood pressure typically begins to rise within the normal range at or within a few years after the onset of moderately increased albuminuria (formerly "microalbuminuria") and increases progressively as the renal disease progresses.

- Among patients with type 2 diabetes, as many as 40 percent are hypertensive at the time of diagnosis and, in approximately one-half of these patients, the elevation in blood pressure occurred **before** the onset of moderately increased albuminuria.

Choice of antihypertensive agents — The choice of antihypertensive agents in diabetic patients is based upon their ability to prevent adverse cardiovascular events and to slow progression of renal disease, if present. The choice is not based upon retinopathy end points since comparative trials have not demonstrated superiority of one agent over another for retinopathy. (See "Prevention and treatment of diabetic retinopathy", section on 'Antihypertensive therapy'.)

- In the ALLHAT trial, diabetic patients had a significantly lower rate of new onset heart failure with low-dose chlorthalidone compared to amlodipine and lisinopril. This effect may have been due at least in part to a lower attained blood pressure with chlorthalidone. (See 'ALLHAT trial' above.)

- In the ACCOMPLISH trial, the combination of an ACE inhibitor and amlodipine provided better protection against cardiovascular outcomes in diabetic patients than the combination of an ACE inhibitor and low-dose hydrochlorothiazide. (See 'Combination therapy and ACCOMPLISH' above.)

- ACE inhibitors and ARBs protect against the development of progressive nephropathy due to type 1 and 2 diabetes. (See "Treatment of diabetic nephropathy" and "Moderately increased albuminuria (microalbuminuria) in type 1 diabetes mellitus" and "Moderately increased albuminuria (microalbuminuria) in type 2 diabetes mellitus".)

An ACE inhibitor or ARB is clearly preferred as initial therapy in any hypertensive diabetic patient who has moderately increased albuminuria (formerly "microalbuminuria") or severely increased albuminuria (formerly "macroalbuminuria") in an attempt to slow renal disease progression. Most experts will also begin with an ACE inhibitor or ARB in hypertensive diabetic patients without proteinuria. This is unlikely to occur in patients with type 1 diabetes in whom moderately increased albuminuria typically precedes hypertension.

Although ALLHAT found some better outcomes with low-dose chlorthalidone, this effect could have been related to the lower attained

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Natural Standard

What is fenugreek?
Does it interact with meds?

- Provides high-quality, evidence-based information about complementary and alternative medicine
- Includes dietary supplements and integrative therapies
- Grades reflect level of available scientific data + or - the use of therapy for a specific medical condition
- **M**: Available on mobile devices
- Merging with *Natural Medicines Comprehensive Database* in early 2014

Fenugreek (*Trigonella foenum-graecum*)

Synonyms/Common Names/Related Substances:

1-methylnicotinic acid, 3-carboxy-1-methyl pyridinium, 3-O-alpha-L-rhamnosyl quercetin, 4-hydroxyisoleucine (4-OH-Ile), 5,7,3'-trihydroxy-5'-methoxylisoflavone, abish (Amharic), alholva (Spanish), alkaloids, amber, beta-carotene, betaines, beta-sitosteryl glucopyranoside, biochanin A, bird's foot, bockhornsklöver (Swedish), Bockshornsamen (German), Bockshornklee (German), calycosin, Canadian fenugreek seed, Canadian-grown fenugreek, carotenoids, çemen (Turkish), chilbe, CN 19062, CN 19067, CN 19070, CN 19071, coumarin, D-3-O-methyl-chiroinsitol, daidzein, dioscin, diosgenin, ethyl-alpha-D-glucopyranoside, Fabaceae, fatty acids, fenegriek, fenigreko, fenogreco (Galician, Spanish), fenogrego, fenugree, fenugreek flour, fenugreek gums, fenugreek leaves, fenugreek saponin I, fenugreek seed, fenugreek spouts, FenuLife®, fenu-thyme, fieno greco (Italian), flavonoids, *Foenugraeci* semen, formononetin, furostanol glycosides, galactomannan, gamma-schizandrin, gitogenin 3-O-alpha-L-rhamnopyranosyl-(1-->2)-beta-D-glucopyranoside, gitogenin 3-O-beta-D-xylopyranosyl-(1-->6)-beta-D-glucopyranoside, görögszéna (Hungarian), graine de fenugrec (French), gray hay, Greek hay, Greek hay seed, griechische Heusamen (German), halba (Malay), hilbeh (Arabic, Hebrew), hulba (Arabic), hu lu ba, irilone, iron, kaempferol 3,7-O-alpha-L-dirhamnoside, kaempferol-3-O-alpha-L-rhamnoside, kasoori methi (Hindi, Urdu), kozieradka pospolita (Polish), kreeka lambalääts (Estonian), lectins, mente (Kannada), mentikura (Telugu), mentulu (Telugu), methi (Assamese, Bengali, Dogri, Gujarati, Hindi, Maithili, Marathi, Nepali, Oriya, Punjabi, Urdu), methika (Sanskrit), methini, methri, methro, methylnicotinic acid, methyl-protodeltonin, methyl-protodioscin, minerals, mithi guti (Assamese), N-methyl nicotinic acid, N,N'-dicarbazyl, naringenin, niacin, nicotinic acid, orientin-2''-O-p-*trans*-coumarate, pazhitnik grecheskiy (Russian), penantazi (Burmese), phenolic acids, protodioscin, quarto, quercetin, quercetin 3,7-O-alpha-L-dirhamnoside, riboflavin, sag methi (Hindi), shambala, sapogenins, saponins, sarsasapogenin, sarsasapogenin 3-O-beta-D-xylopyranosyl-(1-->6)-beta-D-glucopyranoside, sarviapila (Finnish), scopoletin, shabaliidag (Pahlavi), shanbelile (Farsi), smilagenin, sotolone, star fenugreek, syndrex, tricin, tricin-7-O-beta-D-glucopyranoside, trigonella, *Trigonella*, *Trigonella balansae*, *Trigonella caerulea*, *Trigonella foenum-gracecum*, *Trigonella poenumgraecum* L., *Trigonella* semen, *Trigonella stellata*, trigonelline, trigoneoside Xa, trigoneoside Xb, trigoneoside XIb, trigoneoside XIIa, trigoneoside XIIb, trigoneoside XIIIa, uluhal (Sinhala), uwatu

Clinical Bottom Line/Effectiveness

Brief Background:

- Fenugreek is a plant in the family Fabaceae. Both the leaves and the seeds are commonly used. Fenugreek is produced in Asia, the Middle East, South America, and southern Europe. Fenugreek seeds are often used in the making of *garam masala* (South Asian spice blend).
- Fenugreek has a long history of medicinal uses in Indian and Chinese medicine and has been used for numerous indications, including labor induction and aiding digestion, and as a general tonic to improve metabolism and health.
- Preliminary animal and methodologically weak human trials have suggested possible hypoglycemic and antihyperlipidemic properties of oral fenugreek seed powder. Preliminary trials have also studied the use of fenugreek as a galactagogue, and for exercise performance enhancement, head lice, obesity, and skin care. However, at this time, the evidence is not sufficient to draw further conclusions regarding the use of fenugreek for these indications.
- Caution is warranted in patients concurrently taking fenugreek and hypoglycemic agents, in whom blood glucose levels should be monitored. Hypokalemia has also been reported, and potassium levels should be followed in patients taking concomitant hypokalemic agents and those with underlying cardiac disease.

Scientific Evidence for Common/Studied Uses:

Indication	Evidence Grade
Diabetes mellitus type 2	B
Diabetes mellitus type 1	C
Exercise performance enhancement	C
Galactagogue	C
Head lice	C
Hyperlipidemia	C
Obesity	C

Grading System

Synonyms

- 1-methy
trihydrox
glucopyr
calycosi
19070, (
fatty aci
leaves,
Foenugr
L-rhamn
görögsz
halba (M
3-O-alph
(Kannad
Punjabi,
minerals
coumara
alpha-L-
D-xylopy
smilage

Trigonella caerulea, *Trigonella foenum-gracecum*, *Trigonella poenumgraecum* L., *Trigonella* semen, *Trigonella stellata*, trigonelline, trigoneoside Xa, trigoneoside Xb, trigoneoside XIb, trigoneoside XIIa, trigoneoside XIIb, trigoneoside XIIIa, uluhal (Sinhala), uwatu

Home > Da
< Back

Fenugreek/Drug Interactions:

- **General**: Trigonelline, a constituent of fenugreek, was used as a quaternary carrier for improved drug delivery into the brain (192), into specific cells (193), or to the skin (194).
- **Acetylcholinesterase inhibitors**: Based on *in vitro* study, fenugreek extracts and trigonelline inhibited acetylcholinesterase activity (1), but conflicting data exist (195).
- **Albumin**: Based on animal study, albumin had additional hypolipemic effects over fenugreek alone (196).
- **Analgesics**: Based on rat study, *Trigonella foenum-graecum* extract may have analgesic activity similar to nonsteroidal anti-inflammatory drugs (NSAIDs) (2;121). Analgesic effects of fenugreek seed extract were shown in other studies, perhaps by decreasing inflammation (8;9;10). Based on animal study, acetaminophen resulted in depletion of trigonelline (197).
- **Antiarrhythmics**: Fenugreek aqueous extract was found to reduce potassium levels in human study and theoretically may increase the risk of hypokalemia when used with certain antiarrhythmic agents (83).
- **Anticoagulants and antiplatelets**: Based on animal study, case report, and theory, fenugreek preparations may raise prothrombin time (PT) or International Normalized Ratio (INR), decrease platelet aggregation, and increase the risk of bleeding (118;119;120; 121;122). In rat study, a fenugreek extract inhibited ADP (10^{-5}M)-induced platelet aggregation (IC_{50}=1.28mg/mL) (121).
- **Antidepressants, monoamine oxidase inhibitors (MAOIs)**: Fenugreek has been theorized to possibly potentiate the activity of MAOIs, although reliable human data are lacking in this area.
- **Antidiabetic**: In human study, fenugreek seed powder resulted in the decreased use of oral hypoglycemic drug intake and a decline in percentage of the subjects who were on hypoglycemic drugs (88). Data from preclinical and human study suggest that fenugreek possesses both acute and chronic hypoglycemic properties (75;76;77;78;79;80;80;80;81;82;83;84;85;86;87;88;89;90; 91;92;93;94;95), and the hypoglycemic effects of fenugreek extracts and oils and galactomannan have been shown in animal study (34;96;97;98;99;100;101;102;103;104;105;106;107;108;109;110;111;112;113;114;115;116). In human study, fenugreek saponins plus sulfonylureas were more effective than sulfonylureas alone for blood glucose lowering (117). In animal study, a combination of lower doses of fenugreek extract and glimepiride (5mg/kg of body weight) showed safer hypoglycemic activity over higher doses, which resulted in lethal hypoglycemia (112).
- **Antifungals**: Based on *in vitro* study, fenugreek extracts (seeds and other plant parts) and a cloned defensin Tfgd1 from fenugreek had antifungal activity (4).

smilagenin, sotolone, star fenugreek, syndrex, tricin, tricin-7-O-beta-D-glucopyranoside, trigonella, *Trigonella*, *Trigonella balansae*, *Trigonella caerulea*, *Trigonella foenum-gracecum*, *Trigonella poenumgraecum* L., *Trigonella* semen, *Trigonella stellata*, trigonelline, trigoneoside Xa, trigoneoside Xb, trigoneoside XIb, trigoneoside XIIa, trigoneoside XIIb, trigoneoside XIIIa, uluhal (Sinhala), uwatu

Diabetes mellitus and related conditions

Levels of scientific evidence for specific therapies

Grade: A (Strong Scientific Evidence)	
Therapy	**Specific therapeutic Use(s)**
Alpha-lipoic acid	Type 2 diabetes
Konjac glucomannan	Diabetes
Grade: B (Good Scientific Evidence)	
Therapy	**Specific therapeutic Use(s)**
Beta-glucan	Diabetes
Chromium	Hypoglycemia
Fenugreek	Diabetes mellitus type 2
Guar gum	Diabetes mellitus
Gymnema	Type 1 diabetes mellitus
Gymnema	Type 2 diabetes mellitus
Ivy gourd	Diabetes
Magnesium	Diabetes (type 2)
Nicotinamide	Type 1 Diabetes mellitus: preservation of beta-islet cell function
Vanadium	Diabetes
Whey protein	Diabetes
Grade: C (Unclear or Conflicting Scientific Evidence)	
Therapy	**Specific therapeutic Use(s)**
Acidophilus	Diabetes (type 2)
Active hexose correlated compound	Diabetes
Acupuncture	Diabetes
Agar	Diabetes
Alfalfa	Diabetes
Aloe	Diabetes

Should Mrs. Hernandez take a daily aspirin to prevent stroke?

ePSS: Electronic Preventive Services Selector

- App designed to help primary care clinicians identify clinical preventive services appropriate for their patients
- Based on current, evidence-based recommendations of the U.S. Preventive Services Task Force (USPSTF)
- Search by specific patient characteristics, e.g., age, sex, selected behavioral risk factors
- Available online *http://epss.ahrq.gov/PDA/index.jsp*
- **M**: Available on mobile devices

ePSS: Electronic Preventive Services Selector

Search for Recommendations

Enter the following information to retrieve recommendations from the USPSTF Preventive Services Database. USPSTF leave all search criteria blank and simply click "Show Recommendations". All fields are optional.

Age: 45 Years

Sex: (•) Female **Pregnant:** ☐
( ) Male

Tobacco User: ( ) Yes (•) No

Sexually Active: (•) Yes ( ) No

Reset | Show Recommendations

Search for Recommendations

ePSS

View All | A | B | C | D | I

Enter th… Database.

USPST… onal.

Age:

Sex:

Toba…

Sexu…

Re…

19 - Recommended (A, B)

Grade	Title
A*	**Cervical Cancer**: Screening -- Women 21 to 65 (Pap Smear) or 30-65 (in combo with HPV testing)
A	**Chlamydia**: Screening -- Women Ages 24 and *Younger* OR Women Ages 25 and *Older* at Increased Risk
A*	**Folic Acid**: Supplementation -- All Women Planning or Capable of Pregnancy
A*	**HIV**: Screening - Adolescents and Adults
A*	**High Blood Pressure**: Screening -- Adults 18 and Over
A	**Lipid Disorders in Adults**: Screening -- Women 45 and Older, Increased risk for CHD
A	**Syphilis**: Screening -- Men and Women at Increased Risk
B*	**Alcohol Misuse:** Screening and Behavioral Counseling Interventions in Primary Care -- Adults
B	**BRCA Mutation Testing for Breast and Ovarian Cancer**: Women, Increased Risk
B*	**Breast Cancer**: Preventive Medications -- Women At Increased Risk

Search for Recommendations

ePSS

Enter the following information to retrieve recommendations from the USPSTF Preventive Services Database. USPSTF leave all search criteria blank and simply click "Show Recommendations". All fields are optional.

19 - Not Recommended (D)	
Grade	**Title**
D*	**Aspirin to Prevent CVD**: Women younger than 55 years of age, to prevent stroke
D*	**Asymptomatic Bacteriuria:** Screening -- Men and Non-Pregnant Women
D	**BRCA Mutation Testing for Breast and Ovarian Cancer**: Women, Low Risk
D*	**Breast Cancer:** Preventive Medications -- Women Not at Increased Risk
D*	**Breast Cancer**: Teaching Breast Self-Examination (BSE)
D*	**Carotid Artery Stenosis**: Screening -- General Adult Population
D*	**Cervical Cancer**: Screening --Women who have had a hysterectomy

LexiComp

Is the dosage for lisinopril correct?

- Up-to-date comprehensive drug information for clinicians
- Over 1600 drug monographs including drug interactions, tablet identification, medical calculations, patient education leaflets
- Delivers key information quickly
- **M**: Available on mobile devices

Lisinopril (Lexi-Drugs)

Navigation Tree

Expand All

- ALERT: U.S. Boxed Warning
- Pronunciation
- Brand Names
- Pharmacologic Category
- Dosages
- Uses
- Clinical Practice Guidelines
- Administration and Storage Issues
- Medication Safety Issues
- Warnings & Precautions
- Pregnancy & Lactation
- Adverse Reactions
- Interactions
- Patient & Therapy Management
- Preparations
- Pharmacology & Pharmacokinetics
- Dental Information
- Pearls & Related Information
- References
- International Brand Names

Monograph Images Adult Patient Education Pediatric Patient Education

Jump to Section Print Help

Dosing: Adult

Heart failure: Oral: Initial: 2.5-5 mg once daily; then increase by no more than 10 mg increments at intervals no less than 2 weeks to a maximum daily dose of 40 mg. Usual maintenance: 5-40 mg/day as a single dose. Target dose: 20-40 mg once daily (ACC/AHA 2009 Heart Failure Guidelines)

Note: If patient has hyponatremia (serum sodium <130 mEq/L) or renal impairment (Cl_{cr} <30 mL/minute or creatinine >3 mg/dL), then initial dose should be 2.5 mg/day

Hypertension: Oral: Usual dosage range (JNC 7): 10-40 mg/day

Not maintained on diuretic: Initial: 10 mg/day

Maintained on diuretic: Initial: 5 mg/day

Note: Antihypertensive effect may diminish toward the end of the dosing interval especially with doses of 10 mg/day. An increased dose may aid in extending the duration of antihypertensive effect. Doses up to 80 mg/day have been used, but do not appear to give greater effect.

Patients taking diuretics should have them discontinued 2-3 days prior to initiating lisinopril if possible. Restart diuretic after blood pressure is stable if needed. If diuretic cannot be discontinued prior to therapy, begin with 5 mg with close supervision until stable blood pressure. In patients with hyponatremia (<130 mEq/L), start dose at 2.5 mg/day.

Acute myocardial infarction (within 24 hours in hemodynamically stable patients): Oral: 5 mg immediately, then 5 mg at 24 hours, 10 mg at 48 hours, and 10 mg every day thereafter for 6 weeks. Patients should continue to receive standard treatments such as thrombolytics, aspirin, and beta-blockers.

Dosing: Geriatric

Refer to adult dosing. In the management of hypertension, consider lower initial doses (eg, 2.5-5 mg/day) and titrate to response (Aronow, 2011).

Dosing: Pediatric

Hypertension: Children ≥6 years: Oral: Initial: 0.07 mg/kg once daily (up to 5 mg); increase dose at 1- to 2-week intervals; doses >0.61 mg/kg or >40 mg have not been evaluated.

Dosing: Renal Impairment

Heart failure: Adults: Cl_{cr} <30 mL/minute or creatinine >3 mg/dL: Initial: 2.5 mg/day

Hypertension:

Lisinopril (Lexi-Drugs)

Navigation Tree

Expand All

- ALERT: U.S. Boxed Warning
- Pronunciation
- Brand Names
- Pharmacologic Category
- Dosages
- Uses
- Clinical Practice Guidelines
- Administration and Storage Issues
- Medication Safety Issues
- Warnings & Precautions
- Pregnancy & Lactation
- Adverse Reactions
- Interactions
- Patient & Therapy Management
- Preparations
- Pharmacology & Pharmacokinetics
- Dental Information
- Pearls & Related Information
- References
- International Brand Names

Monograph Images Adult Patient Education Pediatric Patient Education

Jump to Section Print Help

Clinical Practice Guidelines

Coronary Artery Bypass Graft Surgery:

ACCF/AHA, "2011 ACCF/AHA Guideline for Coronary Artery Bypass Graft Surgery," November 2011

Diabetes Mellitus:

American Diabetes Association, "Standards of Medical Care in Diabetes - 2013," January 2013

Canadian Diabetes Association, "Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada," 2013

Heart Failure:

ACCF/AHA, "2009 Focused Update Incorporated Into the ACC/AHA 2005 Guidelines for the Diagnosis and Management of Heart Failure in Adults," March 2009

ACCF/AHA, "2013 ACCF/AHA Guideline for the Management of Heart Failure," June 2013. **Note:** Information contained within this monograph is pending revision based on these more recent guidelines.

Canadian Cardiovascular Society, "2012 Heart Failure Management Guidelines Update: Focus on Acute and Chronic Heart Failure," 2012

"HFSA 2010 Comprehensive Heart Failure Practice Guideline," July 2010

Hypertension:

"ACCF/AHA Expert Consensus Document on Hypertension in the Elderly," 2011

"National High Blood Pressure Education Program Working Group on High Blood Pressure in Children and Adolescents," May 2005

"The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure: The JNC 7 Report," August 2004

Hypertension:

Standards of Medical Care in Diabetes—2013

American Diabetes Association

Diabetes mellitus is a chronic illness that requires continuing medical care and ongoing patient self-management education and support to prevent acute complications and to reduce the risk of long-term complications. Diabetes care is complex and requires multifactorial risk reduction strategies beyond glycemic control. A large body of evidence exists that supports a range of interventions to improve diabetes outcomes.

These standards of care are intended to provide clinicians, patients, researchers, payers, and other interested individuals with the components of diabetes care, general treatment goals, and tools to evaluate the quality of care. Although individual preferences, comorbidities, and other patient factors may require modification of goals, targets that are desirable for most patients with diabetes are provided. Specifically titled sections of the standards address children with diabetes, pregnant women, and people with prediabetes. These standards are not intended to preclude clinical judgment or more extensive evaluation and management of the patient by other specialists as needed. For more detailed information about management of diabetes, refer to references (1–3).

The recommendations included are screening, diagnostic, and therapeutic actions that are known or believed to favorably affect health outcomes of patients with diabetes. A large number of these interventions have been shown to be cost-effective (4). A grading system (Table 1), developed by the American Diabetes Association (ADA) and modeled after existing methods, was utilized to clarify and codify the evidence that forms the basis for the recommendations. The level of evidence that supports each recommendation is listed after each recommendation using the letters A, B, C, or E.

These standards of care are revised annually by the ADA's multidisciplinary Professional Practice Committee, incorporating new evidence. For the current revision, committee members systematically searched Medline for human studies related to each subsection and published since 1 January 2011. Recommendations (bulleted at the beginning of each subsection and also listed in the "Executive Summary: Standards of Medical Care in Diabetes—2013") were revised based on new evidence or, in some cases, to clarify the prior recommendation or match the strength of the wording to the strength of the evidence. A table linking the changes in recommendations to new evidence can be reviewed at http://professional.diabetes.org/CPR. As is the case for all position statements, these standards of care were reviewed and approved by the Executive Committee of ADA's Board of Directors, which includes health care professionals, scientists, and lay people.

Feedback from the larger clinical community was valuable for the 2013 revision of the standards. Readers who wish to comment on the "Standards of Medical Care in Diabetes—2013" are invited to do so at http://professional.diabetes.org/CPR.

Members of the Professional Practice Committee disclose all potential financial conflicts of interest with industry. These disclosures were discussed at the onset of the standards revision meeting. Members of the committee, their employer, and their disclosed conflicts of interest are listed in the "Professional Practice Committee for the 2013 Clinical Practice Recommendations" table (see p. S109). The ADA funds development of the standards and all its position statements out of its general revenues and does not use industry support for these purposes.

Originally approved 1988. Most recent review/revision October 2012.
DOI: 10.2337/dc13-S011

I. CLASSIFICATION AND DIAGNOSIS

A. Classification

The classification of diabetes includes four clinical classes:

- Type 1 diabetes (results from β-cell destruction, usually leading to absolute insulin deficiency)
- Type 2 diabetes (results from a progressive insulin secretory defect on the background of insulin resistance)
- Other specific types of diabetes due to other causes, e.g., genetic defects in β-cell function, genetic defects in insulin action, diseases of the exocrine pancreas (such as cystic fibrosis), and drug- or chemical-induced (such as in the treatment of HIV/AIDS or after organ transplantation)
- Gestational diabetes mellitus (GDM) (diabetes diagnosed during pregnancy that is not clearly overt diabetes)

Some patients cannot be clearly classified as type 1 or type 2 diabetic. Clinical presentation and disease progression vary considerably in both types of diabetes. Occasionally, patients who otherwise have type 2 diabetes may present with ketoacidosis. Similarly, patients with type 1 diabetes may have a late onset and slow (but relentless) progression of disease despite having features of autoimmune disease. Such difficulties in diagnosis may occur in children, adolescents, and adults. The true diagnosis may become more obvious over time.

B. Diagnosis of diabetes

For decades, the diagnosis of diabetes was based on plasma glucose criteria, either the fasting plasma glucose (FPG) or the 2-h value in the 75-g oral glucose tolerance test (OGTT) (5).

In 2009, an International Expert

Accessss Federated Search

- *http://plus.mcmaster.ca/ACCESSSS/*
- Searches simultaneously several evidence-based resources (online evidence-based texts, and pre-appraised journal publications)
- Follows 6s model of evidence-based decision-making
- Provides email alerts to new published evidence in user's area of interest

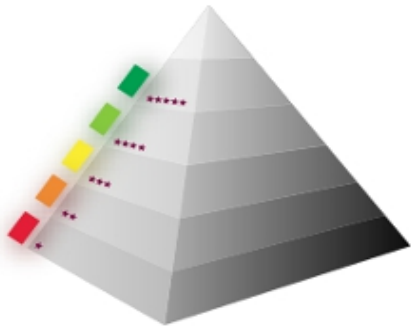
ACCESSSS
Federated Search

hypertension and diabetes

Search
Advanced Options

Current PLUS Database: Physician

Resource Portal:
None
Add your Institution



6S model explained
Criteria for articles in PLUS

- Summaries ★★★★★
  - UpToDate
  - DynaMed
  - Best Practice
  - Stat!Ref PIER
- Synopses of Syntheses ★★★★☆
  - ACP Journal Club (via PLUS)
  - DARE
- Syntheses ★★★☆☆
  - PLUS Syntheses
- Synopses of Studies ★★☆☆☆
  - ACP Journal Club (via PLUS)
- Studies ★☆☆☆☆
  - PLUS Studies
- Non-Appraised ☆☆☆☆☆
  - PubMed CQ

Summaries ★★★★★

UpToDate
- Treatment of hypertension in patients with diabetes mellitus
- Comorbidities and complications of type 2 diabetes mellitus in children and adolescents
- More Results...

DynaMed
- Diabetes – treatment of hypertension
- Hypertension treatment in patients with diabetes
- More Results...

Best Practice
- Assessment of hypertension
- Diabetic cardiovascular disease
- More Results...

Stat!Ref PIER
- Screening for Type 2 Diabetes
  (Screening and Prevention)
- Essential Hypertension
  (Diseases Alphabetically » "E" Diseases)
- More Results...

Synopses of Syntheses ★★★★☆

ACP Journal Club (selected via PLUS)
- Review: Statins reduce mortality and major vascular events in patients with no history of CV disease
- Meta-analysis: Atorvastatin reduces CV events and increases new-onset diabetes in patients with coronary disease
- More Results...

DARE
- A systematic review and meta-analysis of pharmacist-led fee-for-services medication review

New in ACCESSSS

New We recently made
institutional acces
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Mon. Feb. 11th 2013

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VisualDx

And what is that rash on her arms?

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Differential Builder

Build a differential by entering patient findings.

Search by Dx diagnosis, Rx medication, or F patient finding.

Choose a Clinical Scenario

Pediatric Skin

Neonate/Infant < 1 year

- Multiple Lesions or Rash
- Single Lesion or Growth

Child < 18 years

- Multiple Lesions or Rash
- Single Lesion or Growth

Specialized Content

- Male Anogenital
- Female Anogenital

Adult Skin

Adult > 18 years

- Multiple Lesions or Rash
- Single Lesion or Growth
- Dark Skin - Multiple Lesions or Rash
- Dark Skin - Single Lesion or Growth

Elder > 70 years

- Multiple Lesions or Rash
- Single Lesion or Growth

Specific Clinical Scenarios

- Fever & Rash
- Immunocompromised
- International Travel
- Bites, Stings, & Infestations
- Marine Exposures
- Male Anogenital
- Female Anogenital
- Nail & Distal Digit
- Hair & Scalp
- Cellulitis DDx

Add Body Location / Distribution

Male Female

- Scalp
- Face
- Neck
- Arm
  - Shoulder
  - Axilla
  - Antecubital Fossa
  - Elbow
  - Forearm
  - Upper Arm
  - Wrist
- Hand or Fingers
- Trunk
- Anogenital
- Leg
- Foot (Feet) or Toes

Distributions:

Widespread
Scattered Haphazard
Scattered Few
Acral
Photodistributed (Sun-Exposed)
Intertriginous
Symmetric Extremities
Lymphangitic

Add Key Findings

Appearance

- (•) No Acute Distress
- ( ) Patient Appears Ill
- ( ) Patient Appears Systemically Ill - Toxic
- ( ) None

Timing

- ( ) Developed Rapidly in Minutes or Hours
- (•) Developed Acutely Over Days to Weeks
- ( ) Developed Steadily Over Weeks to Months
- ( ) Developed Chronically Lasting Months to Years
- ( ) Recurring Episodes or Relapses
- ( ) None

Other Findings

- [ ] Fever (Febrile)
- [ ] Pruritus (Itching)
- [ ] Arthralgia (Joint Pain)
- [ ] Lymphadenopathy

OK Cancel

86 diagnoses match all 2 current findings

Abscess

All Images (15)

Bedbug Bite

All Images (25)

Bite or Sting, Arthropod

All Images (29)

Cellulitis

All Images (24)

Dermatitis, Allergic Contact

All Images (82)

Dermatitis, Dyshidrotic

All Images (21)

Dermatitis, Perioral

All Images (16)

Dermatitis, Poison Ivy - Oak - Sumac

All Images (32)

Dermatitis, Stasis

All Images (25)

[E] Ecthyma Gangrenosum

All Images (17)

Erysipelas

All Images (21)

Folliculitis

All Images (20)

Furunculosis

All Images (19)

Herpes Simplex Virus

All Images (35)

Herpes Simplex Virus, Genital

All Images (19)

Bedbug Bites

Bedbug Bite Adult Rash

Patient Handout

VisualDx

Contents

Clinical Scenario

Adult Rash

Differential Diagnosis & Pitfalls

- Drug eruption
- Allergic contact dermatitis
- Atopic dermatitis
- Gianotti-Crosti syndrome (in children)
- Pityriasis lichenoides et varioliformis acuta
- Ecthyma
- Dermatitis herpetiformis
- Scabies (look for burrows)
- Pediculosis corporis (examine hairs for lice and nits)
- Flea bites (ask about pets)
- Urticaria
- Papular urticaria

Best Tests

This is largely a clinical diagnosis based on careful history and physical examination and assessment of the sleeping and living environment. Punch biopsy may indicate an arthropod reaction.

Therapy

Eradicate the infestation as described. Bites will resolve on their own in 1-2 weeks. Therefore, treatment is aimed at controlling symptoms.

Oral antihistamines for pruritus: diphenhydramine 25-50 mg p.o. 3 times daily or hydroxyzine 10-25 mg p.o. 3 times daily, as tolerated.

Mid-potency topical corticosteroids (Class 3-4) for skin lesions:

- Triamcinolone cream, ointment – Apply twice daily (15, 30, 60, 120, 240 gm).
- Mometasone cream, ointment – Apply twice daily (15, 45 gm).
- Fluocinolone cream, ointment – Apply twice daily (15, 30, 60 gm).

Use Class 6-7 steroids on the face (desonide cream, lotion, or ointment twice daily).

Secondary infection may require oral antibiotic therapy.

Bullous reactions may be treated with short courses of oral corticosteroids: 0.5 mg/kg each morning for 14 days, tapering slowly during the interval.

Medline Plus

Where can I find information for Mrs. Hernandez in Spanish?

- **#1** for basic quality consumer/patient information
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- Drug and herbal information
- Medical Encyclopedia – full-text with illustrations
- Spanish version
- Interactive tutorials
- Current health news
- **M**: Available on mobile devices

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02 SEP Health News

'DASH Diet' Shown to Lower Heart Attack Risk Almost 20%

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MAGAZINE | EASY TO READ

MULTIPLE LANGUAGES

Diabetes tipo 2

Otros nombres: Diabetes de aparición en adultos
insulinodependiente

La diabetes significa que la glucosa en la sangr
sangre, está muy alta. Con la diabetes tipo 2, l
organismo no produce o usa bien la insulina. L
hormona que ayuda a la glucosa a entrar a las
energía. Sin insulina hay demasiada glucosa en
cantidad elevada de glucosa en la sangre por m
desarrollar problemas serios para el corazón, l
nervios, las encías y los dientes.

Usted tiene un riesgo alto de tener diabetes tip
obeso, tiene historia familiar de diabetes o no

Los síntomas de la diabetes tipo 2 aparecen ler
personas ni siquiera los notan. Pueden incluir

- Sed
- Orinar frecuentemente
- Sentirse hambriento o cansado
- Perder peso sin proponérselo
- Tener heridas que sanan lentamente
- Visión borrosa

Un examen de sangre puede mostrar si usted t
personas controlan su diabetes a través de una
actividad física y exámenes de glucosa en la sa
necesitan además tomar algunas medicinas pa

NIH: Instituto Nacional de la Diabetes y las Enf
Renales

Reciba actualizaciones sobre Diabetes tipo 2 por email

Ingrese su email

Comience aquí

- Diabetes tipo 2 – Enciclopedia
  También está disponible en inglés

Diabetes Type 2

Also called: Type 2 Diabetes

MedlinePlus

Diabetes means your blood glucose, or blood sugar, levels are too high. With type 2 diabetes, the more common type, your body does not make or use insulin well. Insulin is a hormone that helps glucose get into your cells to give them energy. Without insulin, too much glucose stays in your blood. Over time, high blood glucose can lead to serious problems with your heart, eyes, kidneys, nerves, and gums and teeth.

You have a higher risk of type 2 diabetes if you are older, obese, have a family history of diabetes, or do not exercise.

The symptoms of type 2 diabetes appear slowly. Some people do not notice symptoms at all. The symptoms can include

- Being very thirsty
- Urinating often
- Feeling very hungry or tired
- Losing weight without trying
- Having sores that heal slowly
- Having blurry eyesight

A blood test can show if you have diabetes. Many people can manage their diabetes through healthy eating, physical activity, and blood glucose testing. Some people also need to take diabetes medicines.

NIH: National Institute of Diabetes and Digestive and Kidney Diseases

Get Diabetes Type 2 updates by email

Enter email address GO What's this?

Start Here

- Am I at Risk for Type 2 Diabetes? *NIH* (National Institute of Diabetes and Digestive and Kidney Diseases)
  Also available in Spanish
- Facts about Type 2 (American Diabetes Association)
- Type 2 Diabetes: What You Need to Know *NIH* (National Institute of Diabetes and Digestive and Kidney Diseases) – In English and Spanish

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- Diabetes diet – type 2
- Giving an insulin injection
- HbA1c
- High blood sugar
- Type 2 diabetes
- Type 2 diabetes – self-care

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- Diabetes
- Diabetes Complications
- Diabetes in Children and Teens
- Diabetes Medicines
- Diabetes Type 1
- Diabetic Diet
- Prediabetes
- Children and Teenagers
- Diabetes Mellitus
- Endocrine System

National Institutes of Health

The primary NIH organization for research on *Diabetes Type 2* is the National Institute of Diabetes and Digestive and Kidney Diseases

Languages

Overviews

- Diabetes Mellitus Type 2: Overview (Beyond the Basics) (UpToDate)
- Type 2 Diabetes (Mayo Foundation for Medical Education and Research)
- Type 2 Diabetes Mellitus (InteliHealth, Harvard Medical School)
- Your Guide to Diabetes: Type 1 and Type 2 NIH Easy-to-Read (National Institute of Diabetes and Digestive and Kidney Diseases)
  Also available in Spanish

Latest News

- Blood 'Marker' May Predict Diabetes Risk in Older Women (09/20/2013, HealthDay)
- Weight-Loss Surgery Can Improve Long-Term Diabetes Control, Study Says (09/19/2013, HealthDay)
- 4 Factors Predict Diabetes Remission After Surgery (09/13/2013, HealthDay)
- New! Younger Women with Type 2 Diabetes Face Higher Risk of Heart Disease (09/12/2013, American Heart Association)
- Whole Fruits for Health (08/30/2013, HealthDay)
- Beware of Illegally Sold Diabetes Treatments (07/23/2013, Food and Drug Administration)
- More News on Diabetes Type 2

Diagnosis/Symptoms

- A1C Test and Diabetes NIH (National Institute of Diabetes and Digestive and Kidney Diseases)
- Comparing Tests for Diabetes and Prediabetes: A Quick Reference Guide NIH (National Institute of Diabetes and Digestive and Kidney Diseases)
- Diabetes Numbers at-a-Glance 2012 NIH (National Diabetes Education Program) - PDF
- Diagnosis of Diabetes and Prediabetes NIH (National Institute of Diabetes and Digestive and Kidney Diseases)
- Microalbumin Test (Mayo Foundation for Medical Education and Research)
- Symptoms (American Diabetes Association)

Treatment

- Diabetes Medicines (Food and Drug Administration)
- Diabetes Mellitus Type 2: Treatment (Beyond the Basics) (UpToDate)
- Medicines for Type 2 Diabetes: A Review of the Research for Adults (Agency for Healthcare Research and Quality)
  Also available in Spanish
- MedlinePlus: Diabetes Medicines NIH (National Library of Medicine)
  Also available in Spanish
- Premixed Insulin for Type 2 Diabetes: A Guide for Adults (Agency for Healthcare Research and Quality)
  Also available in Spanish

Return to top

Prevention/Screening

- Choose More than 50 Ways to Prevent Type 2 Diabetes NIH Easy-to-Read (National Diabetes Education Program) - PDF
- Family Health History and Diabetes NIH (National Diabetes Education

Dieta para diabéticos

MedlinePlus

Otros nombres: Dieta y diabetes, Nutrición para personas con diabetes

Si tiene diabetes, su cuerpo no puede producir o utilizar la insulina adecuadamente. Esto conduce a una elevación del nivel de glucosa (azúcar) en la sangre. Una alimentación sana ayuda a mantener el azúcar de la sangre en un nivel adecuado. Es una parte fundamental del manejo de la diabetes, ya que controlando el azúcar en la sangre (glucemia) se pueden prevenir las complicaciones de la diabetes.

Un nutricionista puede ayudarlo a diseñar un plan de comidas específico para usted. Este plan debe tener en cuenta su peso, medicinas que esté tomando, estilo de vida y otros problemas de salud que usted pueda tener.

Una alimentación saludable para un diabético incluye

- Limitar alimentos con altos contenidos de azúcar
- Comer porciones pequeñas a lo largo del día
- Prestar atención a cuándo y cuánta cantidad de carbohidratos consume
- Consumir una gran variedad de alimentos integrales, frutas y vegetales
- Comer menos grasas
- Limitar el consumo del alcohol
- Usar menos sal

NIH: Instituto Nacional de la Diabetes y las Enfermedades Digestivas y Renales

Reciba actualizaciones sobre Dieta para diabéticos por email

Ingrese su email ENVIAR ¿Qué es esto?

Comience aquí

- Diabetes y nutrición (Academia American[illegible] Médicos de Familia)
  También está disponible en inglés
- Diabetes y plan de nutrición *Tutorial interactivo* (Instituto de Educación al Paciente)
  También está disponible en inglés

Temas relacionados

Diabetes
Diabetes tipo 1
Diabetes tipo 2
Alimentos y nutrición
Diabetes mellitus
Sistema endocrino

Institutos Nacionales de la Salud

El organismo de los NIH principalmente responsable por realizar investigaciones científicas sobre *Dieta para diabéticos* es el Instituto Nacional de la Diabetes y las Enfermedades Digestivas y Renales

Cross-Cultural Healthcare Resources

- EthnoMed *ethnomed.org*
  Cultural and medical issues pertinent to healthcare of ethnic groups in Seattle area
- Culture Clues *depts.washington.edu/pfes/CultureClues.htm*
  Tip sheets for increasing awareness about preferences from diverse cultures
- SPIRAL *spiral.tufts.edu*
  Patient information resources in Asian languages
- Health Information in Multiple Languages
  www.nlm.nih.gov/medlineplus/languages/languages.html
- RHIN *rhin.org* For refugees and health providers
- Consumer Health Information in Many Languages
  nnlm.gov/outreach/consumer/multi.html

EthnoMed *ethnomed.org*

- Information about cultural beliefs and medical issues pertinent to the health care of immigrants to Seattle
- SE Asian and East African populations originally
  - *Cambodian, Ethiopian, Oromo, Somali, Tigrean and Vietnamese.*
  - Other ethnic groups added, such as Chinese, Hmong, Hispanic, Iraqi, and more.
- Includes patient information pamphlets in various languages

EthnoMED
Integrating cultural information into clinical practice



Feature: October/November 2013

Multimedia Patient Education Highlight: Cancer

EthnoMed and Healthy Roads Media, in collaboration with the Community House Calls Program at Harborview and its community partners, produced a series of handouts and Flash video slideshows in seven languages (**Amharic, English, Khmer, Somali, Spanish, Tigrinya and Vietnamese**) that provide introductory information about several topics: biopsy procedures, cancer chemotherapy, prostate cancer and surgeries for breast cancer.

Biopsy | Cancer Chemotherapy | Prostate Cancer | Surgeries for Breast Cancer

Cancer education was identified by the Community House Calls staff as a major area of need for EthnoMed content development. The program's Caseworker / Cultural Mediators (CCMs) served as advisors and narrators, community members provided linguistic/cultural input, and health care providers gave clinical input to develop the new education materials. The project also supports CCMs in utilizing iPads for delivering health education to patients and community groups.

The new materials are available for web viewing via both the EthnoMed and Healthy Roads Media websites. Healthy Roads Media is also hosting mobile video

Welcome To EthnoMed

EthnoMed contains information about cultural beliefs, medical issues and related topics pertinent to the health care of immigrants to Seattle or the US, many of whom are refugees fleeing war-torn parts of the world.

EthnoMed Newsletter

Subscribe to our e-Newsletter to receive updates about what's new.
Read more...

Local Somali Leader Honored As Champion Of Change

Mohamed Ali, a Somali refugee with a master's degree in public health, has been recognized by the White House as a **Champion of**

Mexican Cultural Profile

EthnoMed

Author(s): Andrea B. Smith, MD PhD, Author
Reviewer(s): Community Reader, Rozy Ramirez Harborview Medical Center/University of Washington
Contributor(s): Leon Reines, Revisons, August 2003
Date Authored: September 01, 2000
Date Last Reviewed: August 01, 2003

Mexico

Geography

Mexico is bordered to the North by Texas, New Mexico, Arizona and California. To the South it is bordered by Guatemala and Belize. To the East is the Caribbean Sea and the Gulf of Mexico. To the West is the Pacific Ocean. The total area of Mexico is 1,972,550 sq. km which is slightly less than three times the size of Texas. The climate varies from tropical to desert and the terrain includes high rugged mountains, deserts, low coastal plains and high plateaus. Mexico is made up of 31 states and has Mexico city as its capital.

History and Politics

Originally inhabited by many different ethnic groups from which you can mention the Mayas, Zapotec, Aztec and others, Mexico, like much of South and Central America, was colonized by the Spanish, being occupied from 1521-1810. Colonization led to both the acquisition of Spanish culture and the loss of great part of the Aztec culture, with the present day culture being a melange of the two. Mexican independence occurred September 16, 1810 and was sparked by the Napoleonic threat to acquire what was then "New Spain". Afraid of losing their emerging culture, the "criollos" (descendants of the Spaniards born in Mexico) and the "mestizos" (descendants of the Spanish and Indian intermarriages) united in a movement known as "Los Insurgentes" which eventually overthrew Spain.

Texas at that time was sparsely inhabited, having been neglected by Spain in the years prior to the revolution. The newly formed Mexican government therefore allowed US citizens to settle there. These citizens did not adopt the Mexican language or culture and in 1829 when Mexico

Contents

Mexican Cultural Profile

Author(s): Andrea B. Smith, MD PhD, Author
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Etiquette

Studies indicate that Hispanics expect a caregiver to show warmth to a patient and family members and should not be strictly business (Zouchay). A physician should be attentive, take their time, show respect, and if possible communicate in Spanish. Some simple phrases are listed above for those who do not know any Spanish. Hispanics also have more respect for care givers if they exhibit confidence.

Family Life and Kinship Structure

Although Mexican families tend to be Patriarchal, it is the mother who is in charge of health care (Gonzalez-Swafford). Home remedies are passed on from mother to daughter. When a family member is sick, it is a family crisis and often there will be many people to whom the in charge of health care, for more difficult and chronic treatments, it is often important to physician will have to explain the disease process (Davidhizar). Although the mother is the one convince the father that this is necessary.

Adulthood and Old Age

For information on geriatrics and older Hispanic/Latino Americans, see Stanford's Ethno Med Health and Health Care of Hispanic/Latino American Older Adults. This is an on-line learning module, but you can download the module as a PDF and print the cultural profile by filling out a short survey. Additional cultures and geriatric information also available on their site.

Nutrition and Food

Food is often used to cure illness as will be discussed later (Gonzalez-Swafford). Here we list some foods as they are categorized for healing.

Cold Foods	Hot Foods
Beans	Aromatic Beverages
Corn products	Chili
Dairy products	Expensive Meats (beef, water fowl, fish, mutton)

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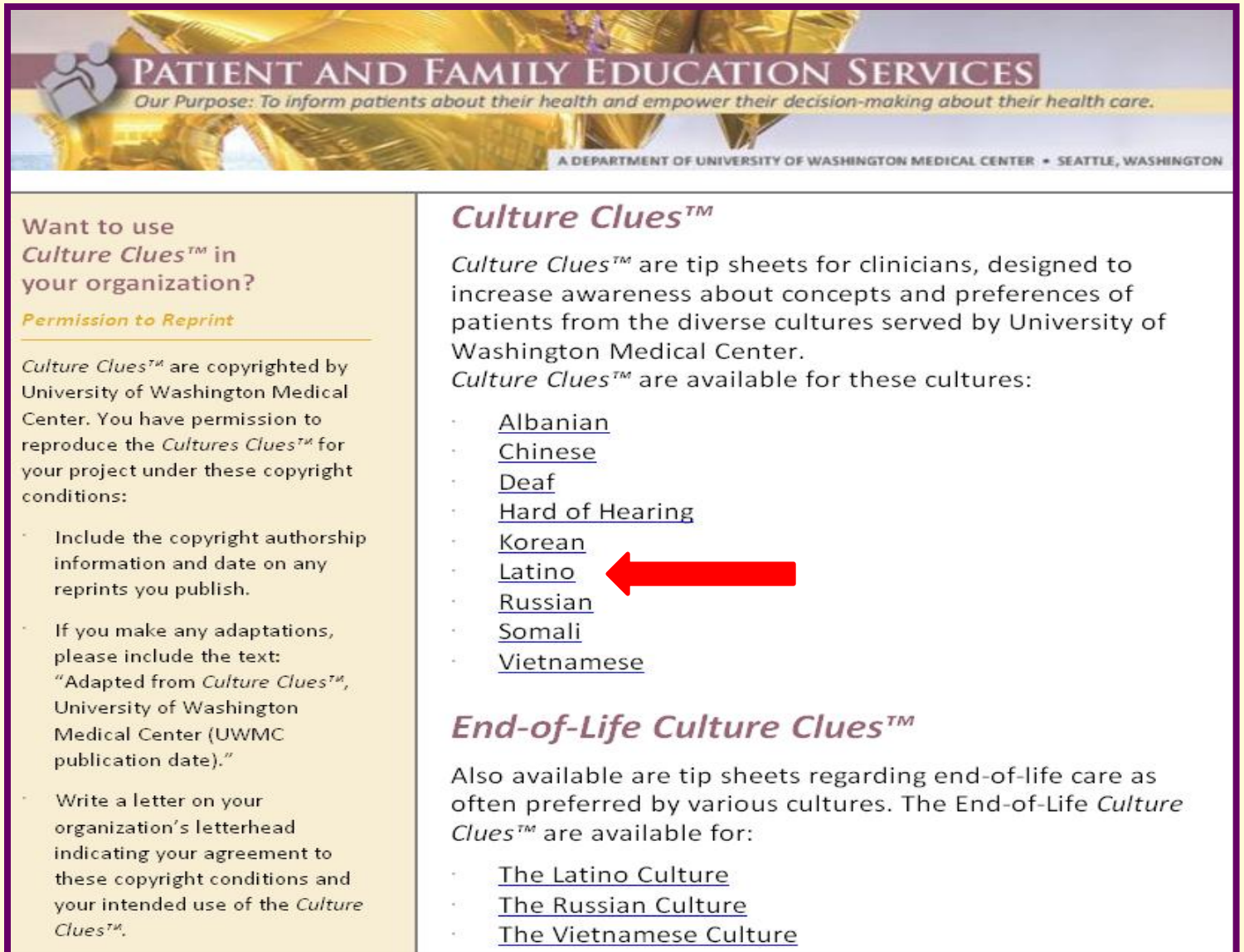
Culture Clues

depts.washington.edu/pfes/CultureClues.htm



PATIENT AND FAMILY EDUCATION SERVICES

Our Purpose: To inform patients about their health and empower their decision-making about their health care.

A DEPARTMENT OF UNIVERSITY OF WASHINGTON MEDICAL CENTER • SEATTLE, WASHINGTON

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- Write a letter on your organization's letterhead indicating your agreement to these copyright conditions and your intended use of the *Culture Clues™*.

Culture Clues™

Culture Clues™ are tip sheets for clinicians, designed to increase awareness about concepts and preferences of patients from the diverse cultures served by University of Washington Medical Center.
Culture Clues™ are available for these cultures:

- Albanian
- Chinese
- Deaf
- Hard of Hearing
- Korean
- Latino
- Russian
- Somali
- Vietnamese

End-of-Life Culture Clues™

Also available are tip sheets regarding end-of-life care as often preferred by various cultures. The End-of-Life *Culture Clues™* are available for:

- The Latino Culture
- The Russian Culture
- The Vietnamese Culture

Communicating with Your Latino Patient

Perception of Illness • Patterns of Kinship and Decision Making • Comfort with Touch

Culture Clues™ is designed to increase awareness about concepts and preferences of patients from the diverse cultures served by University of Washington Medical Center. **Every person is unique; always consider the individual's beliefs, needs, and concerns.** Use *Culture Clues*™ and information from the patient and family to guide your communication and your patient care.

How does the Latino culture deal with illness?

Explaining the Causes of Illness and Disease

- Your patient may see illness as an imbalance. The imbalance may be between internal and external sources (for example, hot and cold, natural vs. supernatural, the soul is separate from the body).
  - **Ask your patient, "Can you tell me what caused your illness?"**
- There are folk-defined diseases such as *empacho* (stomach ailment) and standard western medically defined diseases such as measles, asthma, and TB.
- Many patients seek medical care from *curanderos* or other folk healers.
  - **Ask about use of pharmaceuticals or home therapies such as herbal remedies or certain foods. Screen for possible patient use of injectables, especially antibiotics or vitamins. Ask if you can see the home treatment if your patient cannot identify the substance.**

Helping Your Patient Take an Active Role in Care and Recovery

- Your patient may believe that God determines the outcome of illness.
  - **Consider the impact religion will have in your patient's active participation in health care recovery. You can validate your patient's belief by asking, "Will God be served by taking the best care of yourself?"**
- The patient is seen as an innocent victim, and will be expected to be passive when ill.
  - **Help your patient take an active role in his or her recovery.**

Helping Your Patient Feel Comfortable with UWMC

- Remember to find out if this is your patient's first visit to University of Washington Medical Center.
  - **Keep in mind that patients who are new to the system may not be aware of the role of the Primary Care Team or the process for getting a referral to a specialist.**

Understanding Concerns About Depression

- Depression may not be seen as an illness. It is often seen as a weakness and an embarrassment to family.
  - **Treat these issues with respect. You may want to also offer the services of a clergy member.**

How are medical decisions made in the Latino culture?

Making Decisions About Health Care

- The mother determines when a family member requires medical care; the male head of the household gives permission to go to the medical center.
- Head of household, often oldest adult male, is the decision-maker, but important decisions often involve the whole family. The family spokesperson is usually the father or oldest male.
  - **Ask your patient about whom they want to be included in medical decisions. If the patient does not want to make medical decisions for themselves, let them know they need to prepare a Durable Power of Attorney for health care.**
  - **When possible, engage the whole family in discussions that involve decisions about care.**

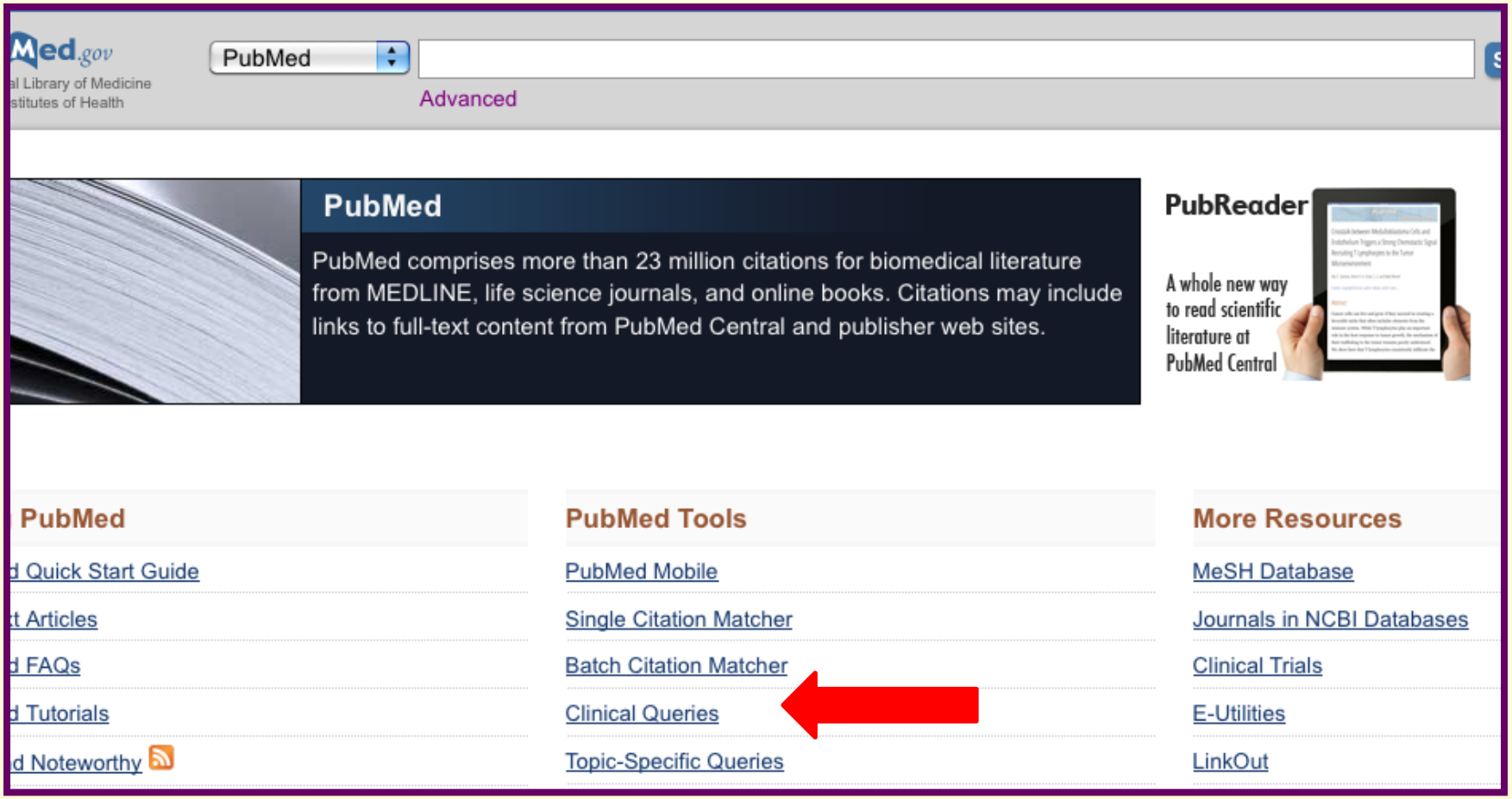
Managing Medical News

- The family would prefer to hear about bad medical news before the patient is informed. The family spokesperson usually delivers information about the severity of illness. The family may want to shield the patient from the bad news.

And when you have more time… search for Research articles

- PubMed Clinical Queries
  - Special section of PubMed that quickly connect clinicians with evidence-based clinical literature
  - Covers MEDLINE database -5,500 international biomedical journals
  - Searches for RCTs and Systematic Reviews +
  - **M**: Available on mobile devices
- CINAHL [Cumulative Index to Nursing and Allied Health Literature]
  - coverage from 1982+ of nursing and 17 allied health disciplines literature
  - 1700+ journals indexed
  - Can easily search for Research articles
  - **M**: Available on mobile devices

PubMed Clinical Queries



PubMed Clinical Queries

Results of searches on this page are limited to specific clinical research areas. For comprehensive searches, use

diabetes AND fenugreek

Clinical Study Categories

Category: Therapy

Scope: Narrow

Results: 5 of 6

Antidiabetic plants of Iran.

Shojaii A, Dabaghian FH, Goushegir A, Fard MA.

Acta Med Iran. 2011; 49(10):637-42.

Meta-analysis of the effect of herbal supplement on glycemic control in type 2 diabetes.

Suksomboon N, Poolsup N, Boonkaew S, Suthisisang CC.

J Ethnopharmacol. 2011 Oct 11; 137(3):1328-33. Epub 2011 Aug 5.

Fenugreek bread: a treatment for diabetes mellitus.

Losso JN, Holliday DL, Finley JW, Martin RJ, Rood JC, Yu Y, Greenway FL.

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Clinical observation on trigonella foenum-graecum L. total saponins in combination with sulfonylureas in the treatment of type 2 diabetes mellitus.

Lu FR, Shen L, Qin Y, Gao L, Li H, Dai Y.

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Effect of Trigonella foenum-graecum (fenugreek) seeds on glycaemic control and insulin resistance in type 2 diabetes mellitus: a double blind placebo controlled study.

Gupta A, Gupta R, Lal B.

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Systematic Reviews

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Are alternative supplements effective treatment for diabetes mellitus?

Kasuli EG.

Nutr Clin Pract. 2011 Jun; 26(3):352-5.

Complementary and alternative medicine for the treatment of type 2 diabetes.

Nahas R, Moher M.

Can Fam Physician. 2009 Jun; 55(6):591-6.

Traditional Indian spices and their health significance.

Krishnaswamy K.

Asia Pac J Clin Nutr. 2008; 17 Suppl 1:265-8.

See all (6)

PubMed Clinical Queries

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diabetes AND fenugreek

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Asia Pac J Clin Nutr. 2008; 17 Suppl 1:265-8.

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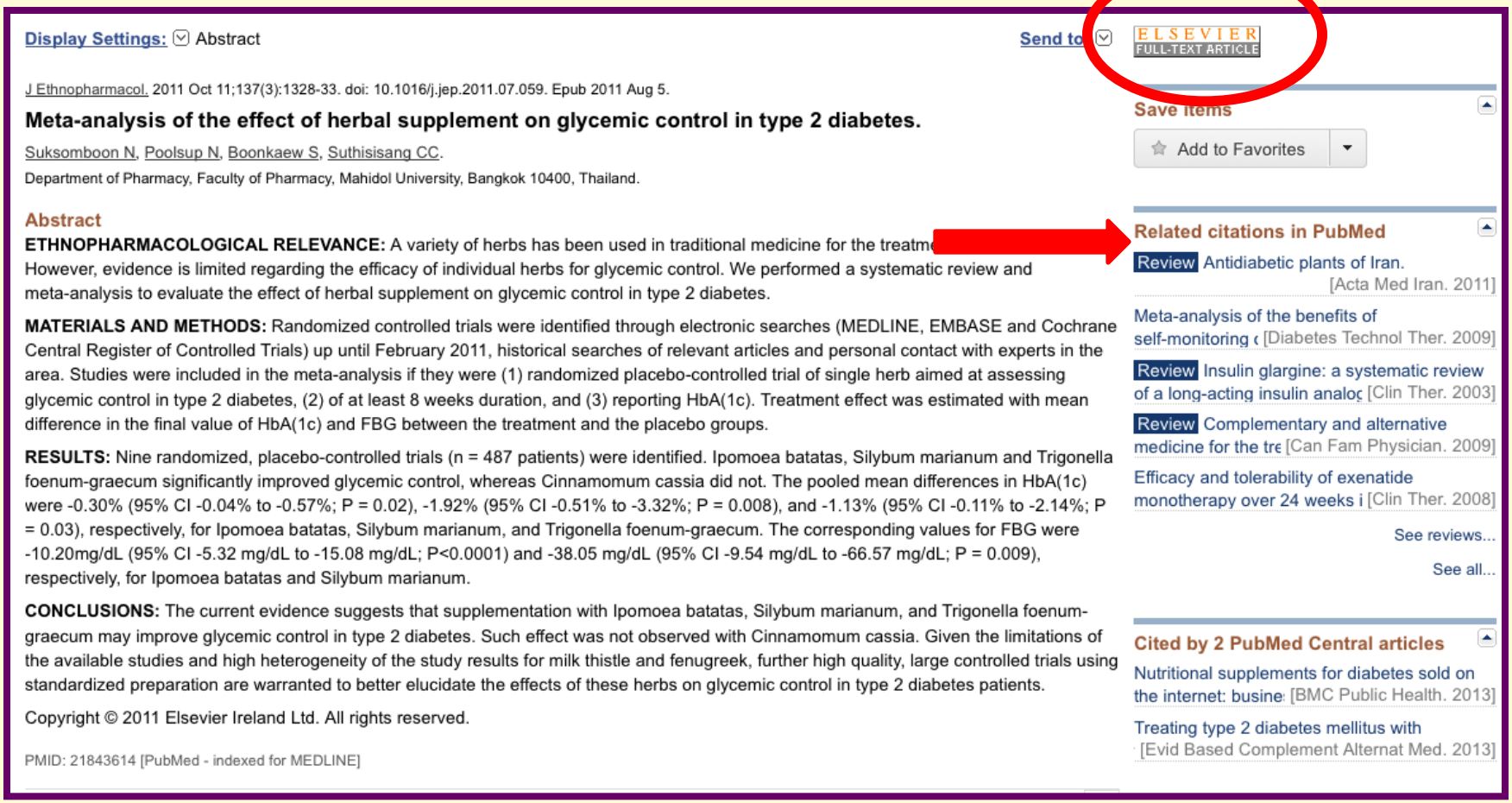
PubMed Abstract



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J Ethnopharmacol. 2011 Oct 11;137(3):1328-33. doi: 10.1016/j.jep.2011.07.059. Epub 2011 Aug 5.

Meta-analysis of the effect of herbal supplement on glycemic control in type 2 diabetes.

Suksomboon N, Poolsup N, Boonkaew S, Suthisisang CC.

Department of Pharmacy, Faculty of Pharmacy, Mahidol University, Bangkok 10400, Thailand.

Abstract

ETHNOPHARMACOLOGICAL RELEVANCE: A variety of herbs has been used in traditional medicine for the treatm However, evidence is limited regarding the efficacy of individual herbs for glycemic control. We performed a systematic review and meta-analysis to evaluate the effect of herbal supplement on glycemic control in type 2 diabetes.

MATERIALS AND METHODS: Randomized controlled trials were identified through electronic searches (MEDLINE, EMBASE and Cochrane Central Register of Controlled Trials) up until February 2011, historical searches of relevant articles and personal contact with experts in the area. Studies were included in the meta-analysis if they were (1) randomized placebo-controlled trial of single herb aimed at assessing glycemic control in type 2 diabetes, (2) of at least 8 weeks duration, and (3) reporting HbA(1c). Treatment effect was estimated with mean difference in the final value of HbA(1c) and FBG between the treatment and the placebo groups.

RESULTS: Nine randomized, placebo-controlled trials (n = 487 patients) were identified. Ipomoea batatas, Silybum marianum and Trigonella foenum-graecum significantly improved glycemic control, whereas Cinnamomum cassia did not. The pooled mean differences in HbA(1c) were -0.30% (95% CI -0.04% to -0.57%; P = 0.02), -1.92% (95% CI -0.51% to -3.32%; P = 0.008), and -1.13% (95% CI -0.11% to -2.14%; P = 0.03), respectively, for Ipomoea batatas, Silybum marianum, and Trigonella foenum-graecum. The corresponding values for FBG were -10.20mg/dL (95% CI -5.32 mg/dL to -15.08 mg/dL; P<0.0001) and -38.05 mg/dL (95% CI -9.54 mg/dL to -66.57 mg/dL; P = 0.009), respectively, for Ipomoea batatas and Silybum marianum.

CONCLUSIONS: The current evidence suggests that supplementation with Ipomoea batatas, Silybum marianum, and Trigonella foenum-graecum may improve glycemic control in type 2 diabetes. Such effect was not observed with Cinnamomum cassia. Given the limitations of the available studies and high heterogeneity of the study results for milk thistle and fenugreek, further high quality, large controlled trials using standardized preparation are warranted to better elucidate the effects of these herbs on glycemic control in type 2 diabetes patients.

PMID: 21843614 [PubMed - indexed for MEDLINE]

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Review Antidiabetic plants of Iran. [Acta Med Iran. 2011]

Meta-analysis of the benefits of self-monitoring ([Diabetes Technol Ther. 2009]

Review Insulin glargine: a systematic review of a long-acting insulin analoç [Clin Ther. 2003]

Review Complementary and alternative medicine for the tre [Can Fam Physician. 2009]

Efficacy and tolerability of exenatide monotherapy over 24 weeks i [Clin Ther. 2008]

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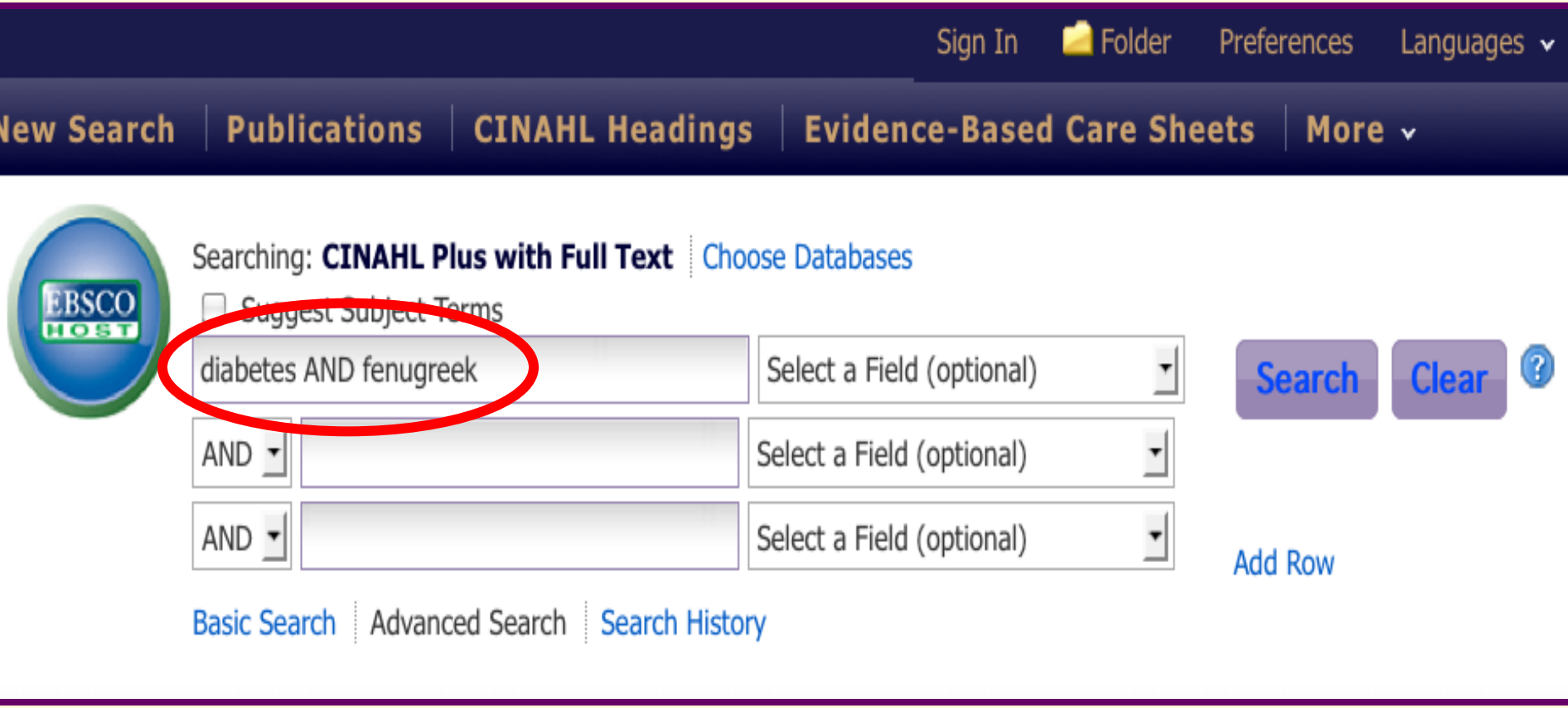
Cited by 2 PubMed Central articles

Nutritional supplements for diabetes sold on the internet: busine [BMC Public Health. 2013]

Treating type 2 diabetes mellitus with [Evid Based Complement Alternat Med. 2013]

CINAHL Search request for research articles



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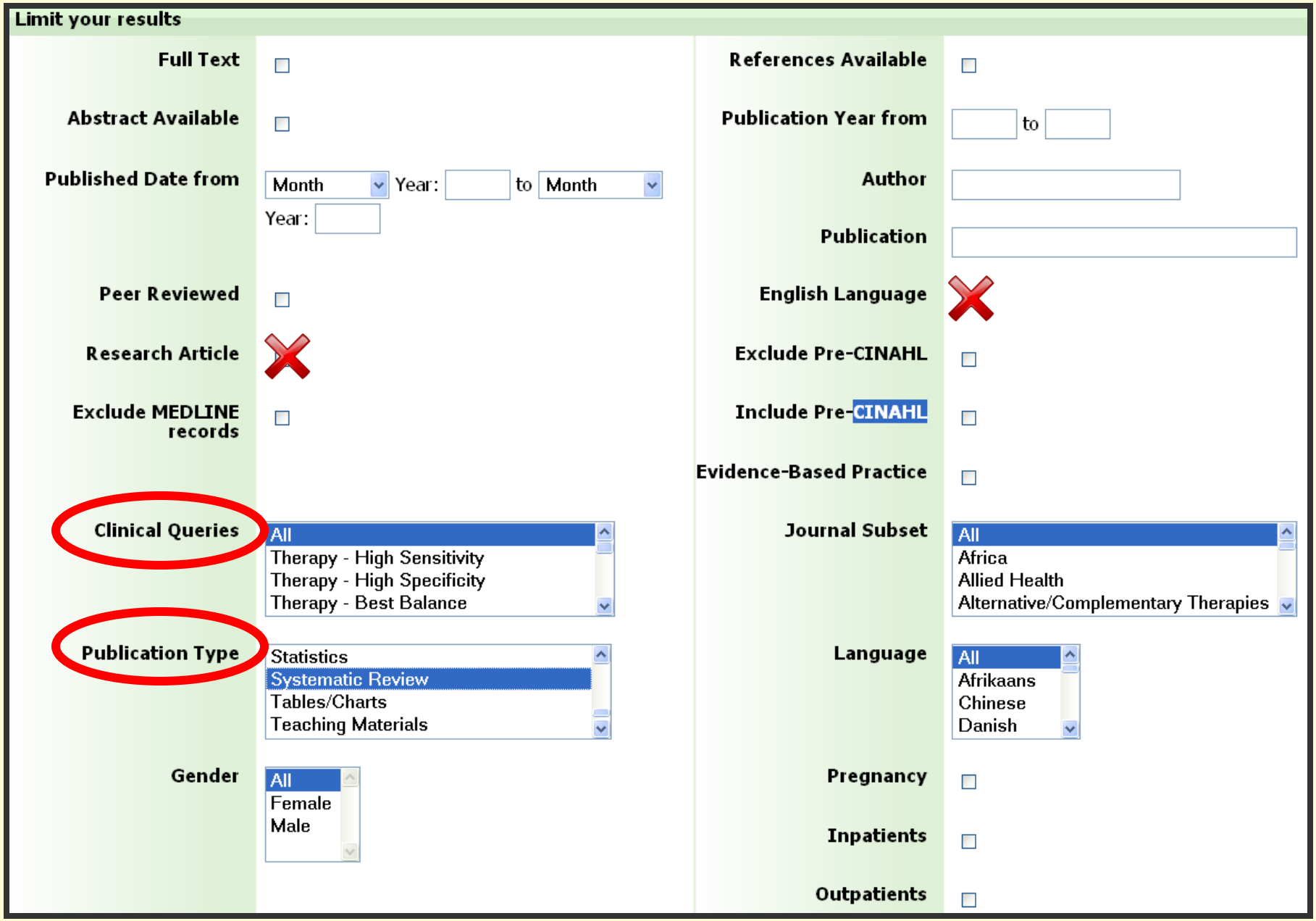

CINAHL Results

1. Academic Journal

Complementary and alternative medicine for the treatment of type 2 diabetes.

(includes abstract) Nahas R; Moher M; Canadian Family Physician, 2009 Jun; 55 (6): 591-6. (journal article - research, systematic review) ISSN: 0008-350X PMID: 19509199

OBJECTIVE: To review clinical evidence supporting complementary and alternative medicine interventions for improving glycemic control in type 2 diabetes mellitus. QUALITY OF EVIDENCE: MEDLINE and...

Subjects:

Biological Products; Diabetes Mellitus, Type 2; Diabetes Mellitus, Type 2; Medicine, Herbal; Trace Elements

Database:

CINAHL Plus with Full Text

Check for Full Text

May Link to full text

2. Academic Journal

Fenugreek bread: a treatment for diabetes mellitus.

(includes abstract) Losso JN; Holliday DL; Finley JW; Martin RJ; Rood JC; Yu Y; Greenway FL; Journal of Medicinal Food, 2009 Oct; 12 (5): 1046-9. (journal article - clinical trial, research, tables/charts) ISSN: 1096-620X PMID: 19857068

Use of fenugreek, a food with demonstrated efficacy in lowering blood sugar, is limited by its bitter taste and strong flavor. A bread incorporating fenugreek using a proprietary process was test...

Subjects:

Bread; Diabetes Mellitus, Type 2; Diet; Insulin Resistance; Plants, Medicinal; Taste; Middle Aged: 45-64 years; Female; Male

Database:

CINAHL Plus with Full Text

Check for Full Text

3. Academic Journal

Meta-analysis of the effect of herbal supplement on glycemic control in type 2 diabetes.

(includes abstract) Suksomboon, Naeti; Poolsup, Nalinee; Boonkaew, Sukamai; Suthisisang, Chuthamanee C.; Journal of Ethnopharmacology, 2011 Oct; 137 (3): 1328-33. (journal article - meta analysis, research, systematic review) ISSN: 0378-8741 PMID: 21843614

Abstract: Ethnopharmacological relevance: A variety of herbs has been used in traditional medicine for the treatment of diabetes. However, evidence is limited regarding the efficacy of individual...

Subjects:

Medicine, Herbal; Hypoglycemic Agents; Glycemic Control; Diabetes Mellitus, Type 2; Plants, Medicinal

Database:

CINAHL Plus with Full Text

Check for Full Text

4. Academic Journal

Mixture of cinnamon and fenugreek powders shows beneficial effects in diabetic (type 2) patients... 14th Annual Symposium on Complementary Health Care, 11th to 13th December 2007, University of Exeter, UK.

Devrim E; Durak I; Focus on Alternative & Complementary Therapies, 2007; 12: Supplement 1: 20. (journal article - abstract, research) ISSN: 1465-3753

How to Access E-Resources?

- Try your hospital or clinic resources
- WA State: HEAL-WA *heal-wa.org*
- Other states: contact your State Library or association
- Public libraries: have health-related databases
- Many free journal sites:
  - BiomedCentral *biomedcentral.com*
  - PubMed Central *pubmedcentral.gov*
  - Free Medical Journals *freemedicaljournals.com*
  - Highwire *highwire.stanford.edu*

HEAL WA
Health Evidence Resource for Washington State

Authoritative, current, evidence-based information for health care providers in Washington State.

heal-wa.org

TOOLKITS DATABASES EBOOKS EJOURNALS REFERENCE HELP ABOUT

news

VisualDx Mobile - New Download Instructions
Apr 08, 2013

VisualDx now includes patient handouts
Feb 26, 2013

Suspension of Washington State Mercury Limits on Certain Flu Vaccine
Jan 30, 2013

New Pregnancy & Lactation Checker in Natural Standard
Jan 25, 2013

Natural Standard en Français
Aug 17, 2012

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DynaMed, VisualDx

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Complementary & Alternative Medicine
Natural Standard

Prevention, Screening, Immunizations

Patient Care Management
Nursing Reference Center

Multicultural Information
EthnoMed, RHIN

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MedlinePlus,
Patient Ed Reference Center

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Certain resources in HEAL-WA (indicated by a lock) require a HEAL-WA access code (UW NetID) and password for access.

Once you have set up your HEAL-WA access code and password, LOG IN to HEAL-WA by clicking on the "Log In" button at the top of this column.

LOG OUT from HEAL-WA by simply closing your browser.

Set up your HEAL-WA access - to set up a HEAL-WA access code and password, see the instructions on the Getting Started page.

PLEASE NOTE that once you have set up your access code, it can take up to a day for your access code to be recognized so you can log in to HEAL-WA.

E-Resources for Non-OHSU Oregon Licensed Health Professionals

- *http://www.ohsu.edu/xd/education/library/orhp.cfm*
- Access Medicine
  - includes 75 medical reference books
  - includes the Lange *Current Diagnosis and Treatment* series, *Harrison's*, etc.
  - offers downloads for mobile devices

Key Points

- Refer to the handout "E-Resources for Point-of-Care Decision-Making"
- Remember point-of-care E-resources:
  - DynaMed
  - Natural Standard
  - ePSS
  - LexiComp
  - Accessss
  - VisualDx
  - MedlinePlus
  - EthnoMed

E-Resources for Point-of-Care Decision-Making

Handout:
http://media.hsl.washington.edu/media/schnall/AdvPract2013handout.pdf

PowerPoint:
http://media.hsl.washington.edu/media/schnall/AdvPract2013pp.pdf

Questions?

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